REGULATION DECLARATION:

This thesis has been composed by the undersigned and is his own work.

Signed: R. B. Weir,
R.B. Weir,
22nd June, 1974.
ABSTRACT:

This thesis examines the development of the distilling industry in Scotland from the end of the eighteenth century, when spirits had replaced beer and ale as the most popular drink, until 1910, when the industry was faced with a declining market. It traces the process of excise reform between 1780 and 1823 and establishes the organisation of the distilling industry (both in its legal and illicit forms), the methods of production, the markets for spirits, and the industry's relationship with agriculture. The effects of excise reform on the Scottish distilling industry are viewed within the context of the contemporary debate on Government regulation of commercial activity, and in relationship to the unification of the spirit market within the United Kingdom. The changing total demand for spirits and the alterations in the demand for different types of spirits, both home produced and imported, are uncovered. The implications of technological change, following the introduction of the Coffey or Patent still (which allowed continuous distillation) are discussed. Capital/output ratios are used to show how it was existing large Lowland distilleries that adopted the innovation and how they found it easier to form trade associations to curb competition. The qualities of the patent still also enabled patent still distillers to switch to maize, a cheaper raw material, and the British distillers relationship with agriculture is discussed in the context of the internationalisation of the grain trade after 1870. English and Irish patent still distillers joined Scottish patent still distillers in trade associations and the thesis examines the background to the formation of the Distillers Company Limited in 1877. The firm's early managerial problems and the extent to which it achieved the original aims that underlay the amalgamation are considered, the position of the patent still distilling industry as a whole being examined through its major trade association, The United Kingdom Distillers Association (1878-88). Discussion then moves from producers to distributors and the development of blending, which revolutionised the marketing of Scotch whisky, is traced through the experiences of Arthur Bell & Sons Ltd.
and "The Big Three": John Walker & Sons Ltd., John Dewar & Sons Ltd., and James Buchanan & Co. Ltd. This shows the creation of national enterprises, the growing market power of the blenders, their export trade, and problems confronting them in the first decade of the twentieth century. The thesis ends by pointing to the unstable relationship between distillers and blenders as consumption fell.
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ACKNOWLEDGEMENTS:

Most students of business history possess a fund of dismal stories recording the problems which have surrounded their requests for access to business papers. I am happy to report that I do not. Few difficulties were encountered. Indeed, once the purpose of the study had been made clear, very generous and unstinted assistance was given by all the firms approached. By far the most serious difficulty was simply the destructive effects of the passage of time on firms' archives.

In the course of a two year period of full time research during which the papers of a number of companies and trade associations were surveyed, a heavy debt has been incurred. A large number of individuals facilitated access to records, dug out forgotten files, mentioned possible useful contacts, patiently answered questions, offered critical comments and were exceedingly generous in their hospitality.

Given the importance of The Distillers Company in the Scotch whisky trade it would have proved impossible to do more than contemplate this study without access to the Company's records. I wish to acknowledge my gratitude to the Chairman and Management Committee of the D.C.L. for permission to use the Company's archives for the period 1877 to 1925. This study began in the Head Office of the D.C.L. where Mr. C.R.S. Robertson, the late Mr. R.C. Anderson, and Mr. S.W. Shaw gave me an excellent introduction to the trade and the D.C.L.'s records in particular. They also kindly arranged visits to subsidiary companies and I should like to thank Mr. W.K. Buchanan of Scottish Grain Distillers, Mr. A.S. Allan of Scottish Malt Distillers, Mr. H.S.St.C. Murray of John Dewar & Sons Ltd., Mr. D.W. Alexander of John Walker & Sons Ltd., Mr. J. Scott of John Haig & Co., Mr. S.C. Stewart of The Yeast and Foods Division and Dr. J.S. Harrison of The D.C.L. Research Station for their assistance. Although this study concentrates on potable spirit I am also grateful to Mr. J.S. Hunter
and Mr. C. Stevens of B.P. Chemicals (U.K.) for helping me to establish the position of the industrial alcohol market.

Once the records of the D.C.L. and its subsidiaries had been examined other firms in the industry were approached. For permission to inspect their firm's records and for assistance during my visits I am indebted to Mr. J.O. Ure of Arthur Bell & Sons Ltd., Mr. D.Y. Veitch, Mr. I.D. Mackenzie and Mr. J. Cowper of the North British Distillery Company Ltd., and Mr. W. Birnie of McKinlays and Birnie. The records of two trade associations, the Pot Still Malt Distillers' Association of Scotland (now the Malt Distillers' Association) and the Scotch Whisky Association, were also made available. I wish to acknowledge the help of Mr. G.S. Grant and Mr. A.P. Black of the Malt Distillers' Association, and Mr. P.J. Woodhouse and Miss W.A. Rintoul of the Scotch Whisky Association. In addition to those mentioned, a number of people, especially on the broking side of the industry, offered interviews. Most desired to remain anonymous but their confidential help was in all cases most useful, often supplementing from memory what was not available in business papers.

However much the structure of the Scotch whisky industry has changed over time the people who work in it have remained, as Alfred Barnard, the nineteenth century trade journalist, discovered during his mammoth tour round the distilleries of the United Kingdom, unfailingly helpful, courteous and hospitable. Like Barnard:

"I cannot refrain from expressing the delight with which I look back upon my visits and associations with the distillers themselves."

and share his view "that a more agreeable and hospitable class does not exist."

Firms were not the only organisations whose records proved useful. Much help was also given by the staffs of the Customs & Excise Library, London, the National Library of Scotland, and the Scottish Record Office.
In utilising these records I have benefitted greatly from the encouragement, guidance, and criticism of my two academic supervisors, Professor S.B. Saul and Professor T.C. Smout. They have helped to render the incomprehensible, comprehensible; whilst my typist, Mrs. Sheila Miller, has made the illegible, legible. I thank them all.

---

THE PROCESSES OF DISTILLING

A BASIC OUTLINE

The production of a potable spirit involves four operations. These are:

i. Malting
ii. Washing
iii. Fermenting
iv. Distilling

The basic function of a distiller is to convert cereal grain into alcohol. The process itself is a simple one and merely involves an additional stage to the fermentation process in brewing. The major raw material is some form of grain, usually barley in Scotland, though other starch containing materials e.g. potatoes, carrots and mangel wurzels, as well as direct sugar products like molasses have been used in distillation in the U.K. at different periods. The choice of barley depends on its high starch content and the ease with which it germinates to enable the first process, MALTING, to occur.

In Eighteenth century Scotland, two species of barley were grown; in the richer and more improved area of Lowland Scotland, hordeum vulgare, a two-rowed barley, and in the Highlands, hordeum hexastichon, a plant in which the seeds occur in six rows. This latter form has the name bear, bere or bigg. It was generally regarded as an inferior grain and fetched a lower price than barley. Both grains were suitable for malting, the object of which is to convert the starch contained in the grain, which is insoluble, into soluble sugars. The second stage, WASHING, then extracts these sugars from the grain. All that malting involves is a partial repetition of what happens to grain when it is planted, with the difference that in the distillery, nature is teased along in a controlled environment. In normal vegetation the growing plant draws on starch reserves contained in every corn. These starch reserves are made
available to the plant by an enzyme called diastase. Diastase converts the starch into a sugar called maltose. Normally maltose feeds the green leaf of the plant whilst the roots develop and search for nourishment from the soil. What the distiller is after, is the sugar to convert into alcohol. To get this the natural growing process is replicated by moistening the grain (by steeping it in water) and then stacking it to allow heat to build up as growth begins. The rate of germination is controlled by spreading the grain out and turning it. It is important not to allow germination to proceed too far as the plant then uses up the starches for its own growth thus reducing the amount of sugars ultimately available to the distiller. Germination is therefore halted by drying. This is done by heating the barley, or as it is called at this stage, green malt, in a kiln. The kiln may be fired by peat to give the malt (and the spirit) a peat smoke flavour. Once dried, the malt is screened to break off the rootlets, and then ground to crush the cell walls of the grain which facilitates the release of the soluble sugars. This is the final stage in the preparation of malt. It now contains a large proportion of convertible starch and maltose sugar, the enzyme diastase being inactive.

The buildings in the distillery which the malt has gone through so far are: the barley store, the malt barn (where germination took place), the malt kiln (where it was dried), the malt house (where it was screened and ground). From the malt house it proceeds to the mash house.

In the mash house boiling hot water is added to the ground malt. Hot water restores the activity of diastase and the enzyme completes the conversion of the soluble starch into maltose. Diastase will also convert the starch in grain which has not been malted, a factor of some importance as it allows the distiller to use unmalted or raw grain (not necessarily barley) and thus save on the expense of malting. The extract obtained by mashing is known
as WORT. The wort is drained out from the vessel (the mash tun) in which mashing occurs. What is left behind in the mash tun are the spent hulks of the malt. This is called DRAFF and is used as cattle food.

Each batch of malt is mashed several times to obtain the highest possible extract. From the mash tun the extract or wort flows into a collecting vessel or UNDERBACK and then through coolers into the FERMENTING BACKS. The amount of saccharine matter in the wort is important as this determines the amount of alcohol which will be yielded when YEAST is added to the wort in the fermenting back. Cooling takes place before the wort reached the fermenting back to prevent the maltose decomposing and the yeast being killed.

Fermentation takes place when the yeast is added to the wort. Enzymes in the yeast break the sugars in the wort down, forming alcohol and releasing carbon dioxide gas. After fermentation is complete a clear liquid containing water, alcohol and some yeast is left. This is known as WASH. This liquid is akin to beer in that the alcohol in it is about 5% by volume or about 10° Proof.

The object of the last stage DISTILLATION is to separate the alcohol from the water and concentrate it. From the fermenting backs the wash passes into the first still called a WASH STILL or SINGLING STILL. It is in this still that the alcohol is separated from water. This is achieved simply by heating the wash. Alcohol has a lower boiling point than water and when heated it rises as vapour from the wash. The next stage is to turn the vapour back into liquid form by condensing it. The shape of the still has undergone considerable alteration over time but it is best thought of as being wide at the bottom and narrow at the top (pear shaped). At the top or HEAD the still narrows and curves over leading through a thin pipe to a WORM. The worm is simply a coil immersed in cold water and it is here that the alcoholic vapour condenses into a
liquid. On the first distillation this liquid is known as LOW WINES. This distillate as it flows out of the worm is sampled for its various FRACTIONS. In distiller's parlance these fractions are: the FORESHOTS or first running of the still, SPIRITS or the middle portion of the distillate, and FEINTS or the last part of the distillate. The foreshots and feints are both impure containing compounds of the higher alcohols and by-products. At this stage they are returned to the low wines still for a further distillation. The middle portion, however, passes into the Low Wines still for a second distillation to concentrate the alcohol. Again its separate fractions are returned to the still for a further distillation. The separation of these fractions is the heart of the stillman's art. His aim is to obtain a distillate which contains some of the higher alcohols and compounds (aldehydes, esters, furfural) sufficient to give the spirit its distinctive taste. Too large a proportion of these compounds or CONGENERICS as they are called would produce a harsh undrinkable spirit. It is the stillman's art in this last process which perpetuates the craft mythology of whisky production.

The process which has just been described is that used in distilling malt whisky. In outline it is also the process which existed at the end of the 18th century. There is one other process which makes use of a continuous form of distillation. In 1830 Aeneas Coffey, an Irish exciseman, patented a still which produced whisky in one continuous process unlike the traditional pot still method which is a batch process. This will be described in Chapter Six.
NOTES ON THE TEXT:

ABBREVIATIONS:

- A.B.& S.  Arthur Bell & Sons Ltd.
- B.M.B.  Board Minute Book.
- B.P.P.  British Parliamentary Paper.
- C & Ex.  Customs and Excise.
- C & Ex. M.B.  Customs and Excise Miscellaneous Bundles.
- D.C.L.  The Distillers Company Limited.
- D.C.L. (G)  Distillers Company Gazette.
- J. & S.  John Dewar & Sons Ltd.
- J.I.  Journal of the Institute of Brewing.
- J.W. & S.  John Walker & Sons Ltd.
- L.B.  Letter Book.
- M.P.G.  Million Proof Gallons.
- N.B.D. Co.  The North British Distillery Company Ltd.
- N.S.M.D.A.  North of Scotland Malt Distillers' Association.
- O.P.  Over Proof.
- P.G.  Proof Gallon.
- P.P.G.  Per Proof Gallon.
- S.J.P.E.  Scottish Journal of Political Economy.
- S.M.D.  Scottish Malt Distillers Ltd.
- S.R.O.  Scottish Record Office.
- S.W.A.  The Scotch Whisky Association.
- U.P.  Under Proof.
- W. & S. T.R.  Wine and Spirit Trade Record.
- W. T.R.  Wine Trade Review.

SPELLING:

(i) "Whisky" and "Whiskey" — both forms of spelling were used in the nineteenth century though today the latter is reserved for Irish whiskey. In general I have used the former spelling except when quoting contemporary sources or discussing the product of the Irish distilling industry.

(ii) "Scotch" and "Scottish" — "Scotch" was used to describe both the people and the drink of Scotland in the nineteenth century. When quoting contemporary sources I have left the spelling unchanged except where this would confuse the meaning.
Introduction:

In the course of the nineteenth century there developed a cultural stereotype of the Scot. An apparently unlimited thirst for whisky was part of the stereotype along with other familiar emblems of identification: haggis, bagpipes, kilt and sporran. Reality was, of course, at variance with the stereotype and outside the ribaldry of the music hall or the cultural conformity of emigrant societies, few Scots wore the kilt, played the pipes, or toiled amidst the splendours of loch and glen. The place of whisky drinking in Scots life also changed over the century as did the nature of whisky itself.

This study was prompted by a curiosity about the industry that produced whisky, especially in view of the evident association of whisky with Scotland and the relatively small mention that the industry received in standard textbooks on Scottish economic history. The contrast was heightened by the fact that most textbooks pointed to the high proportion of consumer income which went on food and drink in the early stages of industrialisation, and to the baneful social consequences of the heavy drinking that accompanied the advent of industrial society. Could these really be adequately considered without some examination of the activities of the drink manufacturers? Even a superficial view seemed to suggest that an increase in the demand for drink on the scale the text books suggested would not have left the supplying industries unaltered. Moreover, the drink industries processed the products of agriculture. What relationships existed between the distillers and farmers? Dissatisfaction with the existing bias towards textiles and heavy industry at the expense of consumer orientated industries was not the only reason for wishing to study the distilling industry. Certain characteristics of the modern Scotch whisky trade also suggested that the industry's history might be worth examining. The industry was dominated by one company, the Distillers Company; how had it acquired that position? The industry was heavily engaged in exporting; how had this business developed? Certain brands of Scotch whisky were
household names in this country and famous throughout the world; what marketing skills lay behind these brands? These, in brief, were a few of the thoughts that pointed to the distilling industry as a useful field for historical research, and some of those questions are discussed in this thesis.

The thesis begins in the closing decades of the eighteenth century when it had become evident to contemporaries that spirits had replaced beer and ale as the most popular drink. It ends in 1910, the year when the after effects of Lloyd George's Budget began to be felt, and contemporaries started to believe that "the whisky age" might be coming to a close. There is a symmetry between the opening and the ending; both were periods when the problems arising from the attractiveness of spirits for raising Government revenue dominated the distillers' thinking.

The increasing use of spirits in Scotland at the end of the eighteenth century attracted attempts to harness spirits for raising revenue and the first three Chapters examine the evolution of the excise system. Because the construction of a satisfactory system of levying duty was prolonged and attended with widespread repercussions, "the Scotch distillery" received a lot of attention. The material presented in evidence to official enquiries has been used to examine the organisation of the industry (both in its legal and illicit forms), the methods of production, the markets for spirits and the distillers' impact on agricultural change. Where available, material from business papers in public archives has been used to supplement official reports.

Excise reform in the distilling industry was part of a larger debate about the appropriate spheres for Government regulation of commercial life and the Scottish distilling industry was used as a testing ground for the new theories of laissez faire political economy. These chapters discuss the way competition was used to attempt to solve the industry's problems.
By 1623, a more acceptable method of levying duty had been achieved and, with the active encouragement of Scottish landowners, a legal industry was established. Mainly because of the very success of the reforms in Scotland the distilling industry ceased to attract public comment. The Excise continued, however, to collect statistics on the spirits industry and, more importantly, to press forwards towards the goal of a free trade in spirits within the United Kingdom. This was achieved in 1858 when duty and distillery regulations were made uniform throughout England, Scotland, and Ireland. In Chapter Four, the consequences of fiscal harmonisation are discussed and the excise statistics utilised to uncover the patterns of demand for different types of spirits during the nineteenth century. Two years after internal fiscal harmonisation, the external barriers to foreign spirits were removed, carrying the logic of reform to its ultimate conclusion, and the Chapter also establishes the place of imported spirits in the British market.

As a whole, Chapter Four, is designed to provide a broad perspective within which to view subsequent developments. Chapter Five returns to the Scottish industry after 1623 to give more detailed consideration to the production, wholesaling, and retailing of spirits as well as to the effects of competition on the industrial structure.

Although, partly because of the form the excise system took, rapid technological change was a feature of the Lowland distilling industry after 1780, both Lowland and Highland distillers worked from the traditional pot still. This was (and is) a discontinuous or batch process but in 1830 Aeneas Coffey patented a continuous still. The search for a method of continuous distillation, the technological features of the Coffey or Patent Still, and the relationship between science and innovation are discussed in Chapter Six. This is followed, in Chapter Seven, by an account of the diffusion of Coffey's still, and the main theoretical content of the thesis in which capital/output ratios are used to explain the gulf that emerged between the pot and patent still distillers, is to be found in this chapter.
So far as sources are concerned Chapter Eight marks the dividing point between reliance on official records and the appearance of business papers. Using the implications of the different capital/output ratios in pot and patent still distilling, it shows how the patent still distillers began to form trade alliances that cut across the national boundaries of England, Scotland and Ireland. The Chapter also investigates the divorce of patent still distillers from home agriculture. Amongst the Lowland patent still distillers the inadequacy of the trade association as a means of suppressing competition, especially foreign competition, resulted in the formation of the Distillers Company in 1877.

As the largest firm in the distilling industry, Chapter Nine, is devoted to a study of the problems which afflicted the firm in its early years. One of these was the dominant position of vendor-managers in the firm but the Chapter shows how this weakness was realised and, eventually, eliminated. A learning process enabled the Company to solve this entrepreneurial deficiency. The other problem was the gap between the Company's productive capacity and its market power which persuaded the Board to reinstate the trade association as a way of curbing competition.

Chapter Ten deals with the United Kingdom Distillers’ Association or "the Whisky Parliament". Whilst mainly a narrative account of the Association's efforts to achieve a remunerative price for patent still spirits the Chapter ends by relating its experiences to the existing interpretations of the role of trade associations in the British economy during "the Great Depression." It also, for comparative purposes, briefly surveys the German and American distilling industries to see what was meant by "the competitive norm" British distillers faced. The Chapter forms the essential trade background from which to view the extent to which the D.C.L. achieved the original amalgamation aims of 1877. This is done in Chapter Eleven.
Chapter Eleven is the last chapter exclusively devoted to the Distillers Company, and some justification for breaking off from the development of that firm must be made. It is to be found in the creation of a new method of marketing Scotch whisky. The D.C.L. was formed from amongst the Lowland patent still distillers, producers of grain whisky, a less expensive product than malt whisky. The patent still distillers sold their grain whisky to the wholesale dealers. Some of it, an unknown proportion, was sold to the consumers in an unaltered state but, increasingly from the 1870s Scotch whisky was sold in the form of blends or mixtures of malt and grain whisky. The components of the blends were stored for maturation to improve the spirit. It was the blender, a particular type of wholesale dealer, who created the distinctive place for Scotch whisky in national and international spirit markets. The blender also established the practice of branding. The growing importance of the distributor over the primary producers of malt and grain whisky was the most significant feature of the Scotch whisky trade in the last quarter of the nineteenth century.

Chapter Twelve investigates the historical problems involved in discussing blending and explains the approach selected here. This involves, in Chapters Thirteen to Sixteen, a study of one blending firm, Arthur Bell & Sons of Perth. Bell's rich records enable the practice of blending and its economics to be explained. The firm's history is not viewed in isolation but is used to highlight features such as the absence of the tied retail trade in distilling unlike the brewing industry, and a range of practices which enabled the blenders to offset the disadvantages whisky faced as a result of falling relative prices in the 1870s, and 1880s. Chapter Fifteen offers a critique of the existing explanations for the declining per capita consumption of spirits.

Bell's history has its limitations in explaining the rise of national blending firms and also, as the firm retained its independence, in discussing the movement towards amalgamation that characterised the trade after 1900. So, in Chapters Eighteen and Nineteen,
attention is switched to firms that are now subsidiaries of the D.C.L.: Walkers, Dewars and Buchanans. "The Big Three", as they started to call themselves in 1910, grew rapidly in the boom of the 1890s. Their expansion into exporting is discussed as is their growing concern about the uncertain state of the whisky market after 1900. These two Chapters present a rather different account of "The Big Three" than is to be found in existing histories of the whisky trade. In particular, advertising and salesmanship are placed in a more balanced perspective.

The concluding Chapter draws the blenders and distillers together again, showing that the Distillers Company had begun to embark on a policy of "consolidating" the grain distilling industry after 1900. In pursuing this policy it faced the problem of the increasing importance of "The Big Three" as distributors. In their turn "The Big Three" had the prospect of the J.C.L. dominating their grain whisky supplies and the Chapter ends by pointing to the unstable situation within the trade. By 1910, whatever the stereotype of the Scot, almost as much Scotch whisky was being consumed outside Scotland as within.
CHAPTER ONE

THE DISTILLING INDUSTRY AT THE END OF THE EIGHTEENTH CENTURY

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CHAPTER ONE
THE DISTILLING INDUSTRY AT THE END OF THE EIGHTEENTH CENTURY

I. THE EXCISE SYSTEM

In a pamphlet published in 1818 the Rev. Chichester concluded a study of revenue collection in Ireland with the statement that "the calamities of civilised warfare are, in general, inferior to those produced by the Irish Distillery Laws." To a lesser degree this statement might also be applied to the collection of spirit duty in Scotland, for between 1784 and 1823 the economic and social ramifications of this major branch of the public finances were widespread indeed. The widespread nature of the distilling industry within Scotland, its importance to the agricultural system, its role in the commercial relationships of Scotland and England, and the revenue gathering potential of its product in a period marked by high wartime expenditure ensured that alterations in the level of excise duty and in the method of collection would be attended with important consequences. Moreover, excise duty was being levied on an industry which, if universal in location, exhibited marked regional characteristics, especially in the extent to which industrialisation had altered the scale of production and the extent of the market. The aim of this chapter is to establish the nature and structure of the industry within the framework of the excise system and the Scottish economy at the end of the eighteenth century.

In the Highlands the production and consumption of aqua vitae or whisky was probably widespread by the middle of the eighteenth century. As a peasant craft it provided a ready outlet for the poorer quality grain grown in the Highlands. What is important however for the subsequent commercial development is the spread of whisky in the Lowlands with their growing urban markets. What were the origins of the growth in whisky consumption during the century? The rise in the use of whisky appears to have been at the expense of the traditional Scottish beverage, Scots ale or "twopenny", and the origin of the replacement of beer by whisky may be traced to the malt duty imposed by Walpole in 1725 and subsequent increases. A mutually reinforcing combination of price increases in ale caused by the additional duty.

and the adulteration of the product by brewers attempting to offset the tax, sealed the fate of twopenny and opened the market for spirits. This change and its consequences were widely reported by parish ministers in the Statistical Account. Town parishes appear to have been most sensitive to the change, partly because the fall in ale consumption reduced the sum collected from the town's grant of twopence on a pint of ale. In Dundee this grant raised only £326 in 1791 compared with £500 in 1745, despite an increase in population. The minister complained that:

"... malt liquor here has been so much debased that it ceases to be the drink used in social meetings, or for refreshments from the fatigues of labour; and the people deprived of their ancient, exhilarating, and wholesome beverage, have recourse to intoxicating and enervating spirituous liquors..." 3.

From Stirling the parish minister appealed for a review of the revenue laws, for:

"by them, the people have been in a manner compelled to use spirituous liquors, for want of wholesome beer. The present mode of gauging the brewer, and of farming the duties to the distiller has the unavoidable effect of ruining the former, and encouraging the latter. The consequence is that the brewery, in most parts of Scotland, produces a thin vapid sour stuff, under the name of small beer, which is all that the common people can get for their money, unless they go to English porter, now become the beverage of the more opulent. The poor labourer, finding that the beer he purchases, neither warms, nor nourishes him, flies unavoidably to ardent spirits, now selling at a very reduced price..." 4.

An objection to the argument that the malt tax destroyed Scotch ale might be that malt is used in distilling, and why therefore was whisky not equally affected? The answer is twofold and reflects the very different nature of the distilling industry as it was practised in different areas of Scotland. Neither in the Highlands nor the Lowlands was taxation a very serious matter for distillers up till the 1780s. In the Lowlands excise duty was collected by a system of survey. This involved periodic visits by a riding officer to a distillery, and depended for its success on the honesty of the distiller in returning all his output for duty purposes. As well as surveying distilleries, the excise officer in the Lowlands was frequently respons-

3. The Statistical Account of Scotland (1792-99), Vol. 8, p. 221 hereafter referred to as O.S.A.
sible for collecting glass, paper, soap and salt duties, all of which made him a much harassed man and gave great scope for fraudulent production. Highland distillers, on the other hand, were sufficiently isolated until after the '45 to evade taxation, and to distribute their illicit whisky south of the Highland area. Certainly, by the 1790s illicit Highland whisky had secured a considerable reputation in Lowland cities for its excellent quality. Indeed, as will be argued, its very excellence was due to the craft industries freedom from the excise. Although there was a considerable volume of illicit spirit produced in the Lowlands, Edinburgh is reputed to have had 400 illicit stills as opposed to only eight licensed in 1777,\(^5\) tighter excise control sharply curbed this by the end of the century. It is then, in the licensed distilleries, that the answer for the failure of the malt tax to damage whisky consumption must be sought. In the large industrialised Lowland distilleries, whisky was made from a mash which contained only a small proportion of malted barley. From sheer empirical experiment the distillers established what science was later to confirm,\(^6\) that so long as a small proportion of the mash consists of malted barley, the diastase enzyme in the malt is quite sufficient to convert the starch in the raw (unmalted) grain into saccharine matter. By cutting back on malt the distillers offset the tax. It certainly appears to have altered the product – as did the rapid distillation techniques with their poor fractionation which were also adopted to save tax – but the cheapness of the product, and its consumption, along with cordials and other flavouring matters such as British brandy and rum, probably saved it from the fate of debased beer.

The parish minister of Stirling appealed for a review of the revenue laws as indeed did many other contributors to the Statistical Account. The Account was undertaken between 1792 and 1799, and in 1798 one of the most far-reaching and fundamental enquiries into the revenue laws and the distilling industry in Scotland got under way. The Select Committee was given the task of enquiring into the rate of duty:


\(^6\) The Clows quote Accum's reference in his 'A Treatise on the Adulteration of Food' p.21 to a Dr. Irvine as the instigator of this method, but the evidence of the distillers to the 1798-99 enquiries suggests a much cruder empiricism.
"... as proper to be imposed in the Highlands, or in any district between those and the Lowlands, so that the same shall bear as fair and just a Proportion as can be settled to the Duty now existing on the Contents of the Stills in the Lowlands..."

with due regard to

"... the Quantity which may be distilled from Stills of given dimensions, and the Whole of Costs and Charges attending the same, whether for Materials, Fuel, Labour or incidental charges; having in view at the same time, the Quality of Grain, and the Quality and consequent Value of Spirits produced..."

Why was an enquiry into the distilling industry and the excise system necessary at all? To answer this it is necessary to understand the development of the excise duty in Scotland. Under Article 7 of the Treaty of Union between England and Scotland, the same level of excise was to be imposed in both countries. In 1736 the Gin Act designed to supress excessive gin drinking was passed. Scottish malt spirits were excluded from the Gin Act, which created an immediate difference in the levels of excise. The Gin Act was repealed in 1743 but the Scots exemption remained. The difference in the level of duties was always added to Scotch spirits for export to England. So long as Scots distillers did not export spirits to England this system remained unquestioned, but in 1777 2,034 gallons were sent south of the border. On as small a scale as this no great damage was done to the English distillers' own trade. By 1780 over 34,000 gallons were exported and four years later this figure had expanded to 427,498 gallons. With English consumption levels around the two million gallons mark, Scottish exports of almost half a million gallons hit hard. Complaints by English distillers were one source of pressure on the existing excise laws.

7. Papers relative to the Distillers in Scotland (1798) p.3. The exact reference for the Select Committee of 1798 and 1799 is: B.P.P. First Series, Vol. XI, pp.319-804. Two Reports from the Select Committee on the Distillery in different parts of Scotland, and on the best mode of levying and collecting the Duties upon the Distillation of Corn Spirits in Scotland. The Select Committee's investigations were published in two volumes for Sessions 1798 and 1799 with the Report and the Papers presented to the Committee split between the two volumes. Hereafter the Select Committee is cited as either Report (1798), Papers (1798) or Report (1799). I am grateful to Mr. G.S. Buchanan of Scottish Grain Distillers Ltd. for allowing me an extensive loan of these volumes.


9. Papers etc. (1798), Appendix 34, pp. 431.

from within Scotland itself, and it involved both the small scale Highland distiller and the large capitalist Lowland distiller. Since the 1770s spirit production had come under increasing Government surveillance in an attempt to secure the revenue. The policy was to encourage duty payments by fostering licensed distilleries. To achieve this a series of acts established a minimum still capacity of 400 gallons for licensed production, limited private stills at first to ten gallons, then to two, and finally ended the liberty of private distillation, and gave the Excise power to seize illegal stills. Given the integral role of distilling

"...in that country (the Highlands) where there are neither Trade nor Manufactures, the People depend wholly upon the Plough and on their cattle for support, both of which were greatly promoted by the Use of Private Stills..."

it was an object more easily stated than achieved. Without spirits, rent payments could not be met, as the inferior quality of Highland grain offered no market. Without the draff and dreg by-products of distilling

"...cattle must perish in a long and dreary Winter, when the Country is covered with Snow." 13.

Moreover the poverty of the people and the lack of capital made a legal sized still of four hundred gallons impossible, as did the lack of a market

"...in a country thinly inhabited at any time, and now depopulated by the Numbers of Men serving in His Majesty's Armies." 14

Bluntly stated by these petitioners, these were the facts of economic life in the Highlands. What the Highlanders sought was permission to use small capacity stills and to pay a duty on the capacity of the still "...without Survey or payment of any other duty." 15

In the Lowlands, distillers had two main complaints against the excise system. The first was the damage being done to their market from "...the destructive Right of Exemption from Duties claimed by Mr. Forbes of Culloden." 16 This was the famous Ferrinsh privilege granted to the Forbes family for their long support to the Whig cause.

11. The series of Acts were 12 George III, cap 46; 14 George III, cap 72; 19 George III, cap 50.
12. (1781) 21 George III, cap 55.
15. Papers etc. (1798) Appendix 22, p. 372.
In 1785 it was terminated and the family compensated. The second complaint was less easily dealt with. It came from the damage caused to the Lowland distillers by the output of the illicit Highland stills which was smuggled into the Lowlands. What was endangered by this smuggling was the whole Excise policy of curbing private distilling and encouraging licensed production. For the new distilleries of the Lowlands, if they were to survive commercially, could only respond in kind by themselves defrauding the revenue, and between 1780 and 1783 the instructions of the Scottish Board of Excise to its officers show an increasing concern over the frauds perpetrated in the large distilleries. More attention, for example, was paid to stocks and utensils, the transport of spirits was to be accompanied by permit, stills were to be locked and sealed during distilling, a full account was to be taken of the wash and watchmen were to be placed in distilleries where cheating was suspected. A second response by some Lowland distillers to the flooding of their home market with illicit whisky seems to have been the development of the export trade to England, and by the early eighties exports reached record heights. The English — or rather the London distillers, for only two out of the twelve English distilleries lay outside the capital — put up a barrage of protest.

From three corners then: from the Highlands, the Lowlands and London, came protests about the Excise system. A fourth source of dissatisfaction came from the Scottish Board of Excise itself which felt the survey to be an increasingly ineffectual means of levying duty. The Wash Act of 1784 was intended to please everyone. For the Scottish Board of Excise it codified "...many salutary restrictions..." which it had previously tried unsuccessfully to enforce, including the use of the hydrometer to judge the strength of spirits. In the Lowlands and England duties were lowered and laid entirely upon the wash — the fermented liquor before distillation — at a rate of fivepence per gallon on the assumption that 100 gallons of wash would yield 20 gallons of spirits i.e. 2/- per gallon. The Highlands received special fiscal status. An area demarcated as the Highland area paid duty not on the quantity of spirits produced but on the capacity of the still at 20/- per gallon of content, thus a twenty gallon still compounded to pay a licence annually of £20. This system became known as the Licence.

17. Papers etc. (1798) Appendix 25, p.379
system as opposed to the Survey.

The regional principle involved in the creation of a Highland area, or as the Lowland distillers said "the Highland exemption" was an interesting one and highlights some of the difficulties of levying taxation in what was for all intents and purposes a dual economy. The Board of Excise was quite explicit that the Act was "...for the Purpose of promoting Agriculture and Improvement, for assisting (the Highlanders) to rear and support cattle, and for accommodating inhabitants with spirits drawn from their own grain at moderate rates, so as all Pretence for the Commission of Frauds against His Majesty's Revenue may be removed." 18.

If the motive was not entirely based on unrelieved altruism, for the measure was strongly urged by the landed interest in the Highland area, it did at least seem a realistic assessment of the capacity of the Excise to maintain a survey in what was a wild, remote and not entirely law abiding area where distilling was a widespread occupation. As the measure stood it was supposed to allow for the inferior resources of the area in grain, capital, fuel and markets but even then it was still fraught with difficulties. How many distillers would be willing to take out licences when the possibility of detecting illicit distillation was relatively small, and when even if detected the punishment was trivial? How many Highlanders could afford a twenty gallon still? Could the whole Highland area be judged to have poor resources? What about the fertile straths and fringes of the Highland area? Would all the spirits produced in the area be consumed there, or would there be a repetition of smuggling into the Lowlands? Would there by anything to prevent the Highlanders drawing on Lowland grain markets? Would the Excise be able to detect violations? The answers to these questions are to be found in the increasingly restrictive regulations built around the Highland area until the termination of the Licence plan in 1801. The Wash Act also gave the Highlanders the privilege of duty free malt to encourage malt whisky production. In 1785 a restriction was placed on the amount of malt that was allowed duty free, the capacity of the still was increased to 40 gallons (no size smaller than 30 being allowed), output per still was fixed and no spirits were to be sold across the Highland line. Moreover, there were not to be more than two stills for each parish and the privilege of distilling was to be given to those included on a list made up by the heritors of the parish

18. Report (1799) etc. p.27
BEST COPY

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Poor text in the original thesis.
A General Map of Scotland distinguishing the Lowland, Highland and Intermediate Districts (1799)
which the Excise Board might veto. Eight years later, in an attempt to suppress trading exchanges across the Highland line, distilling was forbidden for two miles within the boundary and three miles from the coast. Also the purchase of Lowland grain by Highland distillers was proscribed. By 1797 it became necessary to create an intermediate area (see Map 1 and note) where duty was charged at a rate in between Highland and Lowland levels. This was designed to isolate the main market towns along the edge of the Highland area like Dunblane, Perth and Blairgowrie where a flourishing trade in illicit spirits had grown up. Like the Ice Age in reverse, the Highland area crept back North and West but with little effect on breaches of the law. The virtual collapse of the law in the Highland area was one reason for the appointment of the Select Committee in 1798.

For the rest of the explanation for the enquiry it is necessary to turn to events in the Lowland area. Here, as in England, the Wash Act granted a duty based on a presumed yield of twenty gallons of spirits to one hundred of wash. In England this remained the basis of the excise system until 1825, but in Scotland it lasted only two years. The reason given for its rapid demise in the 1798 report was that "... the exactitude needed gave (the distiller) the opportunity to elude the vigilance or purchase the connivance of the Excise Officer."19 Certainly fraudulent practices by distillers were widespread and even included an attempt by James Stein, the owner of the great Kilbaggie distillery, to allay prosecution by

Note on Map 1
As a comparison between the boundaries in the Map and the following discussion of the Highland and Lowland areas soon makes evident there is a high degree of ambiguity surrounding the exact demarcation of the Highland area. For example, in the Map most of Fife is in the Lowland area but the Excise lists (see table 2 ) put some Fife distillers in the Highland area. There is unfortunately no way of reconciling these differences. Although an exact definition of the boundaries was given to the Select Committee in 1798 by a member of the Board of Excise it does not tally with the Map which was produced in 1799. The dates of the legislation creating the boundaries were as follows:

1st. Highland boundary (red line) 25 Geo III cap.22, sect 10
2nd Highland boundary (yellow line) 33 Geo III cap.61, sect 26
3rd. Highland boundary (blue line) 37 Geo III cap.102, sect 6

Given that the Excise actually managed to bisect the market town of Elgin by drawing the line along the main street the anomalies in the map may be taken as symptomatic of the increasing confusion inherent in the excise system at the end of the eighteenth century.

19. Report etc. (1798) p.5
bribing the Solicitor to the Board of Excise with an offer of £500, but it is also possible that pressure from the English distillers desiring a tighter Scottish excise system in the face of increasing Scottish spirit exports helped to overthrow the Wash Act. In 1786 the two year old system was dropped in favour of an annual licence. The Scotch Distillery Act of 1786 extended the principle present in the Highland area from 1784, and was based on what proved to be one of the least correct assumptions in the history of British public finance: that

"...the Art of Distillation... was so fully known, that persons skilled in it could compute, with sufficient exactness, the quantity of Spirits which a Still could produce in a year, in proportion to its solid or cubic capacity..." 22.

i.e. the number of gallons of liquid it contained. In other words, all that was needed was to calculate the number of gallons any size of still could produce, decide on a duty rate per gallon, multiply by the contents of the still and that was the annual licence to be paid. On paper it was not lacking in merit. Unlike the survey system where the distiller paid duty as he produced his spirits, the licence could be paid in anticipation by instalments thus easing the distiller's financial problem. The manufacturer, once he entered his still, might be free from excise interference and the public revenue was easily ascertained. Although the Act extended the Licence system to the whole of Scotland the old reputed disadvantages of the Highland distillers were recognised in the Act by a 10/- per cubic gallon differential tax (Lowlands 30/-; Highlands 20/-). The English distillers also secured some small measure of protection under the Act for besides the equalising duties being maintained, the Scottish distillers were forbidden to export to England by land in the hope that this would curb cross Border smuggling activity, the outports and sea routes being considered more easily controlled than the long Anglo-Scottish border.

The Licence system, fine on paper, rested fundamentally on the correctness of the assumption that "...the Art of Distillation

20. Papers etc. (1798) Appendix 25, p.379
21. Act 26 George III, cap. 64
22. Report etc. (1798) p.5
was ... so fully known." Behind the calculation of the duty, which might safely be collected, lay the belief that the distiller was working at the limits of the existing technology, for it was thought that the still could only be charged and worked off once a day. How the excise arrived at this figure is not clear, but events proved it to be grossly erroneous. The Lowland distillers, who seem to have been much more technologically advanced than their Highland brethren, accepted the unoffered challenge inherent in a flat rate duty, improved their actual working organisation increasing the rates of charging and discharging their stills; re-designed their stills, adding a large head to the still - which was not counted part of the still for duty purposes - all of which lowered the rate of duty which each gallon produced bore. What became known as "working against time" well nigh broke the back of the excise system. Rapid distillation flooded the whisky markets of the licensed Highland distillers and the London distillers, and it put pressure on those who lacked the skill and capital to distil speedily, to evade the duty. A game of cat and mouse ensued with the authorities raising the duty and the Lowland distillers pushing up their output. By 1798 some Lowland distillers had cut their charging and discharging rates to eight minutes compared with the assumed once a day; whilst duty rose from £1.10.0d. per cubic gallon in 1786 to £54 twelve years later. The exact increases were as follows:

<table>
<thead>
<tr>
<th>DATES</th>
<th>LOWLANDS</th>
<th>INTERMEDIATE</th>
<th>HIGHLANDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 1786–July 1787</td>
<td>£1.10.0</td>
<td>-</td>
<td>£1.0.0</td>
</tr>
<tr>
<td>July 1788–July 1793</td>
<td>£3.0.0</td>
<td>-</td>
<td>£1.0.0</td>
</tr>
<tr>
<td>July 1793–October 1795</td>
<td>£9.0.0</td>
<td>-</td>
<td>£1.10.0</td>
</tr>
<tr>
<td>October 1795–December 1796</td>
<td>£18.0.0</td>
<td>-</td>
<td>£2.10.0</td>
</tr>
<tr>
<td>December 1796–July 1797</td>
<td>£54.0.0</td>
<td>£9.0.0</td>
<td>£6.10.0</td>
</tr>
<tr>
<td>July 1797–July 1798</td>
<td>£54.0.0</td>
<td>£9.0.0</td>
<td>£6.10.0</td>
</tr>
</tbody>
</table>

It must be remembered, however, that part of this increase was also due to the revenue necessities of the Napoleonic Wars, and despite evasion the revenue secured rose, from £71,138 in 1787 to £157,531 in 1797, though by no means in proportion to output.

24. Source: Papers etc. (1798) Appendix 6, p.255
25. Papers etc. (1798) Appendix 2, pp.185. The separate figures for the Highlands and Lowlands in 1797 were £18,834 and £138,697 respectively. A prohibition on distilling was in force from September 1795 to October 1796.
2. THE STRUCTURE OF THE DISTILLING INDUSTRY.

From the question "why was the enquiry necessary" it is worth turning to what it revealed about the "state of the Scotch Distillery" in an attempt to establish the nature and structure of the distilling industry in Scotland. In two important respects this is a difficult task. In the first place a large section of producers - the illicit distillers - were by the very nature of their activities left unrecorded in the enquiry. What evidence there is comes down in a second-hand manner, either from the excise officers who had little reason to appraise their activities objectively, or from licensed distillers who had virulently strong feelings about their dangerous commercial rivals. The second difficulty arises with respect to the Lowland distillers. This group has generally been regarded by writers as a unified one and they have been described mainly through the activities of two important distilling families - the Haigs and the Steins. It could however be argued that these families were by no means representative of the Lowland distilling industry as a whole. Certainly they figure largely in all the Excise enquiries down to 1823 but their peculiar position of enjoying what amounted to a monopoly of the Scottish whisky trade to England surely makes them unrepresentative of the main body of Lowland distillers. Both in the 1798-99 enquiry and in the 1823 enquiry the business practices of those distillers rich enough to be engaged in the English market came in for sharp criticism from their Lowland brethren. Having stated this difficulty it remains, alas largely insoluble. Although historically many of those Lowland distillers engaged only in the Scottish trade survived longer than the export distillers, the only business records - and even these relate to a minute fraction of their history - to survive (ironically due to bankruptcy) relate to the Haige and Steins. Of other important Lowland distilling families like the Harveys and the Grays of Glasgow and the Dunlops and Aitchisons of Haddington, there is a complete absence of records. Fortunately, whilst the bulk of the Lowland distillers left little by way of historical evidence, the same is less true of the Highland distiller. The acute struggle with the smuggler and the importance of the Highland distiller to agriculture meant that they received
much more attention in public investigations. Moreover, the ill-fated ventures created on the promising recommendations of the 1823 enquiry have left a good sample of bankruptcy records.

The implication of this brief review of the documentary evidence is simply this, that for the increasingly important Lowland distilleries, the answers to many of the basic questions which an economic historian would be interested in at the formative stage of an industry's development are almost wholly elusive. Thus it is virtually impossible to answer a simple question like "what groups were prepared to invest in Lowland distilleries in the eighteenth century?" Were the investors merchants or farmers? Or were they small-scale local distillers who gradually built up large-scale distilleries? If so, were they self-financed or did they draw on bank lending and trade credit? What was the part played by the landed interest in the Lowlands? Did they put up the capital for distilleries in the hope that by consuming their tenants' grain the distillery would act as a spur to agricultural improvement like the Dukes of Atholl and Sutherland did for the Highland distiller in the 1820s. It is possible to arrive at some part of the answers to these and similar questions from the available evidence but disappointingly the economic historian surveying the eighteenth century Lowland industry must admit to a deal of ignorance on these basic issues.

In a memorandum submitted to the Select Committee in 179926 John Steinn contrasted the ease with which excise duty was collected in England, where there were only twelve distilleries, with the situation in Scotland where:

"...the Distillery is in a Thousand hands. It is not confined to great Towns or to regular Manufactures, but spreads itself over the whole Face of the Country, and in every Island from Orkney to Jura. There are many that practise this Art who are ignorant of every other, and there are Distillers who boast that they can make the best possible whisky who cannot read or write, and who carry on this Manufacture in Parts of the Country where the Use of the Plough is unknown, and where the Face of an Exciseman was never seen. Under such Circumstances it is impossible to take account of its operations; it is literally to search for Revenue in the Woods or on the Mountains."

MAP 2: Number and Output of Licensed Distilleries (1798 - 99)
NUMBER of LICENSED DISTILLERIES .... I 798-99
OUTPUT of LICENSED DISTILLERIES 

x equals output in units of 50,000 gallons
Despite this universal nature of the distilling industry, it is possible to examine the major characteristics of those distillers who entered for licensed production under the 1786 Act. On the basis of the entered distillers Tables 2 and 3 (p.13 and p.14) have been drawn up to show the numbers of licensed distillers and the scale of output in the Lowlands and the Highlands, and Map 2 shows the distribution of licensed output within Scotland on the basis of the excise collection boundaries. What is immediately noticeable is the overwhelming difference in the scale of operations in the two areas. The largest output in the Lowlands - that of John Stein's distillery at Cannonmills in Edinburgh - is over forty times the size of the largest Highland distillery - that of John Thompson of the Pitcairngreen distillery in the Perth collection.

Even at the lower end of the output scale, William Menzies' distillery in Gorbals still recorded an output over twice that of Thompson's. Moreover, within these two areas the degree to which output had become concentrated in a few hands varied markedly.

**TABLE 2: SPIRIT PRODUCTION IN LOWLAND SCOTLAND (1798-1799)**

<table>
<thead>
<tr>
<th>DISTILLER</th>
<th>LOCATION</th>
<th>OUTPUT</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Stein</td>
<td>Cannonmills</td>
<td>101,158</td>
</tr>
<tr>
<td>James &amp; John Haig</td>
<td>Locharn</td>
<td>98,048</td>
</tr>
<tr>
<td>Robert Stein &amp; Co.</td>
<td>Kilbogie</td>
<td>76,340</td>
</tr>
<tr>
<td>George Myln</td>
<td>St. Clements Wells</td>
<td>57,938</td>
</tr>
<tr>
<td>John Stein</td>
<td>Kennetpans</td>
<td>51,290</td>
</tr>
<tr>
<td>Taylor &amp; Walker</td>
<td>Linton, Dunbar</td>
<td>34,291</td>
</tr>
<tr>
<td>Brown, Courlay &amp; Co.</td>
<td>Paisley</td>
<td>31,767</td>
</tr>
<tr>
<td>John Harvey</td>
<td>Yoker, Govan</td>
<td>24,883</td>
</tr>
<tr>
<td>John Bald</td>
<td>Carstairs, Ailawa</td>
<td>24,819</td>
</tr>
<tr>
<td>Charles Stein</td>
<td>Huttonburn, Milnathort</td>
<td>23,893</td>
</tr>
<tr>
<td>John Philp &amp; Co.</td>
<td>Doll, Ailawa</td>
<td>22,977</td>
</tr>
<tr>
<td>James Millar</td>
<td>Craigend, Stirling</td>
<td>17,253</td>
</tr>
<tr>
<td>Henry Scotland &amp; Co.</td>
<td>Dunfermline</td>
<td>16,305</td>
</tr>
<tr>
<td>Adam Dawson</td>
<td>Bonnytown, Linlithgow</td>
<td>16,139</td>
</tr>
<tr>
<td>David Cassels</td>
<td>Kepp, Stirling</td>
<td>15,162</td>
</tr>
<tr>
<td>George Simpson &amp; Co.</td>
<td>Lamsbmill, Kirkliston</td>
<td>14,843</td>
</tr>
<tr>
<td>Peter Wright</td>
<td>Paisley</td>
<td>14,558</td>
</tr>
<tr>
<td>Blair &amp; Martin</td>
<td>Greenock</td>
<td>13,584</td>
</tr>
<tr>
<td>Jean Buchanan</td>
<td>Cowie, Jannockburn</td>
<td>13,264</td>
</tr>
<tr>
<td>Elizabeth Harvie</td>
<td>Gallowhill, Paisley</td>
<td>12,868</td>
</tr>
<tr>
<td>Duncan, Montomerie &amp; Co.</td>
<td>Inverkeithing</td>
<td>12,772</td>
</tr>
<tr>
<td>William Haig</td>
<td>Kincaple, St. Andrews</td>
<td>12,489</td>
</tr>
<tr>
<td>Robert Menzies &amp; Co.</td>
<td>Paisley</td>
<td>12,128</td>
</tr>
<tr>
<td>James McFarlane</td>
<td>Paisley</td>
<td>11,984</td>
</tr>
<tr>
<td>Daniel McFarlane</td>
<td>Paisley</td>
<td>11,708</td>
</tr>
<tr>
<td>William Glen</td>
<td>Maina, Linlithgow</td>
<td>11,695</td>
</tr>
<tr>
<td>Harvie &amp; Co.</td>
<td>Paisley</td>
<td>11,399</td>
</tr>
<tr>
<td>Robert Spears</td>
<td>Kirkaldy</td>
<td>8,431</td>
</tr>
<tr>
<td>Millar, Baird &amp; Co.</td>
<td>Wallacepaw, Boness</td>
<td>7,615</td>
</tr>
<tr>
<td>J. &amp; T. Burns</td>
<td>Hamilton</td>
<td>7,024</td>
</tr>
<tr>
<td>William Menzies</td>
<td>Gorbals</td>
<td>5,026</td>
</tr>
</tbody>
</table>
### Table 3: Spirit Production in Highland Scotland (1798–1799)

<table>
<thead>
<tr>
<th>Distiller</th>
<th>Location</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Thompson</td>
<td>Pitcairngreen, Perth</td>
<td>2,398</td>
</tr>
<tr>
<td>William Paterson</td>
<td>Callender</td>
<td>2,345</td>
</tr>
<tr>
<td>George Waddel</td>
<td>Wetzel, Perth</td>
<td>2,155</td>
</tr>
<tr>
<td>Lyon, Donald &amp; Co.</td>
<td>Inverary, Aberdeen</td>
<td>2,074</td>
</tr>
<tr>
<td>Alexander McLeish</td>
<td>Cultochleodoch, Methil</td>
<td>1,890</td>
</tr>
<tr>
<td>Humphry McFarlane</td>
<td>Rohean, Dumbarton</td>
<td>1,821</td>
</tr>
<tr>
<td>William Walker</td>
<td>Jackabank, Montrose</td>
<td>1,818</td>
</tr>
<tr>
<td>Donald Allan</td>
<td>Finden, Ferrintosh</td>
<td>1,584</td>
</tr>
<tr>
<td>Donald Murray</td>
<td>Drumcuden, Ferrintosh</td>
<td>1,561</td>
</tr>
<tr>
<td>John McInnes</td>
<td>Hill Drummond, Methil</td>
<td>1,543</td>
</tr>
<tr>
<td>John Robeson</td>
<td>Dunverny, Ferrintosh</td>
<td>1,526</td>
</tr>
<tr>
<td>Alexander Hanson</td>
<td>Old Aberdeen</td>
<td>1,523</td>
</tr>
<tr>
<td>James Dunro</td>
<td>Dalney, Milton, Ross</td>
<td>1,513</td>
</tr>
<tr>
<td>Robert Simpson</td>
<td>Ryesfield, Ferrintosh</td>
<td>1,488</td>
</tr>
<tr>
<td>Malcolm Mcgrigor</td>
<td>Clathrick, Crieff</td>
<td>1,476</td>
</tr>
<tr>
<td>John Buchan &amp; Co.</td>
<td>Crieff</td>
<td>1,466</td>
</tr>
<tr>
<td>Christian Mcgraw</td>
<td>Tornabuiag, Ferrintosh</td>
<td>1,418</td>
</tr>
<tr>
<td>William Bennerman</td>
<td>Tulibardine, Fife</td>
<td>1,417</td>
</tr>
<tr>
<td>Robert Murray</td>
<td>Hartfield, Tain</td>
<td>1,400</td>
</tr>
<tr>
<td>Malcolm Mcfarlane</td>
<td>Aberfoyle, Callendar</td>
<td>1,332</td>
</tr>
<tr>
<td>James McLaren</td>
<td>Callendar</td>
<td>1,324</td>
</tr>
<tr>
<td>William Fair &amp; Co.</td>
<td>Barrenpark, Rothesay</td>
<td>1,237</td>
</tr>
<tr>
<td>Donald Fraser</td>
<td>Drumacherney, Inverness</td>
<td>1,191</td>
</tr>
<tr>
<td>George McAndrew</td>
<td>Torrich, Inverness</td>
<td>1,114</td>
</tr>
<tr>
<td>James McKiddy</td>
<td>Balblair, Ross</td>
<td>1,109</td>
</tr>
<tr>
<td>Alexander McArthur</td>
<td>Polnach, Inverness</td>
<td>1,071</td>
</tr>
<tr>
<td>Henry Bannerman</td>
<td>Tulibardine</td>
<td>1,061</td>
</tr>
<tr>
<td>James McPherson</td>
<td>Ardiseer, Inverness</td>
<td>1,051</td>
</tr>
<tr>
<td>James McBeath</td>
<td>Hempriggs, Wick</td>
<td>1,028</td>
</tr>
<tr>
<td>John Clark</td>
<td>Nairn</td>
<td>1,027</td>
</tr>
<tr>
<td>Alexander Fraser</td>
<td>Inverness</td>
<td>1,014</td>
</tr>
<tr>
<td>Hugh McDonald</td>
<td>Culduthel, Inverness</td>
<td>1,004</td>
</tr>
<tr>
<td>Mrs. Somerville</td>
<td>Down, Crieff</td>
<td>1,006</td>
</tr>
<tr>
<td>James Cumming</td>
<td>Bught, Inverness</td>
<td>981</td>
</tr>
<tr>
<td>George Ross</td>
<td>Midfearn, Tain</td>
<td>948</td>
</tr>
<tr>
<td>Robert McKay</td>
<td>Killichatton Hill, Bute</td>
<td>898</td>
</tr>
<tr>
<td>Duncan Mcconnochy</td>
<td>Rothesay</td>
<td>795</td>
</tr>
<tr>
<td>John Clune</td>
<td>Swadale, Thurso</td>
<td>768</td>
</tr>
<tr>
<td>John Watt</td>
<td>Millfield, Banff</td>
<td>678</td>
</tr>
<tr>
<td>Alexander Archer</td>
<td>Mill of Alter, Forres</td>
<td>659</td>
</tr>
<tr>
<td>Alexander Souter</td>
<td>Markasle, Forres</td>
<td>622</td>
</tr>
<tr>
<td>John Leith</td>
<td>Muckleswartie, Insch</td>
<td>616</td>
</tr>
<tr>
<td>William Murray</td>
<td>Greenland, Thurso</td>
<td>615</td>
</tr>
<tr>
<td>Hugh Campbell</td>
<td>Callender</td>
<td>611</td>
</tr>
<tr>
<td>Simon Ross</td>
<td>Glafield, Tain</td>
<td>560</td>
</tr>
<tr>
<td>William Ferrier</td>
<td>Cardross, Dumbarton</td>
<td>552</td>
</tr>
<tr>
<td>Daniel Christie</td>
<td>Dalvey, Forres</td>
<td>549</td>
</tr>
<tr>
<td>James Steven</td>
<td>Blackhills, Forres</td>
<td>514</td>
</tr>
<tr>
<td>Duncan Anderson</td>
<td>Ardincospie, Argyll North</td>
<td>454</td>
</tr>
<tr>
<td>John McLean</td>
<td>Milliesich, Inverness</td>
<td>361</td>
</tr>
</tbody>
</table>
TABLE 41  OUTPUT CONTROL IN LOWLANDS AND HIGHLANDS (1798-92)

<table>
<thead>
<tr>
<th></th>
<th>LOWLANDS</th>
<th>HIGHLANDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of licensed distillers</td>
<td>30</td>
<td>58</td>
</tr>
<tr>
<td>Output of licensed distillers</td>
<td>782,738 galls</td>
<td>61,279 galls</td>
</tr>
<tr>
<td>Output of ten largest distilleries</td>
<td>525,227</td>
<td>19,189</td>
</tr>
<tr>
<td>% of total output produced by the ten largest distilleries</td>
<td>67%</td>
<td>31%</td>
</tr>
<tr>
<td>Output of Stein and Haig distilleries</td>
<td>364,018</td>
<td>-</td>
</tr>
<tr>
<td>% of total Lowland output from Stein and Haig distilleries</td>
<td>47%</td>
<td>-</td>
</tr>
</tbody>
</table>

27. i.e. the administrative unit for gathering in duties. Unfortunately the boundaries of these are not known exactly, nor is the extent to which they altered during the period.

28 & 28a.


Papers (1799) Appendix (B.2) pp. 200-201.

Note:

1. The periods covered by the account vary between distillers owing to the different times at which they renewed or commenced working. The earliest start is from 6th July, 1798; but the Lowland distillers in general began under the Act 38 Geo III cap. 92 at the 10th October, 1798 and the account was brought down to 10th February 1799.

ii. Output is measured in scale of 1 to 10 over proof.

iii. Spirits produced - this column in the report is covered by the note that "This column is made up according to the quantities ascertained by the Officers' Accounts with the distillers returns. It is apprehended however that in many instances both are very far short of the Truth" because of fraudulent concealment.
The wide divisions which these statistics highlight between the two sections of the distilling industry make it worthwhile to examine the Lowland and Highland distillers separately. The impression got from the 1798 and 1799 reports is one of a Lowland distilling industry and a Highland distilling craft. As a witness from Perth\(^29\) succinctly described it:

"The Lowland Distillers, being more the most part Proprietors of their Works, have erected them on a greatly improved and commodious Plan, whereby, and by other Means, they can work them Six Times as often as we do; and can draw Five Gallons at least from a Boll\(^30\) more than we can; and although the spirits they make are inferior to ours, they get it sold, having the command of all the great Towns and most populous Country, as well as a Foreign Market. In this respect we are also far behind them."

In four respects the Lowland distilleries stood out from the Highland ones: in ownership, output, quality of spirits and markets. The last was probably the greatest advantage for the Lowland distillers' market was urban and growing, unlike the Highlanders which was local and badly circumscribed by illicit distillers and smugglers of Dutch Geneva.\(^31\) Also some of the Lowland distillers had "...a Foreign Market..." in England, with sales of grain spirit for rectification into gin. One of the great works enjoying these advantages was that of John Stein - a relative of the Haig family by marriage - at Cannonmills. It was described to the enquiry\(^32\) by Adam Whyte, the Surveyor of Excise in Edinburgh. The distillery consisted of eight stills, the larger wash stills ranging in size from 129 to 198 gallons and designed so that at least a third of the wash to be distilled was confined in the head of the still thus avoiding duty. Stein had brought the charging and discharging of the stills down from 20 to 8 minutes, and "...at that work four men are placed at each Still, and every Hand knows his duty, and is ready to execute the same, as a set of Artillery men firing off a...

30. A boll was a Scotch grain measure. It was not uniform throughout but varied locally. A conversion table is included in the 1799 Report, Appendix 30.
31. Gin. Smuggling foreign spirits was another burden which the hard-pressed revenue men had to deal with. Mainly a peacetime activity for unemployed sailors it was more easily dealt with than internal smuggling of illicitly distilled whisky. On the activities of "numerous crews of outlawed, of foreign stout and desperate persons" see Papers (1798) Appendix 28, pp.396.
32. Papers etc. (1798) evidence of Adam Whyte, pp.91.
Field Piece." Rapid distillation involving such high organisation of labour appears to have been the hallmark of the Cannonmills distillery. It was not however a costless activity in terms of fuel, materials and product. Whyte himself had witnessed two stills being burnt out due to the rapid rise in heat needed to throw over the spirit. Coal especially was used in what appeared to observers to be a wasteful way. Worse still for the distiller was the accusation that rapid distillation, by forcing over the neck of the still the higher alcohols and compound by-products, produced a fierce and fiery spirit; as also did the shallow design of the still which when heated caused the solid matter in the wash to burn or singe and impart an unpleasant taste to the spirits. These accusations and the frequent derogatory remarks by both Highland and Lowland distillers about the respective natures of their products were to have important long run consequences for the industry, especially after the introduction of the Coffey or Patent still in 1830, but for the economic historian it raises a more acute problem, that of consumer taste.

It is only too clear that the product designated as Scotch whisky today, is very different from the whisky of 1798, or 1820 or 1890. Today's product is the result of a sophisticated distilling, stocking, blending and marketing operation which at its extreme may involve the subjugation of the contents of the bottle to the shape and design of the packaging or to the image of the consumer which extensive advertising portrays. The retail outlets available to the whisky trade are, at least in this country, the outcome of the complex social, economic and political forces which are the licensing laws. No less complex are the wants which the product satisfies.

By contrast, what is the historical situation? Whisky in 1798, whether made by Highland or Lowland distillers was the result of a process only partially understood; the difficulties which the excise system, based on existing scientific knowledge, ran into when faced with rapid improvements in technique, alone bear witness to this. The product was consumed "reeking from the still" and at times imbued with a variety of "haut and fiery gaults". Nor was the still's product drunk just as whisky for spirits formed the basis for a wide
range of additives. Distribution channels were far more widespread and less restricted than today ranging from the barter deals of peasant cultivators through sales by packmen and other itinerant merchants to the dramshops of new high density industrial centres like Paisley, or their rural equivalent, the tippling hut, and the great merchant houses of Edinburgh, Leith and Glasgow. The wants whisky fulfilled were more catholic when it was consumed by "...labourers... with a little bread for their breakfast..."33, by gentlefolk as toddy after supper, by mourners and wedding guests in what were almost ritualistic bouts of insobriety. In an age when public water supplies were either deficient or dangerous there was a good deal of sound sense in consuming a liquid which had at least been twice distilled, even if some distillers' enthusiasm for adding "...Vitriol and Oil of Almonds..."34 to give their product more flavour contributed to the stomach trouble and "...the great Head Ach..."35 supposedly inextricably linked to the consumption of Lowland spirits. Or so the North Line distillers said. Spirit drinking was also recommended as a remedy for a range of common medical ailments and certain compounds of the higher alcohols were apparently also in vogue for external application in poultice form for rheumatism.36 Daiches has argued that whisky which "...in the Highlands was always a classless drink..."37 became, by the end of the eighteenth century in the Lowlands, "...the democratic drink, the people's drink..." Even if this generalisation is accepted, and even if subjective factors behind the widespread consumption of whisky are recognised, it is still essential in order to understand the differing success of the licensed distilleries in the Lowlands and the Highlands to be in a position to relate consumer taste to production methods in the two areas.

33. O.S.A. Vol. 8, pp.294.
34. 1798 Report, Minutes of Evidence of James Millar, Craigend, Stirling p. 46.
35. 1798 Report, Minutes of Evidence of John Stewart, Blair, in Athol pp.50.
36. I owe these points an anonymous publication, The Compleat Distiller (possibly published in 1793) in the possession of McKinlay and Birnie's, Inverness. The rheumatic cure was still in existence in 1907 to judge from a letter to the North British Distillery Company requesting "a pint of foreshots."
FIGURE 1: Lowland Still

FIGURE 2: Highland Still
The Wash used in making the Experiments was that Proportion having been found by Experience to

In each Charge the whole Substance was wrought.

To each Charge of Wash about One Ounce of an Ounce of Castile Soap was used for each Twelve Wash, new-made Wash requiring more than that.
How did the different distilling methods in the Highlands and Lowlands alter the nature of the product? The accusation by the Highland distillers that Lowland spirits were "fierce and fiery" was based both on raw materials and on distilling practice. Highland distillers worked from an all malt mash and the flavour of the malt was reputed to produce a pleasant tasting spirit. Their malt was also dried in a peat heated kiln which flavoured the malt and added a tincture to the spirits, a point, which Frederick Maclagan, the agent and traveller for Haig's of Lochrin, thought was

"...particularly convenient for the Highlanders, for it is not in their Power to manufacture it without that Flavour, not merely on Account of their drying their Malt with Peats, but from their constant Use of that Species of Fuel in their Families, which gives the same Flavour to their Milk, their Butter, their Cheese, their Meal and their Bread, even their Wooden Utensils and very clothes being affected with it..." 38.

Even more interesting, and this shows the force of consumer preference for Highland spirit, was that when Maclagan had made this type of whisky in Perth the spirit dealers asked to remove it by night from the distillery to persuade customers it was smuggled. Smuggled spirits were more popular, not simply because they broke the law, but also for substantial technological reasons. The illicit distiller and the licensed Highland distiller both distilled from the traditional deep still and they worked slowly from a weak wash. This type of still is Figure 2. in the diagram. Two advantages were attached to this method of working; the contents of the still did not become burnt by the heat of the fire and the spirit impregnated with a singed flavour; and the distillate was more easily split into its different fractions. Rapid distillation on the Lowland pattern with thin bottomed stills (Figure 1. in the Diagram shows an early model) was supposed to breach both these conditions. On the other hand still designs in the Lowlands (See Figure 3) underwent considerable experiment and improvement to overcome these problems. William Corbet of the Glasgow Excise office gave expert testimony to the enquiry on this subject.

38. Report etc. (1798) Evidence of Frederick Maclagan, Appendix 13, pp.307
"...Heat a Still too much, instead of distilling it throws off boiling liquor, and the Operation is thereby totally destroyed; hence arises the Prodigious Difference in the Operation of the Lowland and Highland Stills — the former by means of its capacious and elevated Head, is capable of bearing a great Degree of Heat without the Risk of boiling over, or, as the Distillers Phrase is, running foul; a proportional Quantity of Steam is generated, and it has sufficient room to form a distinct Separation with the Liquor in the Still: The Highland Still has no such scope, and consequent Advantage; an equal Degree of Heat, by making it run foul, would destroy the Operation; it is therefore necessary to apply only a low Degree of Heat, and the Quantity of Steam produced must be proportionally small..." 38a.

Other innovations were also designed to achieve the same end. Soap was placed in the still to prevent the bubbles and foam from the boiling wash, which gather at the neck of the still, from flowing over. Rummaging chains inside the still (the handle in Figure 3 was used to turn the rummagor) kept the solid matter in the wash from sticking to the hot base of the still and prevented burning. The sort of organisational efficiency which this method demanded to prevent the product from being spoilt was formidable. Here again is Adam Whyte of Cannonmills distillery on the subject:

"In this work there are Two Stills generally used for distilling Wash; these stills contain 55 or 56 gallons in the body, and 29 in the Head of each, are charged with Wash up to the sight hole, which may be within 4 or 5 gallons of the full contents of the body. A very strong fire is put into the furnace below the Stills; there are a quantity of Iron Chains affixed to a spindle, which a Man, who stands at the top of the furnace, turns around, and the chains sweep round on the Bottom of the Inside of the Still all the time when the Wash is coming to the boil, and when the spent wash is running off. If the Wash should rise up too far in the act of boiling, and which is known by a man who keeps striking the Head of the Still with a stick, he gives the Alarm to another man, whose sole business is to attend the furnace, and who instantly dashes a pailful of cold water on the bottom of the still, and on the fire, which causes the Wash to fall down, the Fire is then stirred up to a very strong heat, and this process goes on till the Steam is condensed and the Low Wines run off clear. There is another man who attends at the end of the worm, where the Low Wines run off into a receiver, who is called the Ball Man, and who with an instrument examines the Low Wines as they run off; and when he finds there is no more spirit remaining in them, calls out let go, upon

"which every man who is employed about the Still is at his post. He who attends the discharge cock turns it about, and the spent wash runs instantly off, which done, he gives the Signal to the Man on the Top of the furnace, who having opened the sight hole, turns the Charging cock, and fills the still as before with fresh wash; the furnace man dashing in coals, and the other man turning all the time the iron work round, and the same process goes on again Day and Night, and the discharging of the Spent Wash, and renewing the Charge, is done in a few seconds." 39.

The Low Wines still was apparently worked in such the same way without stopping the feints, spirits, and foreshot from being satisfactorily separated. All carried out as Whyte said "... in the Twinkling of an Eye." This description puts distilling on to what sounds almost like a continuous process, the great barrier of charging and discharging being cut to a minimum. It is disappointing that Whyte only described the operations round the still, for production on this scale must have involved an extensive investment in capacity in the preliminary process of malth, mashing, and fermenting for distilling to have gone on at such a pace. Entrepreneurial control to ensure that batches of fermented liquor were not wasted by bottlenecks in distilling must also have been impressive.

Just as it is not possible to say how widespread this style of rapid distillation was, it is equally impossible to find out whether all rapid distillers were able to maintain the quality of their product. Perhaps it was not even vitally important that they did so, for it is quite clear that corn (or raw grain) spirits served a different market from malt. It is this which makes it difficult to recognise Daichis' democratic drink in the Lowlands, for corn spirits being cheaper are "...chiefly drunk by the Dram Drinkers, who wish to get drunk at the cheapest rate, and whose corrupted Stomachs prefer the harshest spirits." 40 Malt whisky on the other hand, as a more expensive product, was taken by "...the better sort of people..." as Abraham Newton, an Edinburgh spirit dealer, told the enquiry. 41 At this stage of the develop-

40. Report etc. (1798) Appendix 1 (A) pp. 60
41. Report etc. (1798) Evidence of Abraham Newton, pp. 74-75. The division of the market can only be clearly seen in the Lowlands. There was some sale for grain spirits in the Highlands but malt spirits, because of a widespread supply from illicit distillers, were not considered a luxury as in the Lowlands.
ment of a mass consumer market price was more important than quality. The ability of the Lowland distillers to evade the malt tax by substituting raw grain for malt in their mashes, and to curtail the licence duty by rapid distillation was vital to their successful development. Admittedly, quality was not entirely irrelevant - the close process control outlined above indicates this - but it was the ability to alleviate the fiscal burden that was the most important factor in enabling the Lowland distillers to expand their market. Other advantages attached to the location of the distilleries in the Lowlands were "...good grain, good roads and conveyances, freedom to send spirits anywhere and coals for fuel."42 On the other hand the licensed Highland distiller, despite the relatively lower duty levied in the Highlands, competed with the illicit distiller and if this were not a sufficiently formidable barrier to his commercial success, had still to surmount bad road communication, both for grain and spirits, the poverty of the consumer, and the lack of coal which necessitated the use of peat or turf "...which retards distilling operations and is expensive in labour and time."43 One other raw material, yeast, was also more expensive for the Highland distiller. The main source of supply for this was the brewing industry and the Lowland distillers relied heavily on imported yeast from the London yeast men.44 Carriage costs were high in relation to the value of the yeast and rose markedly on inland journeys. Unlike the Lowland distillers, the Highland distillers do not appear to have supplemented their sales revenue by selling off surplus yeast to bakers, brewers or fellow distillers. When the price of spirits was low some Lowland distillers extracted more yeast from the fermenting vessels making up the low profit margin on spirits with yeast sales.45 Another

42. Papers etc. (1798) Letter from Caithness Collection, pp.37-39.
43. Papers etc. (1798) Letter from Caithness Collection, pp.38-39
Given the wide difference in spirit duty between the Highland and Lowland areas (£9 as opposed to £54 in 1797/1798) it may be wondered why Lowland distillers did not re-locate themselves in the Highland area. Several factors account for the absence of any attempts to move to take account of the lower duty: 1. despite the duty differential the further north a distiller tried to operate the more likely he was to be undercut by illicit output; 2. producers in the Highland and Intermediate areas were not allowed to send spirits out of the area; 3. distance from urban markets would have made re-location unattractive even without a ban on sales outside the area; 4. "working against time" made a flat rate duty of little consequence to the price of spirit and no substantial gain would have been secured by moving to the lower duty area.
advantage open to the Lowland distillers lay in their sales of
draff and burnt ale for cattle feed and manure. The trade in
by-products which Mathias has described for the English brewing
industry 46 is just as evident in the Scottish Lowland distilling
industry. Dundashill distillery in Paisley, for example, fed a
1,000 milk cows on draff, and Alexander Fairly, the overseer of
Stein's workmen at Kilbogie, claimed that "...if it was not for the
cattle and the farm, he (Stein) would not carry on the business."47
Highland distillers took less advantage from by-product sales. This
may have been due to the lack of urban food markets for draff-
fattened cattle though it is hard to believe that the Highland
cattle breeding trade would not have provided a market. The evidence
of Thomas Ross, the excise collector in Oban, that in North Argyll
"...not one of them everthinks of feeding cattle or swine with their
Grains but sells it at a very low rate: and when there are no
purchasers it is lost entirely to them, as I myself frequently
seen both thrown to the Dunghill.." perhaps confirms his interesting
suggestion that "...indeed the Duty has hitherto been so low, that
there was no Spur to Industry or Exertion."48

In the absence of smugglers and natural handicaps the bene-
ficial spur of a high duty might have worked. Instead, as duty
rose and the Highland distiller was unable to raise his price to
cover it, the number of licences taken out tailed off. The remainder
bemoaned their fate as

"...the poor Highland Distiller who was cramped in every
Stage of the Business, being confined to a 40 gallon
Still - to Bear, the growth of his poor bleak district -
and the sale of his spirits confined to the Highland
District..." 49.

or drew envious comparisons between the Lowland and North line
distillers, whose limited size of stills

44. Customs and Excise Records, Miscellaneous Bundles, No. 16. See
also P. Mathias, The Brewing Industry in England (1700-1830),
(1959), pp.43-51.
45. The more yeast which is skimmed off in fermentation the lower is the
yield of spirits.
46. P. Mathias, "Agriculture and the Brewing and Distilling Industries
in the 18th Century." in the Econ. Hist. Rev. 2nd. Series, Vol.5,
(1952).
48. Papers etc. (1798) Letter from Argyll North collection, pp. 45-49.
49. Papers etc. (1798) Memorial by Campbeltown distillers, pp. 41-43.
"...preclude for ever the idea of any person engaging in them with a View of making a fortune, or even a decent livelihood for a genteel Family, without some other Trade or Business in the Country, and therefore the Distilling in the North line is chiefly carried on by small Farmers, with the Assistance of Sons and Servants. This observation is confirmed by Ten Years Experience of the Operation, where it will not be found that any person engaged in it have, during the Period, actually realised the small sum of £600 thereby but instances of above Twenty have become bankrupts... and many who had licences... have voluntarily resigned; while on the other hand the South line affords such superior Advantages to prosecute the Business, that immense Fortunes of £1,000 to £100,000 have been made in the course of Four or Five Years, and some of them by persons possessing no Capital or Credit, but emerging from Bankruptcy..." 50

These distinctions between the two groups of distillers are not however absolute ones. At no time could the North line, even after the Intermediate Area was established, take into account all the imperceptible shadings in relative locational advantages. Thus the Paisley distillers, meeting to answer the Excise enquiry, claimed that

"...all of the meeting have suffered very great loss from the Highland Distillers buying and raising the price of grain in their markets, and supplying their former Lowland customers with spirits at a lower rate than they can afford..."

It is surely significant that the Highland distillers complained about were situated

"...upon the Leven, in the Parishes of Cardross, and the Row, and all along the coasts of Cowall, Cantyre, Arran and Bute." 51.

for in these areas easy sea access to Lowland grain, coal and whisky markets overcame the transport problem of other Highland areas.

Nor, if the evidence of the Glasgow distillers is to be believed, did the level of technological advance suddenly sink north of the Highland line, for some distillers in Perthshire and Argyllshire had

"...acquired a degree of dexterity in working, and have Advantages little inferior to the Low Country distillers..."

50. Papers etc. (1798) Letter from North Line distillers at Dunblane, pp. 50-58.
Cantyre is now Kintyre.
including

"... a contrivance on the most approved Plan, connected with the Still head, for heating their wash, which greatly assists and forwards the Operations of Distilling". If such distilleries did exist, and it must be remembered that the Glasgow distillers were aiming to secure higher duties in the Highlands and therefore presented an optimistic view, they were well abreast of their Lowland competitors in distilling technology.

One other aspect of the Highland and Lowland distilling trades which comes out of the enquiries merits attention. This is the manner in which the Lowland distillers came together to answer the Excise enquiry. Despite the grievance of the smaller Lowland distillers who were excluded from the London market, the Lowland distillers appear more united in their approach to business problems. They show an early tradition of joint action which is not found to the same extent amongst the Highland distillers, each a small man faced with a local problem as it touches his parochial market. As will be shown, the Lowland trade assembles very soon involved themselves in sharing output and attempting to fix prices.

3. ILLICIT DISTILLATION IN THE EIGHTEENTH CENTURY

As will have become clear from the last section no small part of the problems of both the Highland and Lowland distillers and the Excise lay with the activities of the illicit distiller. Free from the pressures of the excise laws and the burden of duty payments, the illicit distiller was able to work from an all malt mash. This mash was then converted into a weak wash and distilled off slowly; all factors which resulted in a better spirit being produced. This made the illicit distiller a formidable competitor of the licensed distiller, and a destroyer of the licensing policy. Illicit distillation was not, however, a condition of uniform incidence, either by location or by time, and it is the aim of this section to answer, or rather, attempt to answer, for in the nature of the subject any definitive conclusion is not possible, the question: how prevalent was illicit distillation in Scotland by the end of the eighteenth century?

52. Papers etc. (1798) Letter from Glasgow Distillers, pp. 29-30.
MAP 3: Illicit Distilling: Excise Prosecutions, All Offences (1796)
EXCISE PROSECUTIONS - ALL OFFENCES (1796)

BY COLLECTION

Map 3

SCALE

- 0 - 25
- 26 - 50
- 51 - 75
- 76 - 100
- 101 - 125
- 201 +

Aberdeen

Teviotdale

Perth

Edinburgh

Linlithgow

Dumfries

Argyll North

Argyll South

Glasgow

Ayr

Fife

Haddington

Inverness
MAP 4: Illicit Distilling - Excise Prosecutions, Private Distilling Only (1796)
If precision is lacking, there are at least some useful pointers to the extent and geographical distribution of illicit distillation within Scotland. The Excise presented an account of distillery prosecutions before Justices of the Peace to the 1799 enquiry. The figures for 1796, a year when all distilling was prohibited, and which was a bumper year for prosecutions, have been tabulated as follows:

TABLE 5 — AN ACCOUNT OF DISTILLERY PROSECUTIONS FOR PENALTIES BEFORE JUSTICES OF THE PEACE FOR THE YEAR ENDING 5TH JULY, 1796. (53)

<table>
<thead>
<tr>
<th>COLLECTION</th>
<th>Total number of Prosecutions</th>
<th>Men/Women</th>
<th>Private Distilling</th>
<th>Still-making</th>
<th>Grain offences</th>
<th>Unlicensed retailing</th>
<th>Aiding</th>
<th>Other</th>
<th>Amount/Value Fined</th>
<th>Actual Sum Recovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aberdeen</td>
<td>155</td>
<td>148/7</td>
<td>149</td>
<td>4</td>
<td>11</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>£77,940</td>
<td>£ 373</td>
</tr>
<tr>
<td>Ayr</td>
<td>137</td>
<td>132/5</td>
<td>130</td>
<td>10</td>
<td>-</td>
<td>12</td>
<td>1</td>
<td>-</td>
<td>£50,010</td>
<td>£1,100</td>
</tr>
<tr>
<td>Argyll North</td>
<td>90</td>
<td>82/8</td>
<td>89</td>
<td>-</td>
<td>19</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>£47,430</td>
<td>£ 379</td>
</tr>
<tr>
<td>Argyll South</td>
<td>28</td>
<td>25/3</td>
<td>10</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>17</td>
<td>3</td>
<td>£ 9,100</td>
<td>£ 5</td>
</tr>
<tr>
<td>Caithness</td>
<td>35</td>
<td>31/4</td>
<td>29</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>3</td>
<td>£15,190</td>
<td>£ 172</td>
</tr>
<tr>
<td>Dumfries</td>
<td>4</td>
<td>4/0</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>£ 1,700</td>
<td>£169</td>
</tr>
<tr>
<td>Fife</td>
<td>40</td>
<td>37/3</td>
<td>30</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>6</td>
<td>4</td>
<td>£19,180</td>
<td>£315</td>
</tr>
<tr>
<td>Glasgow</td>
<td>54</td>
<td>54/0</td>
<td>50</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>1</td>
<td>£25,290</td>
<td>£ 672</td>
</tr>
<tr>
<td>Haddington</td>
<td>2</td>
<td>2/0</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>£ 1,000</td>
<td>£ 32</td>
</tr>
<tr>
<td>Inverness</td>
<td>203</td>
<td>199/4</td>
<td>154</td>
<td>7</td>
<td>32</td>
<td>8</td>
<td>2</td>
<td>72</td>
<td>£92,430</td>
<td>£352</td>
</tr>
<tr>
<td>Linlithgow</td>
<td>174</td>
<td>172/2</td>
<td>136</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>12</td>
<td>27</td>
<td>£74,540</td>
<td>£1,388</td>
</tr>
<tr>
<td>Perth</td>
<td>78</td>
<td>76/2</td>
<td>68</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>10</td>
<td>£36,750</td>
<td>£ 464</td>
</tr>
<tr>
<td>Edinburgh</td>
<td>37</td>
<td>29/8</td>
<td>8</td>
<td>-</td>
<td>-</td>
<td>28</td>
<td>-</td>
<td>6</td>
<td>£ 5,420</td>
<td>£ 48</td>
</tr>
<tr>
<td>Teviotdale</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

On the basis of the table two maps have been prepared. The first (map 3) shows the distribution of Excise prosecutions for all offences in 1796, and the second (map 4) shows the distribution of prosecutions for private distilling. The difference between the two maps is that offences like unlicensed still-making and retailing, which were predominantly Lowland offences, have been excluded from map 4. So too have offences included as 'other' in Table 5. This designation covers a variety of offences such as harbouring smuggled spirits (most prevalent in those collections like Perth and Linlithgow whose northern boundaries fringed on the Highland line), attack—

53. The source for Table 5 is the Report etc. (1799), Appendices A1, A3, A4, A6, A7, A9, A10 and A12.
ing or "deforning" the Excise officers, being in possession of
distilling materials and/or equipment, and running off with the
still (though apparently not fast enough.)

Both Maps show the widespread breaches of the excise laws
throughout Scotland. Only the Teviotdale collection, which in­clud­ed Roxburgh... and Berwickshire reported no prosecutions, which
seems surprising in view of the cross-border smuggling trade, 54
as does the low level of prosecutions in south-west Scotland. That
Linlithgow (a collection which included towns like Dunblane) with
174 prosecutions should be second to Inverness with 203 suggests
the need for caution in interpreting the figures for Highland
collections. The relatively more effective nature of the preven­
tive work of the excise in the Lowlands means that fewer breaches
escaped detection. The figures for Highland collections are pro­
bably the very tip of a large undetected illegal iceberg. If the
figures for the seizure of illegal stills are anything to go by
Lowland Scotland was being brought under much more effective control
in the 1790s:

**TABLE 6: ILLEGAL STILLS, SEIZED AND CONDEMNED 55**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>LOWLANDS</th>
<th>HIGHLANDS</th>
<th>YEAR</th>
<th>LOWLANDS</th>
<th>HIGHLANDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1780</td>
<td>169</td>
<td>253</td>
<td>1790</td>
<td>162</td>
<td>296</td>
</tr>
<tr>
<td>1781</td>
<td>927</td>
<td>767</td>
<td>1791</td>
<td>79</td>
<td>259</td>
</tr>
<tr>
<td>1782</td>
<td>819</td>
<td>1122</td>
<td>1792</td>
<td>91</td>
<td>158</td>
</tr>
<tr>
<td>1783</td>
<td>857</td>
<td>667</td>
<td>1793</td>
<td>62</td>
<td>193</td>
</tr>
<tr>
<td>1784</td>
<td>127</td>
<td>524</td>
<td>1794</td>
<td>33</td>
<td>175</td>
</tr>
<tr>
<td>1785</td>
<td>779</td>
<td>992</td>
<td>1795</td>
<td>25</td>
<td>168</td>
</tr>
<tr>
<td>1786</td>
<td>566</td>
<td>479</td>
<td>1796</td>
<td>464</td>
<td>799</td>
</tr>
<tr>
<td>1787</td>
<td>560</td>
<td>725</td>
<td>1797</td>
<td>58</td>
<td>859</td>
</tr>
<tr>
<td>1788</td>
<td>149</td>
<td>434</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1789</td>
<td>192</td>
<td>402</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Before looking at local variations in the figures in Table 5,
two other points may be made. The prosecution figures have been
broken down according to the sex of the offender. Whilst there were
quite a lot of women prosecuted, the numbers are not quite in agree­
ment with the statement that

"...it is well known that the Greatest Part of the Distilla­
tion in the Highlands is carried on by women, who are fit
for, or employed in nothing else..." 56.

55. The source for Table 6 is the Report etc. (1798), Appendix 36, p. 432.
The last two columns also indicate the prevailing unreality of the punishments for breaches of the law. The column showing the total of the maximum possible fines which could have been awarded bears little relationship to the column showing the amounts actually recovered. The problem of an adequate punishment for a poor peasant tenantry was a hard one. If the Justices fined their own tenants, the tenants were unlikely to be able to afford their rents and the Justices suffered. If, on the other hand, the tenant failed to pay the fine and was jailed, his wife and children suffered, and a peasant in prison could

"...do nothing towards retrieving his own affairs..."57

Indeed, as Colonel Sir George Mackenzie told the 1823 Commission,

"...If our tenants fall we must fall along with them..."58

This kind of extreme dependence on illicit distilling, which enabled poor quality grain to be converted into cash and rents to be paid, was very much a feature of the north and west of Scotland. The presence of illicit distilling in this area is easier to explain than the corresponding absence of illicit distilling in the south and west. In Table 5 Teviotdale and Dumfrieshir[e are the areas where least illicit distilling was carried on. Why was this? Is it simply that Excise control was stronger? There seems to have been plenty of smuggling in this area, carrying spirits from Scotland to England to profit from evading the English import duty. Dealers in places like Langholm and Coldstream were known to carry far larger stocks than could be accounted for by local consumption, but whether these stocks came from licensed or unlicensed distillers, is less certain. Philipson's articles show that by the 1830s, the preventive force on the border was much strengthened, but this is true of all of Scotland, not just the borders, and there are no indications that excise control was any better in this area in the 1790s. Nor does there appear to have been any aversion to whisky in the borders. Border ministers observed the switch from beer to whisky in their parishes as elsewhere, though if the Rev. Dr. Thomas Martin's complaints were anything to go by, the change was not welcomed.


58. The Fifth Report, etc. Appendix 50, p. 131.
"Had all the fabled ills emitted from Pandora's box been realised, they could not have produced more deplorable effects, than when whisky, of all other liquors the most subversive of the health, the industry, and the morals of the people, became so cheap and so common as to supersede the drinking of beer, the good old wholesome beverage of our fathers. Religion, morality, health and industry are the dreadful sacrifices." 59.

Neither did the area support a licensed industry. No licences were recorded in either the Dumfries or Teviotdale collections in 1798/99. 60. It is possible that the large distilleries of Paisley, Haddington and Edinburgh with their low-priced grain spirits, captured the border market and kept illicit distillation at bay. To accept this argument is to accept the failure of these distilleries to do the same thing in areas much closer to home. The licensed distilleries may, however, have helped to remove one of the causes of illicit distilling. In the Highlands illicit distilling was, as will be discussed, 61 closely related to the lack of outlets for poor quality grain and population pressure on landholdings, both of which created a need to supplement income. In the eastern Borders, especially in the Berwickshire Nether, some of the best quality distilling barley was grown. A high demand from urban distilleries gave the tenants sufficient income without resort to illicit distilling. The same was also true of the south and west with the distillers of Paisley and Glasgow keen buyers of local grain. It may also be the case that in the Borders population growth was less marked and holdings consequently larger than in the Highlands which enabled the tenantry to thrive without cash from illicit distilling. Much of the above argument is essentially speculative and these points will be developed in relation to the large-scale illicit distilling which sprang up after 1800. At this stage these arguments underline the need to qualify statements about the universal nature of distilling with reference to local conditions.

In 1796 the Board of Excise in Scotland effected 1,037 prosecutions for breaches of the excise laws. Eighthundred and fifty eight of these were for private distilling. Also in that year excise officers carried out 1,634 seizures which yielded almost five and a

60. Report etc. (1799), Appendix (B.2), pp. 200-205.
61. See Chapter 2.
half thousand gallons of spirits and one and a half thousand stills, as well as a vast quantity of assorted distilling equipment such as boilers, coppers, worms, tubes and tubing. How much more illicit distilling remained uncovered cannot even be guessed at, but clearly illicit distilling was flourishing on a grand scale. By comparison, however, with events after 1800, illicit distilling was nowhere near its peak, for in 1822, the year before the cut back in duty levels, 4,867 prosecutions were recorded. The reasons for illicit distilling on this scale and the nature of the illicit trade will be examined in the following chapter.

4. THE ENGLISH MARKET

One of the supposed advantages of the Lowland distillers enviously viewed by the Highland distillers was the 'foreign' or English market. The advantage was not entirely beneficial. The market the Lowland distillers were supplying was one which demanded a coarse grain spirit fit for rectification into gin, and the very success which some Lowland distillers achieved in breaking into the English market placed them in some jeopardy. As has been suggested above one source of pressure which resulted in the Wash Act had been that of the English distillers alarmed at the increasing imports of Scottish spirits. The replacement of the Wash Act by the Licence plan introduced conditions which slightly circumscribed the trade but not sufficiently to disarm the outrage of the English distillers, and in 1788 they successfully obtained further limiting measures on the trade. Under the Lowland Licence Act of 1788 new regulations were introduced applicable to Scots working for the English market. Such Scottish distillers were required to give at least twelve months notice of intention to distil for the English market. A minimum still capacity of 200 gallons (wash) and 50 gallons (low wines) was required, which put the trade in the hands of the larger firms. Most immediately damaging the import duty payable on the arrival of spirits in London was sharply

62. Source of these statistics same as Table 5.
64. Above pp. 4-6.
65. Act 28 George III, cap. 46.
raised. The first two conditions excluded all but the largest from entering for the trade, and the third in the short run operated as a total prohibition. For those distillers already engaged in the trade the results were disastrous. In March, 1788 the creditors of James Haig (Cannonmills), John Haig (Lochrin), John Stein (Kennetpans) and James Stein (Kilbagie) assembled to sort out the pieces of what appeared to be a commercial disaster of the first magnitude. Before the increase in import duty, these distillers had apparently been making sales in the English market at a loss, probably in an effort to break up a united trade front by the London distillers, and with the increased import duty found themselves trapped in the net of a self-destructive tactic. Not merely could their spirits not be sold in England, but due to the provision relating to 12 months notice of entry, the stocks of spirits could not be realised in Scotland as the excise refused to grant permits for their sale. Faced with a liquidity crisis as a result the families — controlling four of the largest distilleries in Scotland and 47% of output in the Lowlands — had no alternative but to face their creditors.

What was the family background to this position of strength in the industry? Both Haig and Stein families had been active in the distilling industry around the Clackmannan area since the early eighteenth century. In 1751, with the marriage of Margaret Stein, daughter of John Stein, to John Haig, the two families had become united. Whether this marital connection resulted in close business ties in the early days, it is impossible to say, but when John Haig died in 1773 leaving a widow and eleven children aged from four to fourteen, Margaret Stein’s father put the five Haig boys through their distilling apprenticeships in his distilleries at Kennetpans and Kilbagie. According to the Rev. Moodie, parish minister of Clackmannan, in the Statistical Account these two distilleries up to their stoppage in 1788 manufactured spirits only to an extent hitherto unknown in this part of the island of Great Britain. Kilbagie, the larger of the two, apparently consumed 60,000 bolls

66. This section on the Haigs and the Steins is based on two main sources: The sequestration books of James Haig and John Haig in the Scottish Record Office (S.R.O.); Series RH 15 — 2080 and 2081


68. O.S.A. Volume 14, pp.623-626.
of corn annually from which 3,000 tons of spirits were made. In addition to the spirits the distillery farm maintained about 7,000 black cattle and 2,000 swine on the waste grains. The cattle were marketed in Edinburgh and Glasgow, and the pigs slaughtered and cured for the English market. These activities employed 300 people which makes the distillery a sizeable industrial establishment by eighteenth century standards, as does the estimated capital valuation of buildings and utensils at £40,000. Other early industrial features were a canal linking Kilbagie to the Forth and, at Kennetpans, a steam engine

".. of Bolton and Watt construction... first of the kind to be erected in Scotland." 69.

Besides these substantial distilling interests James Stein had diversified into fishing, being the proprietor of

".. a 300 ton ship, nearly equipped for the Greenland Whale Fishery." 70.

and coal mining and iron smelting. The Haig brothers from their apprenticeships branched out to found their own distilleries: Andrew in partnership with a member of another Lowland distilling family, the Jamiesons, at Kincardine; James at Cannonmills, then Lochrin and later Sunbury, all in Edinburgh; John first of all in partnership with James at Lochrin and then by himself at Bonnington in Leith; Robert in Ireland at the Dodderbank distillery; and William at Kincaple and later at Saggie near St. Andrews. Interest in distilling was not limited to the male heirs of John Haig alone, for two of his daughters widened the family's distilling interests through marriage, one to John Jameson who founded the Bow Street Distillery in Dublin in 1780, and one to John Philip a distiller at Dolls near Menstrie in Clackmannanshire. Much the same outward spread of talent appears to have occurred within the Stein family itself with sons distilling at Hattonburn near Milnathort and at Cannonmills. What this all added up to was a considerable influence on the trade politics of the distilling industry, which is only partly measured by the control of 47% of Lowland output. What marks the Kilbagie and Kennetpans distilleries as unique is that they

69. O.S.A. Volume 14, pp. 623-626.
70. S.R.O., R.H. 15 - 20860.
71. The site was then called Tulliallan.
"...depended entirely on the London market for the sale of their produce..."\textsuperscript{72}

a dependence which, when the import duty increased in 1788, proved to be damaging.

If the degree of concentration in the Lowland industry seems high it was still much less than that which faced the Lowland distillers in the English market. By 1798 the production of spirits in England had taken on a very different structure from that to be found in either Scotland or Ireland. Instead of whisky the main consumer demand was for gin which is simply grain (or molasses) spirit that has gone through an additional distillation or rectification and to which flavouring matter like juniper berries and coriander seeds have been added. Competition did not take place amongst the distillers but rather amongst the rectifiers. By 1798 there were 14 distilleries in existence in England, 10 in London, 2 in Bristol and one each in Worcester and Maidstone. In view of the desire of the Scottish Board of Excise to concentrate whisky production within licensed distilleries where duty might be easily safeguarded and collected, it is worth looking at the reasons for the more concentrated structure of the distilling industry in England. The long run factor of most importance was the fall in gin consumption since the heights of the "Gin Age" in the first half of the eighteenth century. This alone does not entirely explain the absence of new competition in the industry for in the 1790s spirit consumption in England had started to recover from its doldrum levels of the 1760s:

**TABLE 7** \textit{ANNUAL AVERAGE SPIRIT CONSUMPTION IN ENGLAND}

<table>
<thead>
<tr>
<th>Year</th>
<th>Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>1760-61</td>
<td>2.301 million gallons</td>
</tr>
<tr>
<td>1790-91</td>
<td>3.667 million gallons</td>
</tr>
</tbody>
</table>

However, a new entrant to the English distilling industry would have been competing with established producers operating large-scale industrial concerns. The English distilling industry seems to have undergone an industrial revolution very similar to that which Mathias has described in the brewing industry. The comparative smallness of even the largest Scottish distilleries, whose great size so impressed

\textsuperscript{72} O.S.A. Volume 14, pp. 623-626.

\textsuperscript{73} Mitchell and Deane, \textit{op.cit.}, pp. 254-259.
contemporary commentators, alongside the London distillers is marked. Kilbagie, the largest distillery in Scotland, boasted a singling (or wash) still of 2,100 gallons capacity and a doubling (or low wines) still of 673 gallons, making 2,773 gallons in total. The next largest still in Scotland was to be found at Cannonmills and it held 1,600 gallons.\(^74\) By contrast one of the leaders of the London distillers, Samuel Payne of Vauxhall distillery owned stills holding 13,000 gallons.\(^75\) These may have been exceptional even by English standards yet smaller London distillers like Henry Weymouth of Battersea with stills of 4,500 gallons were still operating on a larger scale than the great Lowland distillers. The investment in steam power, furnaces, mash tuns and fermenting vessels, together with the economies of scale arising from this scale of production must have been much greater than anything yet apparent in Scotland. Clearly, a newcomer to the English distilling trade attempting to compete with these large units of production, whose owners usually set prices in concert, was very likely to come off second-best. The English distillers were aided in maintaining their oligopolistic position not just by their overwhelming technological scale and capital employed, but also by the excise regulations and the nature of their product. The Wash Act with its requirement of a high level of spirit extracted from the wash meant that the distillers had to work from a strong (i.e. high gravity) wash. This high extract yielded a harsh spirit unsuited for consumption after only two distillations. This was why the Wash Act and the subsequent extension of English distilling regulations to Scotland in 1814 proved to be so singularly unsuited to Scottish conditions. It was also the reason why the illicit distiller's product made from a low gravity wash and distilled slowly found so much favour amongst consumers. In England where it was custom to drink rectified spirits the flavour of a distiller's output was less essential to either his or the excise law's success. Without this constraint the English distillers were far freer to expand capacity. That it was the Lowland distillers engaged in this market who had reached the greatest scale of production yet seen in Scotland at the end of the eighteenth century is potent testimony to the extent to which consumer prefer-

\(^{74}\) S.R.O. R.H.15 - 2080.
\(^{75}\) Report etc. (1798), pp. 173-176.
ence influenced distilling practice and technology.

Despite the import duty Scottish exports to England recovered from 1795, though far below the level of the mid-1780s:

**TABLE 8 - SPIRITS SENT FROM SCOTLAND TO ENGLAND 1777-1798**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>GALLONS</th>
<th>YEAR</th>
<th>GALLONS</th>
<th>YEAR</th>
<th>GALLONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1777</td>
<td>2,034</td>
<td>1780</td>
<td>34,067</td>
<td>1790</td>
<td>N11</td>
</tr>
<tr>
<td>1778</td>
<td>5,135</td>
<td>1781</td>
<td>97,177</td>
<td>1791</td>
<td>N11</td>
</tr>
<tr>
<td>1779</td>
<td>7,413</td>
<td>1782</td>
<td>183,929</td>
<td>1792</td>
<td>N11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1783</td>
<td>176,490</td>
<td>1793</td>
<td>N11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1784</td>
<td>427,498</td>
<td>1794</td>
<td>N11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1785</td>
<td>837,751</td>
<td>1795</td>
<td>125,377</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1786</td>
<td>881,969</td>
<td>1796</td>
<td>9,233</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1787</td>
<td>32,267</td>
<td>1797</td>
<td>27,153</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1788</td>
<td>86,045</td>
<td>1798</td>
<td>47,675 (11)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1789</td>
<td>195,144 (1)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Due to the legal constraints on entry into the trade such as the still capacity standard, the trade remained in the tight control of the Haig and Stein families until the 1820s; a feature which was the cause of much bitterness between the rest of the Lowland distillers and the Excise.

5. DISTILLING AND AGRICULTURE

Besides the invasions of each other's markets, one other feature of the Highland/Lowland rift in the distilling industry generated a great deal of heat in the 1798-99 enquiries. This was the question of the quality of grain available to the two sets of distillers and it casts light on an issue of some importance: how important was the distillers' demand for grain to agriculture at this time?

In abnormal times it was sufficiently important for a complete prohibition of distilling, because of a scarcity of grain, as between September 1795 and October 1796. It was also large enough to stir the urban mob to riot and attack distilleries when famine threatened as in 1784. 77 In less troublesome times the distillers' demand played an important part in the agricultural system of both Lowland

76. Report etc. (1798) Appendix 34, pp. 431. The figures are for the year ending 5th July. Note (i). The figure for 1789 should not be taken as indicating that the increased import duty had little effect for it is mainly made up of sales of stocks held by the Haig etc. creditors and which the English trade agreed to take over at a heavy discount. Note (ii). For the half year only.
77. J. Laver, op.cit. pp. 22-26, and Arnot, op.cit.
MAP 5.1 Malt made in Scotland (1793 - 1803)
MALTF MADE IN SCOTLAND 1793 - 1803
TEN YEAR TOTALS, BY EXCISE COLLECTIONS

SCALE:
One x equals 250,000 dry bushels
and Highland Scotland, and by the early nineteenth century in the regional specialisation of some English arable counties.

The Distillers' demand was for three types of barley: barley for malting, by necessity of fine quality and well dried in the stack; barley to be used raw, where quality was less important; and a third category, bigg, which though used both malted and raw deserves separate specification because of its importance in the Highlands.

How did this demand influence the agricultural system? In his history of the brewing industry in England, Mathias demonstrated the importance of the English brewers' and distillers' demand for barley to agriculture, especially the improvement of the light soil regions of East Anglia. His work also drew attention to barley

"...a Cinderella of English cereals and farming - hard working but little noticed." 78.

The type of exercise which he carried out to evaluate the role of barley in the total framework of English agricultural production by using contemporary estimates of the main cereal crops to show the national importance of barley, and by examining malt duty payments in each excise collection to show the regional agricultural pattern was based on a firmer statistical foundation than is available for Scotland at the end of the eighteenth century. For Scotland there are no separate statistics for the main cereal crops, but there are figures for the total malt made in each excise collection for the period 1793-1803. 79 These are represented in Map 5. How useful are they? The reservations Mathias expressed about the English figures: the ineffectual nature of the excise survey, the correspondingly large unrecorded output, and the changing (but unknown) boundaries of the excise collections apply to Scotland; illicit production even more so, especially if the malt figures are related to excise prosecutions in e.g. Inverness (see table 5, p.26)

78. P. Mathias, op.cit. p.390
In 1799 the duties paid by breweries and distilleries in England and Scotland were as follows:

<table>
<thead>
<tr>
<th></th>
<th>Breweries</th>
<th>Distilleries (£mn.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>2.33</td>
<td>0.3</td>
</tr>
<tr>
<td>Scotland</td>
<td>0.08</td>
<td>0.3</td>
</tr>
</tbody>
</table>

79. Taken from the Papers attached to the Report from Select Committee on... Petitions Complaining of an Additional Duty on Malt in Scotland, Appendix 8.
If this latter qualification applies mainly to the North and West Highland area, another serious disadvantage attaches to Lowland Scotland, for malt statistics are not equivalent to the total demand for barley when distillers used a large proportion of raw grain in their mashes. This unrecorded demand for raw grain may be as high as three times the recorded malt output. Also, malt was used by both brewers and distillers, and whilst it is relatively safe to assume that brewery demand was much less than distillery demand, how much less is not known. All these weaknesses mean that Map 5 can only be taken as a very rough guide to the distribution of malt production in Scotland.

Unlike England where most brewers relied on a specialised malting trade for their supplies of malt, Scottish brewers probably and Scottish distillers certainly, carried out their own malting. Why there should have been this structural difference in the trades of the two countries it is difficult to say. In the Highlands the explanation perhaps rests on the small-scale units of production in distilling which never generated sufficient demand to warrant specialised malsters. For illicit distillers, malting, being a lengthy process, was the riskiest part of production. At the same time, however, purchases of malt from a professional malster under excise surveillance would have increased the risk of detection. A not dissimilar difficulty probably encouraged Lowland distillers to do their own malting and to conceal the proportion of malt to raw grain going in the mash tun. So long as raw grain was free from duty the Lowland distillers had every incentive to remain very private enterprises and to avoid public supplies of malt. The use of raw grain was one of the three offences listed in the 1798 Report according to which the distillers were:

80. Based on the distillers mash tun contents included in the 1799 Report, Appendix (B.s) pp. 201-205.
81. From 10th November, 1820 under the Act I George IV cap. 74, distillers were required to give a declaration of the quantities of malt and raw grain used by them. Mathias calculated the annual average consumption of malt (mn. bushels) in brewing and distilling between 10th October, 1823 and 5th January, 1829 to be:

<table>
<thead>
<tr>
<th></th>
<th>Brewing</th>
<th>Distilling</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>21.32</td>
<td>0.29</td>
</tr>
<tr>
<td>Scotland</td>
<td>0.63</td>
<td>2.80</td>
</tr>
<tr>
<td>Ireland</td>
<td>1.31</td>
<td>0.86</td>
</tr>
</tbody>
</table>

Source: B.P.P., 1829 XVII, 129; 1826-27 Accounts No. 488. in Mathias op. cit., p.375, Table 17.
"...in Fraud of the Revenue (by increasing the capacity of stills and using unmalted grain); infringing the Laws of Religion (Sunday working); and injuring the Health and Morals of the lower Orders of the People, by furnishing them with unwholesome Spirits at a very low Price." 82.

Fraud makes the statistics less valuable than they might otherwise have been in times of less burdensome taxation. With this qualification in mind, there is one other use to which the statistics may be put. Until 1803 malt duty was levied at the same flat rate on malt made from barley and bere or bigg, yet the latter grain was generally recognised as being inferior to barley, both for malting (it had a higher percentage of 'lie-backs' i.e. grains that fail to germinate) and for adding to the mash tun (because of its lower starch content). Excise recognition of this inferior quality was one factor behind the creation of the Highland area, though the Lowland distillers challenged that view, and it was true that

"...in many places of the Highlands very good barley is produced, in general the Bear and Barley of the Highlands is thin of the Hulk and what is termed good sharp Grain." 83.

Against this view, the landed interest in the Highlands complained that due to the malt tax being equal on barley and bear, no market could be found for the poor quality grain as distillers, in order to cover the tax, wanted the maximum malt yield possible. To settle this dispute the Commissioners of Excise referred the matter to Dr. Thomas Thomson, lecturer in Chemistry at Edinburgh University to ascertain by "philosophical experiment" the relative yields of English barley, Scottish barley and bigg. Taking the extract yielded from malt made from English barley as 100, the relative yields of Scotch barley and bigg were 97.8 and 88.8 respectively, which confirmed the empirical evidence of the more honest distillers. The experiments also confirmed that a mash of raw grain and malt yielded more than malt alone. These findings went a long way towards justifying the introduction of differential tax in 1804 to put all three grains on an equal footing. The malt statistics used

82. Report etc. (1798) p.8.
83. Papers etc. (1798) pp. 12-16. Letter from John and James Haig.
84. Papers relating to Experiments •• to ascertain the relative Qualities of Malt Made from Barley and Scotch Bigg, B.P.P. (1806) Vol. 2, pp. 425.
GRAPH I: Estimated Proportions of Malt made from Barley and Bera or Bigg (1793 - 1803)
in Map 5 were collected prior to the change in duty and are divided into estimated proportions of malt made from barley, and malt made from bigg or bere. These have been plotted in Graph 1. What sort of interpretation can be placed on these figures? If barley cultivation as opposed to the growing of bigg or bere is taken as an index of agricultural improvement then the Lowland areas, Fife, the Lothians, Berwickshire and Renfrewshire emerge as counties of substantial agricultural improvement. Perthshire does also but the position of the distilling industry in that county with its main market towns on the fringe of the Lowland area is best examined separately. Ayrshire alone of the Lowland counties shows a greater output of bigg than barley which might be taken as indicative of a lower level of agricultural progress. On the other hand how justifiable is the use of barley cultivation as an indicator of progress? Although contemporaries recognised a difference between barley and bere and bigg, the absence of any clear scheme of classification makes it difficult to assert that barley cultivation as such marked a movement to an improved species. In 1849 Thomas Thomson classified the different species of barley grown in Scotland. The first type, hordeum vulgare, was a two-rowed barley and was mainly grown in Southern Scotland and England. It was from this type that the most improved strains, including Chevallier, were selected in the nineteenth century. As hordeum vulgare was not suited to a wet climate the area of cultivation in Scotland was limited to the South, Berwickshire being the main county. The oldest species was hordeum hexastichon, a six-rowed barley, known as bere in the south of Scotland and as bigg in Aberdeenshire. Bere was also the local name given to the third type, a four-rowed barley. Both these latter types were hardier and ripened earlier than the two-rowed variety but both were recognised as being inferior for malting purposes. Traditionally, however, bere of both the six and four-rowed variety, occupied an important place in Scottish farming and diet. At the beginning of the eighteenth century, a large volume of bere was grown both in later barley growing districts like Berwickshire and in the Highlands. It was basically the drink crop (ale) but it could be used for food, bere

85. T. Thomson, Brewing and Distillation (Edinburgh, 1849), pp. 8-9.
86. i.e. the seeds occur in two rows.
meal, and was commonly used as grain in soup, scotch broth.

To contemporaries, the distiller's demand for these grains was regarded as important. Reviewing the desirability of a widespread licensed industry, John Young of the Excise concluded his argument with the statement:

"... if the inhabitants had a good steady Market, by means of Distilleries within a Convenient Distance, they could be encouraged to pursue a regular Rotation of Crops, the Soil would daily improve, and Heath. and Whins would give place to fertile and extensive Fields of Corn and Pasture..."

The importance of the two grains depended on their positions in the crop rotation systems of the Highlands and the Lowlands.

The case for the importance of barley in Lowland crop rotations is almost the same as that for Norfolk where the soil was as light if less thin and poor. In the Lowlands and the coastal fringes of the Highland area barley followed turnips or potatoes. Unlike wheat it did not exhaust the soil, it grew faster — important in the shorter Scottish summer — and it could be followed by wheat in a true regular arable rotation. Moreover it had other bonuses in its straw, and when distilled in draff and dreg for cattle feed and manure. Such bonuses went towards maintaining the food supply for a growing population, for

"...the beef and pork, fed in the distilleries, always supplied the markets, during the interval between failure of the turnip-beef and the preparation of the grass-beef of the ensuing summer..."

In the Highlands bigg cultivation was "indispensably necessary" though its role in the crop rotation and in the economy of the Highland area was of a different nature than the Lowlands. In the Highland crop rotation oats, the main Highland food grain, followed bigg. Bigg could be sown late in the season and harvested early. Although of poorer quality and yield than barley, it was much hardier and more able to withstand the rigours of unpredictable Highland summers. The soil preparation necessary for its success required more ploughing than for oats and this improved top soils. In the

88. Report etc. (1798) Appendix No. 6, pp.263.
89. J. Headrick, General View of the Agriculture of Angus, pp. 573.
90. J. Headrick, General View of the Agriculture of Angus, pp. 573.
91. Report from the Select Committee on ...Hate of Duty payable on Malt, B.P.P. 1803-4, Vol. 5, pp.6
Highland food chain bigg could be mixed with oats to give an edible meal in "...Periods of Calamity..." and the protection which bigg offered from "...the horrors of famine..." during this period of rapid population growth may not be its least claim to importance as a prop for an insecure economic structure. Whilst famine brought home the role of bigg in the Highland economy, its place in happier times was as the distiller's raw material. Its importance to agricultural improvement in Aberdeenshire was reviewed by George Skene Keith giving evidence to the Salt Duties Committee in 1804. After pointing out that barley production in Aberdeenshire was "...a trifle, sown by a few Gentlemen farmers..." and that infield lands were usually sown with bar or bigg he outlined the effects of the drink industries demand:

"...Ten years ago, when there was a liberal competition between the Brewers in the towns and numerous licensed distillers who were scattered over the Country (which occasioned a great demand for Bar or Bigg), the great wide Balks, or pieces of barren land, between the Ridges of our Infield or Old Croft Lands, were ploughed up, the distinction between Infield and Outfield ground was gradually abolished, and a great Proportion of the latter was limed, and manured for a crop of Turnips, and then laid down with Bar and Grass seed. Our Agriculture at this time was rapidly advancing towards Perfection..."

Although such striking evidence from other parts of the Highlands is not available, there is sufficient evidence to indicate the importance of distilling demand in securing a cash crop from bigg cultivation. For example the parish minister of Killeaman in Ross-shire having demonstrated for the Statistical Account that the seven 30 gallon stills in his Parish received too low a price for their spirits to afford a return on capital, then went on to ask:

"...why then so many distilleries? For these reasons: Distilling is almost the only method of converting our victual into cash for the payment of rent and servants; and whisky may, in fact, be called our staple commodity..."

There was, however, a world of difference between distilling demand which yielded a cash crop, and distilling demand as a vehicle for land improvement. If as Gray has argued, the South and East of the

92. 1803-4 Vol. 5, pp. 6
Highlands found "...solvency through reform..." during the nineteenth century then Keith's description of agrarian improvement in Aberdeenshire may be seen as the beginning of this movement. It was not to be painless progress, at least as far as the distilling industry was concerned, for the greater part of Aberdeenshire became subject to the Lowland distillery laws in 1799 and

"by depriving us of the demand from our licensed distilleries our Agriculture received a very severe check." 96

The North and West with its cash crop dependence on distilling could not be pulled so easily into the nineteenth century. The cash crop besides helping to pay for rent, servants and the expenses of the aristocracy met, like black cattle, kelp and fishing, the food deficit of the area in meal and flour. When John Stein described Highland distilling practice as "...something of a Primitive and Patriarchal Appearance... (which)... will proceed while a Pot or Tin Cannister is to be found in the Highlands..." 97 it appeared quaint and archaic to his more sophisticated commercially orientated Lowland eyes, yet it was none the less vital to the survival of the Highland economic structure. The Excise might draw a line on a map in all good intention to delimit a Highland area, but by attempting to keep the Highland distiller within a boundary, the Excise system was directly clashing with the economic support system of the area. "Were we" said the minister of Campbeltown "allowed to export a part to help us pay our meal and flour, it would do us much service." 98

In the absence of legal encouragement to whisky sales outside the Highland area, the Campbeltown community directed by harsh economic necessity turned like many others to illicit distilling and smuggling.

One of the counties split in two by the Highland line was Perthshire. As far as resources were concerned there was some sense in this. Along the northern boundary of the county at the top of Glen Garry and around Rannoch, soils and climate were as mean and bleak as the worst of the Highland area, whilst in the south the land around Callander, Crieff and Doune was as fertile as the Lothians. Its shifting fiscal boundaries (see Map 1, p.8) reflected growing Excise awareness of the variety of agricultural conditions and also the important role of its market towns in transactions between the Highland and Lowland areas. Doune, Crieff, Callander, Dunkeld, Perth

and Blairgowrie all straddled the main roads into the Highland area and through them came the whisky output of the Highland area. Evidence on the position of one of these market towns, Perth, was given to the 1793 enquiry by James Duncan, a corn factor in the city. He was purchasing barley for the Lowland distillers from the Highland area. This was good barley from the country round Loch Tay. As well as factoring he also supplied malt to the Highland distillers taking their spirits in exchange, a trade quite illegal under the excise laws. His forthright and open replies to the Committee suggest that he was merely describing a widespread practice. As well as sending malt northwards, he also sent coal and lime as return consignments in the grain wagons. "Highland distillers" he told the enquiry "bring their spirits down to the line during the day especially to the Bridge of Almond; there are two public houses where they deposit their spirits; in the night they take different ways unknown to the officers to introduce their spirits, although we have a very diligent officer at Perth." Nor were these distillers representatives of Stein's primitive patriarchs for they were not prepared to use poor quality, damaged grain wanting only that which would malt best. In this respect at least they appear to have been quite as commercially motivated as their Lowland brethren which perhaps accounts for Lowland hostility to the smuggler. Duncan regarded the distillery grain demand of sufficient importance to be alarmed at the prospect of a prohibition on the use of unmalted grain, for

"...it would have a very bad effect on the Corn Market because there is hardly one season out of three that there is not from one quarter to a half of the barley produced in the country unfit for malting owing to Rain and heating in the Stack."

This was the case in the three counties where he was dealing: Fife, Perth and Kinross. Besides the corn market being set back by any discouragement to the distilling industry, the cattle trade would also be hurt if the distillers did not buy cattle for fattening. All in all he was satisfied with the licence system which he considered beneficial to distillers, farmers and corn merchants alike because it had stabilised grain prices and made credit conditions

"...I would not give extensive credit to the Distillers if the system of Survey were renewed — for the Bankers would not discount their bills. The general course of credit given by the Corn factor to the Distiller is from three to four months, taking Bills at that date. He pays the farmer ready money which is procured by getting those Bills discounted. Return to the Survey would reduce grain prices and farmers would be unable to pay rents."

There was then a network of credit extending between the distiller and farmer, and eventually landowner. The distiller stood at the centre for his credit system extended forward to the sales of his spirits to wholesalers and retailers. The annual rhythm to this credit cycle is worth noting. Distilling began in September when the harvest came in. The distiller received credit for his grain purchases from the Corn factor who paid the farmer ready money. Winter spirit sales peaked in December and January, but wholesalers credit stretched three months till March or April. Bill discounting filled the gap and the distillers problem was to balance the maturity of his bills to the corn factor against receipts from spirit dealers. As will be discussed the sort of financial juggling and heavy reliance on external credit which this involved proved to be the downfall of many newcomers to the distilling industry.

Perth itself was not a great distilling centre at the end of the eighteenth century. The illicit distiller and smuggler made legal production a financially suicidal activity. Despite this the surrounding countryside was no less influenced by the demand from the distiller, and the sophisticated financial network supported by these trading activities was another feature of the growing commercialisation of Scottish agriculture. It might also be seen as a warning that alterations in the method of levying duty were likely to have very widespread ramifications indeed.

Even if this view of the role of the distilling industry in agricultural improvement is correct, the historian, surveying distilling in Scotland and comparing it with the impressive evidence assembled by Mathias for the English brewing industry, is surely

100. See Chapter 3.
left with some nagging doubts about the appropriateness of distilling for agricultural development. The English brewer appears to have had much more influence over his raw material markets than the Scottish distiller. Fine quality malt was absolutely essential to the brewer and his premium prices for the best malt were transmitted back through professional malsters to the barley growing regions and seem to have been a sharper spur by far to agricultural improvement. Might not Scottish agriculture have been more rapidly improved if the brewer had been free from the harmful malt tax? Some contemporaries show signs of having felt this, though their motive for encouraging brewing was mainly temperance in origin like the worried freeholders, heritors and J.P.'s of Edinburgh who wished to curb

"...the pernicious consequences arising from the baneful practice of dram drinking..." 101.

To some extent the question ignores the differences in the qualities of English and Scottish grain. As James Duncan pointed out, much of Scottish barley was too poor to malt successfully and without distilling could probably not have found any commercial outlet except for cattle and poultry feeding. Indeed by the end of the eighteenth century the larger Scottish distillers were already turning, albeit in a small way, to Norfolk and Suffolk for their malting barleys. It is true that it was second quality 102 yet even with transport costs it was still able to compete successfully with the best quality Lothians barley; which is perhaps a sad commentary on the state of Scottish agriculture. On the other hand, that it should have been the large distillers with "...cost cutting ambitions..." 103 who ventured into the English grain markets is, as Mathias has argued, as much "...a mark of developing industrial maturity..." 104 as of agricultural backwardness.

One other question may be raised about distilling as a force in agricultural improvement: was the distiller's demand stable or not? This is surely an important question, for without some guarantee of stability agricultural investors were unlikely to be encouraged to sink their capital in roads, drains, seeds, fertilisers and the

102. Papers etc. (1798) pp. 11
103. Mathias, op.cit. p. 399
104. Mathias, op.cit. p. 400
other paraphernalia of improvement. It is only too clear from bankruptcy papers that the cost of distilling failures to farmers tied up in the credit network described by James Duncan was high. James Haig's bankruptcy in 1788 left debts to grain merchants and farmers of just short of £20,000. The three largest claims on his property were £7,799, £3,100 and £2,393. All were for grain advanced to the distillery, and all were larger even than the Royal Bank's claim for £1,800. With the simultaneous bankruptcies of the three other great distillers it is likely that grain suppliers were deeply involved. Admittedly these failures were exceptional because of the size of the distillers; for other distillers it was a matter of debts of £4-£500 in small lots scattered amongst farmers. The failures do point to the dangers to farmers who became involved in selling grain to an industry whose fortunes were closely tied to the clash of conflicting interests which were the Excise laws. It is interesting that the creditors of the Haigs and the Steins having laid the blame for the collapse on the London distillers "...whose influence would prevent equality in the law..."107 then appealed to the "...landed Gentlemen..." to take up the Scottish distillers case for a reform of the law. That the landed interest did so, on this and subsequent occasions right down to the 1823 reforms, is proof of the importance attached to the distilling industry as an outlet for grain production.

Whilst it is possible to concur with the view of Chambers and Mingay108 that supply factors were more important in determining arable crop prices, their statement that "... the demand for wheat, barley, rye and oats being largely for bread, fodder and distilling, was for lack of alternatives, not subject to much variation. The demand for grain was therefore inelastic..." can less readily be agreed with. Did the Distillers never increase their barley purchases when grain prices fell? With barley costs accounting for about 40% of the cost of production there was considerable scope for cost saving by increasing purchases when grain prices fell and stock holding. Also, on the demand side for spirits, low food prices

106. See e.g. S.R.O. R.H.15-2084.
109. See Table 9 below.
left "...the inferior sorts of people..." with more cash to spend on drink. As Neil Bryle, the Edinburgh agent for Stein, Dewar and Co. wrote "...the fall in the price of Grain may enable the labouring classes to drink more, and thereby increase the consumption..."

If, in the absence of spirit production and consumption figures, questions about the stability of distilling demand are essentially speculative, so too unfortunately is the discussion of effects of harvest fluctuations on the distilling industry. It is curious that whilst much time was spent discussing grain costs in different parts of Scotland little attention seems to have been paid to the effects of changes in grain prices. Stein, for example, when asked what influenced the value of his spirits replied:

"...it depends on the State of Highland smuggling at the time, whether the markets be bare of spirits or glutted, (and) whether the sales be for ready Money (in which case large Discounts are given) or for long credits." I

He did not, however, try to explain why the market was "bare" or "glutted". Yet, if the figures produced by the Excise for costs of production in the three fiscal regions were accurate then barley costs accounted for 46% of production costs in the Lowlands, 43% in the Highlands and 34% in the Intermediate area. The figures they produced have been tabulated as follows:

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<th>Lowlands</th>
<th>Intermediate</th>
<th>Western</th>
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<tr>
<td>Barley 1.</td>
<td>46%</td>
<td>43%</td>
<td>34%</td>
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<tr>
<td>Licence Duty ii.</td>
<td>31%</td>
<td>31%</td>
<td>36%</td>
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<tr>
<td>Malt Duty iii.</td>
<td>9%</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Grinding Malt</td>
<td>2%</td>
<td>2%</td>
<td>1%</td>
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<tr>
<td>Fuel</td>
<td>2%</td>
<td>3%</td>
<td>5%</td>
</tr>
<tr>
<td>Servants Wages and Horses</td>
<td>2%</td>
<td>9%</td>
<td>14%</td>
</tr>
<tr>
<td>Wear of Utensils, Rent &amp; Repairs</td>
<td>3%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Loss by insolven- cies at 5%</td>
<td>5%</td>
<td>2%</td>
<td>5%</td>
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TOTAL COST OF PRODUCTION PER GALLON 100% 4/6 100% 5/3 100% 6/6

111. Papers etc. (1798) pp. 10.
112. Based on Appendix No. 44 of the 1798 Report, pp. 488-89. Notes: i. the quantities of grain are the quantities allowed to be malted duty free and distilled, i.e. 3,120 bolls in Lowlands, 500 bolls in Intermediate, 250 in Western. ii. Licence duty at £54 (Lowland) £9 (Intermediate); £5.10.0 (Western) - all per gallon of still capacity. iii. Malt duty paid only in the Lowlands.
and are based on the quantities of grain allowed to be malted free of duty and distilled in the Highland and Intermediate areas under the Licence plan (and its assumption that the "Art of Distillation was so fully known..."). It is obviously not true to say that the distillers were entirely unconcerned with raw material costs. The evasion of the malt tax through the use of raw grain and shift towards purchases of Norfolk and Suffolk barley indicate differently.

At times the Lowland distillers did attempt to control the factors which resulted in the market being "bare" or "glutted". Frederick Macclagan, the agent and traveller for Haig of Lochrin, told the enquiry: 113

"...I have known the distillers endeavour to raise the price of spirits by agreement among themselves, but I never knew it continue for a week together..."

He was referring to the home market. The exception, as in many other things, was the London market where James Haig negotiated price and output terms with the English distillers. 114 There were good "political" reasons for doing so as excessive Scottish imports might lead to the London distillers pressing for higher import duties. At any rate as so few houses were large enough to work for the market, and most were controlled by the Haigs and Steins, output and price agreements were easier to reach and keep. After 1800 more frequent attempts were made by the Lowland distillers to reach agreements on a wide range of trade matters including the Corn Laws, 115 where landed interest and distillers were not at one, and output control; though Ryrie's comment that "the Falkirk meetings appear to be for the purpose of humbugging each other..." 116 suggests that sweetness and reason were infrequent attenders at the distillers' assemblies.

114. Report (1798) Appendix No. 21, pp. 351.
By 1800 the distilling industry in Scotland had taken on many of the characteristics which were to develop during the nineteenth century. There was a clear division between the Highland and Lowland sections of the industry in the sources of raw materials, in methods of production, in the scale of production, in the type of spirit produced and in the markets supplied. Undermining the position of both groups of distillers, but especially the licensed Highland distiller, was the large scale extent of illicit distilling. Whilst illicit distilling can be seen as a lag in the spread of effective excise control to a remote and lawless area, it was also a function of the agricultural economy and the harmful effects of excise legislation. The latter put a premium on evasion by making the production of a spirit satisfactory to Highland tastes exceptionally difficult under lawful conditions. It was little wonder then, that as the still capacity duty rose and rapid distillation increased, the Excise, surveying the ruins of the licence plan, should ask in despair: "...If there is anywhere in this Business a conceivable Ultimatum, where is the Fancy to place it?". It was not an easy question to answer, for in reality the Excise policy was split between two conflicting aims and refined tinkering with the system such as the addition of a survey to the licence system (together with a duty on raw grain) recommended by the 1798 committee, did little to solve the conflict. One aim was to encourage, at the request of the landed interest, agricultural production and to do this involved the establishment of a widespread distilling industry whose small scale units would mop up grain surpluses. The other aim, consistent with securing the revenue, was to foster licensed distillation and given the establishment of the Excise only large scale units could be effectively policed. The licence plan with its control of still size and grain allowances appropriate to regional differences can be seen as an attempt to secure both these aims. It implied that the industry, despite its regional characteristics, could be held tight in a fiscal framework satisfactory to large and small distiller alike. Illicit distilling and technological advance
undermined this framework and the history of the distilling industry down to 1823 is largely the history of attempts to evolve a policy capable of solving this paradox.
CHAPTER TWO

THE EXCISE SYSTEM AND THE ILLEGITIMATE DISTILLERS (1800 - 1850)

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INTRODUCTION

In 1821 whilst giving evidence to the Committee on Malt Duty, Woodbine Parish, the Chairman of the Scottish Board of Excise, was asked to explain the background to the consolidated distillery act which had been passed earlier that year. This new law, which combined over thirty previous acts, had been necessary he said, because

"...all the former Acts for regulating the trade were so blended and mixed, so difficult of comprehension, either by traders or excise officers, that it became highly desirable to consolidate all pre-existing laws." 2

Whilst this statement in itself virtually condemned the tortuous nature of all previous excise legislation since the distilling industry in Scotland had attracted attention as a source of public revenue, more positively it also marks the opening of a new phase in the method of levying spirit duty, and a phase which was ultimately to result in the creation of a flourishing legal industry and the extinction of the smuggler and illicit distiller. The key phrase involved in this policy was that of encouraging "universal competition" within the distilling industry in Scotland and ultimately within the United Kingdom as a whole. It is the aim of this, and the following chapter, to examine the way in which the paradoxical nature of eighteenth century excise legislation was resolved and a legal framework established in which a legitimate industry could thrive. The present chapter discusses the changes in the excise system between 1800 and 1823, and includes a detailed study of illicit distilling, one of the major difficulties that faced the excise reformers. In Chapter 3, the development of the Lowland distilling industry during the period of excise reform is surveyed, with particular attention being paid to the firm of Stein, Dewar & Co., one of the few Lowland distilling enterprises whose business records have survived. Excise reform was not confined to Scotland, and in order to establish a broader perspective, Chapter 3 includes

1. Act George IV, C.74.
an examination of the Lowland distillers' activities in the English market. Finally, the conclusions to the points argued in Chapters 2 and 3 on the process of excise reform are drawn together in Chapter 3.

In "Finance and Politics" published in 1888, Sidney Buxton showed how the reduction in Scottish and Irish spirit duties in 1823 was one of the first, and most successful, of the fiscal reforms implemented by Huskisson during his spell of office at the Board of Trade between 1823 and 1827. Important as the reduction in spirit duty was, especially in curbing the challenge from the illicit distiller, it was only one of a series of measures recommended by the Wallace Commission. This Commission under Thomas Wallace, Vice-President of the Board of Trade, had originally been given the task of investigating the problems of revenue collection in Ireland. At the prompting of Alexander Gordon, fourth Duke of Gordon, one of the largest landowners in the Highlands and a man much concerned about the high incidence of illicit distilling, it had directed its attention towards Scotland. What the Commissioners found in the Highlands surprised nobody: large-scale evasion of excise duties, widespread illicit distilling, an almost total disregard for the excise laws. Much more interesting were developments in the Lowlands. There, a process of reform, underway since 1816, had begun to yield significant results. The guiding principle was "universal and general competition" and its main protagonists, the permanent officials of the Scottish Board of Excise. In view of this rather precocious appearance and application of the principle of laissez-faire political economy, well in advance of the end of the Corn Laws and the repeal of the Navigation Laws, it would be interesting to know the origins of this ideological commitment amongst the permanent excise officials. Existing sources provide little help. "Dr. Smith's" principles of taxation were mentioned during the 1798/1799 Enquiry.

but gained little ground against the Select Committee's desire to maintain special provisions for the Highlands, which automatically involved Government manipulation of the competitive struggle in the distilling industry. Whatever the philosophical underpinnings of the argument surrounding Government control of distilling prior to 1798/99, two things served to make the debate much more explicit and earlier in the distilling industry than in other areas of economic activity. One was the burden imposed by wartime expenditure on the excise system, and the other, the impact of the post-war depression on the Highland economy. The first stretched the existing system to its limits, the second destroyed it. The lesson that was drawn from the collapse of the excise system was that less, rather than more government interference, was the solution.

If curing an industry's troubles by "universal competition" was a solution admirably fitted to later nineteenth century economic philosophy, there is also no doubt that it was a solution much easier to reach after the end of the severe fiscal strains of the Napoleonic Wars. In 1793, excise duties in Great Britain raised over £8.5 million for the Crown, which amounted to 47% of the Government's income. Although by 1815, the share of Government income collected by the Excise in the United Kingdom had fallen to 37%, the actual sum of £29.5 million was over three times larger than in 1793. Over two-thirds of this sum came from taxation on alcoholic beverages and their raw materials.

In England, Scotland and Ireland spirit duty increased throughout the wars. In Scotland the revenue from home-made spirits amounted to £53,871 in 1793. By 1803 this figure had increased

7. In "The Wealth of Nations", Adam Smith had little to say on the distilling industry, as such. On grounds of equity, he opposed the rich man's liberty of private distilling while the poor drew their spirits from the licensed distilleries; a viewpoint which reflected his Lowland background and his ignorance of the longstanding Highland custom of distilling amongst poor peasants. He also suggested that duty should be levied on malt and not on beer or spirits. At a more general level his remarks on the oppressive ness of excise duties and the extent to which they tended to involve increased interference with the producer were applicable to the distilling industry. See The Wealth of Nations, Book V, Chapter II, Part II, Article IV.

to £370,086 and in 1807 the peak yield of £790,714 was attained. Thereafter, with a prohibition on distilling from grain in 1809/11 and 1813, the yield sagged although still high by eighteenth century standards. Seen from this standpoint the spirit duty proved remarkably successful in raising finance for wartime expenditure. It is however, a standpoint which does not take into account the difficulties involved in this fiscal burden. The 1799 Committee, aware of the large-scale evasion then taking place, estimated that the average annual consumption of spirits in Scotland was 3.6 million gallons. It is a telling commentary on the extent of evasion that at no time between 1799 and the reduction in duty levels in 1823 was this number of gallons ever returned for duty purposes. Instead, after allowing for the effects of the prohibition periods, the volume of spirit taxed, at best stagnated, and at worst fell off sharply. The fairly buoyant revenue yields were based on an extraordinarily high level of duty. As in the eighteenth century the really harmful effects of the excise system lay, not so much in the level of duty, but in the means adopted for securing it.

2. THE EXCISE SYSTEM (1800 - 1823)

Between 1800 and 1823, the distillers in Scotland worked under three different excise systems. The first arose out of the recommendations of the Parliamentary Committees of 1798 and 1799. This lasted until 1814. It involved amendments to the still capacity licence system designed to counter rapid distillation. Licence duty continued to be charged per gallon of still content, but the duties per gallon were to be considered equivalent to certain quantities of spirits. For example, in the Lowlands distillers were charged a licence duty of £108 per gallon of still content and each gallon of still content was assumed to yield 2025 gallons of spirits at 1 to 10 degrees over proof. By itself

10. Higher duty rates were charged on spirits made from non-British raw materials.
this system would not have increased the security of the revenue or solved the problem of the quality of spirit being produced in the Lowlands. To solve these two problems, a high rate of duty (3/- per gallon) was levied on production in excess of the duty equivalents and on deficiencies along with a requirement that wash had to yield 11% of spirit. The former measure discouraged attempts to beat the licence duty by rapid distilling, whilst the latter enabled the distiller to work from a relatively low gravity wash which was considered to produce a better quality spirit.

Another check on revenue security came from the system of survey which policed the licence duty. This placed obligations on the distiller and excise official alike. The Lowland distiller was directed to make a monthly return on oath of the quantities of worts made and spirits produced, whilst the excise officer similarly made a monthly return to be taken as the legal charge against the distiller. Other features of the new system were a duty of 2½d. per gallon on all wash prepared, and 6d. per gallon on all spirits produced. The licences on still content were to be paid in advance of distilling, by monthly instalments.11

All these regulations applied only in the Lowlands and only to Lowland distillers working for the home market. With the exception of two alterations: an increase in the licence, wash, and spirit duties and an increase of the required percentage extract to 16½%, this system remained unchanged until 1814.

In the Highlands the 1798/99 reforms continued the still capacity duty at £6.10.0, a rate higher than before, but still far lower than in the Lowlands. This rate was assumed equivalent to 52 gallons at 1 - 10 degrees over proof. Provision was made for excesses and deficiencies to be charged at 3/6 per gallon. In 1806, the content duty was increased to £6.13.4 but the excess/deficiency provision was dropped in favour of duties to be levied per gallon of worts and spirits, as in the Lowlands.

When taken as a rate per gallon, these duties worked out as follows:

**TABLE 10: RATE OF DUTY PER GALLON IN SCOTLAND**

<table>
<thead>
<tr>
<th>Year ending 5th July</th>
<th>LOWLANDS</th>
<th>Year ending 5th July</th>
<th>HIGHLANDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1802</td>
<td>3/5 Grain</td>
<td>3/- Grain</td>
<td></td>
</tr>
<tr>
<td>1803</td>
<td>3/5 Sugar</td>
<td>3/- Sugar</td>
<td></td>
</tr>
<tr>
<td>1804</td>
<td>5/2 Grain</td>
<td>4/6 Sugar</td>
<td></td>
</tr>
<tr>
<td>1805</td>
<td>5/2 Sugar</td>
<td>4/6 Sugar</td>
<td></td>
</tr>
<tr>
<td>1806</td>
<td>5/2 Sugar</td>
<td>4/6 Sugar</td>
<td></td>
</tr>
<tr>
<td>Licence period 1806</td>
<td>5/1 Grain</td>
<td>4/5 Sugar</td>
<td></td>
</tr>
<tr>
<td>Licence period 1807</td>
<td>5/1 Sugar</td>
<td>4/5 Sugar</td>
<td></td>
</tr>
<tr>
<td>Year ending 1st Dec. 1809</td>
<td>3/3 Sugar</td>
<td>2/6 Sugar</td>
<td></td>
</tr>
<tr>
<td>Year ending 1st Dec. 1810</td>
<td>3/3 Sugar</td>
<td>2/6 Sugar</td>
<td></td>
</tr>
<tr>
<td>From 1st Dec. to 1st Nov. 1811</td>
<td>3/3 Sugar</td>
<td>2/6 Sugar</td>
<td></td>
</tr>
<tr>
<td>From 1st Dec. to 1st Nov. 1811</td>
<td>5/1 Grain</td>
<td>4/5 Sugar</td>
<td></td>
</tr>
<tr>
<td>From May 1811</td>
<td>7/1 Sugar</td>
<td>5/11 Sugar</td>
<td></td>
</tr>
<tr>
<td>From 1st Nov. 1811 to 1st Dec. 1812</td>
<td>7/1 Sugar</td>
<td>5/11 Sugar</td>
<td></td>
</tr>
<tr>
<td>From 1st Nov. 1811 to 1st Dec. 1812</td>
<td>5/3 Sugar</td>
<td>4/6 Sugar</td>
<td></td>
</tr>
<tr>
<td>From 1st Nov. 1811 to 1st Dec. 1813</td>
<td>5/3 Sugar</td>
<td>4/6 Sugar</td>
<td></td>
</tr>
<tr>
<td>From 1st Dec. 1813 to 1st Oct. 1814</td>
<td>7/1 Grain</td>
<td>5/11 Sugar</td>
<td></td>
</tr>
<tr>
<td>From 1st Oct. 1814 to 9th Nov. 1815</td>
<td>8/4 Sugar</td>
<td>8/4 Sugar</td>
<td></td>
</tr>
<tr>
<td>Year ending November 1816</td>
<td>8/4 Sugar</td>
<td>8/4 Sugar</td>
<td></td>
</tr>
<tr>
<td>Year ending November 1817</td>
<td>5/6 Sugar</td>
<td>5/6 Sugar</td>
<td></td>
</tr>
<tr>
<td>No change until 1823</td>
<td>2/4 Sugar</td>
<td>2/4 Sugar</td>
<td></td>
</tr>
</tbody>
</table>

(See also Graph 4, p.104)

The important point to notice is that the level of duty was lower in the Highlands until 1814. In October 1814, the regulations for controlling the distilling industry in England were extended to Scotland. For the first time since the Wash Act of 1784 the regulations were applied to the whole of Scotland, Highland and Lowland alike. Neil Byrne, the Edinburgh agent for Stein, Dewar & Co. described the change as a "vexatious business" and in the event this proved to be a classic understatement. The least reprehensible aspect of the English system was that it did away with the still content duty, replacing it with a duty of 1/- per gallon on wash and 2/10d. per gallon on spirit produced. In the Lowlands

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this was equal to a rise of 1/3d. per gallon in duty, a substantial increase in itself, even without reference to the commercial crisis in which the Lowland industry was embroiled at the time. For the licensed Highland distiller, already badly hit by the illicit distiller, it meant an even greater increase of 2/5d. per gallon. This was not an end to the damaging aspects of the Act. It also prohibited stills of less than 500 gallons in the Highlands and 2,000 gallons in the Lowlands. For the former group, a still of 50 gallons had been considered unrealistic less than twenty years earlier, whilst in the Lowlands only the export distillers had stills anywhere near 2,000 gallons capacity. Besides, the so-called uniformity of the system did not extend to allowing the Highland distiller to sell his spirits south of the Highland line, although the Lowland distiller could sell in the Highland area. Worse still, for the Highlander and Lowlander alike, was the provision which restricted the distiller's freedom to manage his worts as he pleased.\textsuperscript{15} Now the distiller was required to produce at least 18 gallons of spirits per 100 gallons of wash from a specified strength of wort. At 18\%, the spirit "was scarcely drinkable being so harsh as to be unfit for punch and quite unsaleable."\textsuperscript{16} Also at the gravity specified in the Act, 70 lbs. of saccharine matter per barrel, it was simply not possible, because of the distiller's inability to decompose all the saccharine material, to reach the required 18\% without adding extra concentrations of saccharine extracts like sugar, molasses, honey and flour to the wort. This practice, known as lodging, was prohibited by the Act, which meant that to meet the legal requirement of 18\% of spirits the distiller had to contrive to illicitly introduce additional material to his worts, and even after performing this little piece of gymnastics for the Excise, he was still left with a product unsuited to Scottish tastes.

In view of these flaws and weaknesses why was the Act ever introduced? To understand this it is necessary to refer again to the twin problems facing the Excise at the end of the eighteenth

\textsuperscript{15} Scarisbrick, \textit{op.cit.} p. 56, note 12 quoting Ruspratt.
\textsuperscript{16} J. Scarisbrick, \textit{op.cit.} p. 56
century: the need to secure the revenue, which was thought to be best achieved in large distilleries, and the desire to have a widespread distilling industry to form a market for grain, which meant in the less well endowed areas a small-scale industry.

In the Lowlands the licence system certainly encouraged the large distiller. Besides the cost advantages to be gained from rapid distilling the high level of licence duty threw the trade into a few hands. It is easy to see how this was so when duties were paid in advance of production and sale. In the home trade, the distillers with the largest stills by 181417 were John Haig and John Stein each with stills18 holding 165 gallons. For these they paid monthly an advance duty of £1,485 (165 x £108 divided by 12).19 The smallest still in the Lowlands belonging to James Bruce held 42 gallons and paid £378. Even ignoring the question of the amount of fixed capital necessary to set up in the distilling business, the large size of the preliminary working capital made the cost of entry prohibitive, except for the large capitalist, under the licence plan.

Whilst the licence plan kept the number of distillers down, in the Lowlands it also tended to encourage the distillers to band together to "protect their capitals" through price and output agreements.20 It is noticeable that when the Wallace Commission was collecting evidence in 1822 most of the Lowland distillers were inclined to look back on the licence system with benign wistfulness. Alexander Haig thought the licence system "the best because the revenue was secure and each distiller was on an equal footing." There were "few small stills because all distillers were obliged to work to a certain extent," and it allowed "nearly a monopoly."21 William Paul of Stirling agreed, because "it kept numbers down to 22 - 24 distillers" and "there was a line which kept the Highlanders back from us."22 The memory has a trick of remembering only the best features of the past and the licence system, even if it

17. B.P.P. 1816, XIV, House of Commons Papers, p. 5.
18. Low wine and Wash stills together.
19. The distillers seldom worked for twelve months, nine would be a more realistic figure.
22. 5th Report, Appendix 74, pp. 216.
did allow "nearly a monopoly", did not prevent over-production and downward sagging spirit prices during its existence. Nor did it rescue some large distillers from losing "their capitals" in spectacular bankruptcies such as those of the Willars of Craigend in 1810, and Duncan Montgomery of Inverkeithing in 1813.

In the more abrasively competitive environment of what Archibald Dunlop called "the present open system" of excise regulations in the early 1820s however, the licence system must have seemed to prosper a cozy club of distillers.

Near monopoly, a virtue from the distillers' viewpoint, was regarded less favourably by the Excise. In the first place there was no correlation between the degree of monopoly and the security of revenue. The large distiller was just as liable to evade duty by such traditional ruses as increasing the contents of the still head and abstracting fermented wash. Indeed, the larger and richer the distiller, the more he could afford to bribe the excise officer: an individual whose low salary and lower status exposed him to temptation, and shrug off the trifling fines for detected fraudulent activity. In the second place some members of the Scottish Board of Excise felt that the monopolistic tendencies appearing under the licence plan were but a symbol of a larger malaise affecting the whole of the excise on spirits. This feeling can be understood when it is remembered that the Scottish Board of Excise had been a most unwilling participant in many of the changes which had taken place in the excise system. It had, for example, warned well and fought long and hard against the introduction of the Highland area. In 1781 it argued against "the bad Consequences likely to arise from the introduction of a partial and local law relative to a very essential branch of the Revenue under our Management," only reluctantly conceding, after Pitt's intervention, this breach in "the general principle of taxation" of a uniform duty. Also, given the volume of evasion and corruption which

23. See below, Chapter 3.
25. 5th Report, Appendix 72, pp. 209.
26. 5th Report, Appendix 82, pp. 253-256.
27. 1798 Report, Appendix 16, pp. 331-339. Evidence of Sir John Dalrymple: "A proper salary animates an Officer's pride to act with Honour; a low Salary is a Sort of Excuse to himself for doing Wrong."
the Board believed it had uncovered as a result of the survey, it seemed grossly unfair that the "distillers so cramped in their illegal trade" should raise a "cry of oppression" and engage the support of the landed interest in an effort to persuade Parliament to adopt the licence system. In the event the Board's fear that the exemptions involved in partial laws would increase evasion, smuggling, pleas for further exemptions, and policing problems was amply justified. The stability of the licence system between 1800 and 1814 was more apparent than real: taxing Lowland and Highland distillers at different rates according to location and raw materials meant a continuous juggling and struggling for transitory advantages through changes in the law by distillers and their landed allies. Beside, all this was true not merely of the home market but also of the export trade to England and Ireland. Distillers engaged in these markets, worked under entirely different regulations and duty rates, in an effort to reproduce the excise system prevailing in the importing country.

By 1814, these distortions were revealing themselves in falling revenue yields and growing evidence of a massive upsurge in illicit distilling, for, of course, the second of the twin problems of the Excise - controlling the scattered small-scale units of the Highland industry was most ineffectually handled by the licence system. The licence system maintained all the barriers to the production of a malt spirit suitable to Highland tastes which had been pointed out to the Select Committee of 1798/99, and it limited the sales of the licensed Highland distiller to the Highland area; a limitation the illicit distiller did not recognise.

By themselves, this formidable list of harmful consequences would have been sufficient to damn the licence system. When it is remembered that on top of these difficulties lay the complexities of trying to regulate the trade in spirits between Scotland, Ireland and England, it is easy to understand why the remedy of extending the English excise system to Scotland had an appealing

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simplicity about it. As far as the security of the revenue was concerned, the English system had a long history of success. On the other hand, as was discussed in Chapter One (pp. 30-35), the industry which it controlled was of a very different structure to that in Scotland.

Exactly which interested party promoted the adoption of the English system in Scotland is not clear. The Scots distillers and the landed interests in Scotland can almost certainly be ruled out. Ryrie's surprise on hearing of the proposal 31 would suggest an origin south of the border. The Lowland distillers who worked for the home market were aware of the dangers and difficulties involved in operating large stills and working to high spirit percentages. 32 Scarisbrick 33 suggests pressure from the English distillers, "because the Scots was still possessed of too large a share of the English trade to please the English distiller." There may be some truth in this. The export trade to England was run under separate excise regulations and though the few Scots distillers who could afford to enter (never more than five firms down to 1822) had reached a mutually profitable 34 modus vivendi with the English distilling interest by 1822, between 1802 and 1814 the Scots share of the English spirit market had increased from 5% to 28%. The main protagonists, however, seem to have been the Treasury and the English Board of Excise. The English Board felt that its system "had reached a high degree of perfection" and besides, it was opposed to the confusion and lack of security involved in the Scots system. Its opposition was shared by the Scots Board of Excise, but at least that body had a greater awareness of the difficulties involved in any change, and so:

"...Upon the arrival of this act in Scotland, several of its rules and regulations were so prejudicial, and so inapplicable to the Scotch distillery, that the Board of Excise obtained a warrant from the Lords of the Treasury, giving the Commissioners' authority and power to exercise such general discretion in carrying the act into effect, as might appear, under all circumstances, best to combine the interests of the manufacturer with the security of the revenue." 35.

31. S.H.O., R.H.15-1856 at 20th April, 1814.
32. 5th Report, App. 72, pp. 204.
33. J. Scarisbrick, op.cit. p. 47
34. Supplement to 5th Report, p. 8
35. 5th Report, App. 83, p. 258.
Under this warrant the Board attempted to ameliorate some of the bad effects of the 1814 Act in the Highlands by allowing small stills to be used and Highland spirits to be sold in the Lowlands. Both were blocked by the Lowland distillers securing an injunction in the Court of the Exchequer to prevent the Board altering the Act. As a result the Highland distillers experienced all the worst features of the Act: the high increase in duty, the increase in the minimum size of still, the poor quality of spirit and the continuing restriction on access to the Lowland market.

Because of the high minimum still size and the increased level of duty the English system, like the licence system, "prevented persons of small fortune or credit from entering the trade." Both the high duty and the poor quality of the spirit gave added scope for the illicit distiller and smuggler. As also did the continued existence of the Highland line. Although it can be seen that the English system did nothing to solve the fundamental problems facing the excise, many of the evils ascribed to it were of long standing. It also had the misfortune to be introduced during the first class commercial crisis which hit Scotland at the end of the Napoleonic Wars so that some of the opprobrium aimed at the excise system originated in the post-war depression. Besides, as soon as the harmful effects became clear, the Scots Board of Excise set about initiating changes. Indeed, in that the English system, by exacerbating the problems of the distilling industry, highlighted the need for reform, it could be argued that it did no long-run disservice to the industry.

36. Although the Lowland distillers might very well have stood to gain from playing along with the Scottish Board of Excise and seeking further alterations, favourable to themselves, in the 1814 Act, instead of blocking the attempt by the Board to improve the position of the licensed Highland distillers, this apparently inconsistent behaviour may be explained by two things. First, the fear of competition from Highland spirits in Lowland markets where Highland malt whisky enjoyed a good reputation for quality. Second, the disadvantages of the 1814 Act may have been offset for some of the large Lowland distillers by the reduction in the number of licensed distillers which held out the prospect of a reduction in competition. It is not clear from the sources, which Lowland distillers were instrumental in seeking the injunction, but in view of the favourable retrospective comments about the 1814 Act made by Haig and Dunlop to the Wallace Commission, it seems likely that the move would have come from the large distillers. Highland landowners probably put pressure on the Board to alter the Act.
After two years operation the English system was dropped in November 1816. What replaced it was not so much one system as a series of Acts, both novel and experimental, which mark the progress of excise reform down to 1823. The main architect of these reforms was Woodbine Parish, the Chairman of the Scots Board from September 1815. The principal features of these acts, as he outlined them to the Excise Commissioners, were:

"...universal and general competition, to prevent monopoly and combination; gradual reduction of the quantity of spirits required from the 100 gallons of wash; the removal of all unnecessary restraints upon the trader in the manufacture of his spirits; the permission to use small stills, and the abolition of the Highland boundary line." 40.

In detail what they involved was a reduction in spirit duty from 8/4 to 5/6 a gallon in 1817; permission to use stills as small as 40 gallons; and a relaxation of the previously strict obligations to work to required quantities and strengths of spirit. The reduction in duty and the relaxation of obligations were really joint features of the new system for the duty was charged partly on wash and partly on spirit. How this worked out was as follows: instead of the distiller having to work with worts at one specific gravity and produce a high percentage spirit extract, he could, by 1822, choose to work from worts of one of a range of gravities, each of which was expected to yield a percentage of spirits. The range of densities ran from 60° to 81° with respective spirit extracts of 11 to 15 gallons. Each gallon of wort was charged duty at a rate which varied according to its density, and each gallon of spirit produced was charged according to the gravity of the wort from which it was made and in proportion to the strength of spirit produced. For example, a distiller choosing to work from worts of 81° gravity was charged 8½d. per gallon. On 100 gallons this amounted to 850d. He was then expected to distil these 100 gallons into 15 gallons (15%) of spirits, so that each gallon of spirit bore 56 2/3rd wort duty. He then paid a spirit duty of 9½d. per gallon on top of this making

37. 5th Report, App. 83, p. 258.
38. 5th Report, App. 83, p. 258.
39. The Acts were: 56 George III, cap.106; 58 George II, cap.50; 1 George IV, cap. 74 and 3 George IV, cap. 52.
40. 5th Report, App. 83, p.252.
a total duty of 5/6 1/6thd. The beauty of the new system lay
not in the method of calculating duty, the above example in a
simplification of a complex scale, but in the relative freedom
it gave to distillers to choose their method of production, and to
produce the sort of spirit which the market wanted, rather than a
spirit produced in accordance with the distortions required for
revenue security as under the licence and English systems. What
the gradual reduction in the required percentage of spirits and
the free choice of density involved, was recognition of the prin-
ciple "that the excellence of spirits is in inverse ratio to the
density of the wash...".

Although the main motive behind the relaxation of control
over the distilling process was to enable the licensed distiller
to produce a spirit which would successfully compete with the
illicit product, the ability of the Excise to introduce the new
system arose from the greater control which the saccharometer gave
in checking the distillers' brewing operations. The saccharometer
is simply an instrument for determining the densities of liquids
heavier than water. Its usefulness to the brewer, distiller and
Excise is due to the fact that as worts are fermented their specific
gravity declines, and this decline is related to the creation of
alcohol. This process — in distilling parlance, attenuation — can
be measured by the saccharometer. The saccharometer had been
developed by a Hull brewer, John Richardson, as far back as 1784,
for weighing worts. In 1799 its use as a means of checking fer-
mentations and assessing the spirit richness of wash had been advocated
by the Scottish excise officers appearing before the Committee on
the Scotch distillery laws. The experiments of Drs. Hope, Thomson
and Coventry in 1806 on the relative yields of malt made from barley
and bigg showed that Richardson's model was inaccurate and Thomson
designed an improved model. This model was adopted by the Excise

41. See J. Scarisbrick, op.cit. p. 58 and S.W. Sillett, op.cit. pp.55-56
42. 5th Report, paragraph 5.
43. It works on the same mechanical principle as the hydrometer, i.e.
a floating body which sinks until it displaces its own weight of
the liquid in which it floats. The fall in the specific gravity
is due to the conversion of the sugars in the worts into alcohol.
44. See J. Scarisbrick, op.cit. p.57 and P. Mathias, op.cit. pp. 63-78
45. B.P.P. 1821, VIII, Report on Malt Duty-Papers relating to Malt
made from Barley and Scotch Bigg, pp. 65-66.
for the limited purpose of detecting increases in the weight of wash but it was not until 1816 that its use was made general in checking attenuations. The importance of this instrument for excise purposes cannot be underestimated for until its introduction, the Excise "had no efficient control over the distillers' operations." Without any knowledge of how much alcohol there was in the wash and what it could be expected to yield when distilled, the Excise had no means of checking additions to the wash (which escaped wash duty) or abstractions of spirits. In the absence of the saccharometer the excise system was forced to calculate duty on presumptive yields as for example, under the Wash Act. The alternative duty on still content assumed a hypothetical level of output. Both were accompanied by a barrage of restrictive regulations. With the saccharometer the way was clear for the construction of a system of distillery regulation "at once fair to the trader and just to the revenue." The reforming acts of 1816, 1818, 1820 and 1823 embodied the principles of saccharometry and gradually freed the distillers' operations from excise interference.

Although the four acts have been considered as a continuous process of reform, they were each introduced under different conditions and circumstances. The first two were experimental and designed to resurrect the industry from the ruins of the English system. The third, in 1820, was a consolidating measure based on the experience of the first two, and the fourth embodied the recommendations of the Wallace Commission. Although the recommendations of the Wallace Commission have been seen by other writers as laying the foundations for a legal distilling industry in Scotland, a close examination of the Commission's proposals shows them, at least as far as Scotland is concerned, to be merely an extension of the liberalising trend already apparent in excise legislation since 1816. Thus for example, the recommendation that gravity limits be widened from $60^\circ - 80^\circ$ to $30^\circ - 80^\circ$ was merely an improvement on the existing situation. Likewise duty, which had been brought down from $8/4$ to $5/6$ under the 1816 Act was further cut to $2/6$. On the

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46. Dy. 46 George III, cap. 102, $125$.
47. & 48. See J. Scarisbrick, op.cit. p.72
49. The saccharometer had many implications for distilling technology see below, pp. 114 ff.
50. See, e.g. R. Bruce Lockhart, Scotch (1951) p.21 and D. Daiches, op.cit. p.51
other hand the Commission's recommendations did effectively solve the major outstanding problem: illicit distilling.

What impact did the first three acts have on the distilling industry and on the security of the revenue? Did they achieve the aims outlined by Woodbine Parish? Some idea of the effects of the acts can be got from Table II.

**TABLE II: EFFECTS OF THE 1816/1820 REFORMS IN SCOTLAND**

<table>
<thead>
<tr>
<th>Old System Entered for Season</th>
<th>Stills under 500 Gallons</th>
<th>Stills above 500 Gallons</th>
<th>Total Distillers</th>
<th>Gallons distilled</th>
<th>Rate of Duty</th>
<th>Total Duty Paid</th>
</tr>
</thead>
<tbody>
<tr>
<td>1816</td>
<td>—</td>
<td>—</td>
<td>36</td>
<td>1,030,772</td>
<td>8/4</td>
<td>£428,599</td>
</tr>
<tr>
<td>1817</td>
<td>81</td>
<td>27</td>
<td>108</td>
<td>2,139,207</td>
<td>5/6</td>
<td>£599,165</td>
</tr>
<tr>
<td>1818</td>
<td>84</td>
<td>28</td>
<td>112</td>
<td>2,367,914</td>
<td>&quot;</td>
<td>£663,461</td>
</tr>
<tr>
<td>1819</td>
<td>111</td>
<td>29</td>
<td>140</td>
<td>2,365,998</td>
<td>&quot;</td>
<td>£552,771</td>
</tr>
<tr>
<td>1820</td>
<td>96</td>
<td>30</td>
<td>126</td>
<td>2,167,558</td>
<td>&quot;</td>
<td>£602,673</td>
</tr>
<tr>
<td>1821</td>
<td>76</td>
<td>31</td>
<td>109</td>
<td>2,366,676</td>
<td>&quot;</td>
<td>£712,490</td>
</tr>
</tbody>
</table>

This clearly shows the remarkable increase in the number of legal distillers, the increase in total revenue despite the 34% cut in duty, and the rise in output. The breakdown of the number of stills in use according to size also shows the extent to which the acts had helped small capitalists enter the industry. Under the English system all stills had to be a minimum capacity of 500 gallons. Many of those who had invested in large stills continued to work from them, but the diminished size requirement allowed men of slender resources to establish licensed distilleries. Less promising, from the point of view of the success of the reforms, was that this group of small scale distillers, after an initial increase, began to decline from 1819. To find out why this should have happened, it is necessary to know whether the decline was uniform throughout Scotland, or not. In Table 12, the number of licensed distillers in the Highlands and Lowlands is plotted. This shows, that after a large initial influx in both the Highlands and the Lowlands, the number of licensed distillers began to decline.

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distillers declined more severely in the Highlands between 1819 and the reforms of 1823. Lowland distillers appear to have been the major beneficiaries of the early excise reforms, whilst the Highland distillers, despite the cut in duty, the greater freedom to produce a spirit competitive with the illicit product, and access to Lowland markets still faced formidable difficulties.

So far as competition with the Lowland distiller was concerned, the Highlander was burdened by higher transport and raw material costs. These, however, were not his most serious worries, as his malt spirits generally fetched a higher price in Lowland markets than corn or grain spirits. Two of the Highland distillers who had taken advantage of the reforms to set up small stills, Munro of Teaninich and Fraser of Brackla, had both found markets in Edinburgh and Glasgow. Although both were selling at a loss in these markets, their main concern was not inability to compete with the Lowlanders, but their continuing incapacity to counter the illicit distiller on their home ground.

The main factor they blamed for this, and the relative decline of the licensed Highland distiller since 1819, was the malt duty. From 1803 until 1817 malt made from bigg had been charged at a lower rate than malt made from barley. Like most taxes, malt duty had increased during the Napoleonic wars, but in 1817 it had been cut. Unfortunately for the Highland distiller, the differential tax, which was designed to compensate for the poorer malting and

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52. Source: B.P.P. 1831, VII Select Committee on the Malt Drawback on Spirits, p.92. The number of distillers in Table 12 is not the same as in Table 11. Why this should be so is not clear as both were compiled by Woodbine Parish. Few of the excise statistics for this period are unambiguous.
distilling quality of bigg, ended in 1817 (see Table 13.)

TABLE 13: RATES OF MAL'! DUTY IN SCOTLAND (per bushel)54

<table>
<thead>
<tr>
<th>Year</th>
<th>Barley</th>
<th>Bigg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1780</td>
<td>8 1/3rd</td>
<td>8 1/3rd</td>
</tr>
<tr>
<td>1802</td>
<td>1/8 ½</td>
<td>1/8 ½</td>
</tr>
<tr>
<td>1803</td>
<td>3/9 ½</td>
<td>3/1 ½</td>
</tr>
<tr>
<td>1817</td>
<td>1/8 ½</td>
<td>1/8 ½</td>
</tr>
<tr>
<td>1819</td>
<td>3/7 ½</td>
<td>3/7 ½</td>
</tr>
<tr>
<td>1821</td>
<td>3/-</td>
<td>3/-</td>
</tr>
<tr>
<td>1822</td>
<td>2/7</td>
<td>2/-</td>
</tr>
</tbody>
</table>

The effect of this on agriculture was probably more serious than on distilling55 for the distiller turned away from the poorer quality grain to offset the tax by using higher yielding varieties, including in some cases English barley.56 However, in 1819 malt duty was sharply increased and this reacted doubly unfavourably on the Highland distiller. The duty increase eroded the slight improvement gained from the 1816 and 1818 Acts over the illicit distiller. It also made it more difficult to compete with the Lowland distiller, because working from an all malt mash, the Highland distiller not only got a lower spirit yield, but was unable to offset the malt tax by introducing an increased proportion of raw grain into his mash. The harmful effects of malt duty can be traced even further; given the close connexion between illicit distilling and tenant poverty anything which damaged grain markets in the Highlands was likely to stimulate illicit distilling. Malt duty by being levied equally on barley and bigg, grains of different qualities, rebounded unfavourably on the poorer of the two and forced the tenant farmer to seek an alternative outlet for his grain. Robbed of a legitimate trade, the Highland tenant resorted to supplying the illicit distiller or distilling for himself. Not the least of the ironies involved in the whole illicit traffic was that the smuggler, free from both malt and spirit duties, was able to offer a higher price to the farmer than the legal producer. So much so, Fraser of Brackla complained that "...we pay more here than I do in Mark Lane."57

54. Based on P. Mathias op.cit. Table 24, p.400 and S.P.P. 1831, VII Select Committee on the Malt Drawback, p.93.
55. The Highland Society offered premiums to growers for best quality bigg to encourage its use in legal distilling.
57. 5th Report, App. 101, p.326. Mark Lane is the London Corn Exchange.
In 1822, Fraser, giving evidence to the Wallace Commission, was satisfied that "smuggling was never at such a height in this part of Scotland as at present." His assessment sits oddly alongside Woodbine Parish's view, that, as a result of the excise reforms "foreign smuggling is nearly at an end, and the home smuggler no longer openly defies the laws, but is reduced almost universally to the secret and clandestine disposal of his spirits." If his view seems complacent it was at least justified by reference to Lowland conditions for in that area the main benefits of the reforms were to be found (see Maps 6 and 7, p. 146). There, the twin problems facing the Excise at the end of the eighteenth century seemed to have been satisfactorily solved: the revenue was much more secure and a widespread distilling industry had been established, relatively free from the excessive interference and hurtful consequences of now discarded excise systems. By 1823 it remained to be seen whether the Wallace Commission could repeat this achievement in the Highlands.

3. ILLICIT DISTILLING IN SCOTLAND

(I) INTRODUCTION

In 1832 James Barrie Fraser wrote a three volume novel entitled "The Highland Smugglers". Whilst the book employed the "dear reader" style, so favoured by nineteenth century novelists, and was shot full of the sickly sweet romanticism which so bedevilled that century's understanding of Highland problems, it is still of some interest to the economic historian. The two central figures of the story are the Laird of Glenvallich and his house guest, a young Englishman called Tresham. Besides good looks, Tresham's main virtues are a wholesome bravery and a naive curiosity. The former results in him falling into the hands of a smuggling band, after losing his way whilst stalking deer in a remote glen, and the latter enables him to put questions to his host, after his release by the smugglers, which lets the author expose the "cultural gap" between the archaic and barbaric Highlands and the civilised South. Profoundly influenced by the poverty and squalor of the smugglers, Tresham asks his host:

"...in the name of goodness, how does this multitude of inhabitants, tenants, cotters, - call them how you will - manage to subsist themselves, if they do not cultivate the ground, even though they do sit almost rent free?"

"Why sir..." comes the reply "...you would scarcely credit me if I were to tell you; but it is a short tale. They plant potatoes and brew whiskey; that is, in two words, the history of their life and occupation."

Not all together impressed by this answer Tresham wonders why Government measures have not stopped illicit distilling. The reply is bluntly withering:

"What can the fair weather chiefs, sitting in their big chairs round their boards of green cloth, know of our Highland glens, or of the lads that live in them."

In fact Fraser was being less than fair to the Government, for by 1832 illicit distilling in Scotland was very much diminished.

60. The situation in Ireland was very much different. See K.H. Connell, "Illicit Distillation: an Irish Peasant Industry", in Historical Studies (1963).
Excise prosecutions, which had reached record levels of over 4,000 in the early 1820s, had, by 1832, dropped to just over a hundred. It is the aim of this section to examine the organisation of the illicit trade, the reasons for its increase down to 1823 and its subsequent rapid demise.

(II) ORGANISATION

It has to be remembered when discussing illicit distilling that the attempt to collect revenue in the Highlands was being made in an area where private distilling was widespread during the eighteenth century. As John Stein said "...in Scotland the Distillery is in a thousand Hands." There was already in existence a widespread capacity for distilling which was driven underground by taxation. Relatively few of these distillers seem to have been men working on their own. Instead groups of tenants clubbed together to buy a small still. For example, In Urray, a parish on the Beauly Firth there were nine stills:

"...Highlanders from Lochabar, the extensive west coast of Ross-shire and the Isle of Skye, buy the spirits at between 10/- and 14/- the Scotch gallon. One man only in the parish occupies a still without partners. From five to ten or twelve tenants join about one of these stills, by which means each has an opportunity of manufacturing his own growth of barley; and where that falls short of making up his proportion he buys from his neighbours. The whole barley in the parish is distilled... but it is not equal to the quantity manufactured into spirits by nine stills... The barley crop is generally allotted for paying the rents. The principal or only profit resulting from the distillery is keeping up the price of grain, and converting it speedily into money. The profits otherwise are nothing except the draff or grains."  

This was in the 1790s and it is not hard to imagine, that as duty increased, not merely were these distillers driven underground through their inability to raise capital to finance duty or to purchase the large stills required by law, but that the illegal

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product became much more profitable.

The main raw material, barley, was readily available though its conversion into malt, being a lengthy process was also the riskiest. No great equipment was necessary for maltings; a few sacks of grain steeped in a burn or peat bog would germinate and with a little attention could be malted successfully. Once malted the grain was dried over a peat fire. This process enabled the malt to be stored and imbued the spirit with a "peat reek" or "gout", a feature which was supposed to be favoured by consumers of the illicit product. Malt had to be ground before mashing and this was done by mill owners in exchange for spirits.

Unlike Ireland, where a variety of raw materials were used, the illicit distiller in Scotland appears to have been predominantly a malt distiller, although the Rev. G.S. Keith did report:

"...the Use of a coarse spirit chiefly made from potatoes in Aberdeenshire, where the operator with only the Head of a Still and his own Pot or Kettle, and other apparatus, in all worth only a few shillings, and with materials valued at from 15s. to 20s. can in the Course of One Week gain from £3 to £6 according to the Price of Whiskey..."  

Molasses were said to have been used during the Wars because of the high tax on malt. Because of their easier concealment and ease of working (they cut out malting, and mashing simply consisted of adding hot water) molasses may have been preferred by the urban illicit distiller. It is unlikely though that the remote and isolated Highland smuggler used molasses when he could malt with impunity.

One raw material which does not seem to have been readily accessible to the illicit distiller was yeast. Whether there were any intermediaries who specialised in supplying this commodity is not clear, but according to Morewood some illicit distillers evolved a technique for preserving yeast by boiling an oaken withe in wort and drying it. This was reputed to last for twenty years. With yeast and malt the distiller only needed fuel and water.

63. B.P.P. 1831, VII, Select Committee on Malt Drawback, p. 95
65. 5th Report, App. 75, p. 226.
Problems of transport and cost probably ruled out coal, and peat was easily accessible in the Highlands. A good water supply was necessary for mashing and distilling, the worm of the still being immersed in cold water to condense the spirit vapour.

Stills were made either from copper or tin. By the end of the eighteenth century most Lowland distillers were agreed that copper stills produced better spirits, but for illicit distillers copper had two disadvantages: its heavier weight meant that it was less easy to carry off during excise raids and if it was seized a greater financial loss. Tin as well as being cheaper and lighter was also more easily repaired by itinerant tinkers. Tin stills were also said to give the illicit product a different flavour.

Apart from the still, the illicit distiller's largest piece of fixed capital, the only other utensils needed were a tub for mashing, a vat for fermenting, and casks for distributing the spirit in. An oak cask or barrel would do for the first two, but the last needed small casks, usually the size of an anker (about ten gallons) which could be easily transported slung on either side of a pony's back.

As to his actual production process the illicit distiller had to keep the time involved as short as possible for fear of detection. Unlike the licensed distiller he could not afford to repeatedly infuse his mash to get the maximum extract nor could fermentation be carried to its full extent. These however gave favourable characteristics to the spirit: the weaker worts gave a milder spirit and the less complete fermentation avoided the use of large quantities of yeast which was reputed to taint the legal product. Although there was always a degree of urgency present in the smuggler's activities, the actual process of distilling was slower relative to the large capitalist distiller. Whether a slow

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68. See K.H. Connell, op.cit. p. 62
69. See K.H. Connell, op.cit. p. 62
70. 5th Report, App. 75, p. 226
71. 5th Report, App. 82, p. 255.
72. 5th Report, App. 74, p. 219 and Morewood, op.cit. p. 574.
distillation was better than a rapid one was a controversy which raged down to 1823 and beyond. The main point in favour of a slow distillation was that it allowed each portion of the distillate to be easily separated. The traditional distilling process in Scotland involved the use of two stills, the singling and the doubling still. It is unlikely that illicit distillers used two stills but they do seem to have distilled the spirit twice. In some areas the spirit underwent more than two distillations:

"...In the Island of Lewis, which affords bero, oats and rye, usquebaugh is distilled; this usquebaugh, when three times distilled, was called trestarig; and when four times distilled, usquebail, more than two spoonsfull of which were sufficient to endanger life." 74.

The result of these processes was an illegal spirit which, as the Excise Commissioners were told in Perth:

"...is universally preferred and brings nearly double the price when sold at Excise sales. The best spirit is said to come from Glenlivet in Aberdeenshire, being brought across the mountains on horseback, to within 8 or 10 miles of the town, where the carriers are met by parties of men, women and children, who conceal the spirit in small tin cans, and bring it into Perth with such secrecy as to render detection almost impracticable. The superiority of flavour is attributed to the low gravity of the wash and the slowness of distillation. It is also thought that honey is added..." 75

On the other hand, had some of the southern consumers who enthused over its flavour actually seen the conditions under which the spirit was produced they might have been less willing buyers, for according to James Cornwall, an Excise Collector, part of the flavour was due to:

"...the slovenly dirty manner in which the operations are carried on; the washbacks or vessels in which the wort is fermented are never cleaned; whenever they are emptied they are filled again; all wash in a sour state produces spirits of a very different flavour from wash in a sweet state..." 76.

73. 5th Report, App. 116, p.386. c.f. T.W. Carr's puzzlement: "There has, indeed, been at times within my recollection, a great debate whether slow or quick distilling - or in large stills or small stills - or with weak wash or with strong wash - or with malt wash or sugar wash - or with raw grain, or with a mixture of them all, were the best; and within these few weeks I have been told that the very best material for distillation is potatos..."
74. Worwood, op.cit. p.581.
75. 5th Report, App. 101, p.324.
76. 5th Report, App. 82, pp. 255-256.
What sort of people were involved in illicit distilling? Before private distilling became illegal "many Gentlemen and reputable farmers" kept small ten gallon stills, the maximum size allowed by law, producing spirits for their own use. In addition there was "an inferior class of men" who distilled for sale in stills of 18 - 20 gallons, larger than the law permitted. As a group they were recognised by the end of the eighteenth century to be "beyond the Reach of the Law on account of their Poverty." They were not, however, unaffected by the changes in the distillery laws in the 1790s:

"...whereas before the establishment of distilleries, and the additional excise on malt, a poor man made his boll of bear into malt, and paid the duty for it, and then distilled from it an excellent spirit, which he sold at a high price to the rich, and thus obtained a good price for his grain, and the grains and offal helped to maintain, and often to preserve the lives of his cattle when provender was scarce; now the whole advantages that were before enjoyed by the poor, are, by the distillery law, thrown into the hands of rich distillers (for none can be distillers upon the present plan but the comparatively rich)..." 78.

As the conditions for licensed distilling became more onerous the ranks of the illicit distillers swelled. This though was not the only factor, poverty was a successful recruiting sergeant, especially after the Napoleonic Wars. The sort of economic background in which illicit distilling thrived can be found from the following description of one of the smuggling districts, Cabrach, a parish in Upper Bannsire:

"...it is a very poor parish; the land is very poor; it is a very high tableland, and at the same time boggy to a great extent. The people are remarkably poor; it is a very late cold district; the grain does not ripen there well, and the breeding of black cattle and universal smuggling, forms the whole trade and occupation of the people..." 79

Whilst the actual manufacture of spirit was carried on by poor tenants and peasants, some degree of specialisation developed between the maker and the distributor:

78. O.S.A. Vol, 9, p. 580.
79. 5th Report, App. 64, p. 175.
There are two sets of people; there is a race of low cottagers and women, widows, who manufacture the spirits, and run all the risks in manufacturing; and there is a set of other persons regularly trained smugglers, who come and purchase off them — who buy off A, B, and C and then set out with horse loads of spirits, and go away a considerable distance. There is the village of Huntley to which they carry it, to Banff, to Aberdeen, and to all the places round, they then come back, if they succeed, for a fresh cargo, so that there are two classes. Those who manufacture the smuggled spirit do not appear to me to trade in it; there are a separate set of persons who trade in it. Some years ago, if these carriers were returning with their casks empty they would have shrunk from off the ground if they had met a gentleman, or any person disposed as I am to oppose the system; now they meet them with a degree of confidence that appears a remarkable display of the differences they seem to glory in it; I do not know where those people reside; I do not know any one of them; I know some of their faces, but I never see them unless they are unloaded; they ride in little ponies, with a little cask on each side, and do not appear to pay any regard to appearances..." 80.

This doubt about who constituted the second group of carriers or traders remains. Connell has stated that "...such was the success in the Irish market of the private distiller (or his distributor) that it would be no surprise to find that he ventured beyond it — especially, perhaps, in an endeavour to serve fellow-countrymen who retained in emigration their taste for potexc." 81 The Excise reports speak of groups of "Irish flaskers" people who travelled armed in bands of a dozen or more and brought the whisky over the hills from areas like Strathdon, Glenbucket and Breadalbane into the Lowlands. 82 Keeping off the main military roads, they travelled by pony carrying the spirit in flasks or animal skin bladders of 6 to 8 gallons. 83 In some places the Irish did not limit their talents to transporting whisky. On the islands of Loch Lomond they joined forces with the local inhabitants for distilling, with, as the Excise noted, unfortunate effects on the latter:

"...The habits of the great classes of people in those districts have become so vitiated, and they have so strengthened themselves by forming associations with Irishmen (who appear to have resorted to this country for the very purpose), as with

80. 5th Report, App. 64, p. 176.
82. 5th Report, App. 67, p. 205.
83. 5th Report, App. 84, p. 272.
"the idle and lawless of our own country, that there is too much reason to fear that the late alteration of the distillery laws will not lead to an abandonment of the proceedings." 84 Whether they were actually Irishmen or not is debatable. With the prevailing level of Lowland ignorance about the Highlands and the Lowland prejudice against the immigrant Irishman, it was easy to attach the epithet "Irish" to anyone unusual appearing in the Lowlands. It also provided a convenient scapegoat to cover the activities of Highland landowners' tenants. On the other hand, both Irish and Highland emigrants to Lowland cities provided a large group of consumers for cheap illicit spirit, and in a clandestine trade the distiller was more likely to establish contact with emigrants from his own glen or parish. Nor apparently was the licensed distiller averse to earning a dishonest penny from handling the illicit product. On Islay, one of the largest smuggling islands on the west coast, the principal merchant for illicit whisky was the legal distiller: 85

"...he buys all the spirits he can get, and disposes of his own illegally at their funerals and their weddings..."

Two-thirds of the spirits from the Island went to Glasgow where they fetched as much as half a guinea a gallon because of their high reputation amongst Argyllshire people in the city. This reputation was based on the whisky "being full of acid" 86 which apparently made "an excellent stomachic, and that is the thing that they are so fond of." The high level of acid in the spirit was due to the illicit distillers' habit of "blinking" their worts or letting them go into acetous fermentation. Licensed distillers tried hard to avoid this, for an increase in the acid content of the wash lowered its alcohol yield, but to the illicit distiller this did not matter. As a result the illicit distiller got spirit yields of only 6 to 8 gallons per 100 gallons of wash. Such low yields help to explain the rapid disappearance of many of the small distillery businesses set up after the 1823 Act. James McLanab, a licensed distiller at Cowie in Stirlingshire, described the illicit trade to the Wallace

84. 5th Report, App. 83, p. 263.
85. 5th Report, App. 74, pp. 221-222.
86. 5th Report, App. 74, pp. 221-222.
Commission. He himself had produced a spirit using the illicit methods which he had sold to smugglers who carried it to Edinburgh "covered over with their hands". He had also sold the smugglers ordinary grain whisky which they had passed off "as illicit whisky at a high price" suggesting that the demand for illicit whisky did not solely depend on its price, but was also, as McNab believed "a matter of prejudice." 87

Although much illicit spirit was consumed and sold locally there seems to have been little difficulty in disposing of it in market towns and cities. In Inverness, a town with a population of 12,000 in 1820, a 1,000 gallons of spirit, mostly illegal, was reputed to be sold by the town's eighty-three retailers. The effects of this on the licensed distillers were of course disastrous. Fraser of Brackla distillery had not sold even a hundred gallons of spirits within 120 miles of his residence and had "not sent a gallon of whisky to Inverness in the last two years." 88 His fellow distiller, Hugh Munro of Teaninich, had 4,000 gallons on hand, his market being glutted. From a make of 8,000 gallons in 1822 less than thirty gallons had been sold in Rossshire, mainly to his own workmen and to retailers as cover for illicit spirit. 89 In the larger towns there were plenty of unlicensed retailers running small dram shops who were only too willing to take the smuggled product into "their disorderly houses...the nurseries of every species of crime." 90

87. 5th Report, App. 74. p. 221-222.
89. Notes Under the excise laws movements of spirits had to be covered by a permit. This enabled the excise officers to check the distillery from which a retailer's stock had come. Retailers bought small quantities of legally produced spirits and then used the excise permit to cover stocks of illicit whisky.
What impact did the illicit distillers' demand have on grain markets in the Highlands? No easy answer can be found to this question for illicit distilling itself can be interpreted as a response to the absence of markets for the poor quality grain grown in some parts of the Highland area. This can be seen in the motives which led some estate owners to invest in licensed distilleries when the excise reforms were introduced. Both Munro of Teaminich and Fraser of Brackla were said to: "...have taken up the business of distillation merely as an accessory to the cultivation of land, and as affording a means for the consumption and disposal of their grain, which in these remote and thinly peopled districts would frequently be attended with with difficulty." Likewise the largest distillery in the district, Harper in Sutherland, had been established by the Marquis of Stafford with the same market creating object in mind and to provide employment for tenants shifted to the coastal strip because of sheep clearances inland. Whilst such marketing problems might be expected to occur in Northern counties like Sutherland, Ross and Inverness, the same motive operated further South. Even in Perthshire, an area where the quality of barley was by no means poor, many of the farmers had turned to distilling for precisely the same reason. Alexander Forbes, a distiller at Melton of Tullymet near Dunkeld, told the 1823 Enquiry that it was "...owing to not getting our grain sold that we became distillers." The post-war depression made distillers out of many farmers. Again the capital for the distillery had come from the landed interest, in this case the Duke of Athol. Such legitimate operations, although indicative of future developments, were, in the early 1820s still the exception rather than the rule. In the illicit trade, the connexion between agriculture and the distiller took many different forms. On Lewis, tacksmen, who held the lease of a farm, let small parts of the farm to smaller

91. 5th Report, App. 96, p. 316.
tenants and gave them barley which they were expected to distil along with the grain they grew themselves. The whisky was then accepted in part-payment of rent. This pattern did not however prevail all over Lewis, but only on the west of the Island. Elsewhere the tenants used their grain "...for subsistence."94 The results of this activity do not appear to have been beneficial either to agricultural advance or the Island or to the tenants, for as rents rose, tenants found themselves having to convert more and more of their grain into whisky and families were said to be "...sometimes reduced to starvation because of illicit distillation." On Islay, where "...everybody was engaged in illicit distilling..."95, the lower tenants were the main smugglers, but whilst they "...gave a few shillings more for grain than the legal distiller..." they refused to pay for the grain if their brewing was seized by the Excise, and being so heavily occupied in smuggling, neglected their own land. Although the distillers in Islay seem still to have had at least one foot on the land, the true professional illicit distiller, whose livelihood was based solely on the whisky pot, was mainly a feature of the north-east where a greater degree of specialisation between distilling and cultivating existed. Just how far this specialisation could go, even to the extent of protecting smugglers, can be seen in Rossshire:

"...It is notorious that the factor of an extensive smuggling estate Mr. William Murray, a bank agent and merchant in the little town of Train, and a great protector of smugglers, who are good customers to his shop, sends his barley a considerable distance to Ardgay, as a depot, from whence it is distributed on credit, and at a high price, to the small smugglers, and he afterwards attends himself, as a J.P., at the excise courts, with other minor justices, some of them even pettifogging lawyers, with whom a present of whiskey from a smuggler would have considerable effect, to protect them from fines. One excise officer had even asserted that he threatened to get him removed from doing his duty; and the writer of this has not a doubt that the present useless drunken officer of the Kincardine division, Reekie, is placed and kept there by the collector Cochrane, on purpose to favour this factor's views as to the smugglers."96

94. 5th Report, App. 86, p. 282.
95. B.P.P. 1831, Report from the Select Committee on the Malt Drawback, p. 94.
The effect of this on the grain market was to maintain a wide regional difference in barley prices, for example, in 1822 licensed distillers around Montrose were paying 18/- to 20/- a boll, whilst smugglers in Rossshire were buying grain at 30/- to 32/- a boll.\textsuperscript{97} It is this sort of impact of the illicit trade which helps to explain the overwhelming difficulties of the few licensed distillers established in the north-east at this time. Already uncompetitive with the illicit distiller because of malt and spirit duty, they were further disadvantaged in competition with Lowland distillers because of the higher price of barley in their local market. For the farmer, however, the illicit distiller provided a better market than the lawful trader, though the results for crop improvement were probably harmful as easy access to an illicit market for poor quality grain reduced the incentive to improve barley strains; a point recognised by the Highland Society with its offer of premiums for raising barley and bear or bigg of a superior quality with a view to its use in legal distilling.

\textbf{(IV) COSTS AND PRICES}

Submitting the activities of the illicit distiller to some form of rational economic analysis has obvious limitations. In part this lies in the very nature of his clandestine operations; the data which are needed to answer questions about the distillers' costs, the price his spirit sold for and his profit margins are almost non-existent. It is not even clear that the main attraction of illicit spirit was its low price. In some cases it seems to have fetched an even higher price than the legal product simply

\textsuperscript{97} 5th Report, App. 57, pp. 136-138
because of the way it was produced and the fact it was illegal. John Stein, for example, complained in 1822 that his grain spirits could find no buyers at 6/6 (a price which included duty at 4/9)\(^98\) whilst the illicit product was fetching between 8/9 and 10/6.\(^99\)

An attempt at rational economic analysis can however be justified in view of the contemporary discussion on how to bring illicit distilling to an end and establish a legal industry. The problem was to find a level of duty which would not make the legal product uncompetitive. Parish thought that this was the wrong approach, arguing that a further reduction of duty would not end illicit distilling because the product fetched a higher price and that consumer preference "...was not just a matter of price, but also of taste."\(^{100}\) In the sense that it was not just a matter of price alone, he was surely right, for part of the difficulty lay in those excise restrictions which prevented as good a spirit being made by the legal distiller. However, the view that whisky consumers were unlikely to respond to a lower priced product does not seem intuitively appealing at prevailing levels of income. The difficulty is that of identifying the composition of the whisky market, a problem which was discussed in Chapter One (Page 21).

It was argued there, that in the Lowlands, grain whisky and malt whisky, served different markets. Grain whisky, as a cheaper spirit, found its main outlet amongst working-class consumers in the cities. By contrast, malt spirits were regarded as a luxury drink and were consumed "by a superior class of persons who make them into toddy and punch, and give a higher price on that ground."\(^{101}\) So far as malt whisky is concerned, the evidence from illicit distilling indicates that this simple division needs some further refinement.

In the Highlands, after all, malt whisky, as the product of a peasant craft satisfied the needs of consumers in the distiller's immediate locality and, it is difficult to regard it, at least in the eighteenth century as a luxury item. The upsurge of illicit

\(^98\) Duty at the time was 5/6 per proof gallon, Stein's calculation was based on a lower strength.

\(^99\) Strength unknown - illicit spirit was usually sold at a higher strength than legal spirit, mostly 11 own proof (o.p.) but sometimes as high as 25 o.p.

\(^100\) 5th Report, App. 83, p. 260.

\(^101\) B.P.P. 1831, VII Report on...the Wast Drawback, p. 56.
distilling suggests that increased taxation did, however, transform it from an accepted necessity of everyday life into a luxury, with the smuggler filling the gap between the price of "parliament whisky" and what the consumer could realistically afford. One group of Highland consumers, the gentry, could afford legally produced whisky and it may have been this that gave malt its luxury label. The change in the attitude of the Highland gentry to the illicit distiller, from undisguised support to hostility, may first be detected in the early 1820s. Once the excise system held out the possibility of distilling a good quality malt whisky at a reasonable price, the gentry began to withdraw their approval of the smuggler and sponsor legitimate producers. The old twinges of conscience aroused in the gentry by the double standard implicit in their responsibility for enforcing the excise laws on a poor tenantry and the sight of smuggled whisky on their own supper tables, disappeared as they patronised the new licensed distillers. For the licensed Highland distiller, one way of escaping the illicit distillers' competition, was to concentrate on producing a fine quality malt whisky for this narrower market. This task became much easier as excise controls eased between 1816 and 1823. As will be discussed later, a strong emphasis on quality marked the Highland distillers approach to his market, even after the threat from illicit spirit diminished. It then became a method of competing with grain whisky.

In the cities another quality of malt whisky, cheap, sour, illicit spirit was dispensed by the shebeens and dram shops to working-class consumers, especially those of Highland and Irish origin. This was a substitute for grain whisky, a drink resembling the spirit which the Highlander and the Irishman had had in their rural communities. From the demand side, the problem for the authorities in 1816 was a dual one: to devise an excise system which would aid the legal production of a good quality malt spirit and select a level of duty sufficiently low to wean consumers away from the illicit product.
From the supply side the question was: "How competitive was the illicit distiller?" How easily could his grip on the market be prised away from him? From what is known about the conditions under which illicit distilling was carried out it can be seen that there were certain weaknesses in the illicit distiller's position. His distilling methods were inefficient; according to James Nobel of the Excise "... the illicit distiller had a great loss because he does not extract two-thirds of the boil of malt." 102

Even working from a weak wash he was unable to extract the full spirit content mainly because the dirty operating conditions turned the wash acid, but also because he had insufficient equipment to mash the malt properly. He was at a disadvantage in that in a clandestine trade disposal of the spent grains for sale as cattle feed was difficult. These he generally concealed. 103 This was quite a sizeable loss as some distillers 104 maintained that the revenue from the sale of spent grains met about half the costs of manufacturing. Costs of distribution in the illegal trade may have been higher also, for the Irish flaxkors bought as low as they could to compensate themselves for the risk of loss by seizure by excise and military patrols in the long route south. The most important cost element in distilling, the price of grain, also came higher to the illicit distiller, and in that this was a result of the high malt and spirit duties on the legal product, which allowed the illicit distiller to pay more for grain this was a sensitive variable, open to influence by the authorities. So successful indeed were the drawback of duty on malt used in distilling, from 1821, and the reduction in spirit duty, from 1823, in restoring the licensed producers' competitive position, and so competitively weak were the illicit distillers, that subsequently the legal traders maintained that the illicit distiller could only compete when the price of grain was low. 105

One cost which the illicit distiller does not seem to have been burdened with was the cost of credit. Although evidence of a

102. 5th Report, App. 84, p.272.
103. 5th Report, App. 70, p. 197.
credit network between the supplier of grain and the smuggler is available for estates like Ardgay, it seems unlikely in a clandestine trade, that there would be sufficient trust for a credit network to be established. Barter or cash transactions were the form of exchange in the smuggling business. The licensed distiller had, however, to pay the cost of capital tied up in duties whilst awaiting payment from the spirit dealer and also the interest on bills for grain. Although on a gallonage basis this only added twopence at most to the cost of a gallon of whisky, it added to the competitive difficulties of the legal trade. Over the licensed distiller’s whole output duty advances meant that the level of capital needed to set up in business was greater than many small men could afford. The extension to Scotland in 1823 of the privilege, already enjoyed by Irish distillers, of warehousing spirits free of duty directly countered both of these effects.

Whilst it would place too great a strain on the available evidence to attach precise figures to the relative cost structures of licit and illicit producers, a hypothetical example may serve to highlight the overwhelming importance of duties in the competitive struggle.

<table>
<thead>
<tr>
<th>TABLE 14: RELATIVE COST STRUCTURES OF LICENSED AND ILLICIT DISTILLERS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td>----------------</td>
</tr>
<tr>
<td>A Fiars price for a quarter of</td>
</tr>
<tr>
<td>Perthshire Barley in 1820</td>
</tr>
<tr>
<td>Malt Duty at 3/8d. per bushel</td>
</tr>
<tr>
<td>Cost of Grain</td>
</tr>
<tr>
<td>B Spirit yield per quarter of grain</td>
</tr>
<tr>
<td>Cost of grain per gallon</td>
</tr>
<tr>
<td>Wash and spirit duties per proof gal.</td>
</tr>
<tr>
<td>C Cost per gallon of malting, yeast, coal, wages, interest,</td>
</tr>
<tr>
<td>bad debts, depreciation</td>
</tr>
<tr>
<td>D Less sale of spent grains per gal.</td>
</tr>
<tr>
<td>E Selling price</td>
</tr>
</tbody>
</table>

Notes: 1. the assumption that both groups paid the same for their grain is unrealistic. The illicit distiller seems to have paid more.
Notes (contd.)
2. Spirit yields are based on evidence from the Excise and from licensed producers. Given the conditions under which illicit spirit was produced, 10 gallons per quarter is a generous figure.

3. Manufacturing costs are based on the evidence from malt distillers. As relatively inefficient producers, the illicit distillers' manufacturing costs were probably higher.

If Columns II and III are compared, it can be seen that free from the burdens of duty, the licensed producer was in a good position to compete successfully with the smuggler. It is important to stress though, that whilst the relative cost proportions are probably reasonably accurate, there were considerable variations in, for example, the cost of grain, in different localities. This is true of selling prices which varied according to local market conditions as can be seen from Table 15, which shows the prices quoted for different types of spirit in evidence to the Wallace Commission:

**TABLE 15: SELLING PRICES OF GRAIN, MALT AND ILLICIT SPIRIT (1822)**

<table>
<thead>
<tr>
<th>Place</th>
<th>Grain</th>
<th>Malt</th>
<th>Illicit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stirling</td>
<td>7/11 proof</td>
<td>8/- to 9/-</td>
<td>8/6 n.s.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7 o.p.</td>
<td>5/- to 6/-</td>
</tr>
<tr>
<td>Inverness</td>
<td></td>
<td>11/- proof</td>
<td>4/- to 5/-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7/2 proof</td>
<td></td>
</tr>
<tr>
<td>Lewis</td>
<td></td>
<td></td>
<td>5/- to 8/- n.s.</td>
</tr>
<tr>
<td>Kirkcaldy</td>
<td>6/6 n.s.</td>
<td>12/- n.s.</td>
<td></td>
</tr>
<tr>
<td>Glasgow</td>
<td></td>
<td>11/9 to 12/-</td>
<td>7/- n.s.</td>
</tr>
<tr>
<td>Edinburgh</td>
<td></td>
<td>11/9 to 12/-</td>
<td></td>
</tr>
<tr>
<td>Haddington</td>
<td>6/2 to 6/8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: n.s. - no strength specified.

Although able to undercut the licensed distiller by evading malt and spirit duties, the illicit distiller who wished to stay in business had one additional cost not suffered by his legal competitor: the costs of fees, douceurs and hush-money which were necessary to buy off his more curious or righteous neighbours and to secure the acquiescence of the gauger.
During the 1799 enquiry John Stein had described the system of survey as a contest between the exciseman and the smuggler which was "...without the least Prospect or Expectation of ...ever coming to a close...Indeed it is in the interests of the Excise Officers that it should not (for) the keenest Sportsman least of all wishes to extirpate the Game...". On a low basic salary the exciseman, after the 1790s, had not even the incentive of boosting his income by a share in rewards and fines for seizures. A vigilant excise officer exposed himself to considerable hazards in attempting to suppress illicit distilling. The riding officers of the Kincardine division told of being shot at in Glenbucket, of having stones thrown at them in Cabrach, and of facing fourteen double-barrelled guns in the pass leading into Glenochty. Donald Ferguson, an officer of the Division, claimed that the excise were "always deformed", that is, turned off the distillery by force, in Kincardine. In Strathglass he had been chasing a man with a still on his back and had fallen over a precipice. In Sutherland, which with Ross-shire witnessed the worst violence, probably because of the clearances, forty to fifty smugglers chased Ferguson and his men off and told them they would be killed if they came back again. However, on this occasion the game went to the Excise for they returned with soldiers and "...the people were turned out... and their homes knocked down." Normally lacking military support the Excise officer was an unpopular individual in an isolated community. It was wisest for the officer if he wished to preserve his hide to reach a compromise with the local smuggling population. A present of whisky from the smuggler supplemented his income and protected the donor from fines. Even the smugglers' wives made presents of butter, eggs and cheese to the gauger's wife for her husband's compliance, on the grounds that "...benefits ought to be mutual." In Lewis this state of peaceful co-existence had proceeded incredibly far. On that island the smugglers and the excise officer had made an agreement that on allowing the smugglers

110. 5th Report, App. 57, pp. 136-137.
to pass so many casks of whisky he received a certain percentage of each anker. From this he netted an extra £230 to £240 a year, about three times his salary. For the sake of appearances periodic seizures were carried out but the stills were left intact and only the wash destroyed. Nor was this all, before his supervisor came round to inspect the island, the officer warned the smugglers to move the stills from their homes. The evidence of this state of affairs on Lewis was given to the Wallace Commission by the Receiver-General of Customs on the island, the resident excise officer having been conveniently seized with a fit on reaching the mainland en route to give evidence! It is hard not to feel sympathetic towards this miserable individual being hauled before "the fair weather chiefs" and towards the rest of his colleagues. Implementing excise legislation in the glens and islands was a lot harder than planning it in the offices of the Excise in Edinburgh. Poorly paid and despised by the local populace, the excisemen placed themselves at risk by being active and received little support from local magistrates and landowners. Hence the good officer's lament: "the conniving officer is best off." 

If the investment in bribes and presents failed to pay off, the illicit distiller was faced with prosecution at the annual excise courts run by the local magistracy. These held out little terror for the illicit distiller:

"...When a pot is seized, no time is lost in procuring another... Offenders, though detected, persevere steadily, knowing as they are already frauded they can be no worse, and that the Day of Reckoning comes but once in a Year. At last the Day of Reckoning comes. Hundreds of Causes are tried in the Course of a few hours by a J.P. Court. The Offenders are generally of the Description who have little to lose and much to gain; they contrive to appear in the most wretched plight possible... All are sentenced in Sums so moderate, that from the Court they return to their offences with redoubled Ardour and Hardiness..."

That was the description of the legal process at the end of the eighteenth century. Little change had been recorded by 1822: "I am told there is no scene of perjury equal to that of an excise court,"

111. 5th Report, App. 86, p.280.
112. 5th Report, App. 84, p. 273.
reported John Forbes, Sheriff-Depute of Perth. The anomalous position of J.P.'s sitting in judgement on their own tenants was not the least of the problems in attempting to suppress illicit distilling. As Sir George MacKenzie noted "...there is not a J.P. who can say, that he does not, in his own family, consume illegally made spirits." Besides, the magistrates income was dependent on the tenant being able to pay his rent. Fines and imprisonment were both unsatisfactory punishments. The problem of punishment was a difficult one and various suggestions were proposed. A deputation of Lowland distillers argued that "...punishment should attach to the person" and suggested overseas service in the Army or Navy. Sir George MacKenzie thought compulsory labour on the new Highland roads a possible solution. A sterner disciplinarian advocated six months in the hulks, adding that "...it would have an excellent effect to send one of the hulks to Cromarty, as there are but indifferent goals in the North. The very idea or fear of the hulk among the Highlanders would be worth a dozen gaugers." In view of the part played by illicit distilling in allowing the Highlander to maintain his landed status, a more realistic suggestion was that the landlord or proprietor be accountable for all excise offences on his property thus compelling him to break an offender's lease:

"This would not prove an oppressive measure. The Dread of its effects, of being turned out of House and Home, an Outcast from Society, would rapidly put an end to the Practice; and to the great Benefit of Proprietor and Tenant, Temperance and Industry would soon take the Place of Habits of Dissipation and Idleness."

114. 5th Report, App. 61, p. 159.
115. 5th Report, App. 50, p. 131
118. 5th Report, App. 50, p. 131. Sir George's intellectual effort in devising this punishment exhausted him and produced a "relapse of illness, which rendered bleeding and blistering necessary." A remedy as effective doubtless as labour on the Highland roads.
119. 5th Report, App. 57, p. 140.
120. See below, page 92.
After 1816 when the landed interest saw the Government taking measures to encourage a legal industry, some of them became less willing to countenance illicit distilling on their estates, and in 1823, the Wallace Commission included a recommendation to the effect that landlords should have the right to terminate leases in cases of illicit distilling. After this, eviction became the usual consequence of a conviction for smuggling, and it was not until the Crofters' Holding Act of 1886, which granted security of tenure to crofters, that anti-smuggling clauses were dropped from leases, despite the protests of the Excise. 122

In fact the deterrent aspect of attempts to prevent illicit distilling received prior legislative attention than reform. In 1822, ahead of the Wallace Commission's report, the Illicit Distillation (Scotland) Act 123 was passed. It included new stiff penalties for distilling offences. Possession of an unmarked still, whether in use or not, earned a fine of £200. So too did obstruction of excise officers in the course of their duties and the removal of spirits without license. The Justices lost their discretion to reduce fines below £20 and non-payment carried an automatic six months imprisonment. Nor was punishment limited to the distiller, the owner of property on which illicit distilling occurred could be fined as could the carrier of spirits without a permit. 124 All these helped to strengthen the excise officers in their fight against illicit distilling, and they received further encouragement in new provisions for rewards for the prevention and detection of illicit distilling. 125

123. Act 3 George IV, c52.
In section 3 of Chapter One the geographical distribution of illicit distilling was examined and the reasons for illicit distilling discussed. These included the basic difficulty facing the Excise in levying duty in a wild, remote and lawless area; the inability of the licensed distiller to produce a spirit satisfactory to Highland tastes and pockets under the prevailing method of charging duty; the ability of the illicit distiller, free from malt and spirit duty, to offer tenants a good price for otherwise unmarketable grain, and the support given by landlords, whose rent rolls were dependent on the proceeds of illicit distilling, to breaches in the excise laws. It was also argued that whilst John Stein's comments about "the ancient Highland custom" of private distilling being "primitive and patriarchal" and "proceeding while a Pot or Tin Cannister is to be found in the Highlands" contained some truth, they also masked the complex role of illicit distilling within the Highland economy itself, and in relations between the Highland and Lowland areas. In what ways did these relationships and the incidence of the illicit trade alter in the nineteenth century?

Although at one time the illicit distiller may have had some of the primitive and romantic qualities which other writers have attached to his activities there is little doubt that by the end of the Napoleonic Wars the scale, and degree of sophistication, of his marketing activities had reached such a peak as to seriously alarm the Excise and the legitimate trader.

It is difficult in the absence of detection figures to assess the degree of illicit distilling during the Wars. Looking at the factors outlined above, it can be seen that some point in the direction of an increase, and some in the direction of a decrease. Both spirit and malt duty reached new heights during the Wars and the

127. See e.g. R. Bruce Lockhart, op.cit. pp. 17-31
amendments to the excise system did little to counteract illicit distilling. The still licence duty, the restrictions on the distiller's freedom to set his worts as he wished, and the exclusion of the Highland distiller from Lowland Markets all served to hinder the licensed producer in his competition with the illicit distiller. A report 128 by excise officers issued soon after the amended system was introduced, showed that as the numbers of licenses taken out in the Highlands tailed off, illicit distilling increased. Weighing against these factors was the prosperity which came to the Highland economy as a result of the war. If distilling can properly be regarded as one of a range of alternative activities facing the Highland economy, then it might be argued that the prevailing prosperity brought by high wartime prices for grain, cattle, sheep and kelp helped to lessen the attractiveness of illicit distilling. In support of this view is the strange hiatus in the customary volume of complaint about the illicit distillers during the war. It is surely significant that it is not until 1816 that widespread recognition of the problem of illicit distilling emerges, precisely at the time when the return to alternative economic pursuits in the Highlands fell sharply in the post-war deflation. Some contemporaries recognised the close link between the fortunes of agriculture and illicit distilling. James Gordon, an Aberdeenshire J.P., thought that "the temptations to illicit distilling are very great at present because of accidental causes", these being the depression in grain and cattle markets. Sir George Mackenzie of Coul described illicit distilling as "one of those local cases which one sometimes meets with when wandering through the interminable labyrinth of agricultural distress." 129 Part of the blame for the post-war upsurge in illicit distilling must, however, rest with the excise system, especially the untimely extension of the English system to Scotland and the duty increase in October, 1814. The English system with its requirements of a high percentage spirit extract and stills of not less than 500 gallons made legitimate production impossible under Highland conditions.

129. 5th Report, for Gordon see App. 64, p.173 and Mackenzie see App. 49, p.130.
That one factor in the rapid abandonment of the English system in November, 1816 was the widespread rise in illicit distilling is clear from Parish's observations on the effects of the system:

"The state of the revenue and of the country, with respect to smuggling and its consequences, were at this period very alarming. The legal trader could not manufacture a spirit suitable to the taste of the people; the country was overrun with smugglers, and the laws were openly set at defiance; bands of lawless persons armed with defensive weapons, and even in some cases preceded by pipers, unloaded vessels and carried off the smuggled spirits without molestation." 130.

Parish estimated that the whole of Glasgow was being supplied by smugglers operating in the Loch Lomond area, and requested military help to establish a chain of infantry positions along the main smuggling routes into the city.

As Chairman of the Scots Board of Excise, Parish was faced with demands from both licensed distillers and, curiously enough, from members of the landed interest, for a solution to the problem of illicit distilling. The petitions which came in from the Highland counties in 1816 demanded abolition of the Highland line, permission to use small stills of 50 - 60 gallons, a reduction in both malt and spirit duty, and a reduction in the required percentage of spirit. 131 All these measures were embodied in the Small Stills Act (as it came to be known in the Highlands) of November, 1816, though Parish expressed reservations that a reduction in duty would combat illicit distilling arguing instead that the large consumption of illicit spirit originated in the climate and in taste preference:

"I do not conceive that their preference would be governed by price unless illegal whiskey were so extravagantly dear, and the price so disproportionate to that of the present legal spirit, as to ensure the sale of the latter, in which case it would be resorted to only by those whose means were scanty; the rich and those above the pressure of want, would still indulge in their favourite liquor. In this view, therefore, the quality is the first recommendation of whiskey, price the second." 132.

130. 5th Report, App. 83, p. 258.
131. B.P.P. 1816, VIII Reports of Woodbine Parish on Illicit Distilling 25th April and 24th May, 1816.
132. B.P.P. 1816, VIII Reports of Woodbine Parish on Illicit Distilling 25th April and 24th May, 1816.
The trouble was that quality and price were not unrelated. An all malt mash had a lower spirit yield and paid more duty than a raw grain mash. The licensed Highland distiller still faced the additional costs involved in distance from the main markets, poor quality grain and higher fuel and yeast costs. The fact was that producing the preferred malt whisky was an expensive task and that without lower duty there was little prospect of licensed distilling in the Highlands.

Despite Parish's objections to a lower duty, some of which were based on the need to "prevent the immoderate use" of spirits, duty was lowered in November 1816. The immediate effects of the 1816 Act were considered to be beneficial in reducing the extent of illicit distilling. John Buchanan, the M.P. for Dunbarton, believed that in his county "illicit distilling stopped for a short while after the Small Stills Act." 133 Certainly the number of licensed distillers increased (see Table 12, p. 67 and graph 3, p.104), and the reforms persuaded some county gentlemen to subscribe to the establishment of legal distilleries. 134 However, with the increase in malt duty in 1819, the smuggler received another boost. Yet, even allowing for the unfavourable impact of the malt duty it is clear from the evidence given to the Wallace Commission that even after the reduction in spirit duty, a duty of 5/6d. was still too high to allow the creation of a successful legal trade in the prevailing depression in the Highland economy. Indeed, as the Commissioners bluntly stated "the local Highland market is held by the illicit distiller." 135

The only source of evidence on the incidence of illicit distilling is the Report of the Wallace Commission. In addition to the basic problem of estimating the incidence of any illicit trade, use of the material collected by the Wallace Commission presents another difficulty. The bulk of the evidence collected by the Commission relates to the eastern Highland Counties, to Aberdeenshire, Invernesshire, Banffshire and Eastern Ross. During
September and October 1822 the Commissioners went out on a tour of inspection to see how the earlier reforms were working. Starting in Perth the Commissioners covered that county, then by way of "the great Highland road" from Dunkeld they went on to Inverness. Instead of then going further north or west, the Commissioners returned south by way of Elgin, Banff, Aberdeen, Montrose, Dundee, Kirkcaldy and Alloa. It is by no means certain that this concentration on the eastern counties was merited by a higher incidence of illicit distilling. It seems more plausible that the neglect of the north and west of Scotland was partly due to continuing communications difficulties and to the fact that smuggling activities in the eastern Highlands, unlike in the west, were more likely to impinge on the economic and social life of the more advanced coastal fringe. By the 1820s "bands of lawless persons armed with defensive weapons, and even in some cases preceded by pipers" appearing in the Lowlands smacked too much of earlier troubles and was no longer tolerable to stronger nineteenth century governments. Newer and more lawful standards of behaviour were being demanded by the Highlands.

It is also possible to detect in the evidence something of a change in the character of the Highland peasant and in the organisation of the illicit trade. Mr. Mackenzie, the M.P. for Ross-shire, who claimed thirty years residence amongst the smugglers and illicit distillers of his county thought that the "morals of the Highland people have undergone a great change; formerly they were mild, sober and inoffensive; now they are daring, profligate and full of insubordination." For him the murder of an informer indicated that "the Irish system is making rapid advances"; Irish illicit distilling being much more extensive and lawless than the Scottish variety. In Ross-shire illicit distilling had created "a numerous and idle population... where there is no employment, except that arising out of the whiskey pot... These parts are accordingly nests of vice." The moral decline witnessed by

136. 5th Report, App. 101, pp. 324-327
137. 5th Report, App. 57, p. 139.
138. See Connell, op.cit. "Pot-sneen-making provides a striking example of the proverbial reluctance of the Irish to accept the Law's definition of an offence." (p.76)
139. 5th Report, App. 57, p. 139.
Maickenzie had even extended to the smugglers' children who "are taught to lie and steal, and poach and kill fish in close time, from their infancy" and were brought up with no respect for the law. Such blanket condemnation does however give rise to the suspicion that Maickenzie was describing something more than the effects of illicit distilling. Rossshire at this time was going through the upheavals of the clearances and statements such as "It is not possible to conceive a school for rebellion greater or worse than the smuggling districts in this county,"\(^{140}\) indicate a degree of concern greater than that likely to arise from the illicit distiller's activities alone. The changed character of the Highlander is not difficult to understand when the whole fabric of his economic and social existence was under attack, and when smuggling provided, at least in Rossshire, not an alternative income, but the only employment. It was little wonder then that Maickenzie was afraid to venture into Strathcnonon, an area of clearances and smuggling.\(^{141}\) Maickenzie was not alone in connecting resistance to agrarian changes with illicit distilling.

Robert Brown, a factor for the Duke of Hamilton, also gave evidence on this point. A Lowlander, he had come to the Highlands in 1798 to carry out estate improvements, and had been successively factor to Macdonald of Clanranald, McLeod of Harris, and the Duke of Seaforth. In Lewis where he had been consolidating land for letting his orders were disobeyed in the parish of Barvas where illicit distilling prevailed. His greatest difficulties had, however, been in Arran in 1814, where he was consolidating farms, building roads and farm houses, and settling low-country tenants. There, some of the inhabitants "...who had been in contact with Irish smugglers carried off the road tools and broke down the new houses." Like all good improvers he had triumphed over these malcontents:

"...they were all convened, and threatened with being turned bodily out of the island, unless they submitted; and I brought my system through and obtained a complete return to obedience."\(^{142}\)

\(^{140}\) 5th Report, App. 101, p. 326.
\(^{141}\) 5th Report, App. 101, p. 326.
\(^{142}\) 5th Report, App. 63, p. 255.
No doubt the product of the illicit still did help to inspire tenants to rash acts against authority and no doubt it gave solace to those who carried the burden of the social costs of the new economic order, but contemporaries by concentrating on the 'law and order' aspect of illicit distilling missed the point that the successful suppression of illicit distilling removed one further support to an insecure economic structure. The suppression of illicit distilling had repercussions on Highland society as well. Many writers have described the prevailing unreality in the growth rate of Highland population relative to the resource base of the Highland area. As a source of income smuggling may have been one further stimulant to Highland population growth. According to the New Statistical Account, in at least one district in Argyll, the majority of labourers and crofters supported large families on the profits from whisky. As Connell has suggested for Ireland, illicit distilling, by encouraging "early and improvident marriages" and helping the peasant to establish his children, may have allowed a larger population to exist than Highland resources warranted. MacDonald has argued that when illicit distilling was suppressed, it became, like the collapse of kelping, one additional force making for Highland migration. Illicit distilling by increasing income enabled the peasant to retain his status as a land holder. Profit from the illicit product enabled the distiller to meet his rent payments, and the higher price which the illicit distiller gave the farmer for his grain also helped keep the landlord at bay. Even the highest classes of tenantry and proprietors were, as Sir George Mackenzie, pointed out: "...under the necessity of indirectly encouraging the traffic because they have no other means for disposing of the produce of their farms...". The ability of the tenant to pay his rent regardless of the source of the rent was one factor lending support to widespread illicit distilling. It also tied in with one of the more obnoxious features of Highland landlordism: the absentee landlord. As James Gordon said, describing Cabrach:

147. 5th Report, App. 49, p. 130.
GRAPH 2: Illicit Distilling - Prosecutions (1825-29) and Detections (1830-69)
SCOTLAND — ILICIT DISTILLING, PROSECUTIONS (1825/29) and DETECTIONS (1830/69)
"..I believe the greatest evil there is that they never see their landlord; there is no residing magistrate; they never see the landlords nor their factors, I believe, except on the days that they pay their rent; and the man who pays his rent best is then, of course, best thought of." 148.

Even Gordon himself, a resident, a magistrate, and an opponent of smuggling had to admit there was little he could do about it for cottagers "whom I suspect of smuggling, pay their rent, and carry their heads very high in consequence."

(VI) DELILFE

If the widespread incidence of illicit distilling in Scotland merits an explanation so too does its astonishingly rapid demise. Graph 2 records the declining number of prosecutions (1825/29) and detections (1830/69)149 of illicit distillers in Scotland. Table 16 shows how illicit distilling was much more effectively brought under control in Scotland than in Ireland, and

<table>
<thead>
<tr>
<th>Year</th>
<th>England</th>
<th>Scotland</th>
<th>Ireland</th>
</tr>
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<tbody>
<tr>
<td>1830</td>
<td>170</td>
<td>392</td>
<td>no record</td>
</tr>
<tr>
<td>1835</td>
<td>301</td>
<td>754</td>
<td>4,904</td>
</tr>
<tr>
<td>1840</td>
<td>121</td>
<td>246</td>
<td>1,004</td>
</tr>
<tr>
<td>1845</td>
<td>163</td>
<td>148</td>
<td>2,178</td>
</tr>
<tr>
<td>1850</td>
<td>551</td>
<td>142</td>
<td>3,545</td>
</tr>
<tr>
<td>1855</td>
<td>301</td>
<td>73</td>
<td>1,853</td>
</tr>
<tr>
<td>1860</td>
<td>125</td>
<td>37</td>
<td>3,272</td>
</tr>
<tr>
<td>1865</td>
<td>57</td>
<td>9</td>
<td>3,457</td>
</tr>
</tbody>
</table>

148. 5th Report, App. 64, p. 176.
149. Both prosecutions and detections are imperfect measures of the illicit trade as they vary with the zeal with which the law was enforced. No detection figures are available until 1830. The sources are B.P.P. 1852-53, XCIX, p. 567 and B.P.P. 1870, XX, p.377. Prosecution figures underestimate the degree of smuggling because many detections were not brought to trial. The source is B.P.P. 1834, XXV, App. 25, p. 113.
for that matter in England where it was predominantly an urban activity. 150

The immediacy of the exit of the illicit trader suggests that the reforms of 1823 were singularly effective in both restoring the competitive position of the licensed distiller, and more positively, in encouraging former illicit distillers to take out licences. The drawback on malt used in distilling from 1820, the large reduction in spirit duty from 5/6 to 2/4 (see Graph 4, pp. 104 ) and the uncompetitive nature of the illicit distiller all aided the licensed distiller. At the same time the new reforms had the good fortune to coincide with a recovery in barley prices which helped to lessen the attractiveness of illicit distilling.

Not the least beneficial aspect of the 1823 reforms was that for the first time they swung the licensed distillers and the landed interest in favour of excise policy. In 1834 Alexander Bannernan of Ruthurdine told the Parnell Commission that:

"In 40 years experience in the distillery, I never knew a law made by the Legislature that was so complete, either for securing the revenue, or improving the quality of spirits, or suppressing illicit distilling..." 151.

Such a statement of support from a distiller for previous excise policy would have been inconceivable. The licensed distillers in the past had always claimed to be the greatest enemy of the smuggler, and so, from 1823, they proved to be. Free "from many of the trammels under which he had hitherto conducted his operations" 152 the licensed distiller was now in a position to produce a good quality malt spirit. Besides the economic weaknesses of illicit production, it may be doubted whether the quality of the illicit product was very high. Made in cramped working conditions with poor quality equipment the illicit product "..was grossly inferior by modern trade standards." 153 The introduction of duty free warehousing in 1823 which allowed malt spirits to be matured softening the harsh characteristics of spirit straight from the still also helped the

150. For illicit distilling in Ireland and England, see Connell op.cit., pp. 71-73.
Support from the landed interest for former illicit distillers and tenants to take advantage of the reforms was also significant. In Glenlivet, where smuggling had been very rife, the Duke of Gordon's factor and the local ministers worked hard to persuade tenants to take up licensed distilling. It was an uphill struggle for the switch to commercial production and marketing demanded new skills. George Smith, whose Glenlivet distillery built up a considerable reputation in the course of the nineteenth century, had an extremely shaky start. In March 1825 with support from the Duke of Gordon, he established a small still at Upper Drumlin. With an "accidental" increase in duty at the beginning of 1826, consumption in Scotland fell back (see Graph 4, p. 104) and many of the new small stills in Glenlivet were hard hit. The duty increase was not the only cause of failure, Smith was short of capital and "was not able to master the business because legal distilling needs a greater quantity of spirits got from grain." In March 1827, the factor wrote to the local minister informing him that "George Smith the distiller at Upper Drumlin has become so embarrassed in his circumstances that he has intimated to me he will be unable to go on. It is to be regretted because the other two stills have also ceased and the only way to dispose of grain is to sell it to smugglers." The reaction to this situation by the factor is important, for rather than letting Smith go under and see the new policy of fostering legal distilling collapse, a fresh injection of capital in the form of a loan of £100 was secured from the estate. Smith, a farmer-distiller, was persuaded to sell his crops, cattle and farming implements to raise fresh capital, and to devote his whole attention to distilling. With the loan and a mortgage on his house and distilling utensils Smith was back in business by April, 1827. From this uncertain start, George Smith never looked back.

156. Accidental in the sense that following the definition of the imperial gallon in the weights and Measures Act (5 George IV, c.74) this measure was accepted for duty purposes in preference to the Scots wine gallon. The effects of this uniform measure differed in England, Scotland and Ireland. In England duty fell from 10/6 per wine gallon to 7/- per imperial gallon. In Scotland and Ireland duty increased nominally by 10d. and actually by d., the rate of 2/- per wine gallon being equivalent to 2/4 per imperial gallon.
With the suppression of the remaining smugglers in Glenlivet in the 1830s and the growth in Scottish whisky consumption, his market was secure. Extensions to his distilling plant reflected this. Upper Bruar in 1824 was only capable of producing 50 gallons per week, but by 1839 this had been raised to 200 gallons. In 1857 the Inland Revenue in a retrospective examination of the excise laws paid tribute to the work of Scots landlords in pursuing the illicit distiller and encouraging the licensed distiller, noting at the same time with regret that "This, we fear, is not the case in Ireland." 

Despite subsequent increases in duty which brought the level up from 2/4 in 1823, to 8/- in 1856, illicit distilling in Scotland never again posed a serious threat to the revenue, the excise system, or the prosperity of the legitimate trader. The granting of excise commissions to the police, the development of the county constabulary and improvements in Highland road and rail communications all served to destroy the lawless and isolated environment in which the illicit distiller thrived.

One of a diminishing band, the illicit distiller's activities could, however, still attract publicity, and to end this examination of the smuggler, this extract which appeared under the heading "Raid on Scotch Smugglers" in the Wine Trade Review for 1888 may serve as an epitaph:

"Another illicit distillery has been seized in the Strathcarron district of Ross-shire. The revenue officers in the course of the raid were seen, and dense volumes of smoke and steam in the distance were evidence of the smugglers pouring the contents of a still over their fire before escaping. The officers found the complete apparatus, with a quantity of

156. (contd.) the remaining 6d. being a direct increase.
157. S.R.O., CR/18-22 at 16th March 1826. I owe this and subsequent references to Dr. V. Gaffney who kindly allowed me access to his work on Glenlivet Distillery.
159. S.R.O., CR/18-22 at 8th March 1827.
160. S. W. Sillett, op. cit. p. 63.
"Manufactured spirits. The men who were seen running away with a bulky load, escaped after an exciting chase. Some of the boldest danced a Highland fling on the top of a turf wall, whistling and howling in derision of the officers. Subsequently, the smugglers, enraged, gave chase to the revenue officers with dogs, and showed signs of attacking the party. The officers made preparations to receive the enemy, and eventually were allowed to continue their homeward journey, without molestation." 162.

Some smugglers at least were still "carrying their heads high" in the 1880s.

CHAPTER THREE

THE LOWLAND DISTILLERS AND THE ENGLISH MARKET (1800–1823)

CONTENTS:

1. The Lowland Distillers (1800–1823) 103–119
3. The English Market 136–144
4. Conclusions 145–147
1. THE LOWLAND DISTILLERS (1800-23)

Whilst the licensed Highland distiller was struggling for survival in the face of the tide of untaxed spirit, between 1800 and 1823 his Lowland counterpart operated under very different conditions. Although not entirely free from the competition of illicit output, as the evidence on smuggling activity around Glasgow shows, the Lowland distiller's problems were more intimately connected with the peculiar disruptions of the Napoleonic Wars, the competitive struggle within the industry and the impact of changes in the excise system.

Distinguishable by the end of the eighteenth century from the Highland distillers in respect of ownership, scale of output, method of production, and size of markets the Lowland distillers continued to enjoy a market from which the licensed Highland distiller was excluded until the establishment of an excise system uniform throughout Scotland from November, 1816. Although for excise purposes Scotland was treated as a united area from 1816, Scots distillers wishing to sell in England, Ireland or overseas faced different regulations. The following discussion of the Lowland industry relates only to what the distillers called the home market, consideration of other markets being reserved for Section 3 (above, pps.136-144).

Although the absence of major documentary sources for individual firms in the Lowland industry leaves an embarrassingly large number of questions which it is possible only to ask but not to answer, there is still sufficient material in parliamentary enquiries, sequestration records and newspapers to enable the changing structure of the industry to be examined, and some of the problems facing individual producers discussed.

In Graphs 3, 4 and 5 the movements in the number of licensed distillers, duty levels, and consumption have been plotted. Before

1. See above, pp. 11-22.
2. The English system introduced in October, 1614 extended to the whole of Scotland, but the Highland distiller was still barred from the Lowland market.
GRAPH 3: Scotland - Number of Distillers (1799 - 1833)
SCOTLAND - NUMBER OF DISTILLERS 1799 - 1833

(Source: 7th. Report, p227)
GRAPH 4: Duty on Spirits made from Corn, Lowlands and Highlands (1802-32)
SCOTLAND - DUTY ON SPIRITS MADE FROM GRAIN

LOWLANDS     HIGHLANDS
GRAPH 5: Scotland - Production and Consumption of Spirits made from Corn (1802 - 1833)
SCOTLAND - PRODUCTION AND CONSUMPTION OF SPIRITS MADE FROM CORN. (1802-1833)
GRAPH 6: Scotland - Production, Consumption, Duty - Sugar Spirits (1808 - 1814)
SCOTLAND: PRODUCTION, CONSUMPTION, DUTY - SUGAR SPIRITS (1808-1814)

MILLION GALLONS
SHILLINGS
PER GN.

DUTY - LOWLANDS

- HIGHLANDS

1808 03 10 11 12 13 14
examining the trends, two points may be made about the statistics. Firstly, the graphs of duty, consumption and production all relate to spirits made from grain. During the Napoleonic Wars sugar and molasses were also used as raw materials. The quantity of molasses spirit distilled was very small, amounting to less than 800,000 gallons in 1800 and 1801, and it has not been included in the figures. From 1809, when grain distilling was restricted, sugar spirits were much more important and the duty, consumption and production of these spirits has been graphed separately (see Graph 6.) Secondly, with the exception of the graph of duty levels (Graph 4) the series are for the whole of Scotland, there being no separate figures for the Highlands, outwith the years 1808/1816, despite the lower level of duty in that area. However in the period 1808–1816 never more than 200,000 gallons of spirits were charged duty in the Highlands and as the bulk of evasion occurred there, it seems safe to assume that the production and consumption figures mainly relate to the Lowland industry at least until season 1817. As far as the number of licensed distillers is concerned, the figures are for the whole of Scotland. The greatest withdrawal of licensed distillers between 1800 and 1816 appears to have taken place in the Highlands leaving, if the statistics are accurate, the licensed trade almost entirely in the hands of the Lowland distillers by 1814. Statistics collected by the Excise before 1823 are by no means precise and other qualifications attaching to them are included in the notes.

What do the statistics reveal about the trends in the Lowland industry down to the end of 1816 when the English system of excise was terminated? Looking at the graph of duty it can be seen that the level of duty rose almost continuously from 3/5 in 1802

3. Excise statistics were collected for distilling seasons rather than for calendar years. Season 1817 thus runs from November 1816 when the new distillery act was passed, to November 1817.
4. Neither of the two main sources on which these graphs are based tell the same statistical tale. The direction of change, if not the exact magnitude, is roughly comparable. The source for graphs 3 and 5 and 6 is in the 7th Report of the Commissioners of Excise Inquiry, 1834, p.227. The source for Graph 4 is App. 9, p. 82 of the Select Committee on Malt Duty 1821. In 1832 a small amount of spirit was made from potatoes this has been added to the production figures (9,419 gallons) and to the consumption figures (1,658 gallons).
to a peak of 8/4 in October 1814, the greatest increase being in 1811 when 2/- was added.

The influence of these increases on consumption and production are less easy to judge in view of the high levels of evasion even within the more effectively controlled Lowland industry. Consumption of grain spirits responded unfavourably to the increase of duty in 1804, but with the small reduction in duty two years later, increased up to 1808. With the marketing of spirits made from sugar from 1809, corn spirits disappeared from sale once stocks were used up, until 1811 when distilling from corn restarted. The duty increase in 1811 again depressed demand. Grain distilling was once again prohibited in 1813. A weak recovery in consumption did not survive the peak duty of 8/4 and in 1816 consumption of licensed spirit reached a low for the period. Production on the other hand remained remarkably buoyant and outside the prohibition years was very little influenced by duty movements until 1816. In graph 3 it can be seen that the apparent stability which the licence system reputedly gave did not extend to the number of distillers prepared to enter licensed production. The number of distillers fluctuated wildly and fell on trend until a low of 24 was reached in 1813. Thereafter, and despite the introduction of the English system, numbers increased though the really dramatic growth of licensed producers followed on the 1816 and 1823 reforms. Comparing the numbers of producers with output one other curious feature emerges. Despite the falling numbers of distillers, production increases and an increasing gap between production and consumption emerges (Table 17):

<table>
<thead>
<tr>
<th>Year</th>
<th>Excess</th>
<th>Year</th>
<th>Excess</th>
</tr>
</thead>
<tbody>
<tr>
<td>1802</td>
<td>166,277</td>
<td>1810</td>
<td>423,373</td>
</tr>
<tr>
<td>1803</td>
<td>224,591</td>
<td>1811</td>
<td>908,769</td>
</tr>
<tr>
<td>1804</td>
<td>588,246</td>
<td>1812</td>
<td>1,313,772</td>
</tr>
<tr>
<td>1805</td>
<td>991,521</td>
<td>1813</td>
<td>608,526</td>
</tr>
<tr>
<td>1806</td>
<td>976,037</td>
<td>1814</td>
<td>1,224,592</td>
</tr>
<tr>
<td>1807</td>
<td>743,726</td>
<td>1815</td>
<td>1,433,282</td>
</tr>
<tr>
<td>1808</td>
<td>906,093</td>
<td>1816</td>
<td>1,226,507</td>
</tr>
<tr>
<td>1809</td>
<td>627,077</td>
<td>1817</td>
<td>1,153,549</td>
</tr>
</tbody>
</table>
How are these features of the industry to be explained?

Allowing for the withdrawal of the Highland distiller from the trade because of illicit distilling, fluctuations in the number of Lowland distillers can be accounted for by two main factors: restrictions on access to raw materials and increases in duty. During the war years various prohibitions were enforced on the use of grain in distilling. Between 1795 and 1797 there was an outright prohibition of distilling because of a scarcity of grain. In 1800/02, 1809/11 and 1813 the use of grain was banned, molasses and sugar being used instead. Sugar was introduced not merely because of a shortage of grain but also because of the surplus sugar stocks resulting from the blocking of the sugar export trade to continental Europe\(^5\) and the subsequent pressure from "Mr. Perceval's West Indian friends"\(^6\) anxious to find an outlet for their produce. The distillers' attitude to this compulsory switch to another raw material was ambivalent. Whilst it avoided a complete halt to distilling, as in 1795/97, it forced them to work from what was a more expensive raw material, although the manufacturing cost, because of the elimination of the cost of malting and grinding corn, and the quicker mashing process, was lower. Sugar distilling also placed the producer, who was located away from the main ports, at a disadvantage.\(^7\) In the absence of cost data it is not possible to establish the overall impact of sugar on distilling costs, but the main complaint against sugar by the large distillers was that it made their investment in malt houses and grinding mills redundant. Their fears were that this would lower the costs of entry to the trade and result in an influx of new competitors. In fact the number of distillers fell most when only sugar distilling was permitted. The reason for this would seem to lie in the original motive in establishing some of the Lowland distilleries: to create a market for grain. With grain prices high there was no need to seek an outlet by distilling. In the Lothians the price rise was sufficient both to persuade farmer-distillers to concentrate on farming and to

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cause a shift out of barley cultivation into wheat. The possibility that West Indian interests might manage to secure an extension to the prohibition on grain, after grain prices dropped, so that the farmer would lose his trade with the distiller was not viewed kindly by the landed interest, and in 1811 a united front of the landed interest and distillers (both English and Scottish) managed to have the sugar bill defeated in the Lords. James Headrick, an opponent of sugar distilling, emphasised the danger to agricultural improvement arising from a continued prohibition on grain:

"...Distillation from sugar can have no more effect upon the land of this country than if the process were carried on in the West Indies... it seems evident that if the prohibition of grain distillation be continued, the operations of the plough will soon be very much curtailed..." 10.

Outwith the sugar distilling periods, the fall in the number of distillers can be accounted for by the behaviour of spirit prices and the consequent profitability of the trade. The distiller takes his profit from the margin between the price at which he can sell his spirit to a dealer and his cost of production. The problem in attempting to establish the width of this margin is the total absence of reliable data on costs and spirit prices.

Spirit prices present the most serious difficulties. In the spirit trade, the price level was established as a result of a multitude of transactions, some as public deals between distillers or their agents and dealers, and some as private sales between distillers and customers. There is no single source of record for all these transactions. None of the three main record sources for the distilling industry: parliamentary enquiries, business papers and newspapers, contain price series for this period in a form which can be safely utilised. The problem is to find exactly what quoted prices are measuring, for example, is the price duty-free or duty paid? Is the price quoted for a cash or credit sale? If the latter, what discount factor must be applied? Is the price inclu-

8. S.R.O. K.H.15–1856 at 18th October 1809 "There is not the smallest prospect of distillation from Grain being allowed, nor does the present prices give any room to suppose that there will be from the present crop. The wheat in East Lothian is of wretched quality and there is very little barley now grown in any of the Lothians..." 9. H.P.P. 1831, VII, Repor...on Molasses...p.79 and p.154. 10. J. Headrick, op.cit. pp. 573, quoted in A. & N. Clow, op.cit. p.565
GRAPH 7.1  Midlothian Flats Price for Barley
sive of the cost of transport and casks? At what strength is the spirit being sold? And most important, when prices are quoted simply for "aqua" or "spirits", is the raw material grain or sugar? In view of these difficulties it seems wiser, rather than presenting the only shaky price series gleaned from the Stein, Dewar records, to rely on the literary evidence on prices and profit margins. This suggests a growing body of consumer resistance, despite wartime prosperity to increases in spirit prices. This expressed itself in part in an enhanced demand for the illicit product, which normally did not directly compete with Lowland grain spirit, and also a switch to competitive beverages, especially ale and rum. So long as prosperous wartime conditions continued such consumer resistance was not especially alarming for the distillers. However, with the unhappy coincidence in 1814 of a new record level of duty, commercial depression, and a new excise system which produced an unfavourable spirit, consumption sank very severely.

As for the other end of the margin, distillers' costs, although no firm data are available the main elements in the cost structure seem to have risen substantially. Barley prices, as can be seen from the graph of Midlothian fiars prices (Graph 7), rose to a peak in 1812, fell to 1815 but then recovered with a series of bad post-war harvests. Within the periods of the prohibition of grain distilling, sugar was a more expensive raw material than grain. The evidence from bankruptcies indicates that high wartime interest rates made the financing of raw material purchases, duty and spirit sales more expensive. As well as increases in spirit duty, the distiller had to finance advances in the malt tax, although the Lowland distiller making up a mash consisting of a high percentage of raw grain, may have been able to offset part of this burden. Besides pushing up costs high grain prices, if they reduced the surplus income available for expenditure on drink, may have lowered the demand for spirits from urban consumers.

11. Discussed and presented below, PP. 119-135.
12. S.R.O., R.H.15-1856 at 15th October 1812 "I find an unusual demand for ale at present which I attribute to the high price of Aqua, and I cannot get my customers half served."
13. See below pp. 119 ff.
With rising costs and static or falling prices there would seem good reasons for believing that profit margins in the distilling industry were under severe pressure, especially in the closing years of the war. If this is the case it would account for the downward trend in the number of distillers. One symptom of the squeeze on profits was the attempt, from 1811 onwards, of a majority of Lowland distillers, at the start of the new licensing period, to agree on the size of their entry, that is, their output, and the price they would charge during the ensuing year. What is equally significant is that this type of "League and Covenant" was not "solemnly observed" and on no occasion were prices held firm for more than a month or two. It is not hard to see why such price fixing failed in view of the growing excess of production over consumption, but why should production have been so unresponsive to falling demand?

Large scale stockholding became a feature of the whisky trade in the course of the nineteenth century with the recognition of the improvement which spirit, especially malt spirit, underwent during maturation. Such stock holding does not appear to account for the wide gap between production and consumption in this period, though it must be stressed that the behaviour of spirit dealers and merchants, who later became the major stockholders, remains a great unknown at this time. Some part of the gap lay in stocks held by them, for when Perceval, in 1811, after increasing spirit duty, threatened to lay a duty on dealers' stocks as well, the dealers' "trembling for their stocks" offered not to undersell the distillers at the old duty if the distillers made no mention of the loss of duty on dealers' stocks in their petitions complaining of the duty increase. Speculative stockholding in anticipation of upward shifts in duty provided one motive for stockholding. It does not seem sufficient to explain the continuing rise in production, when consumption lagged so far behind, unless the dealers were very slow to react to market changes.

The licensing system may also be discounted as a cause of overproduction. Before duty-free warehousing was introduced in 1823 the distiller advanced the duty on his spirits as he made them. The distilling year ran from the Autumn, after the harvest was collected, through to the early summer of the following year, when warm weather caused losses by evaporation and made fermentation less easy to control. Although distilling took place in anticipation of demand, the distiller who "made an entry" or applied for an excise licence in October or November for the ensuing year could terminate his licence at fixed intervals if demand fell off and stocks accumulated. This aspect of the licensing system did not impose any rigidities which made overproduction inevitable.

Can the cause of overproduction be found in the nature of the early nineteenth century economy? In an economy still heavily dependent on agriculture and with an industry so closely related to agriculture as the source of its raw material a connexion might be established between harvest fluctuations and overproduction in the industrial sector. For example, an abundant harvest which lowered grain prices might lead distillers to expand grain purchases and increase output. If spirit prices fell as a result, but consumer demand was inelastic, a surplus would then flood the market. The assumption that spirits were price inelastic does not however seem a realistic one and the response to changes in duty suggests otherwise. Alternatively, if consumers demand were income elastic a fall in grain prices if it meant that urban food consumers had a higher disposable income would result in an increased demand for spirits and might stimulate overproduction. Napoleonic War grain prices were, however, anything but low, and this explanation does not have any great appeal. The converse situation, of a lower surplus income arising from high grain prices would lower demand, and when allied to duty increases helps to explain the lower consumption figures. Production, however, went on rising apparently without reference to what consumption was doing and the solution to the paradox of rising production and falling numbers of distillers must be found in the
behaviour of the distillers themselves.

What was their response to a market situation involving a squeeze on profits from increased duty rates, increased costs and stagnant or even falling prices? How could the distiller try to maintain his profit margins?

As far as his earnings were concerned, the answer is very little indeed. The prices of his only two sources of income, spirit and by-product sales (draff and dreg), were hardly within his control. Despite repeated attempts by the Lowland distillers in their Falkirk meetings no lasting success was achieved in price and output agreements.

His cost structure offered more hope. Although no cost figures are available for the period of the Napoleonic Wars, there are figures for 1822, when duty was still higher than before 1800 but lower than the 1814 peak. In Table 18 (see over) the cost figures for two Lowland distillers, John Stein and John Padon, are reproduced. The figures are not immediately comparable because of the different strengths of spirit they were producing and the smaller quantity of malt Stein was using in his mash. Indeed this latter feature was one way of cutting costs. If these figures are compared with those quoted by the Excise for operating a 40 gallon still in 1799 (Table 9, page 47) some interesting points emerge.

In 1799 duty took up 31% of the cost of a gallon of spirit. By 1822 this had risen to around 70%. The margin available to the distiller to reduce costs had shrunk very drastically indeed. Next to duty the most important cost is grain. In 1799, 2/1 or 46% was attributable to this and in 1822 the figures for Stein and Padon were 1/0½ (16½%) and 1/7½ (20½%) respectively. This lower cost is not due to any fall in the price of grain. Barley in 1799 was selling at 27/7 per quarter, only slightly higher than the 1822 price of 26/4. Malt duty, another factor to be considered in grain prices, was lower in 1799 at 6/3 per quarter compared to 28/- in 1822.
### TABLE 18: COST OF GRAIN SPIRITS (1822)

<table>
<thead>
<tr>
<th>A. JOHN STEIN</th>
<th>B. JOHN PADON</th>
</tr>
</thead>
<tbody>
<tr>
<td>The figures are for the cost of a gallon 10 u.p. spirit made from a mash 9/10ths raw grain 1/10th malt.</td>
<td>The figures are for a gallon of proof spirit made from a mash 6/7ths raw grain 1/7th malt.</td>
</tr>
<tr>
<td><strong>s.d. %</strong></td>
<td><strong>s.d. %</strong></td>
</tr>
<tr>
<td>Grain (including malt duty) 1/0½</td>
<td>16</td>
</tr>
<tr>
<td>Manufacturing expenses, including yeast</td>
<td></td>
</tr>
<tr>
<td>Coal</td>
<td>4½</td>
</tr>
<tr>
<td>Wages</td>
<td>3</td>
</tr>
<tr>
<td>Less sale of</td>
<td>4</td>
</tr>
<tr>
<td>Draff and Dreg</td>
<td>-1 ½</td>
</tr>
<tr>
<td>Other expenses</td>
<td></td>
</tr>
<tr>
<td>Including Interest on Capital</td>
<td></td>
</tr>
<tr>
<td>Wear and Tear</td>
<td></td>
</tr>
<tr>
<td>Sales Expenses</td>
<td>6</td>
</tr>
<tr>
<td>Risk of Bad Debts</td>
<td>7</td>
</tr>
<tr>
<td>Loss of Casks</td>
<td></td>
</tr>
<tr>
<td>Carriage to Leith</td>
<td>1½</td>
</tr>
<tr>
<td>Two months interest on Duties</td>
<td>½</td>
</tr>
<tr>
<td>Spirit Duty</td>
<td>4/9½</td>
</tr>
<tr>
<td><strong>6/8½ 100%</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Spirit Duty</strong></td>
<td></td>
</tr>
<tr>
<td><strong>5/6</strong></td>
<td>69</td>
</tr>
<tr>
<td><strong>7/11½ 100%</strong></td>
<td></td>
</tr>
</tbody>
</table>


However, the Excise figures for 1799 are based on the duty-free grain allowance, whilst the 1822 figures are calculated allowing for the deduction of the drawback on malt which distillers were then permitted. The figures are not sufficiently clear in their original form to establish exactly what the malt duty amounted to per quarter of grain, but the important point is that in 1822, the cost of grain including malt duty, came higher to the distiller than in 1799, yet despite this the actual cost of grain and malt...
duty per gallon is lower. Between 1799 and 1822 some Lowland distillers had managed to secure an increase in the yields of spirit from grain.

In 1799 the average yield for Lowland distillers was 10 gallons of spirit (1 to 10 o.p.) per quarter of malt and raw grain used.16 This was an average which concealed quite a range of yield amongst distillers. John Stein, for example, was drawing 14 gallons per quarter whilst James McFarlane of Paisley could only manage half that figure. Even within one distillery yields varied markedly at different periods. James Millar of Craigend got as high as 14½ gallons between July and September 1799, but only 10½ gallons between October and the following February. Such variations did not escape the notice of the Excise who described them as being due:

"in part to fraudulent Practice; in part to the Quality of the Grain used and Wash Brewed; in part to the skill of the Operator, and Goodness of his Apparatus; and very much to the vast Difference of Celerity in the Manner of Working."

Of these reasons, the first, fraud, continued to play an important part in the ability of the Lowland distiller to survive, at least down to the beginnings of excise reform in 1816. By a variety of well tried dodges, ranging from concealment of wash to straightforward bribing of excise officers, the distiller could offset the high duty and attempt to restore a degree of profitability to his operations. Such evasion seems to have reached a peak in the last years of the War, especially after the introduction of the English system on top of a peak duty and commercial depression. So bad was the situation that Byrle told Stein:

"...It is not possible for the fair dealer or distiller to make a sale and unless some measures are taken by the Trade the consequences must be ruinous to the honest Distiller if such there be..." 18.

Although evasion remained a constant accusation by one distiller against another when price cutting hit sales, right down to the

1830s, it was of little long-term significance in the struggle to increase profitability. Much more important in attempting to account for differences in yields were the other reasons noted by the Excise.

Because rapid distilling techniques had so effectively undermined the still capacity licence system, the 1798 and 1799 enquiries investigated distilling processes in the Lowland industry in great detail. Unfortunately for the historian, subsequent enquiries did not examine matters like still construction and design in nearly such thorough detail. It seems hard to believe, however, that improvements in technique such as new still designs, the incorporation of rummagers inside stills, and pumping apparatus were not being more widely used in the Scottish distilling industry during the Wars. After all, rising duty rates had inspired the search for new techniques at the end of the eighteenth century and with the ever mounting pressure to cut costs, the rewards for successful innovation were even higher.

Economic forces were not alone in stimulating innovation. The attempts to perfect a reliable excise system subjected the distilling process to increased scrutiny. Public controversy played a part as well. The argument surrounding the relative rates of duty to be charged on malt made from barley and bigg resulted in the work of contemporary scientific experts such as Drs. Hope, Thomson and Coventry being directed towards minute and detailed examination of the malting and distilling processes. It was out of their work in 1806 that a new improved saccharometer was developed. This device, so fundamentally important to the successful creation of the new excise system, yielded large benefits to the distillers. It gave him new increased control over his manufacturing process. It required no great initiative or scientific skill to duplicate the work and experiments of Hope, Thomson and Coventry, utilising the saccharometer to find which type of barley gave the greatest yield. The thermometer and the hydrometer held out similar gains. With the help of the thermometer, fermentation, more affec-
The results of this "enlightenment" can most clearly be seen in the rise of spirit yields per quarter of grain used. By the 1820s a distiller who was only capable of drawing 10 gallons of spirit – the 1799 average – from a quarter of grain would have enjoyed but a short stay in the business, unless he were a small malt distiller serving an isolated market protected by transport difficulties from the competition of the major distilleries. John Stein based his cost calculations on a spirit yield of 20.8 proof gallons per quarter, whilst John Padon's yield, although lower at 18 proof gallons per quarter because of the higher malt content in his mash, was still a significant advance on eighteenth century standards. Average yields
related to still capacity have been calculated in Table 19:

<table>
<thead>
<tr>
<th>Size of Still</th>
<th>Number of Distillers</th>
<th>Average % of Malt in Mash</th>
<th>Average yield of Spirit per quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 100 gns.</td>
<td>30</td>
<td>93.53</td>
<td>10.72</td>
</tr>
<tr>
<td>100 - 199</td>
<td>21</td>
<td>79.21</td>
<td>12.36</td>
</tr>
<tr>
<td>200 - 299</td>
<td>11</td>
<td>58.67</td>
<td>13.68</td>
</tr>
<tr>
<td>300 - 399</td>
<td>6</td>
<td>63.37</td>
<td>15.92</td>
</tr>
<tr>
<td>400 - 499</td>
<td>2</td>
<td>36.82</td>
<td>14.00</td>
</tr>
<tr>
<td>Above 500</td>
<td>31</td>
<td>31.33</td>
<td>16.80</td>
</tr>
</tbody>
</table>

Also shown in the table is the percentage of malt used in the mash. Although when averaged out the increases in spirit yield are not as spectacular as Stein and Fadon's figures, the rise is still a significant one and is related not just to the lower amounts of malt being used, but also to the size of still in operation. The figures are for 1820-21 but the rise in yield was most probably a steady increase over a number of years, accumulating gradually as advances in distilling technique disseminated through the industry. The spread of technical improvement does not appear to have been uniform throughout the industry however. Low yields and small stills were much more common in the Highlands, a feature of the Highland industry which had been recognised by some distillers at the end of the eighteenth century:

"At the time of the Highland Distillery Act...the Knowledge of Distillers in the Art of extracting Spirits from Barley was very limited, even compared with their present Knowledge, which is still far behind what it is in other parts of the Kingdom, and therefore barely enabled them to get Bread by the Business." 24.

Although, as part of the search for new improvements to raise output and restore profitability, still design may have advanced there does not appear to have been any great increase in

23. The source for the Table is B.P.P. 1821, VIII, pp.77-79. The figures cover the period 10th November, 1820 to 10th February 1821. The frequency distribution in the table has been slightly changed to conform with modern statistical practice. The table understates yields, the original statistics having the following note: "The quantity of Spirits returned as made, should not be taken as the whole produce from the malt and grain declared, as all the wash made from such grain is not to be worked off when the Account of Spirits was charged."
the size of stills being operated until after 1814. In table 20 (see over) the licensed distillers in Lowland Scotland are arranged in order of the capacities of their stills. In view of the discussion about stills of over 100 gallons capacity before the 1798/99 committees, these figures, including as they do both wash and low wine stills, do not suggest that there had been a move toward larger stills. It is not hard to see why this should be the case when duty continued to be levied on still capacity. Although the still capacity duty had been amended in an effort to curb rapid distillation techniques it may be doubted, given the relatively weak control of the Excise over the distillers' operations, whether rapid distilling entirely disappeared. During the Wars, as duty rose, one answer to cutting the burden of duty was not - so long as duty bore a direct relation to still capacity - to increase still size but to raise the output of each still. Lowland distillers working for the English market, where duty was charged on the wash instead of the still, were not faced with this bottleneck in production. Of the five distillers entered for the English market in 1814, Andrew and Charles Stein of Hattonburn distillery had the smallest still, a mere 3,273 gallons compared with the largest owned by Robert Stein of 12,538 gallons. And these figures were for wash stills only! In the home market the size of still remained a bottleneck in increasing output until the end of the still licence system in 1814. In turn though, the bottleneck did stimulate the search for devices like pre-heaters for the wash which would increase the throughput of the still. The extension of the English system of excise to Scotland in 1814 with its requirement of a minimum still size of 2,000 gallons in the Lowlands ended this bottleneck. Admittedly the English system proved harmful in respect of other policy objectives such as curbing illicit distilling and producing a fine quality spirit, but its impact on distilling technology was beneficial. When the English system ended in the autumn of 1816 and the minimum required size of still was reduced to forty gallons, many Lowland distillers continued


<table>
<thead>
<tr>
<th>DISTILLER</th>
<th>LOCATION</th>
<th>CONTENTS OF STILLS (GALLONS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>James Haig &amp; Son</td>
<td>Sunbury, Edinburgh</td>
<td>165</td>
</tr>
<tr>
<td>John Stein &amp; Co.</td>
<td>Canomills, Edinburgh</td>
<td>165</td>
</tr>
<tr>
<td>William &amp; James Aitchison</td>
<td>St. Clements Wells, Haddington</td>
<td>120</td>
</tr>
<tr>
<td>John Stein</td>
<td>Kennetpark, Clackmannan</td>
<td>110</td>
</tr>
<tr>
<td>Archibald Dunlop</td>
<td>Haddington</td>
<td>97</td>
</tr>
<tr>
<td>John Bald &amp; Co.</td>
<td>Carsebridge, Clackmannan</td>
<td>81</td>
</tr>
<tr>
<td>John Philip</td>
<td>Dolls, Clackmannan</td>
<td>81</td>
</tr>
<tr>
<td>Brown, Gourlay &amp; Co.</td>
<td>Port Dundas, Lanark</td>
<td>78</td>
</tr>
<tr>
<td>John Howbray &amp; Co.</td>
<td>Cambus, Clackmannan</td>
<td>73</td>
</tr>
<tr>
<td>George MacLagan</td>
<td>Underwood, Stirling(?</td>
<td>65</td>
</tr>
<tr>
<td>Spears, Mitchell &amp; Co.</td>
<td>Kirkcaldy, Fife</td>
<td>65</td>
</tr>
<tr>
<td>Andrew Stein &amp; Co.</td>
<td>Grange, Clackmannan?</td>
<td>61</td>
</tr>
<tr>
<td>John Cassels</td>
<td>Kepp, Perth?</td>
<td>60</td>
</tr>
<tr>
<td>Andrew Taylor</td>
<td>West Barns, Haddington</td>
<td>60</td>
</tr>
<tr>
<td>William Young &amp; Co.</td>
<td>Grange, Fife</td>
<td>60</td>
</tr>
<tr>
<td>William Dawson &amp; Son</td>
<td>Bonnytown, Linlithgow</td>
<td>57</td>
</tr>
<tr>
<td>John Carnegie &amp; Co.</td>
<td>Barrowfield, Lanark</td>
<td>57</td>
</tr>
<tr>
<td>John Glen</td>
<td>Mainis, Linlithgow</td>
<td>57</td>
</tr>
<tr>
<td>Daniel McFarlane &amp; Co.</td>
<td>Port Dundas, Lanark</td>
<td>57</td>
</tr>
<tr>
<td>Robert Menzies</td>
<td>Paisley, Renfrew</td>
<td>57</td>
</tr>
<tr>
<td>Duncan Montgomery</td>
<td>Inverkeithing, Fife</td>
<td>56</td>
</tr>
<tr>
<td>Tod, Padon, Vannon &amp; Co.</td>
<td>Borrowstones, Linlithgow</td>
<td>56</td>
</tr>
<tr>
<td>John Edington &amp; Co.</td>
<td>?</td>
<td>53</td>
</tr>
<tr>
<td>James Bruce</td>
<td>?</td>
<td>42</td>
</tr>
</tbody>
</table>

**Total** 1,8364 gallons


Note: The location of the distilleries was not specified in the account. Locations are based on the returns for 1817 for distilleries still in existence at that date.

? = Location not specified.

to use the large stills. Outwith the illicit trade the forty gallon still was increasingly an anachronism by the 1820s. By 1821 only one licensed distiller, Alexander Bullions of Claypots in Perthshire, had the unique distinction of running a 40 gallons wash still. At the other end of the scale, firms like Tod, Padon & Co, William Young & Co, and Thomas Spears & Co. could boast of possessing wash stills of 2,030, 2,081, and 2,140 gallons respec-
tively; a size which would not have been encountered outside those distillers working for the English market seven years earlier.

In the competitive struggle down to 1614 a range of solutions was sought by the Lowland distillers in an attempt to restore profit margins in the home trade. For the trade as a whole one answer was a degree of combination amongst producers to restrict output and maintain prices. The distillers' meetings, never entirely unanimous in matters of trade politics, achieved no success in the field of price and output regulation. This left the individual distiller to square up to the poor market situation as best he could. One way out was to raise spirit yields and to invest in extensions to distilling plant such as mash tuns, fermenting vessels, steam engines and pumps which would increase the throughput of the distillery. Although such investments ran up against the barrier of the fixed-still capacity, the increased output which they secured helped to reduce unit costs. Only by doing this would the Lowland distiller then have sufficient room for manoeuvre to undercut his competitors and preserve his market for grain spirit from fellow distillers and from the predations of the illicit distiller. It is this development which explains the growing surplus appearing on the market at a time when the number of licensed distillers was falling.

(II) MESSRS. STEIN, DEWAR & CO. (1808-1816)

In the midst of these general trends how were individual distillers faring? What accounts for the apparently high casualty rate in the trade? Of the thirty-one licensed distillers in the Lowlands in 1798/99 only fourteen were still in business in 1814. Why did firms like Blair & Martin of Greenock, Henry Scotland & Co.
of Dunfermline, Duncan Montgomery & Co. of Inverkeithing and James Millar of Craigend near Stirling disappear from the trade? Was it just the effects of the profit squeeze or was the distilling industry peculiarly vulnerable to commercial crisis? Despite a high "exit" rate there seems to have been no shortage of new entrepreneurs willing to snap up bankrupts' distilleries or take over leases when others had failed. Kirkliston distillery, for example, which was being operated by George Simpson & Co. in 1799 passed through the hands of at least four firms down to 1833 with one set of partners losing everything to their creditors, including their salt spoons and feather beds. An apparently high casualty rate should not mask the fact that there were a few cases of remarkable longevity in the trade. The Harveys of Yoker, the Youngs of Burntisland, the McFarlanes of Glasgow, and the Balds of Alloa all passed through these troublous times successfully, maintaining their family distilleries and handing them on intact through in the case of the Harveys, Youngs and McFarlanes, three generations and two in the case of the Balds. The Haig and Stein families emerged from the debacle of the English market in the 1780s, if not entirely unscathed financially, certainly as prolific as before, for by the 1830s the two families controlled almost as many distilleries as at the end of the eighteenth century, including the largest one in Scotland at Sunbury in Edinburgh. Why was bankruptcy fatal for some yet merely shaken off like a bad bout of wind by others? What explanation is there for the dramatic rise of East Lothian families like the Dunlops and Mutchions of Haddington between 1800 and 1822, and then their stagnation, decline and ultimate exit from the trade by the mid-nineteenth century? Amidst an apparent uniformity of industry trends there is an astonishing diversity in the fortunes of the Lowland distillers.

Some idea of the upheavals and distortions which the war brought to the distilling industry, the marketing problems faced by distillers and the relationships between distillers, agents and

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dealers can be traced through the correspondence of Neil Ryrie, the Edinburgh agent for Messrs. Stein, Dewar & Co. The documentary source for the following discussion is a volume of Ryrie's in the Scottish Record Office. It is a letter book, which contains the copy correspondence of Ryrie's letters to his business friends including three distillers, Robert Jameson of Alloa, Robert Stein of Loanside near Kilbagie and his son Andrew, for whom he acted.

Not all distillers sold their spirits through agents to wholesale dealers at this time. Many sales were still made direct to the public from the distillery especially to "private families", and farmers who sold their barley to distillers were accustomed to taking a part of their cash back in very liquid form. In distilleries located away from the main Lowland towns such local sales were an important base, but for the expansionist minded distiller they were insufficient. For the industrialising distiller a dense and growing urban market was vital and the best way for an "out of town" distiller to approach this market was through an agent. Indeed the appointments of agents was a feature which marked out not only the differences between the Lowland and Highland industries, but also between the large and small distiller in the Lowlands.

Exactly when Ryrie was appointed agent is not known but some of the elementary tips offered by him in the early letters suggest that his appointment dated from 1808 and that the firm of Stein, Dewar was a relatively new one, for example, regarding whisky samples from the firm Ryrie warned:

"It is really not good nor can I account for it. Unless you can make it better you will lose your reputation and nobody will deal with you. It is at the outset that you can establish a character, and if you do not send a good article, it must be believed when asserted by Mr. Bald that your Mr. Dewar never had any merit in producing the Superior Article he invariably offers his customers here." 28.

27. See for example the evidence of William Hyslop, a retired distiller from Dunfries, before the 1798 Committee: "...Scotch distillers make their sales by salesmen or riders, sometimes selling to wholesale houses in Edinburgh. The large distillers have an advantage because the small distiller cannot afford to keep a rider or Salesman, and they are obliged to go round the country themselves and leave their businesses at home to servants, and of late Years it has been more material for distillers to be in their distillery than ever it was."
The firm was composed of Robert Stein and one Dewar who seems to have handled the actual distilling. Robert Jameson of Alloa is also included in the correspondence as a partner in the firm. Which distillery they were running is not clear. Robert Stein is listed in the Excise returns as the owner of Kilbagie distillery. From 1809/21 this was being entered for the English market and until 1814 it was the largest Lowland distillery in the English trade. Most of the correspondence relates to the home market, and as distillers were not allowed to switch between the English and home market trades without a year's notice the partners must have been running another distillery. This may have been Ormiston distillery in Clackmannan which was listed as being in the Stein's possession in the 1817 returns. By 1814 Andrew Stein, one of Robert Stein's sons had branched out into the English market in partnership with his elder brother, Charles, at Hattonburn distillery. Prior to this he had been working along with his father in the home trade. Partnerships were the main form of industrial organisation and from the frequent changes in partnerships recorded in excise returns, it seems that this was not a particularly stable form of enterprise in the distilling industry. From the point of view of the family, however, partnership agreements were a convenient instrument for bringing younger sons into decision taking positions as their business experience increased, yet without losing parental control, and for expanding the family's distilling interests.

Neil Ryrie's background is not much clearer. He already had an interest in, and knowledge of, the drink trade through his brewing and spirit dealing probably offered an outlet into a more dynamic section of the trade. His capital appears to have been of some size as he was able to make advances to the company and also discounted their bills. Indeed, his "credit and reputation" were the two things "I estimate most..." and both were to be lost in the crisis which hit the business in 1816. As a member of the Edinburgh merchant class social duties took up part of his time. In May, 1814 he

29. see page , note .
30. R.H. 15-1856 at 11th April 1809,
excused himself for not keeping up with the firm's business because:

"...I have the Police Court at present, and I will be needed very much to keep the whores and Ministers in order during the sitting of the Assembly." 31.

Despite such tasks there was still room for leisure activities mainly connected with country pursuits:

"...On Saturday week I am engaged in East Lothian and if you will come in and go East I will introduce you to a few real Drinkers and horse racers. They dine together that day at a smity." 32.

This invitation to Andrew Stein brings out one of the functions of a good agent; an ability to secure introductions to distillers' and merchants' clubs where contacts useful in business could be made.

His functions as agent covered a wider range of tasks than was usual later in the nineteenth century, for besides seeking sales for whisky, he discounted bills, gathered market intelligence, undertook to sell crops from the distillery farms and purchase farm livestock and seed. The most important of these, in view of the great uncertainties which mark the period covered by the correspondence (1808-16) and which so upset the grain and spirit markets, was his intelligence gathering amongst other distillers' agents, spirit dealers, excise officials, bankers, corn merchants and landed gentry. This resulted when dealers' expectations fluctuated wildly, as for example in 1809, when the war taxes and Irish distillery bills were under discussion, in a daily stream of letters to the Steins and Jameson. It is difficult now to realise the importance of these communications with "up country cousins", but a distiller located outside the main market centres stood to lose heavily if he shipped spirits onto an already falling market. A dealer, sensing that a distiller needed to make cash sales urgently to pay off his grain bills, could easily enforce large discounts and turn an expected profit into a loss. As Ryrie said during a bad spell in January, 1811:

32. R.H. 15-1856 at 1st May 1812.
"...Sales and discounts can be commanded at all times but the less of both the better, when nothing but loss stares you in the face..." 33.

A good agent, if he kept his ear to the ground and had reliable business contacts, could be expected to hear of houses whose credit was shaky and steer the distiller away from involvement. In the background of the Napoleonic Wars period this was a consideration of some importance.

What was the market background in which Ryrie was operating? Stein Dewar & Co. were making sales in Glasgow, Edinburgh and Leith with the bulk of their spirit being sold through agents to dealers. In Edinburgh the market was organised around "the cross" in the Grassmarket and distillers' agents and dealers met weekly to arrange deals. Which party had the strongest position depended on the market situation and it seems clear that although the number of distillers was falling the fear expressed by John Young of the Excise that should the distillery business fall into a few hands then "...the knowing Agents of the Lowland distilleries will have an opportunity of exercising all the Tricks of Change Alley." 34 was largely unrealised.

From the outset of Ryrie's appointment the market situation was distinctly unfavourable. Distilling from sugar began in December 1808 but because of the large stocks of grain spirits, prices for sugar spirits fell throughout 1809. Even at 9/3 a gallon (6/3 duty free), a price Ryrie thought to be very low, no buyers could be found. This was in March 1809. By May, always the seasonal low point for spirit prices, dealers were only offering 8/- a gallon and Ryrie warned that:

"...From the quantity of spirits in the market I really fear that it will be unnecessary to hold in the hopes of better prices..." 35.

The following year started in much the same vein:

33. R.H. 15-1856 at 11th January 1811.
34. 1798 Report, App. 6, p. 261.
35. R.H. 15-1856 at 5th May 1809.
The price of aqua is now said to be 9/- and 9/3, I know sales at 9/3 and 9/6. I hope you have no thoughts of beginning in the face of such bad trade." 36.

This piece of advice proved a good forecast for by the year's end the casualities of low prices began to appear:

"Mr. John Haig has stoped payment. I am told none of his friends here are connected with him, and he says he will pay if he gets time. I much fear he would require long time, for he has been making great sacrifices of late. His principal debts are for sugar. His stoppage will be much against the Credit of the Trade particularly at such a time as this, and it will also affect the price of Aqua." 37.

The likely infectious nature of a bankruptcy of a distiller of Haig's size and standing proved, paradoxically, to be something of a help for the fear of the damaging effects of the disposal of his spirit stocks on the market, and the low value relative to his debts to be secured from the sale of his distillery, rapidly persuaded "John Haig's West Country friends...to...come forward to support him." 38 Despite the threat of Haig's bankruptcy and the bankruptcy of James and William Miller of Craigend distillery three days before the New Year, prospects for 1811 looked much rosier with the lifting of the prohibition on distilling from grain. In the event, however, with dealers still flush with stocks and only prepared to offer 8/- (2/11 duty free) for grain spirits—less than half the price obtainable in 1808—grain distilling proved to be "no more profitable than sugar." Worse was to come, for in May 1811 the duty on grain spirits was increased from 5/1 to 7/1. Normally this would have resulted in a steadying of the market from anticipatory buying of spirit produced at the old duty rate but instead the price was "borne down by the large and cheap stocks held by the dealers." The new duty, by itself, was not enough for the dealers "...to brave their nerves." At least on this occasion the dealers did not attempt to undersell the distillers from old stocks because of their fear that the distillers would petition for an equivalent increase in duty on dealers' stocks if

36. R.H.15-1856 at 10th January 1810.
37. R.H.15-1856 at 6th December 1810.
38. R.H.15-1856 at 8th December 1810.
they did. The inability of the distillers to pass on the new duty and the consequent squeeze on margins which this involved can be seen from the prices dealers were offering at the end of 1811. Buyers of grain spirit were offering 9/- per gallon which, although higher than in January 1810, was, after the new duty of 7/1 was subtracted, a shilling lower. By January 1812, the seasonal increase in price because of the high winter demand for spirits had pushed prices up to 10/2 (3/1 duty free) which more than restored the distillers' margin. Such transitory seasonal factors could not always be counted on to swing prices in the distillers' favour:

"The storm set the labouring class idle so that there is no demand for whisky or ale. The high prices to which grain has gone must bear hard upon them and keep the demand for drink less than usual." 39.

Although these essentially short-term factors could be cast aside, the continuing low prices offered for spirits could not, for they inspired rumours about the stability and creditworthiness of the distillers, a situation which the dealers were not slow to profit from:

"I am . . . sorry to tell you that Canonmills being in great want of money is talked of today and the Dealers take the Advantage of it. It is said the Banks are shy of him his engagements are known to be of great magnitude. I trust you will be cautious in what you say and not mention it to anyone but your real friends." 40.

Almost inevitably fear of Canonmills stability resulted in one of its acceptances being challenged and John Stein submitted himself to his creditors. This time no support for the firm could be found and the stocks held by his creditors were released on to the market which depressed prices even more. One of the curious features of bankruptcy at this time is that it did not always have permanent effects on firms. Whether it was that debts to banks and agents had been paid off by the sale of spirit stocks is not clear but by March 1813 Ryrie reported that:

39. R.H. 15-1856 at 1st April, 1812.
40. R.H. 15-1856 at 19th February, 1812.
"Canonmills is going as formerly lodging and borrowing on his spirits, and surely there is no great prospect of his gaining by this mode of management." 41.

In fact Stein was still going strong by the years' end and in 1814 took out a licence for the largest still then working in the home market. For sheer perseverance there can have been few distillers to match John Stein. Such perseverance was not especially welcome to the rest of the trade as it added to the capacity in the industry and ran contrary to the attempts of the Lowland distillers' meetings at Falkirk to limit output and maintain prices. The failure of these agreements, whilst welcomed by dealers, was less favourably received by agents seeking to find a profitable outlet for spirits. "It will be a pity if some understanding as to prices do not take place and I hope the idea of it is not given up." 42 In December 1813 a fresh arrangement was made and Ryrie, whose patience was by now wearing thin, wrote:

"...I hope the League and Covenant entered into by the distillers will be solemnly observed. The disappointed dealers talk of distilling for themselves next year but they have more sense than try the experiment..." 43.

Only a month after the agreement was made the seasonal upswing in demand ate into dealers' stocks with the result that:

"The dealers are all bare and eager to buy on their own terms which they are afraid to name as they see the Distillers do not keep faith with each other...The Distillers are selling under pretence of old engagements at 11/- and 11/3..." 44.

It is interesting to compare these prices with the figure of 14/3 which the Falkirk meeting had resolved to sell at. Little wonder then that Ryrie should declare that: "The Falkirk meetings appear to be for the purpose of humbugging each other." With another abortive agreement in March 1814, this time with a recommended price of 12/- others began to feel the same:

41. R.H.15-1856 at 10th March 1813.
42. R.H.15-1856 at 7th November 1813.
43. R.H.15-1856 at 19th December 1813.
44. R.H.15-1856 at 7th January 1814.
"...I have been in Leith today and the dealers there fear they are taken in. Wyld declared to me that he is told the Compact is to be broke up to certainty, and that some of the Distillers are to work the whole season. If this is to be the case it will be the last in all probability among the present set and surely nobody else will trust to what they say if they cannot be kept bound to each other. It has in the meantime hurt the market and until Distillation is discontinued I fear the price will not revive if another month is persisted in and agreed to by the Trade..." 45.

Such agreements were in a sense becoming an irrelevancy as far as the fortunes of the trade were concerned for other more portentous factors were intervening. Three days after came the report "that an action has taken place in which Buonaparte has been taken prisoner and...his whole army surrendered."46 Confirmation of the report, and the news of Napoleon's abdication threw Edinburgh into "an uproar for two days and nights" with the celebrations culminating in "a grand illumination" with "Six Carts of Coals and a parcel of Tar Barrels set and lighted on the Top of Arthurs seat which had a fine effect."47 Glad as the tidings of victory were to the populace, peace was less welcomed by the dealers:

"No sales because the dealers are alarmed now at the Government countermanding the contract for rum to a limited extent and at the idea of the English distiller working for Scotland on the expiry of the present Act at 5th July." 48.

As a revenue raising measure the right to levy spirit duty was granted annually, the licensing period running from November or December through to the end of the following summer. There then followed a hiatus during which the amount of duty and the form of excise system was open to challenge and debate within Parliament until the new Distilling Act was passed. The uncertainties which hit the spirit market during this interval were exacerbated in 1814 by the knowledge that the dissatisfaction with the existing licence system was likely to result in a radical reorganisation. Besides, overlying the more predictable effects of peace, such as the termination of the Naval rum contract, were the unknown

45. R.H.15-1856 at 7th April 1814.
46. R.H.15-1856 at 10th April 1814.
47. R.H.15-1856 at 16th April 1814.
effects on commodity prices which distillers involved in agriculture, and dealers speculating in colonial produce were very much concerned about. Under the licence system the Lowland distiller had operated in a home market preserved not merely from the licensed Highland distiller but also from the English and Irish distillers. Also with the wartime breach in the Continental spirit trade a large market had been open to the Lowland distiller with the ending of Brandy and Geneva imports. All of this was now subject to change, but in what direction?

Ryrie at first was inclined to discount the depressive factors:

"The dealers who have purchased largely wish to keep up the price, at the same time they infuse the idea that Irish Spirits as well as Foreign may interfere and by this they prevent other dealers from buying.. I do not think that either the one or the other can interfere this season unless what may be smuggled do." 49.

Up until the end of May his prediction held good. At 12/6 per gallon (5/3 duty free) grain spirit prices actually advanced slightly on the news that high duties were to continue on foreign spirits. Spirit prices were, however, no longer the main worry, for the dealers, whose trade was not limited to spirits, were finding survival increasingly difficult in the face of the fall in commodity prices, and on the 23rd May Ryrie reported the first of a long list of failures amongst the Edinburgh and Leith merchants:

"It is the house of Messrs. Thomson Gibson & Co. Leith and John Thomson & Co. Edinburgh. They are said to owe £300,000 in Glasgow.. I fear many will feel the effects of this failure and the Banks will likely retrench." 50

This was followed by the collapse of a spirit dealer:

"James Robertson your old customer has stopt payment for from £30 to £40,000. Hattonburn will suffer severely. Tennant must stop from his connexion with Thomson, Gibson & Co. and Mr. Philips is in there a £2,000 and Canonmills near double that. I fear the evil day is not past with some other great folks in Leith." 51.
By August "the evil-day" was looking extremely long and Ryrie totting up the failures calculated that in Leith alone "a million sterling" had been lost. As an agent inextricably linked to the credit network Ryrie's vulnerability was reflected in his advice:

"...I am of the opinion that the safest and best place for your Spirits at present is in your cellar for more failures are expected...it is more and more difficult every day to know whom to trust...I cannot leave home a single day without running the risk of losing my credit." 52.

On top of this general commercial distress came the news that "the Distillers are to be put upon the same footing in all three Kingdoms to take effect from the 10th November. If so all must sell to good account if purchasers that can pay will buy. I think it is a vexatious business and I fear others will think so..." 53. 
Ironically enough, as spirit prices tumbled down - by February 1815 Ryrie could only make sales at 8/6 which with a new peak duty of 8/4 left 2d. for the distiller - the old problem of distillers cutting prices against each other disappeared and the problem instead became one of finding buyers whose credit could be relied upon: "It is singular that there is no demand for Aqua except by those who have no intention of paying." 54.

Up to this time Ryrie, despite the surrounding commercial depression, had retained his credit intact. As the real causes of the financial crisis in the distilling trade: the new peak duty, falling consumption and the outpouring of illicit spirit onto the market, became more evident Ryrie's position as agent became increasingly difficult. With falling spirit, cattle and grain prices the partners of Stein, Dewar & Co. found themselves facing a growing liquidity crisis. Unable to pay the interest on the loan which Ryrie had made to them or to lower their outstanding trade credit, they passed the burden on to Ryrie whose grievance was marked:

"...I often hear of your payments getting lighter, but I am sorry to say I never feel it. You surely have of late favoured me with a much greater load.

52. R.H.15-1856 at 29th May, 17th August, and 22nd September 1814.
53. R.H.15-1856 at 24th July 1814.
54. R.H.15-1856 at 17th May 1815.
"of your Business than I ever expected and at a time when least able for it. I do not mean my advance but the excessive trouble I have with your accommodation paper and by which... I may by your irregularity lose my credit which I hold most sacred.

Under this impression I request you may consult those concerned with you and Mr. Stein of Loanside and let them know that I cannot think of continuing the care of your business here longer...I did not accept it for the sake of emolument and I trust it will be admitted that I never evinced a sordid disposition to those concerned." 55.

What alarmed Ryrie most was the hazard of "losing what I estimate most, my Credit and reputation." Neither his reputation or credit were helped by a wrongly issued summons on behalf of Stein Dewar for a bill which had already been paid:

"The inaccuracy in conducting the business of your concern seems to increase with the quantity of damned paper - the negotiation of which has of late occupied my time solely - and is so disagreeably painful and degrading that I must insist on being done with it. It is so much out of the line of business that I am ashamed." 56.

The chain of paper in which Ryrie was so firmly enmeshed linked the distillers with their raw material suppliers and customers. The financial mechanism worked as follows: as Stein Dewar purchased the raw materials for distilling they paid for them by bills of exchange which Ryrie financed. Until the spirits produced were sold Stein Dewar were unable to pay Ryrie back. The spirits were sold for either cash or credit. If for cash then Ryrie could be repaid immediately and the outstanding bill retired. If the sale was a credit one (usually at three months) then Stein Dewar took a bill in exchange and asked Ryrie to accept it. With falling spirit prices and growing stocks Stein Dewar were increasingly hard pressed in meeting Ryrie's demands for repayment. The same was true of credit sales if the spirit dealers were unable to sell the spirits they had bought. Unable to advance cash to Ryrie they could ask him to extent the length of their repayment period in which case "the quantity of damned paper" was likely to amount alarmingly. By May 1815 Stein Dewar were falling increasingly behind with their remittances and Ryrie, with "a fresh flight of paper...hovering at (his) door" was compelled "to render my last shilling to your purposes without my consent." Even after a

55. R.H.15-1856 at 17th February 1814
56. R.H.15-1856 at 5th March 1815.
crisis meeting with the partners in July, Stein, Dewar & Co. persisted in drawing on Ryrie until in September he refused to accept any more of their bills. This refusal, which threatened, should Stein, Dewar issue any more bills in his name, to propel them into bankruptcy still left over £600 owing to Ryrie for which "...I have only promises." Despite his annoyance at their behaviour, Ryrie sought out another agent in Edinburgh for the Alloa firm. This gesture may be interpreted as an act of extreme generosity given the earlier behaviour of the firm or as a financially prudent move designed to extricate Ryrie from his financial entanglement without loss. If the latter it nearly succeeded, for by February 1816 Stein Dewar had reduced their indebtedness to £227 but three months later financial disaster struck. Another merchant in Leith went bankrupt. This time it was the agent of Stein Dewar at the port. His collapse pulled Stein Dewar and Ryrie down as well.

What conclusions can be drawn from Ryrie's brief career as agent? Bearing in mind that the lessons drawn from the experience of one agency and one distilling firm, albeit an important one, may not be valid for the industry as a whole, the conclusions would seem to be as follows. The distilling industry, especially the spirit dealing side of it, was extremely vulnerable to any disturbance in its credit network. Although it is difficult to isolate this from the growing burden of stocks which was a feature of the period much of the problem arose out of the large quantity of working capital required in the trade. Two features of the distilling industry were responsible for this: the long gap between production of spirit and its sale, and the burden of financing duty payments. Both features necessitated a heavy reliance on external credit sources.

In the case of those distillers who were also farmers distilling their own grain, the interval between seed time and "distilling harvest" must have placed a great strain on capital resources. In the peculiar circumstances of 1814 with a collapse in commodity prices, those distillers - almost certainly a majority - with capital tied up in crops and stock fattening were placed in an
extremely difficult position. Dealers faced with falling spirit consumption and falling commodity prices – for few appear to have dealt in spirits alone – were caught in just as an exposed situation.

As far as duty payments are concerned these tied up a lot of working capital when duty was paid in advance. In 1814 when the English excise system came to Scotland the amount of capital needed almost certainly increased, both because of the higher level of duty and the larger size of still. The sort of strain which the English system imposed was indicated by Octavius Smith of Thames Bank distillery:

"...in winter we are obliged to advance the duty for all spirits made for the supply of the market during the summer half year; and when there is any competition it breaks the weak back..." 57.

By 1814, after a period of low profitability in the Scottish distilling industry, there were plenty of weak backs ready for breaking. Although the Excise allowed some degree of credit in making duty payments its behaviour over arrears of duty was as tight as the hardest faced banker. A distiller whose credit was cast in doubt or whose payments were in arrears immediately found a writ of attachment placed on his stocks. James and William Miller gave this as one reason for their bankruptcy 58 in 1811, alleging over-charging of duty and claiming "...£40,000 damages for which the collector, solicitor, and whole of the Excise Board ought to be libelled."

This may just have been sour grapes for the partners had also lost over £7,000 in an outside speculation in coal mining, but the Crown, with a prior claim on assets could still pitch a firm into bankruptcy. The Miller's liquidation emphasises the part that a close connection with agriculture could play in a firm's downfall: the Miller's property was valued at £15,482 and almost half of this was accounted for by investments in land, farming equipment and houses. Close ties with farming at a time of agricultural depression could bear heavily on the distiller.

As a credit supplier Ryrie appears as incredibly generous in the time that he allowed to Stein Dewar to curtail their borrowing. It is doubtful whether the banks, the other source of trade credit, would have been so lenient. The attitude of the Scottish banks to the extension of credit in the distilling industry was contradictory: willing to advance capital initially but over-reacting at the slightest hint of instability. This sort of behaviour is noticeable at the end of the eighteenth century and does not appear to have altered much by 1814. Witness for example, the account given by Sir William Forbes, the banker, of the part played by his bank in the collapse of the Steins in 1788. The bank had extended what Forbes, with the benefit of hindsight, called "a degree of credit much beyond the bounds of prudence" to enable the Steins to build up their English trade. Even before the bank discovered that the Steins were operating at a loss in a "foolish and fruitless contest with the London distillers" it became alarmed at the large circulation of bills running in London and retrenched sharply. Although the main cause of the collapse of the Steins lay in the increased import duty on Scottish spirits, the policy of the bank played an important contributory role. The same behaviour is evident in the crisis which hit John Stein of Canomills in 1812, except that on this occasion it was the Royal Bank which withdrew its support. Reliance on the banking system for working capital appears to have been replete with dangers for the distiller.

Of the immediate post war years 1816 was the worst for the Lowland distillers. It may be said to have been the worst year of a uniquely difficult period. Never again was the Lowland industry to be faced with the same unholy combination of events: the death agony of a discredited excise system, peak duty and falling consumption, agricultural depression and commercial crisis.

60. Sir William Forbes, op.cit., p. 72
61. S.R.O., R.H.15-1856. Stein sued the Royal Bank for damages of £300,000 because of its behaviour, an action which he won.
After 1816 the Lowland distillers were faced with different and more favourable circumstances. Duty was reduced and consumption increased, not dramatically but gradually up until the 1823 reforms (see Graph 4 and 5, p.103). With the start of excise reform the quality of spirit improved and the barriers to entry declined. The increasing number of distillers prepared to take out licences reflected this (See Graph 3, p.103). Although the growing number of distillers meant an increase in competition, most Lowland distillers accepted this as a fair exchange for a revenue system which gradually freed the distiller to work as he thought best. William Paul thought "the present law...very good"62 and to Andrew Bannerman it appeared "to be almost unexceptionable."63 A few, like Archibald Dunlop and Alexander Haig regretted the loss of their price fixing arrangements but conceded that "the present open system is better for the country."64 Amidst this generally cheerful acceptance by the Lowland distillers of the reforms only one sour chord was struck and that was over the continuing restriction on access to the English market.

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62. 5th Report, App. 74, p.216.
63. 5th Report, App. 73, p.238.
64. 5th Report, App. 73, p.209 and App. 76, p.22.
(III) THE ENGLISH MARKET

With the termination of the special provisions for the Highland area in 1817, Lowlands and Highlands were treated as one for excise purposes. Duty rates were uniform and the Highland distiller could now work for the Lowland market. Outside of Scotland the distiller who wished to work for English or Irish markets continued to face different sets of excise regulations. The last task of the excise Commissioners in 1823 was to deal with "the complicated and important question" of establishing "a uniform system of distillery laws embracing the whole of the United Kingdom" to pave the way for a free trade in spirits within the U.K.

As far as the English market was concerned it remained down to 1823, for the majority of Scottish distillers, a trade closed to all but the largest by virtue of the restrictive excise regulations which increased the costs of entry to the trade. In 1786, the best year in the eighteenth century for Scottish spirit exports to England, the great Lowland export distillers shipped 881,969 gallons to their agents in London. After the debacle of 1788 with the collapse of the major participants and the increased import duty this figure was not passed until 1805. Despite the increase in countervailing duties which moved in step with home duty increases, the trade showed some signs of growth in the first two decades of the nineteenth century. From 1805 onwards (see Graph 7, over) Scottish spirit exports seldom secured less than 20% of the total market for British spirits in England. Largely because of the restrictive requirements on entry to the trade, which had been further tightened in 1815, an increase in the minimum still capacity from 200 to 3,000 gallons and by the continuance of the restrictive licensing conditions, this market

66. By Act 45 George III, c.100.
67. A distiller had to give a year's notice of intention to enter a still for the English market. A distillery working for the home market had to be kept unemployed for a year if it was to be switched to the English trade or a distiller working for the home market had to have a separate distillery manufacturing solely for exportation. The licensing period came round once a year in October and if an intending distiller omitted to take out a licence then he had to wait another twelve months.
GRAPH 7 (a): Imports of Scottish Spirits into England (1802 - 1822)
IMPORTS OF SCOTTISH SPIRITS INTO ENGLAND

TOTAL BRITISH SPIRITS MARKET IN ENGLAND

IMPORTED FROM SCOTLAND
remained in the control of already established distillers. Up to 1811 only two distillers, John Haig of Lochrin and Robert Stein of Kilbogie, commanded sufficient capital to work for the English market. Three years later the number of distilleries had increased to five with the entry of Stein and Haig offspring into the trade; Andrew and Charles Stein in partnership at Hattonburn distillery; and John and William Haig with their new distilleries at Bonnington and Seggie respectively.68 These numbers stayed, the same five firms still sharing the market in 1821 when the Commissioners turned their attention to the spirit trade between England and Scotland.

Those Scots distillers who possessed insufficient capital to enter the English market viewed what they called "the destructive monopoly of the English market"69 with a malignant envy:

"...In Scotland it is notorious that the export distillers have within the last few years acquired immense fortunes; that several distillers have been paid large sums not to attempt working for the English market; that numerous distilleries have been bought up by the export and English distillers; that the supply in the English market is uniformly kept under the demand; that the making is proportioned between the English distillers and Scotch export distillers, and betwixt each other; and that there is even an understanding betwixt these distillers and the Irish distillers; and that the price of spirits is regularly fixed to the rectifiers by the distillers in England, and those who work for that market...." 70.

Their grievance at being excluded from the English market can be easily understood when the positions of the home and export distillers are compared to the growth in their respective markets:

<table>
<thead>
<tr>
<th>Year</th>
<th>Scottish Spirit Exports (gals)</th>
<th>Scottish Home Market Production (gals)</th>
<th>Scottish Home Market Consumption (gals)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1805</td>
<td>1,102,801</td>
<td>2,617,508 (42%)</td>
<td>1,625,987 (68%)</td>
</tr>
<tr>
<td>1810</td>
<td>987,586</td>
<td>2,171,513 (45%)</td>
<td>1,748,140 (56%)</td>
</tr>
<tr>
<td>1815</td>
<td>1,647,136</td>
<td>3,024,430 (54%)</td>
<td>1,591,148 (103%)</td>
</tr>
<tr>
<td>1820</td>
<td>1,343,108</td>
<td>3,278,129 (41%)</td>
<td>1,863,987 (72%)</td>
</tr>
</tbody>
</table>

68. Bonnington distillery was in Leith. It is now a whisky warehouse. Seggie was near Guardbridge on the River Eden just north of St. Andrews. It is now part of a paper mill.

69. 5th Report, App. 79, p.241

70. 5th Report, App. 58, p.146.
As the table shows the Scottish export houses had carved out a very nice market for themselves. Although exports had only increased by 22% between 1805 and 1820, the market situation was much healthier than in the home market. In Scotland production had expanded by 25% over the same period but consumption had increased by only 15%. Moreover, in the English market only five houses shared a market which, in 1820, amounted to 1.3 million gallons whilst at home no fewer than 131 firms scrabbled for a piece of a market consuming 1.8 million gallons.

Adding to their jaundiced view of the export trade the Scottish home distillers noted that because of the small number of English distillers and Scottish export distillers price arrangements were much easier to reach in the English market. In November 1821, when grain spirits might be purchased in Scotland for 2/3 per gallon (duty free), raw spirits \(^{72}\) could not be bought in England for less than 4/6. \(^{73}\) As the Excise Commissioners pointed out, on the prevailing level of consumption of 5 million gallons in England, this differential meant that more than £500,000 was being paid out for grain spirits by the English consumer than would have been the case in Scotland.

Apart from the costs imposed on the consumer by the price agreements, the Scottish export distillers also fell foul of the home distillers because of the effects of their discriminating pricing policy on the home market. All the Scottish export distillers also possessed or were partners in distilleries working for the home market. Why, when export profits were reported to be so much greater should they have continued to operate in the home market? The answer would seem to be twofold. Although the English market appeared to possess an enviable stability and growth, access to it remained highly dependent on maintaining good relations with the English distillers. It is unlikely that the lesson of the 1788 crisis had been forgotten. Then, the English distillers had reacted to a high volume of Scottish spirit by securing an

\(^{71}\) Sources for Table 21: Export figures from 5th Report, App. 121, p.397 and Home market figures from 7th Report, p.227.

\(^{72}\) "Raw" means before rectification.

\(^{73}\) Supplement to 5th Report, p. 8.
increase in the countervailing duties against Scottish spirit. After 1788, because the restrictions on entry kept numbers low, it was easier to reach agreement with the English distilling trade on price and output but any attempt by the Scottish export distillers to expand at the expense of the English distiller ran the risk of again being rebuffed by parliamentary action. An uneasy alliance abroad dictated a cautious approach and the maintenance of a home distilling reserve. Besides this reason of trade politics there was also a sound economic one. Although the costs of entry to the export market were high, there were, by the end of the Napoleonic Wars, several Lowland distillers operating on a scale which was not very far removed from that necessary to begin exporting. Distillers like Archibald Dunlop, John Padon and Thomas Spears (See Table 22, over) were amongst the top ten producers in Scotland and would have been capable of switching to the export trade. One way of ensuring that this latent competition did not materialise was for the five export firms to operate as a discriminating monopoly. The policy they followed might best be called dumping in reverse. By selling at a low price in Scotland they effectively undercut their potential competitors, lowered home profit margins and prevented possible new entrants from accumulating sufficient capital to establish large distilleries for the English market. It is not surprising then to find that the most virulent opponents of the existing export system were precisely those large distillers who were being hard hit at home to fend off their likely move into the export trade. It was these distillers who amassed the evidence which showed that besides operating a discriminatory pricing policy, the export distillers had actually bought off several intending entrants. John Stein of Kennetpans, John Lowbray of Cambus and Robert More of Underwood had received payment to dissuade them from entering. More reputedly having received £10,000 to stay out. Besides payments to the distillers, the export firms had also purchased or secured the leases of distilleries capable of working for the English market and kept them out of production. Cameronbridge

74. 5th Report, App. 79, p.240.
**TABLE 22: SPIRIT PRODUCTION IN LOWLAND SCOTLAND**

1817

<table>
<thead>
<tr>
<th>DISTILLER</th>
<th>LOCATION</th>
<th>OUTPUT</th>
</tr>
</thead>
<tbody>
<tr>
<td>James Haig Jnr.</td>
<td>Sunbury, Edinburgh</td>
<td>184,760</td>
</tr>
<tr>
<td>Archibald Dunlop</td>
<td>Haddington</td>
<td>148,158</td>
</tr>
<tr>
<td>Wm. &amp; Jas. Aitchison</td>
<td>St. Clements Wells, Haddington</td>
<td>142,627</td>
</tr>
<tr>
<td>George Dunlop &amp; Co.</td>
<td>Linton Bridge, Haddington</td>
<td>110,529</td>
</tr>
<tr>
<td>John Stein</td>
<td>Kennetpans, Clackmannan</td>
<td>106,683</td>
</tr>
<tr>
<td>John Stein &amp; Co.</td>
<td>Canonsmills, Edinburgh</td>
<td>93,250</td>
</tr>
<tr>
<td>John Philip</td>
<td>Dolls, Clackmannan</td>
<td>85,181</td>
</tr>
<tr>
<td>Tod Padon Vannon &amp; Co.</td>
<td>Borrowstanes, Linlithgow</td>
<td>80,764</td>
</tr>
<tr>
<td>John Bald &amp; Co.</td>
<td>Carsbridge, Clackmannan</td>
<td>75,906</td>
</tr>
<tr>
<td>Robert Henries</td>
<td>Paisley, Renfrew</td>
<td>70,389</td>
</tr>
<tr>
<td>James Hill &amp; Co.</td>
<td>Clackmannan</td>
<td>63,068</td>
</tr>
<tr>
<td>Andrew Taylor &amp; Co.</td>
<td>West Barnes, Haddington</td>
<td>57,045</td>
</tr>
<tr>
<td>Brown, Gourlay &amp; Co.</td>
<td>Port Dundas, Lanark</td>
<td>53,662</td>
</tr>
<tr>
<td>Dawson &amp; Mitchell</td>
<td>Lockvilla, Lanark</td>
<td>53,188</td>
</tr>
<tr>
<td>William Young &amp; Co.</td>
<td>Grange, Fife</td>
<td>52,507</td>
</tr>
<tr>
<td>John Moubray</td>
<td>Cambus, Clackmannan</td>
<td>50,563</td>
</tr>
<tr>
<td>Speare Mitchell &amp; Co.</td>
<td>Kirkcaldy, Fife</td>
<td>50,406</td>
</tr>
<tr>
<td>Daniel McFarlane &amp; Co.</td>
<td>Port Dundas, Lanark</td>
<td>50,226</td>
</tr>
<tr>
<td>Stein &amp; Wilson</td>
<td>Grange, Clackmannan</td>
<td>47,172</td>
</tr>
<tr>
<td>McLagan, Dunlop &amp; Horne</td>
<td>Underwood, Stirling</td>
<td>40,150</td>
</tr>
<tr>
<td>John Carnie &amp; Co.</td>
<td>Barrowfield, Lanark</td>
<td>36,660</td>
</tr>
<tr>
<td>Philip &amp; Haig</td>
<td>Cameronbridge, Fife</td>
<td>35,156</td>
</tr>
<tr>
<td>John Harvey &amp; Co.</td>
<td>Yoker, Renfrew</td>
<td>35,003</td>
</tr>
<tr>
<td>William Dawson &amp; Co.</td>
<td>Linlithgow, Bonnytown</td>
<td>26,295</td>
</tr>
<tr>
<td>James Glen</td>
<td>Mains, Linlithgow</td>
<td>27,800</td>
</tr>
<tr>
<td>Lindsay &amp; Brownie</td>
<td>Gorbals, Lanark</td>
<td>15,443</td>
</tr>
<tr>
<td>James Cowan &amp; Co.</td>
<td>Fintry, Stirling</td>
<td>13,907</td>
</tr>
<tr>
<td>Ferguson, Strang &amp; Co.</td>
<td>Tarbet, Dumbarton</td>
<td>11,732</td>
</tr>
<tr>
<td>William Henzies</td>
<td>Gorbals, Lanark</td>
<td>11,570</td>
</tr>
<tr>
<td>George Brown</td>
<td>Rutherglen Bridge, Lanark</td>
<td>8,562</td>
</tr>
<tr>
<td>John Forrester</td>
<td>Kirkliston, Linlithgow</td>
<td>6,492</td>
</tr>
<tr>
<td>John &amp; Charles Grieve</td>
<td>Borrowstanes, Linlithgow</td>
<td>5,612</td>
</tr>
<tr>
<td>John Ballock</td>
<td>Dunachter, Dumbarton</td>
<td>3,535</td>
</tr>
<tr>
<td>James Robertson</td>
<td>Rosebank, Stirling</td>
<td>3,472</td>
</tr>
<tr>
<td>Robert Stevenson</td>
<td>Mill Bank, Ayr</td>
<td>2,882</td>
</tr>
<tr>
<td>James Douglas &amp; Co.</td>
<td>Burnbrae, Stirling</td>
<td>2,649</td>
</tr>
<tr>
<td>James Walker</td>
<td>Bridgeton, Lanark</td>
<td>2,748</td>
</tr>
<tr>
<td>Hugh McIndoe</td>
<td>Balloch, Dumbarton</td>
<td>2,205</td>
</tr>
<tr>
<td>James Adam</td>
<td>Oldhall, Stirling</td>
<td>2,184</td>
</tr>
<tr>
<td>Mathew Clark &amp; Co.</td>
<td>Littlemill, Dumbarton</td>
<td>1,910</td>
</tr>
<tr>
<td>William Muir</td>
<td>Barronepark, Bute</td>
<td>1,507</td>
</tr>
<tr>
<td>Alexander Crichton</td>
<td>Roundtree Park, Dumbarton</td>
<td>1,246</td>
</tr>
<tr>
<td>Robert Symers</td>
<td>Pitslessie, Fife</td>
<td>1,103</td>
</tr>
<tr>
<td>William Buchanan</td>
<td>Bankoll, Stirling</td>
<td>931</td>
</tr>
<tr>
<td>James Orr &amp; Co.</td>
<td>Airdrie, Lanark</td>
<td>923</td>
</tr>
<tr>
<td>James Robertson</td>
<td>Paisley, Renfrew</td>
<td>885</td>
</tr>
<tr>
<td>Alexander Parlan &amp; Co.</td>
<td>Dumbach, Stirling</td>
<td>812</td>
</tr>
<tr>
<td>John Alexander</td>
<td>Loch, Lanark</td>
<td>803</td>
</tr>
<tr>
<td>James Archibald</td>
<td>Kilbirnie, Ayr</td>
<td>795</td>
</tr>
<tr>
<td>Thomas Littlejohn</td>
<td>Stirling</td>
<td>542</td>
</tr>
<tr>
<td>Gilbert Fleck &amp; Co.</td>
<td>Brownfield, Lanark</td>
<td>516</td>
</tr>
<tr>
<td>John Hamilton</td>
<td>Dumbarton</td>
<td>313</td>
</tr>
<tr>
<td>Robertson &amp; McCheyne</td>
<td>Stevenston, Ayr</td>
<td>309</td>
</tr>
<tr>
<td>Robert Leadbitter</td>
<td>Midburns Hill, Fife</td>
<td>260</td>
</tr>
</tbody>
</table>
distillery had been bought and closed. Tulliallan distillery bought and demolished. Inverkeithing had been effectively prevented by the cheaper remedy of leasing the adjoining corn mills and stopping the distillery gaining access to the water from the stream passing its walls.75

Although such evidence as this brought the export distillers into disrepute and helped to abolish the existing regulations surrounding the export trade, it is perhaps important not to exaggerate the profits being made from this monopolistic behaviour. John Stein claimed that he was not making such exorbitant profits as people suggested76 and that he was operating at a loss in both the English and Scottish markets. There may have been a degree of truth in this for one point, which was not noticed during the enquiry, was that although only five firms had entered the trade, the capacity of the stills they operated had risen quite markedly. Over the period for which figures are available (1809/1821) the distilling capacity entered for the English market (as measured by the capacity of wash stills) had risen by a multiple of 3.7 from 13,083 gallons in 1809 to 48,923 gallons in 1821. Sales of spirit in England had, on the other hand, only risen 1.6 times from 721,364 gallons to 1,161,594 gallons.

If sales are measured as a ratio of still content as in Table 23 it can be seen that the ratio had fallen quite considerably from the earlier cosy days when only two houses were entered.

TABLE 23: SALES/STILL CAPACITY RATIOS OF SCOTTISH EXPORT DISTILLERS

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Firms</th>
<th>Sales</th>
<th>Still Capacity</th>
<th>Ratio A/B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1809</td>
<td>2</td>
<td>731,364</td>
<td>13,083</td>
<td>55</td>
</tr>
<tr>
<td>1810</td>
<td>2</td>
<td>987,586</td>
<td>20,353</td>
<td>48</td>
</tr>
<tr>
<td>1811</td>
<td>3</td>
<td>708,394</td>
<td>29,655</td>
<td>24</td>
</tr>
<tr>
<td>1812</td>
<td>3</td>
<td>1,409,838</td>
<td>32,471</td>
<td>43</td>
</tr>
<tr>
<td>1813</td>
<td>3</td>
<td>481,666</td>
<td>24,425</td>
<td>20</td>
</tr>
<tr>
<td>1814</td>
<td>5</td>
<td>1,429,551</td>
<td>47,367</td>
<td>30</td>
</tr>
<tr>
<td>1815</td>
<td>5</td>
<td>1,647,136</td>
<td>35,104</td>
<td>47</td>
</tr>
<tr>
<td>1816</td>
<td>5</td>
<td>1,294,945</td>
<td>42,494</td>
<td>30</td>
</tr>
<tr>
<td>1817</td>
<td>5</td>
<td>1,241,225</td>
<td>43,852</td>
<td>28</td>
</tr>
<tr>
<td>1818</td>
<td>5</td>
<td>1,533,901</td>
<td>44,754</td>
<td>34</td>
</tr>
<tr>
<td>1819</td>
<td>5</td>
<td>1,427,379</td>
<td>44,421</td>
<td>32</td>
</tr>
<tr>
<td>1820</td>
<td>5</td>
<td>1,343,108</td>
<td>39,428</td>
<td>34</td>
</tr>
<tr>
<td>1821</td>
<td>5</td>
<td>1,161,594</td>
<td>48,923</td>
<td>24</td>
</tr>
</tbody>
</table>
It may be that by the time of the Wallace Commission the export firms had overplayed their hand. Operating as a monopoly they had run into the position faced by all monopolists. An increase in capacity necessitated an increase in sales which meant accepting a cut in price. In view of the political constraints operating in the English market, that is, the fear that the English distiller would press for an increase in the countervailing duties, such a policy was not feasible at least in the short run until a new agreement with the English distillers could be negotiated. The only alternative, if unpalatable solution, was to accept a cut back in profit levels. One indication of the growing weakness of "the destructive monopoly" was that in order to limit the entrance of new competitors the Scottish export houses had to call on the English distillers for help in buying distilleries and compensating competitors. 76

As well as the pressure exerted by the home distillers for a change in the regulations dealing with the English market, the Excise Commissioners faced a propaganda campaign within Parliament run by the Scottish landed interests in favour of easier access to the English market. In May, 1822 Captain Wemyss presented a petition 77 from 2,000 farmers and barley growers in Fife requesting that Scotch whisky should be allowed to be imported into England in the same manner as Irish spirits were, estimating that access to the market would raise the annual consumption of barley by 500,000 quarters. The reference to the Irish spirit trade with Great Britain highlighted the other main grievance of the Scottish distillers seeking outlets beyond Scotland. From October, 1814 Irish distillers had been allowed 80 to produce spirits for export under home consumption regulations, to warehouse them duty free, and to export them to Great Britain paying the equivalent Scottish and English duties on landing. Although this advantage had not secured

75. Supplement to the 5th Report, App. 9, p. 31.
76. Supplement to the 5th Report, App. 9, p. 31.
77. The sources for table 23 are B.P.P. 1821, VIII, App. 8, pp. 80-81, and Supplement to the 5th Report, App. 121, p. 397.
78. Supplement to the 5th Report, App. 9, p. 31.
79. The Scotsman, 1st May 1822, p. 147.
80. By Act 54 George III, c. 149.
a large market for Irish spirits either in England, where gin was demanded, or in Scotland, where the low price of home produced spirits acted as a prohibition to them, the lack of reciprocity in the trade angered the Scots distillers. Scottish distillers who wished to sell in Ireland faced the same regulations as in the English market which effectively prevented any market in Ireland being established. The solution to this problem was easier for the Excise Commissioners to find than the problem of the Scottish trade with England for, from 1823 Scotland and Ireland were placed under the same excise system with the assimilation of the Irish method of levying duty (a still capacity licence system) and the Scottish system (of combined survey and account). Duty levels were also equalised. Because duty in England continued to be based on the wash the same remedy could not be applied to the Scottish and Irish export trade with England. In this case the Commissioners recommended as "the nearest approximation that can be made to a free intercourse" that distillers be allowed to manufacture for the English market under the regulations governing English distillers, but with suitable modifications to extend practically a free access. Although a distinct licence continued to be necessary the Commissioners recommended that to enable persons of moderate capital to enter into competition the size of the export still should be reduced below 3,000 gallons. Export spirits were to be warehoused duty free and to pay the same duty as English spirits on importation. The restrictions surrounding licences which had enabled Scottish export distillers to buy off prospective entrants were also altered so as to enable entry at any period of the year, and transfer from home to export trades during the life of the licence. In fact, these modifications proved to be a temporary expedient, for in 1825 the satisfactory results of the 1823 excise reforms in Scotland and Ireland persuaded the Government to extend the principles of the 1823 Act to England.

---

81. The Irish spirits were made mainly from malt and therefore unsuitable for rectification into gin.


83. This was incorporated in the form of a fixed annual licence duty of £10.

84. It is a measure of the continuing failure of the 1823 Act to end illicit distilling in Ireland that duty in Ireland, after rising step by step with Scottish duty until 1630 when it was 3/4 per proof gn. had to be reduced in 1834 to 2/4.
This left the spirit trade throughout the U.K. under one uniform set of excise regulations even if still subject to different amounts of duty.86

This section has considered the export trade of the Scottish distillers with England and Ireland. No mention has been made of trade with countries outside the U.K. Until 1823 this simply did not exist – on a legal basis at any rate – due to the lack of any provision for duty free warehousing of spirits for export. With permission to bond spirits without paying duty incorporated in the Distillery Act of 1823 an export trade began to be created mainly centred in Glasgow and mainly in malt as opposed to grain whisky. Although small at first it increased progressively in the first ten years after the excise reforms as can be seen from Table 24:

<table>
<thead>
<tr>
<th>Year</th>
<th>Malt Spirits</th>
<th>Grain Spirits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1824</td>
<td>1,480</td>
<td>-</td>
</tr>
<tr>
<td>1825</td>
<td>4,195</td>
<td>125</td>
</tr>
<tr>
<td>1826</td>
<td>4,445</td>
<td>-</td>
</tr>
<tr>
<td>1827</td>
<td>9,063</td>
<td>14,951</td>
</tr>
<tr>
<td>1828</td>
<td>11,203</td>
<td>1,696</td>
</tr>
<tr>
<td>1829</td>
<td>12,660</td>
<td>147</td>
</tr>
<tr>
<td>1830</td>
<td>10,443</td>
<td>532</td>
</tr>
<tr>
<td>1831</td>
<td>13,371</td>
<td>-</td>
</tr>
<tr>
<td>1832</td>
<td>19,386</td>
<td>145</td>
</tr>
<tr>
<td>1833</td>
<td>24,462</td>
<td>679</td>
</tr>
</tbody>
</table>

85. In Act 6 George IV, c.80.
86. In 1833 there were still 15 points in which distillery regulations in England, Ireland and Scotland differed. With the exceptions of the requirements on still size (not less than 400 gallons in England, not less than 40 in Ireland and Scotland) and the drawback on malt used in distilling (not allowed in England) the differences were minor and unsubstantial e.g. the time allowed for the collection of worts was 8 hrs. in England and 6 in Ireland and Scotland.
(IV) CONCLUSIONS

In 1798 Frederick Maclagan, the agent and traveller for Haig's of Lochrin expressed his economic philosophy regarding the distillery regulations:

"but it accords with every sound Principle of Legislation and Justice, to say to Distillers of every Description, you shall be placed under one equal and indiscriminating Law, the Sum payable for your Licence shall be One, and you shall be at perfect Liberty to use that Licence for your own Advantage, to the full extent of your Abilities. One Distiller may object to this, and say, I cannot distil under that System, for I cannot manufacture so expeditiously as some of my Neighbours. The Answer to this is obvious, go and learn, for Government has no concern to teach you your Business, nor to make Laws to accommodate your ignorance. Another may object that he has not so good an Apparatus, and therefore cannot extract so great a Quantity of Spirits from his grain. The answer to this is equally plain, before you commence your Business, go and get a proper Apparatus, and if you have not Capital sufficient, you must let it alone; for there never was an Idea conceived more absurd than the supposition, that Government should interpose to level the natural good understanding, or cultivated Abilities of one Man, to the Standard of another Man's Ignorance and Stupidity, or to reduce the Activity in Trade of one Man's extensive Capital to the slovenly exertions of Men who would force themselves into a trade for carrying on of which they are not possessed of Funds sufficient."

Largely because of the economic and social effects of illicit distilling the rigours of capitalist competition within the framework of the licensing system could not be allowed to operate on an industry whose product was heavily taxed. The failure of the excise systems introduced before 1816 to secure revenue, to prevent illicit distilling, to prevent monopoly, and to produce a good quality spirit forced a completely new and novel approach. After 1816 with the reduction in duty, the gradual freeing of the distillers' operations, and the lowering of the barriers to entry all these problems began to be solved. The degree of success which the 1816

87. Source for Table 24 is the 7th Report, p. 65.
MAP 6 (a): Number of Licensed Distilleries (1817)
d represents one distillery

Note - this map is based on counties
O - Orkney S - Stirling
C - Caithness G - Clackmannan
R - Ross and Cromarty F - Fife
I - Inverness L - Linlithgow
N - Nairn E - Edinburgh
Mo - Moray H - Haddington
A - Aberdeen D - Dumbarton
Fo - Forfar Rb - Renfrew & Bute
Ph - Perth La - Lanark

NUMBER OF LICENSED DISTILLERIES 1817
MAP 6 (b): Output of Licensed Distilleries (1817)
OUTPUT OF LICENSED DISTILLERIES 1817

x equals units of output in 50,000 gallons

For names of counties see map of distilleries for 1817.
MAP 7 (a): Number of Licensed Distilleries (1822)
NUMBER OF LICENSED DISTILLERIES 1822

d represents one distillery

The map is based on excise collections

O - Orkney    L - Linlithgow
G - Caithness E - Edinburgh
I - Inverness H - Haddington
A - Aberdeen T - Teviotdale
Ph - Perth    G - Glasgow
S - Stirling  P - Paisley
F - Fife      A - Argyll
S/N - South/North

Map indicates the distribution of licensed distilleries in Scotland in 1822, with symbols denoting the number of distilleries in each region.
MAP 7 (b): Output of Licensed Distilleries (1822)
x equals output in units of 50,000 gallons
For names of excise collections see map of distilleries in 1822.
MAP 8 (a) : Number of Licensed Distilleries (1833)
NUMBER OF LICENSED DISTILLERIES 1833

d represents one distillery

The map is based on excise collections

G - Caithness  L - Linlithgow  A.N. - Argyll North
I - Inverness  E - Edinburgh  A.S. - Argyll South
E - Elgin        H - Haddington  Ayr
A - Aberdeen    G - Glasgow  
M - Montrose    D - Dumfries
P - Perth
S - Stirling
F - Fife

The map is based on excise collections:

G - Caithness  L - Linlithgow  A.N. - Argyll North
I - Inverness  E - Edinburgh  A.S. - Argyll South
E - Elgin        H - Haddington  Ayr
A - Aberdeen    G - Glasgow  
M - Montrose    D - Dumfries
P - Perth
S - Stirling
F - Fife

d represents one distillery

The map is based on excise collections:

G - Caithness  L - Linlithgow  A.N. - Argyll North
I - Inverness  E - Edinburgh  A.S. - Argyll South
E - Elgin        H - Haddington  Ayr
A - Aberdeen    G - Glasgow  
M - Montrose    D - Dumfries
P - Perth
S - Stirling
F - Fife

d represents one distillery

The map is based on excise collections:

G - Caithness  L - Linlithgow  A.N. - Argyll North
I - Inverness  E - Edinburgh  A.S. - Argyll South
E - Elgin        H - Haddington  Ayr
A - Aberdeen    G - Glasgow  
M - Montrose    D - Dumfries
P - Perth
S - Stirling
F - Fife

d represents one distillery
MAP 8 (b): Output of Licensed Distilleries (1833)
OUTPUT OF LICENSED DISTILLERIES 1833

x equals output in units of 50,000 gallons
reforms achieved can be seen from Maps 6 (a,b) and 7 (a,b) showing the distribution of distilleries and output in 1817 and 1822. Undoubtedly the Lowland distillers were the major beneficiaries of the 1816 reforms, though the widespread move into licensed production in Perthshire suggests that even some Highland distillers found encouragement in the new legislation. Beyond Perthshire the few licensed distilleries in operation by 1822 were mainly the result of a continuing perseverance by men like Fraser of Braemar, Munro of Teaninich, and the Duke of Sutherland to find a legitimate outlet for grain and to show tenants that licensed production was not impossible under Highland conditions. Up until 1823 they remained prophets without honour in their own country, their distilleries isolated islands in a sea of illicit spirit. In the ten years after 1823 (see Map 8 a,b) the reforms recommended by the Wallace Commission resulted in them being joined by a host of new licensed producers. The dramatic rise in licensed distillers and the output of legal spirit can be seen from Graphs 3 and 5 (p.103) and Map 8 (a,b). Many questions remain to be asked about those new entrants in the following chapters: about their motives, means, and methods and perhaps most important of all why the distilling industry should have attracted such a volume of entrepreneurial talent if, as has been suggested, the Highlands were blighted by a lack of entrepreneurs.

How successful was the principle of "universal competition" which lay behind the excise reforms? If the percentage of total output controlled by the largest ten distillers is taken as an indicator of the degree of competition in the distilling industry the following picture emerges:

<table>
<thead>
<tr>
<th>Year</th>
<th>Lowlands</th>
<th>Highlands</th>
</tr>
</thead>
<tbody>
<tr>
<td>1798</td>
<td>57%</td>
<td>31%</td>
</tr>
<tr>
<td>1814</td>
<td>56%</td>
<td>-</td>
</tr>
<tr>
<td>1817</td>
<td>52%</td>
<td></td>
</tr>
<tr>
<td>1822</td>
<td>47%</td>
<td></td>
</tr>
<tr>
<td>1833</td>
<td>35%</td>
<td></td>
</tr>
</tbody>
</table>

TABLE 25: OUTPUT OF THE TEN LARGEST DISTILLERIES AS A PERCENTAGE OF TOTAL OUTPUT
Given the degree of technical advance in the Lowland industry the picture is perhaps surprising. In contrast to the London brewing industry at this time, which became less competitive, Excise policy in Scotland by lowering the costs of entry and widening the market reversed the trend which might otherwise have been anticipated of the large and technologically advanced distillers ousting the small. The distilling industry after 1823 was a curious amalgam of large and small units of production. The question for the future was how long could this competitive structure remain.

If the concurrent reforms in the relationships between the distilling industries in Scotland, England and Ireland are considered then it can be seen that the principle of "free intercourse" within the United Kingdom predates the general debate about laissez faire later in the nineteenth century.

In 1823 the Excise found a solution to the paradox which it faced at the end of the eighteenth century in a policy of "universal competition". It was a solution capable of being applied not merely to the difficulties surrounding the collection of duty in Scotland, but also to the trading relationships between the English, Irish and Scottish industries. Until 1823 the distillers' fortunes were tied inextricably, if not exclusively, to the oddities and eccentricities of excise legislation. After 1823 the fate of the distiller depended, excluding changes in the level of duty, entirely on his success in commercial rivalry rather than on his degree of skill in dodging and manipulating all enveloping excise laws.
CHAPTER FOUR

TRENDS IN SPIRIT CONSUMPTION IN THE
NINETEENTH CENTURY

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CHAPTER FOUR

TRENDS IN SPIRIT CONSUMPTION IN THE NINETEENTH CENTURY

INTRODUCTION:

"This wise and salutary measure succeeded beyond all expectations, by degrees the smuggler was driven from his haunts and habits; sober industry took the place of lawless traffic; the morals of the people were improved, and the revenue was greatly increased."¹ This happy verdict on the work of the Wallace Commission came from a group of Scottish distillers. It was based on over ten years experience of the 1823 reforms and stands in marked contrast to the general opposition which previous excise systems had aroused. By the stated objectives of the Commissioners: the safeguarding of the revenue, the curbing of illicit distilling, and the establishment of small-scale distilleries to provide a market for grain, the reforms in Scotland were uniquely successful. Only one aim remained unfulfilled. This was the desire of the Commission to see "a free intercourse in spirits within the United Kingdom."

Free trade within the United Kingdom was to be matched by a growing liberalisation of the conditions surrounding the importation of foreign and colonial spirits. In this Chapter the development of the market for home and imported spirits will be examined. Documentary sources, other than excise records, for the study of the spirit trade in the first half of the nineteenth century are exceedingly sparse and this chapter is largely concerned with utilising the excise records to present a general picture of the U.K. spirit market. In Chapter Five excise records are again drawn on to chart the development of the distilling industry in Scotland after 1823.

¹ B.P.P. 1834, Vol. XXV, 7th Report of the Commissioners of Inquiry: British Spirits App. 24, p.146. Referred to either as the 7th Report or The Parnell Commission.
SECTION ONE: HOME PRODUCED SPIRITS.

Although the extension to England in 1825 of the principles underlying the reformed Irish and Scottish excise systems meant that distillers in the three kingdoms worked under a nearly uniform distillery code, consumers in the three countries paid different rates of spirit duty until 1858. The varying levels and directions of changes in excise duties in the three countries had profound effects on the fortunes of distillers and make it difficult to discuss the distilling industry as a single entity within the United Kingdom until 1858. Differences in the type of raw materials used in the three countries and the spirit demanded by consumers, also influenced the structure of the distilling industry in each country accentuating the basic fiscal disharmony.

In this section the characteristics of national spirit markets between 1823 and 1858 will be examined. Although the description is in terms of national markets, there were two features of the industry in this period that cut across national fiscal boundaries. The first concerned distilling technology and the second, the existence of a competitive struggle between the distilling industries of Scotland, England and Ireland.

Of fundamental importance to the development of the distilling industry during the nineteenth century was the introduction of new forms of still design aimed at overcoming the limitations of the traditional pot still. The most successful of these new stills was the Coffey Still patented by Aeneas Coffey, a retired exciseman, in 1830. The Coffey (or Patent) still produced spirit in a continuous flow, unlike the traditional pot still which was a batch process, and its adoption by distillers both extended distilling capacity and led to trade alliances amongst patent still distillers within the U.K. These alliances provided the framework for the mergers which so characterised the industry after 1870.

In addition to altering the distilling process, the Coffey Still

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2. There were still fifteen points of difference in the excise regulations in 1833. See Scarisbrick, op.cit. pp. 76-77.
4. The Coffey still became generally referred to as the Patent still and the words are used interchangeably here. Until the Coffey still showed its superiority over other stills there were a large number of patents for still designs.
altered the product. The still turned out a cheap grain spirit which resulted in Ireland and Scotland in the displacement of the pot still spirit made from, in Ireland, a partial, and in Scotland, a wholly, malt mash. Rivalry between the two sorts of distillers again created alliances within the trade which cut across national boundaries.

Related to these changes in the process and the product was the growth of a new branch of the wholesale and retail spirit trades, the blenders, who mixed malt whisky with the new grain or patent still spirit to form blended whiskies. The popularity of this new type of whisky with consumers from the 1860s onwards resulted in England in the displacement of gin, the traditional English form of spirit consumption and in an increase in the commercial power of the spirit dealer over the distiller, especially in Scotland.

The other feature was the interchange of spirit between the three kingdoms which existed, despite the different levels of excise duty, before harmonisation in 1858. By no means the least of the eccentricities of excise statistics in the nineteenth century was that these movements remained unrecorded until after fiscal harmonisation was achieved. Despite this problem such snatches of statistics as do exist suggest that, as in the years before 1823, Scottish distillers gained the lion's share of the English market. In 1834 for example, the quantity of spirit distilled in England was 4.563 million proof gallons (m.p.g.). The quantity imported from Scotland was 2,575 m.p.g. and from Ireland 420,000 p.g. Of the Scottish and Irish spirits just 279,000 gallons were made from malt, the rest being grain spirit for rectification into gin. The fact, as the Excise Commissioners pointed out in 1834, that in England "...the prevailing taste of the principal consumers of spirits ...is still in favour of gin"5 produced an industrial structure markedly different from Scotland and Ireland (Table 26).

5. 7th Report, p. 30.
GRAPH 8 (a): England - Quantities of Spirits Distilled and Charged for Consumption (1820 - 1876)
BRITISH SPIRITS: ENGLAND - QUANTITIES DISTILLED (1820/76)

QUANTITIES CHARGED FOR CONSUMPTION (inc. EXPORTS) ....

SOURCE: G.B. Wilson op.cit. Table 3
GRAPH 8 (b): Ireland - Quantities of Spirits Distilled and Charged for Consumption (1820 - 1876)
BRITISH SPIRITS: IRELAND - QUANTITIES DISTILLED (1820/76)

QUANTITIES CHARGED FOR CONSUMPTION (inc. EXPORTS)

SOURCE: G.B. Wilson op. cit. Table 3
GRAPH 6 (e): Scotland - Quantities of Spirits Distilled and Charged for Consumption (1820 - 1876)
BRITISH SPIRITS: SCOTLAND - QUANTITIES DISTILLED — (1820/76)

QUANTITIES CHARGED FOR CONSUMPTION (inc. EXPORTS) . . . .

SOURCE: G.B. WILSON, op. cit. Table 3.
GRAPH 9: Main Changes in The Excise Duty on Spirits (1820 - 1910)
MAIN CHANGES IN THE EXCISE DUTIES ON SPIRITS (1820 - 1910)

England (1820-1860)
Scotland (1820-1858)
Ireland (1820-1860)

United Kingdom (1860-1910)

Shillings Per Gallon

15
14
13
12
11
10
9
8
7
6
5
4
3
2
1

1820 1830 1840 1850 1860 1870 1880 1890 1900 1910
English distillers did not work to produce a spirit which was immediately potable. Instead, using large sized stills and high gravity wash they turned out a harsh undrinkable spirit which was sent to the rectifiers and re-distilled in the presence of flavouring ingredients such as juniper berries and coriander seeds. English distillers did not supply the whole of the rectifiers' demand for spirit. Scottish and Irish distillers exported grain spirit to England for rectification.

Consumer taste was not the only factor which fragmented the U.K. spirit market. Consumer demand also behaved differently in England, Scotland and Ireland between the excise reforms and the harmonisation of duty. This can be illustrated by examining the behaviour of spirit consumption in each national market. In Graphs 8a, b and c spirit consumption in England, Ireland and Scotland is plotted. Graph 9 shows the main changes in excise duty.

**Table 26: The Structure of the Distilling Industry (1832/33)**

<table>
<thead>
<tr>
<th></th>
<th>England</th>
<th>Scotland</th>
<th>Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Distillers</td>
<td>12</td>
<td>260</td>
<td>87</td>
</tr>
<tr>
<td>No. of Rectifiers</td>
<td>108</td>
<td>11</td>
<td>19</td>
</tr>
<tr>
<td>Duty Paid</td>
<td>£1.42 m.</td>
<td>£1.33 m.</td>
<td>£1.54 m.</td>
</tr>
</tbody>
</table>

In England the reduction in spirit duty from 11/8d to 7/- per proof gallon (p.p.g.) in the 1825 excise reform resulted in a marked jump in consumption from 3.6 m.p.g. to 7.4 m.p.g. in 1826. How much of this increase was simply a switch towards legal sources of production is not clear, but in view of the relatively low level of illicit distilling in England and the maintenance of this new level of consumption in the 1830s despite an increase in duty in 1830, contemporary alarm about the appearance of "a new Gin Age" following the excise reform may well have had some justification. From 1830 to 1838 English spirit consumption hovered

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7. This gave a high spirit yield.
9. Though one witness before the Parnell Commission reported that "I was informed by a distillery officer some time back that he was quite certain that there were at least a thousand illicit stills within a mile around St. Pauls, and that he would engage to find a still, and enable the Commissioners of Excise to witness the seizure on any day, on giving him two hours notice." 7th Report, p.38.
between 7 and 8 m.p.g. The closing years of the 1830s saw some increase but the addition to duty in 1840 combined with the downswing of the trade cycle after 1839.10 pulled consumption below the 8 m.p.g. mark. English consumption was not, however, nearly so hard hit by these factors as Irish or Scottish. After 1843 the upward trend in consumption re-asserted itself and except for 1847 and 1856 continued until 1860. The setback in 1847 was probably due to the downturn in economic activity combined with the exceptionally high price of barley, which temporarily pushed spirit prices up. The fall in 1856 was due to the duty increase at the end of the Crimean War which offset the effects of the upswing in the business cycle. By 1860 English spirit consumption stood at 12.9 m.p.g. and although the increase of 2/- in spirit duty made this level untenable the English market was by then the largest and most buoyant in the United Kingdom. In view of developments in Scottish and Irish spirit consumption this made it a prize worth grasping for.

Ireland: (See Graph 8b). If England formed the largest spirit market by the 1860s it was Ireland which held that distinction in the 1830s. The recovery in legal consumption after 1823 was most marked in Ireland. The drop in duty and the overhaul of the excise system both lessened the illicit distiller's profit and improved the quality of 'Parliament whiskey'.11 However, the dramatic leap in legal consumption from 3.5 m.p.g. in 1823 to over 9 m.p.g. in 1825, masked the shaky basis on which the reforms in Ireland were laid. Although the duty increase in 182512 passed without making too large a dent in the recovery of legal consumption, the upsurge of illicit distilling after the duty increases of 1830 and 1842 prevented the additional imposts being maintained. By 1843 these swift reversals to the avowed policy of equalising duties throughout the U.K. made the indefinite postponement of the reform a distinct possibility. The activity of Irish poteen producers was not the only factor influencing

12. Following the conversion of the system of weights and measures to the basis of the imperial gallon instead of the wine gallon.
legal consumption. The noticeable collapse in legal consumption after 1838 occurred in advance of the increase in duty in 1840 and no doubt owed something to the exertions of the energetic Father Mathew in his temperance campaign, as well as to the trough in economic activity. Perhaps more to the former than the latter, for the short lived nature of the fall in consumption — recovery set in after 1842 — bears all the hallmarks of the impermanent results of a crusade. Compared with 1838, recovery was, however, relative rather than absolute. In spite of the famine and the fall it brought to consumption in 1847, consumption grew until 1854. Thereafter, the three increases in Irish duty necessary to bring her into line with England and Scotland by 1858, the additional 2/- in 1860, a resurgence of illicit distilling, and the loss of population by death and emigration all combined to lower legal consumption, so that by 1863 the Irish spirit market was the smallest in the United Kingdom. Although the Irish market showed some signs of growth after 1863, it remained the smallest market in the United Kingdom and from 1876, the peak year for Irish spirit consumption after 1863, when 6.9 m.p.g. were consumed, it went into a prolonged decline.

Scotland: (See Graph 8c). Whilst the spirit market in Scotland could by 1863 be said to be the second largest in the U.K. this amounts to a description, too grandiose by far, for a market which in that year absorbed only just over half a million gallons more than the Irish market. For most of the forty years after 1823 the Scottish spirit market was the smallest in the U.K. Yet, on a per capita basis, the Scots were far and away the spirits drinkers par excellence. For every gallon of spirits consumed in England in 1860, the Scots drank two gallons and six pints and the Irish one gallon and five pints. Although two gallons and six pints for every man, woman and child in Scotland might seem high both absolutely and in relation to England and Ireland, this performance was but a mere shadow of past accomplishments: in 1830, Scottish spirit consumption was four gallons and five pints and Irish, two gallons and one pint for every

gallon consumed in England. Whilst the early interest in temperance in Scotland from the 1820s reflected these high levels of spirit consumption, to some extent this was a belated recognition of long prevailing consumption habits. If the 1799 Committee's estimate of total Scottish spirit consumption of 3.6 million gallons was anywhere near correct, then per capita consumption at the end of the eighteenth century would have been about 2.22 gallons. After "the fatal year" when the excise reforms took place and duty was lowered Scottish per capita consumption in 1825 amounted to 2.71 p.g. No doubt "the excitement of the spirit dealers' advertisements and the novelty of obtaining cheap whisky" produced "a short and sudden ebullition of drunkenness" but what contemporary temperance advocates saw as a rise in Scottish spirit consumption in the 1820s and 1830s looks much less dramatic when considered in the light of the failure of the excise systems before 1823 to account for all the spirit being produced. Much of the apparent increase in Scottish consumption after 1823 was, as in Ireland, due to illicit spirit being drawn into legitimate channels.

Even allowing for this however, Scottish consumption figures in the 1830s probably still underestimated the true extent of whisky drinking. The distillers' warm commendation of the 1823 reforms was matched only by their criticisms of the duty increases in 1825 and 1830. Aware of the Wallace Commissions' estimate of Scottish spirit consumption of six million proof gallons and noting the decrease in consumption following the duty increases, the distillers pointed to a resurgence in illicit distilling as the cause. It was perhaps one measure of the success of the 1823 reforms that the distillers should allow themselves a degree of self-righteousness

14. Neither the type of gallon nor the strength of spirit was specified. If it was the old Scottish wine gallon a reduction of 24% would be necessary to make the figure comparable with the imperial gallon. Offset against the 24% would be the fact that the strength of the spirit was likely to be at least 10 over proof.
15. This figure is calculated on the basis of the 1801 population of 1.625 million.
17. This figure is not related to English consumption like those at the start of the paragraph. Taking individual years for spirit consumption when consumption tended to fluctuate quite widely over a period obviously runs the danger of being misleading. 1825 has been taken as it was the immediate peak post-reform year.
in belabouring the Government with the bogey of the illicit distiller:

"...Had this decrease (in spirits consumption) been a consequence of increased temperance in the use of spirits, it would not certainly have been a matter of regret, but such is not, by any means, the case...it is due to illicit distilling." 19.

As measured by Excise detections there certainly was a revival of illicit distilling in Scotland after 1830, but detections fell away sharply after 1835 and the resurgence probably owed as much to low grain prices as to increased duty. Certainly the 1825 increase in duty had the misfortune to come just before the sharp slump in economic activity in 1826 which pulled consumption down. The decline in consumption between 1830 and 1832 was halted with the upswing in the trade cycle and the peak of spirit consumption in the 1830s of 6.6 m.p.g. coincided with the top of the cycle. This recovery was instrumental in persuading the Government to ignore the Parnell Commission's recommendation that duty should be cut to the 1823 level of 2/4d. in order "to check illicit distilling and give the fair trader a chance."20 In 1840 fiscal unification went another step forward when duty was increased to 3/8d. It remained at that level until 1853 when 1/- was added. There then followed the two increases necessary to bring Scotland into line with England and these, together with the 2/- increase in 1860, ended the post reform rise in Scottish spirit consumption. From a peak at 7.17 m.p.g. in 1852 consumption fell to 4.25 m.p.g. in 1861.

For the United Kingdom as a whole (See Graph 8d) the period from 1860 to 1914 was dominated by two large waves of spirit drinking in the 1870s and 1890s. At the start of the twentieth century total spirit consumption was in decline. The main source of demand in the 1870s and 1890s came from England. Scottish consumption showed some upsurge in these two periods but not to the same extent as in England whilst in Ireland an almost unrelieved fall set in after 1876.

18. William Collins before the Select Committee on Drunkenness, (1834) quoted in Mackie, op.cit. p. 83
20. 7th Report, p. 93.
The implications for the distilling industry of these trends in consumption will be considered later. One point is worth making here. To the historian of the temperance movement, the vital indicator of the movement's success is the behaviour of per capita spirit consumption. As can be seen from Table 27,

**TABLE 27: SPIRITS CONSUMPTION PER CAPITA (proof gallons)**

<table>
<thead>
<tr>
<th>Year</th>
<th>England</th>
<th>Scotland</th>
<th>Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>1820</td>
<td>0.36</td>
<td>0.90</td>
<td>0.49</td>
</tr>
<tr>
<td>1825</td>
<td>0.29</td>
<td>2.71</td>
<td>1.29</td>
</tr>
<tr>
<td>1830</td>
<td>0.56</td>
<td>2.56</td>
<td>1.17</td>
</tr>
<tr>
<td>1835</td>
<td>0.50</td>
<td>2.43</td>
<td>1.43</td>
</tr>
<tr>
<td>1840</td>
<td>0.53</td>
<td>2.38</td>
<td>0.91</td>
</tr>
<tr>
<td>1845</td>
<td>0.54</td>
<td>2.35</td>
<td>0.92</td>
</tr>
<tr>
<td>1850</td>
<td>0.52</td>
<td>2.48</td>
<td>1.08</td>
</tr>
<tr>
<td>1855</td>
<td>0.58</td>
<td>2.02</td>
<td>1.34</td>
</tr>
</tbody>
</table>

B. 1860 - 1914

<table>
<thead>
<tr>
<th>Period</th>
<th>England</th>
<th>Scotland</th>
<th>Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>1860/69</td>
<td>0.54</td>
<td>1.54</td>
<td>0.81</td>
</tr>
<tr>
<td>1870/79</td>
<td>0.63</td>
<td>1.84</td>
<td>1.12</td>
</tr>
<tr>
<td>1880/89</td>
<td>0.65</td>
<td>1.64</td>
<td>1.01</td>
</tr>
<tr>
<td>1890/99</td>
<td>0.66</td>
<td>1.57</td>
<td>0.94</td>
</tr>
<tr>
<td>1900/09</td>
<td>0.68</td>
<td>1.56</td>
<td>0.88</td>
</tr>
<tr>
<td>1910/14</td>
<td>0.46</td>
<td>1.14</td>
<td>0.61</td>
</tr>
</tbody>
</table>

Notes: "Annual figures at five year intervals have been used for this period because of the weaknesses of excise statistics prior to reform."

"For 1860 - 1914 the figures are decennial averages except for 1910/14 which is a five year average."

in Scotland and Ireland per capita consumption was much higher before 1860 than after. In England however, per capita consumption rose throughout the nineteenth century and it was not until after 1900 that it began to fall. Although Scottish and Irish per capita consumption rates were higher than English throughout the nineteenth century, their decline before 1860 must have owed much to the impact of duty harmonisation. An increase of 1/- from 7/- in 1825 to the equalisation rate of 8/- in 1856 was not likely to fall heavily on English spirit drinkers who, before 1825, had been paying a far higher duty. Between 1825 and 1856 English consumers almost certainly enjoyed a long term fall in the duty paid price of spirit. Scottish and Irish consumers by the time of equalisation witnessed a more than threefold increase in duty and by harmonisation were paying more than the pre-reform duty. This factor, more than temperance propaganda accounts for the uneven movement of per capita consumption in the three kingdoms.

For the distiller declining per capita consumption caused little worry so long as population growth offset the decline in per capita consumption. Whatever the troubles which harmonisation brought to the home market of the Scottish and Irish distillers it offered them painless access to the more buoyant and faster growing English market.
So far the behaviour of consumption has been discussed in terms of "home produced spirits". This phrase covered all types of potable spirit produced in the United Kingdom and no distinction was made in the Excise statistics between gin, malt whisky and grain whisky. However, as the Parnell Commission reported, consumer tastes varied between each kingdom and an attempt must be made to establish the changing popularity of each type of "home produced spirit." As well as spirit distilled within the U.K., there were also imported spirits such as brandy and rum coming into the home market and their share of the market must also be ascertained.

In the 1830s gin was the most popular spirit in England and there was "scarcely any demand for whisky in the purer state in which it is prepared for consumption in Scotland and Ireland." While gin ruled in the English spirit market, in Scotland malt spirits were said to be "long established by the prevailing taste as the national beverage" though the Commission also noted that their popularity over grain whisky was due to the drawback of the duty on malt which enabled malt spirits to compete with comparatively low priced grain spirits. In Ireland the preference was for a grain whisky which in terms of its raw materials fell midway between Scottish grain and malt whisky, being made from a mash composed of malted barley, rye and oats.

How long did this picture of the spirit market remain unchanged? To begin with England; how long did gin remain the dominant preference of English spirit drinkers? According to Wilson "the progress of whisky consumption in England was slow... (and)... it may be assumed that for many years the spirit rectified in England was almost entirely gin." Using the Report of the Inland Revenue for 1871/72 as his source he took the decade 1865/1874 as the period when whisky broke into the English market. He saw Irish rather than Scotch whisky as the first challenger to gin

22. 7th Report, pp. 48.
23. 7th Report, pp. 48.
GRAPH IO: England - Imports of Spirits from Scotland and Ireland (1860-1930)
and did not allow Scotch whisky an important place in the English market until the late 1870s. Although the popularity of Irish whisky was an undoubted feature of the period 1865/74 and sparked off a wildly overoptimistic investment boom in Irish distilleries, it can be seen from Graph 10 which shows the imports of Scotch and Irish spirits into England between 1860 and 1930, that at no time were Irish spirit imports larger than Scottish. Much of these imports of Scottish spirit, however, consisted of grain spirit for rectification into gin. It was only Irish whisky which was being sold as whisky in England. The significant change in Scotch whisky sales in England came in the late 1870s with blended whiskies being sold under proprietary names such as Dewar's, Walker's and Buchanan's. As such it was a development which almost amounted to a change in the nature of the product. As Graph 10 shows, this was of qualitative rather than quantitative significance for between 1870 and 1887 sales of Scottish spirit were exceptionally low due to the virtual collapse of the Scottish grain distillers trade with England.

Can these qualitative impressions of the change in the English consumer's taste be quantified? Although the Excise statistics remain silent on the relative market shares of gin and whisky some indication of a falling preference for gin may be obtained by examining the quantity of spirits passing through the hands of rectifiers. The Parnell Commission's figure for 1832/33 indicates that gin consumption in England amounted to 7.4 m.p.g. By 1890 when nearly all spirit for rectification came from patent still distillers, only six million of the twenty-five million gallons of patent still spirit distilled in that year went to the rectifiers and English spirit consumption at 16.9 m.p.g. was more than double that of 1832/33. In 1907 with English spirit consumption running at over 22 m.p.g. only 1.5 m.p.g. of gin were produced and the once mighty gin occupied a relatively insignificant place in the spirit market. In absolute terms gin consumption only fell slightly over the period 1830 to 1890, but relatively it was losing ground to whisky. So far as competition between

25. See Chapter Seven.
26. B.P.P. 1890/91, Volume XI, pV. The Select Committee on British and Foreign Spirits. Also a small amount of this gin went to consumers in Scotland and Ireland.
different spirits is concerned the important point about the fall in gin drinking is that it did not come about because of a fall in the price of whisky relative to gin. As gin production simply took the spirit manufacturing process one stage further by rectification, gin and grain whisky were only separated in price by a few pence per gallon. The reasons why whisky edged gin out of the spirit market do not lie in straightforward price competition.

In Scotland, once the illicit distiller was ousted from the market, competition developed not between whisky and gin as in England, but between different types of whisky. The rivalry between malt and grain distillers had become a marked feature of the Scottish distilling industry by the beginning of the nineteenth century. Amongst the factors that enabled the Lowland grain distillers to undercut malt distillers was that by working with a mash mainly composed of raw grain they saved both on malt duty and on the cost of malting. In order to shift the competitive balance more in favour of the malt distiller and the licensed distiller the 1821 Distillery Act introduced a drawback of malt duty. On the recommendation of the Wallace Commission this drawback was further increased by making it into a drawback on the spirits made from malt. 27 Only spirits made from a mash consisting entirely of malted barley were eligible and this effectively prevented grain distillers claiming drawback on the portion of malt which it was absolutely essential to have in the mash. As malt duty had had to be paid in advance before the spirits made from it were sold, the new form of drawback by allowing credit on duty payments, also helped to reduce the amount of working capital needed to set up in malt distilling. 28 In practice, however, the effect of the drawback was not limited to the Highland distiller. Production of malt spirit was stimulated

27. The drawback was: Malt Drawback

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1821/23</td>
<td>1/- per bushel on malt used</td>
</tr>
<tr>
<td>1824/25</td>
<td>1/- per gallon on spirits made from malt only</td>
</tr>
<tr>
<td>1826/30</td>
<td>1/2</td>
</tr>
</tbody>
</table>

The prevailing level of malt duty (per bushel) was:

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1820</td>
<td>3/8</td>
</tr>
<tr>
<td>1821</td>
<td>3/6 (Barley malt) and 3/- (Bigg malt)</td>
</tr>
<tr>
<td>1822/30</td>
<td>2/7 (Barley malt) and 2/- (Bigg malt).</td>
</tr>
</tbody>
</table>

in both Highland and Lowland distilleries. Indeed, the unintended beneficiaries of this fiscal maneuvering were the Lowland distillers whose larger scale of production enabled them to continue to undercut the Highland distiller. For the consumer a three tier price structure emerged by the 1830s. According to Archibald Dunlop, the East Lothian distiller, spirit prices in Scotland in 1831 were as follows:

<table>
<thead>
<tr>
<th>Spirit Type</th>
<th>1831 Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highland Malt Spirit</td>
<td>10/-</td>
</tr>
<tr>
<td>Lowland Malt Spirit</td>
<td>6/3</td>
</tr>
<tr>
<td>Corn Spirits</td>
<td>5/9</td>
</tr>
</tbody>
</table>

The figure for Highland malt whisky looks a bit high; in the same year Campbeltown distillers were receiving 8/- p.p.g. for malt whisky, but the relative order of prices is almost certainly correct.

Despite Highland malt spirits being relatively more expensive, they were, as can be seen from Table 29:

<table>
<thead>
<tr>
<th>Year</th>
<th>Malt Spirit Distilled North (of Highland South Line)</th>
<th>Malt Spirit Consumed North</th>
<th>Malt Spirit Consumed South</th>
<th>Sent from North of Highland Line to South</th>
<th>England</th>
<th>Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>1824</td>
<td>305,000</td>
<td>309,983</td>
<td>2,480,386</td>
<td>275,391</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1825</td>
<td>497,324</td>
<td>490,186</td>
<td>3,489,762</td>
<td>322,641</td>
<td>774</td>
<td></td>
</tr>
<tr>
<td>1826</td>
<td>676,264</td>
<td>594,137</td>
<td>3,152,042</td>
<td>381,707</td>
<td>339</td>
<td></td>
</tr>
<tr>
<td>1827</td>
<td>581,680</td>
<td>625,189</td>
<td>3,207,615</td>
<td>371,012</td>
<td>3,389</td>
<td></td>
</tr>
<tr>
<td>1828</td>
<td>738,216</td>
<td>643,449</td>
<td>4,234,333</td>
<td>345,885</td>
<td>6,693</td>
<td></td>
</tr>
<tr>
<td>1829</td>
<td>956,087</td>
<td>788,711</td>
<td>4,260,635</td>
<td>322,628</td>
<td>10,630</td>
<td></td>
</tr>
<tr>
<td>1830</td>
<td>1,002,293</td>
<td>844,656</td>
<td>4,747,394</td>
<td>483,803</td>
<td>14,247</td>
<td></td>
</tr>
</tbody>
</table>

enjoying an increasing sale in Lowland markets taking just under 10% of the Lowland malt whisky market by 1830. The demand for Highland malt spirit in the Lowlands seems to have come mainly from private families ordering direct from the distillery. These consumers

30. 7th Report, Appendix 85, p.246. For years ending 10th October.
were not "common dram drinkers" or punch drinkers but people who bought direct from the distillery because "there is that belief that there is a mixture made in Glasgow... but there can be no mixture made in the Highlands; it is a genuine article."

The mixture these consumers were afraid of consisted of malt and grain whisky. What later came to be dignified with the title of 'blending' was regarded in the 1820s as "adulterations and impositions." Mixing was done by the dealers in an attempt to produce a reasonably-priced and palatable beverage. By the 1830s grain spirits were not consumed directly but instead were used "only for rectifying and making into compounds."

William Haig of Seggie Distillery claimed that he had not sold a gallon of grain spirit in Scotland "these last twenty years" and that all his spirit went to the English market. He did however make a "silent spirit" for the Scottish market which was sold "for mixing with foreign spirits and with Highland spirit."

Whilst the grain distillers regarded mixing as a legitimate device for meeting the urban consumer's demand for a low priced drink the Highland distiller took a different view. The owners of Fettercairn distillery complained to the Parnell Commission that "retail and wholesale dealers... by mixing and compounding, are enabled to undersell the malt distiller in his own market; thereby imposing on the community with an inferior article."

A.K. McKay, the manager of Teaninich distillery, even went so far as to propose raising spirit duty because of:

"...the most appalling results, when all who feel inclined can (by the present scale of duties and number of licensed pastilential dram shops)... get intoxicated for a small sum of 3d., being the current price of the imperial gill of whisky, alias three glass, and chiefly adulterated with that cheap and deleterious stuff imported from the raw grain distillers... who... are able to undersell the malt distillers' less intoxicating and more wholesome article."

How much of the malt distillers' objections to mixing were based on concern for the consumer and how much on straightforward fear

34. 7th Report, App. 125, p.359.
35. 7th Report, App. 19, p.142.
36. 7th Report, App. 30, p.163.
of the economic strength of the large Lowland distiller remains a moot point. As Table 29 shows, malt spirit production south of the Highland line more than kept pace with consumption and at a price (Table 28) not much more than grain spirit. It was not even clear how much whisky was being mixed. Archibald Dunlop claimed that only half a million gallons were consumed as mixed spirit in 1830 compared to malt whisky consumption of over 5½ m.p.g. and the Highland distillers outrage probably originated in the Lowland distillers move into malt whisky production.

The argument about mixing in the 1830s held however some pointers for the future. Even without taking excise duty into account, Highland malt whisky was the most expensive of all Scotch whiskies. As duty rose in Scotland up to 1860 Highland malt became increasingly priced out of the mass market and mixing received an additional impetus. In the Spirits Act of 1860 permission was given to mix or blend spirits in bond and this privilege by cutting the capital tied up in duty paid stocks, gave the spirit dealer more finance for expansion as well as encouraging more competition in spirit dealing. Fiscal changes were not alone in promoting blending. The Coffey Still produced a pure form of grain spirit at a relatively low price which made it a particularly useful blending agent. By 1845 when six Scottish distilleries operated patent stills the amount of grain spirit produced by these patent stills surpassed the grain whisky distilled in pot stills. Ten years later there were thirteen patent still distilleries. They had an output greater than that of all the 124 pot still distilleries put together, and the rise of grain whisky production at the expense of malt became one of the most significant developments in the whisky market in the second half of the nineteenth century.

In Ireland there was no conflict between malt and grain distiller. The licensed Irish distiller made a grain whisky from a mixed mash of barley, rye and oats which differed from the illicit
distillers' product only in that coal rather than turf was used to kiln the malt.\textsuperscript{37} Poteen retained its widespread popularity at least down to the Famine and the licensed distiller survived only by evasion of duty and large-scale cost cutting production.\textsuperscript{38} Even then the home market was still open to invasion by Scottish malt distillers. As the Irish distillers did not manufacture wholly from malt they were not eligible for the drawback on malt spirits. And in the 1830s by undercutting Irish grain whisky, Scottish malt whisky enjoyed some popularity, mainly in Derry.\textsuperscript{39} It does not appear to have been a lasting popularity for, by 1860, a mere 18,000 gallons of Scotch whisky were being sold in Ireland.\textsuperscript{40}

With the main demand in Ireland for a grain whisky it was not surprising that Coffey stills spread most rapidly there. By the mid-1850s pot and patent still products enjoyed a rough parity in the Irish market. Unlike Scotland there was not at that stage the same antagonism between pot and patent still distillers. Possibly, this was because after the Famine the industry was faced with a declining market and production became concentrated in a small number of large distilleries. Sales were sought outside Ireland mainly by the four great Dublin distilling firms\textsuperscript{41} and in the 1860s and 1870s Irish whisky enjoyed some popularity though more as a fashionable drink amongst a small section of English society than as a mass seller.\textsuperscript{42}

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\textsuperscript{37} See K.H. Connell, \textit{op.cit.} p.73.
\textsuperscript{38} K.H. Connell, \textit{op.cit.} pp.85-86.
\textsuperscript{39} B.P.P. 1831, Vol.VII, Select Committee on Malt Drawback etc. p. 120; 7th Report, p. 72; Scarisbrick, \textit{op.cit.} p.76.
\textsuperscript{40} G.B. Wilson, \textit{op.cit.} p. 343.
\textsuperscript{41} They were John Jameson & Sons; William Jameson & Co.; Sir James Power & Son; Messrs. G.E. Roe & Co.
\textsuperscript{42} Graph \textit{11} shows imports of Irish spirit into England. The figures for Irish whisky sales in Scotland and Scotch whisky sales in Ireland between 1860/1890 were:

<table>
<thead>
<tr>
<th>Year</th>
<th>Irish Whisky sold in Scotland (proof gallons)</th>
<th>Scotch Whisky sold in Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>1860</td>
<td>3,000</td>
<td>18,000</td>
</tr>
<tr>
<td>1870</td>
<td>36,000</td>
<td>5,000</td>
</tr>
<tr>
<td>1880</td>
<td>232,000</td>
<td>16,000</td>
</tr>
<tr>
<td>1890</td>
<td>349,000</td>
<td>21,000</td>
</tr>
</tbody>
</table>

In relation to total spirit consumption in each country these were very small amounts. Source: G.B. Wilson, \textit{op.cit.} pp.353-354.
GRAPH II: Home Consumption of Imported Spirits (1840 - 1930)
(II) IMPORTED SPIRITS

Such then was the changing nature of the market for home produced spirits. This leaves imported spirits for consideration: what place did imported spirits occupy in the spirit market and how much competition did the home distiller face? In Graph 8d p. 155 the consumption of imported spirits in the United Kingdom between 1820 and 1930 is plotted. The term "imported Spirits" covers brandy, rum, geneva and 'other' foreign spirits. From 1840 separate statistics exist for the categories brandy, rum, and 'other' foreign spirits. These have been plotted in Graph 11. There are no statistics for the consumption of those imports amongst the three kingdoms until 1891. Table 30 records the consumption of imported spirits in each kingdom and shows that England was the most important market in the United Kingdom for these spirits:

<table>
<thead>
<tr>
<th>Year</th>
<th>England</th>
<th>Scotland</th>
<th>Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>1891</td>
<td>6,956</td>
<td>799</td>
<td>666</td>
</tr>
<tr>
<td>1895</td>
<td>6,767</td>
<td>794</td>
<td>693</td>
</tr>
<tr>
<td>1900</td>
<td>7,274</td>
<td>839</td>
<td>693</td>
</tr>
<tr>
<td>1905</td>
<td>5,497</td>
<td>689</td>
<td>585</td>
</tr>
<tr>
<td>1910</td>
<td>4,297</td>
<td>544</td>
<td>423</td>
</tr>
<tr>
<td>1915</td>
<td>5,390</td>
<td>696</td>
<td>556</td>
</tr>
<tr>
<td>1920</td>
<td>4,026</td>
<td>964</td>
<td>459</td>
</tr>
<tr>
<td>1925</td>
<td>1,787</td>
<td>290</td>
<td>109</td>
</tr>
<tr>
<td>1930</td>
<td>1,196</td>
<td>184</td>
<td>77</td>
</tr>
</tbody>
</table>

From Graph 8d it can be seen that in only seven years between 1820 and 1860 did home consumption of imported spirits amount to more than 5 million gallons. Between 1824 and 1832 there was a slight rise in consumption but after 1832 when 5.17 m.p.g. were drunk, consumption drifted down to 3.16 m.p.g. in 1843. After 1843 consumption rose and in 1849 5.2 m.p.g. were consumed. Although the

43. Source: G.B. Wilson, op.cit., Table 10, pp. 356-358.

* For Northern Ireland only.
5 m.p.g. mark was passed in 1853, 1854 and 1856 it was not until 1860 when 5.52 m.p.g. were consumed that the 1849 level was passed. If the consumption of imported spirits is related to the total consumption of spirits in the U.K. (Table 31) in the years of peak consumption it can be seen that imported spirits accounted for between 17% and 24% of the total spirit market, so that although the overall picture is one of stagnant consumption between 1820 and 1860, imported spirits had a substantial share of the U.K. market. In fact for a period in the 1820s and 1850s almost as much imported spirit was consumed in the U.K. as home produced spirit in Scotland. After 1860 consumption of imported spirits grew more rapidly than at any time before 1860 and in 1875, the peak year for the consumption (both total and per capita) of imported spirits in the nineteenth century they held 28% of the U.K. spirit market.

The reason for these different trends before and after 1860 lies, as with so many other issues in the spirit trade, with the level of duty. During the nineteenth century a two-tier system of customs duty operated on imported spirits. The highest rate was reserved for foreign spirits (mainly brandy and geneva) whilst colonial spirits (mainly rum) came in at a substantially lower preferential rate (Table 32).

**Table 31: Percentage Share of Total Spirit Market — Foreign Spirits**

<table>
<thead>
<tr>
<th>Year</th>
<th>A (Imported Spirits)</th>
<th>B (All Spirits)</th>
<th>A as % of B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1826</td>
<td>5,855</td>
<td>24,086</td>
<td>24</td>
</tr>
<tr>
<td>1832</td>
<td>5,171</td>
<td>26,518</td>
<td>20</td>
</tr>
<tr>
<td>1849</td>
<td>5,266</td>
<td>28,228</td>
<td>19</td>
</tr>
<tr>
<td>1853</td>
<td>5,143</td>
<td>30,164</td>
<td>17</td>
</tr>
<tr>
<td>1854</td>
<td>5,128</td>
<td>31,012</td>
<td>17</td>
</tr>
<tr>
<td>1856</td>
<td>5,003</td>
<td>28,304</td>
<td>18</td>
</tr>
<tr>
<td>1860</td>
<td>5,522</td>
<td>26,926</td>
<td>21</td>
</tr>
</tbody>
</table>

1860, imported spirits had a substantial share of the U.K. market. In fact for a period in the 1820s and 1850s almost as much imported spirit was consumed in the U.K. as home produced spirit in Scotland. After 1860 consumption of imported spirits grew more rapidly than at any time before 1860 and in 1875, the peak year for the consumption (both total and per capita) of imported spirits in the nineteenth century they held 28% of the U.K. spirit market.

The reason for these different trends before and after 1860 lies, as with so many other issues in the spirit trade, with the level of duty. During the nineteenth century a two-tier system of customs duty operated on imported spirits. The highest rate was reserved for foreign spirits (mainly brandy and geneva) whilst colonial spirits (mainly rum) came in at a substantially lower preferential rate (Table 32).

44. Source: Based on G.B. Wilson, *op.cit.* Table I, pp. 331-332.
TABLE 32: CUSTOMS DUTY ON IMPORTED SPIRITS (ENGLAND) \(^{45}\)

<table>
<thead>
<tr>
<th>Year</th>
<th>Brandy</th>
<th>Geneva</th>
<th>Rum</th>
<th>Rum from British Possns</th>
<th>Rum not from British Possns</th>
</tr>
</thead>
<tbody>
<tr>
<td>1816/17</td>
<td>18/9</td>
<td>18/9</td>
<td>18/9</td>
<td>18/9</td>
<td>12/1</td>
</tr>
<tr>
<td>1823/24</td>
<td>18/10-32/4</td>
<td>18/10-32/4</td>
<td>18/10-32/4</td>
<td>18/10-32/4</td>
<td>11/7-32/4</td>
</tr>
<tr>
<td>1825/26&quot;</td>
<td>22/6</td>
<td>22/6</td>
<td>22/6</td>
<td>22/6</td>
<td>22/6</td>
</tr>
<tr>
<td>1833</td>
<td>15/4</td>
<td>15/4</td>
<td>15/4</td>
<td>15/4</td>
<td>15/4</td>
</tr>
<tr>
<td>1842/43</td>
<td>22/10</td>
<td>22/10</td>
<td>22/10</td>
<td>22/10</td>
<td>22/10</td>
</tr>
<tr>
<td>1852/53</td>
<td>15/4</td>
<td>15/4</td>
<td>15/4</td>
<td>15/4</td>
<td>15/4</td>
</tr>
<tr>
<td>1861/62</td>
<td>10/5</td>
<td>10/5</td>
<td>10/5</td>
<td>10/5</td>
<td>10/5</td>
</tr>
</tbody>
</table>

These rates applied only to spirits landed in England. No separate customs rates for Scotland survive in any records and it is assumed that the customs duty payable on imported spirits landed in Scotland bore the same relationship to Scottish home duty as to English duty, i.e. that the differential between customs duty and excise duty was equal in the two kingdoms even though the excise rates were not the same. On this assumption Table 33 shows the resulting Scottish customs duties:

**TABLE 33: SCOTTISH CUSTOMS DUTIES**

<table>
<thead>
<tr>
<th>Year</th>
<th>A</th>
<th>B</th>
<th>C(A-B)</th>
<th>D</th>
<th>E(D+C)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>English Customs Duty</td>
<td>English Excise Duty</td>
<td>Differential</td>
<td>Scottish Excise Duty</td>
<td>Scottish Customs Duty</td>
</tr>
<tr>
<td></td>
<td>Foreign Colonial</td>
<td>Foreign Colonial</td>
<td>Foreign Colonial</td>
<td>Foreign Colonial</td>
<td></td>
</tr>
<tr>
<td>1825</td>
<td>22/6</td>
<td>7/-</td>
<td>15/6</td>
<td>2/10</td>
<td>18/4</td>
</tr>
<tr>
<td>1833</td>
<td>22/6</td>
<td>7/-</td>
<td>15/6</td>
<td>2/10</td>
<td>18/4</td>
</tr>
<tr>
<td>1842/43</td>
<td>20/10</td>
<td>7/10</td>
<td>3/8</td>
<td>3/4</td>
<td>18/4</td>
</tr>
<tr>
<td>1852/53</td>
<td>15/4</td>
<td>7/10</td>
<td>4/8</td>
<td>3/4</td>
<td>18/4</td>
</tr>
<tr>
<td>1861/62</td>
<td>10/5</td>
<td>10/-</td>
<td>10/-</td>
<td>10/-</td>
<td>10/-</td>
</tr>
</tbody>
</table>

As one of the structures of the fading mercantilist economy, the aim of the duties was twofold: to protect the home market not just in interests of the British distiller but also to ensure the use of the home grain crop to the benefit of the landed interest; and at the same time to offer some encouragement to the colonial producer by discriminating against foreigners. The logic of reform of the home excise system was first to throw each national industry

\(^{45}\) Source: The Wine Trade Review, May 15th, 1898, p.338. 'Lower rates apply to under proof; higher rates apply to overproof gallons. " Proof gallons.
open to competition and then to establish a free trade in spirits within the U.K. as a whole. So far as the customs duty on imported spirits was concerned the anomalous position of maintaining high duties at a time when the home distilling industry was being subjected to competition was becoming evident by the 1830s.

Amongst producers of imported spirits the most pressure for reform came from the West Indian planters. Their campaign was not based on the free admission of rum but on the use of molasses in brewing and distilling. During the Napoleonic Wars they had some success in this campaign when in 1809/11, and again in 1812/13, sugar was allowed as a raw material in the drink industry because of the shortage of grain. Opposition from the landed interest, afraid of the likely damage to the barley market, and the Excise, wary of the facilities which sugar distillation gave for the evasion of duty, made this but a temporary expedient. Permission was quickly withdrawn as soon as the grain supply situation eased.

Developments in the West Indian economy, however, increased the pressure from planters to gain access to the British spirit market either for rum or its raw materials, sugar and molasses. Soil exhaustion and the consequent fall in sugar yields in the old established colonies such as Barbados and Dominica turned them into high cost producers increasingly being undercut by the output of the newer settlements of Trinidad and Demerara. The loss of the American market with the opening of plantations in Louisiana, Brazil and Cuba also made them look to the British market as one solution for their difficulties. Although the reduction of the customs duty

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46. See Chapter 2, Table 10, p.56.
47. It eliminated malting and it was easy to add sugar to the wort to increase the gravity. See below, p. 169.
48. For the use of sugar in brewing at this time see P. Mathias, op.cit. pp. 234-235.
on colonial spirits in 1825, and the increased differential duty between colonial and foreign spirits, marked a significant political advance for the West Indian interests, its economic results were less dramatic. The new price of rum was neither sufficiently low to hold out any real prospect of a significant increase in sales, nor sufficiently high to offer the planters a fair return. Six years later the West Indian interests were reported as being in "a state of unparalleled depression" and were pressing for an alteration in the Excise laws to allow the use of molasses in brewing and distilling in the hope "that this would open up a useful avenue for their produce."

Their proposal was that when the average price of barley was not less than 34/- per quarter the brewers should be permitted to use molasses and the distillers should be allowed a drawback on the spirits produced from molasses equivalent to the customs duty on molasses. This proposal was rejected but the reasons for its rejection are worth examining.

By 1830 the revenue derived from British spirits amounted to over £5.2 million and the possible effects of the introduction of molasses into the distilleries on the security of "so important a branch of the Public Revenue" was a matter of grave concern to the Committee. Under the reformed excise system duty was charged on the quantity of spirits produced. Two checks on the quantity of wash and low wines backed up this initial charge. Also the processes of brewing and distilling were separated which prevented fresh worts being added to the wash and hence the quantity of spirits being increased above the level indicated by the two checks. Washing with grain took a long time and could be easily watched by Excise officers, whereas sugar and molasses might easily be added to the worts and thus destroy the check based on calculating the density of the wash. The only way to get round this problem would have been to resort to

51. 'The Scotsman' did however blame the troubles of the Scottish distillers in 1826 on the large stocks of rum which had built up with the lower duty. The effect of these stocks was probably to weaken home prices rather than uplift sales of rum. See 'The Scotsman' May 20th, 1826, p.318.
52. L.J. Ragatz, op.cit. p.373.
55. Brewing i.e. the preparation of the fermented liquor prior to its distillation.
the old excise system which had prevailed in England prior to 1825. Then, duty had been charged, not on the spirits produced, but on the wash. Under this system it was in the distillers' interest to use wash of the greatest fermentable gravity in order to obtain the highest possible spirit yield. Such spirits were of inferior quality and required to be rectified before being consumed. The system was therefore inapplicable to Scotland and Ireland. A return to poor quality spirit raised again the spectre of illicit distilling, not entirely vanquished in Scotland, and still widespread in Ireland in the 1830s.

In addition to these considerations the realisation that no means could be found of detecting mixtures of molasses and grain meant that a drawback on molasses was likely to inspire fraudulent claims for drawback. Nothing less than a complete prohibition on distilling from grain would enable molasses to be safely used and this would wipe out the capital which distillers had invested in maltings, grinding mills and mash tuns; an outcome which would have run contrary to the Government's assurances about the permanency of the reformed excise system.56

Revenue and technical considerations were not alone in defeating the proposal. Despite the application of laissez-faire principles to the conduct of the spirit trade the objections of the landed interest to the lessening of the protection offered by the duty on molasses still held sway in the early 1830s. It was the Committee's opinion:

"..that the use of Molasses in the Distilleries, to such an extent as to afford any material relief to the West Indian Planter would very seriously injure the interests of the Barley Growers of this Country..the use of Molasses in the Breweries would have the effect of displacing a quantity of British barley of the finest quality, and the use of Molasses in the Distilleries would necessarily exclude a large portion of the Barley of inferior quality, which though not fit for malting, is perfectly well suited to the use of the Distiller..the permission to use Molasses...would virtually destroy the small advantage which this discriminating duty affords to the Agriculturists of this Country." 56

56. By Lord Goderich in 1830, see B.P.P. 1831, Vol. VII Report from the Select Committee on the use of Molasses etc. p.79.
Eloquent testimony indeed to the importance of the drink industries to British agriculture.

Although another Committee investigating the commercial state of the Caribbean colonies the following year declared the exclusion of molasses to be highly objectionable in principle no action was taken on its recommendation for a reversal of policy.\(^{57}\) With the repeal of the Corn Laws in 1846 the virtual prohibition\(^{58}\) on sugar and molasses was defensible only on revenue grounds. Experiments carried out by the Excise\(^ {59}\) into comparative values of barley, malt, sugar and molasses to brewers and distillers and the means of checking on their use removed this last objection. In 1847 the use of sugar in distilleries with a drawback of the customs duty, except for so much as was necessary to countervail the duty on malt, was authorised.\(^ {60}\) The following year molasses and treacle, and the mixture of these with grain and malt were also allowed.\(^ {61}\) With the reduction of the customs duty on the raw materials for rum distilling there was no longer any point in maintaining a customs duty on the finished product and from 1852 rum came in at home duty rates.\(^ {62}\)

In 1852 the differential between the customs duty on foreign spirits and the excise duty had been halved and in the commercial treaty with France in 1860 free trade principles were carried to their logical conclusion with the admission of foreign spirits into the U.K. at the same rate of duty as British spirits paid except for a small surcharge to meet the distillers' claims for the additional cost which Excise restrictions imposed on them.

So far, consumption of imported spirits and the changing levels of the customs duty on them have been discussed. This leaves the question of the degree of competition which the home distiller faced from imported spirit. To answer this question it is necessary to know the relative prices of home and imported spirits after duty was paid. Unfortunately the problems of establishing a

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\(^{57}\) L.J. Bagatz, op.cit. p.380.

\(^{58}\) A virtual prohibition because only one class of material was allowed to be used in distilling at any one time and because of the customs duty on sugar.

\(^{59}\) B.P.P. 1847, Vol.LIX, Report from the Board of Excise to the Treasury on the Use of Barley, Malt, Sugar and Molasses in Breweries and Distilleries.

\(^{60}\) D.P.P. 1847: Report from the Board of Excise to the Treasury on the Use of Barley, Malt, Sugar and Molasses in Breweries and Distilleries.
reasonably accurate price series for spirits are legion. Ideally what is wanted is a retail price series that would show the price per glass which the consumer was paying. In a perfect world this would make allowance for the battery of devious tricks which licensed traders employed in competition for profit and customs watering down, misdescription, mixing and adulteration. Instead all that exists before the establishment of the trade press are odd snatches of statistics in a range of sources. The two tables of price quotations used here (See tables 14 and 15) are based on The Scotsman's "Leith and Glasgow Prices Current" and The Economist. The prices quoted are wholesale prices and the examples for England and Scotland have been calculated to show the effect of the different duties in the two countries. Where a range of prices is given, this indicates differences in quality e.g. whisky was quoted under the description 'inferior' to 'best' whilst Geneva was listed as being of a 'common' or 'fine' mark. As wholesale prices they were quoted at a variety of strengths and to get uniformity all prices have been converted to proof strength. No separate prices were given for British made gin but with the addition of 1d. to 2d. per gallon for rectification, grain spirit prices may be taken as gin prices. The series should be taken as indicating the comparative order of magnitude of spirit prices rather than as a precise measurement of the price of each spirit.

In view of the structure of duty which imported spirits bore, the degree of competition faced by the British distiller varied between different imported spirits and it is necessary to consider each in turn.

60. Act 10 Victoria c.6.
61. Scarisbrick, op. cit. p.78.
62. There was still a 4d. per gallon surcharge to match the malt duty.
63. The Wine Trade Review began in July 1863 as a supplement to The Grocer. It was published monthly. The amount of information about the spirit trade in it was very small at first, indeed it displayed some hostility to spirit drinking. As whisky consumption in England grew so did the Review's interest in the trade. Its circulation expanded as sales of wine and foreign spirits increased after the 1860 Free Trade Treaty. Announcing an extended coverage in its second volume it declared "the field that we take possession of is extensive, and, thanks to the operation of free-trade principles, is still extending."
### TABLE 34: SPIRITS PRICES IN ENGLAND (per proof gallon)

<table>
<thead>
<tr>
<th>Year</th>
<th>1825</th>
<th>1830</th>
<th>1853</th>
<th>1856</th>
<th>1861</th>
<th>1865</th>
<th>1870</th>
</tr>
</thead>
<tbody>
<tr>
<td>RUM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) Jamaican</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duty</td>
<td>8/6</td>
<td>8/6</td>
<td>8/2</td>
<td>8/2</td>
<td>10/2</td>
<td>10/2</td>
<td>10/2</td>
</tr>
<tr>
<td>Total</td>
<td>11/1</td>
<td>11/2</td>
<td>10/6</td>
<td>10/10</td>
<td>13/-</td>
<td>12/9-12/11</td>
<td>12/3-12/4</td>
</tr>
<tr>
<td>(2) Foreign</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duty</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2/3</td>
<td>1/9</td>
<td>1/4- 1/6</td>
</tr>
<tr>
<td>Total</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>15/4</td>
<td>10/5</td>
<td>10/5</td>
</tr>
<tr>
<td>BRANDY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duty</td>
<td>3/7</td>
<td>3/8</td>
<td>7/4-3/2</td>
<td>10/2-11/2</td>
<td>9/6-14/6</td>
<td>5/10-9/4</td>
<td>4/7-5/3</td>
</tr>
<tr>
<td>Total</td>
<td>22/6</td>
<td>22/6</td>
<td>15/4</td>
<td>15/4</td>
<td>12/12-2/12</td>
<td>11/5-11/8</td>
<td>12/-12/2</td>
</tr>
<tr>
<td>GENEVA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duty</td>
<td>2/3½</td>
<td>3/1</td>
<td>2/1-2/8</td>
<td>2/9-2/10</td>
<td>2/2-2/4</td>
<td>2/-2/1</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>24/9½</td>
<td>25/7</td>
<td>17/5-18/-</td>
<td>18/1-18/2</td>
<td>12/7-12/9</td>
<td>12/5-12/6</td>
<td>-</td>
</tr>
<tr>
<td>AGUA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) Grain</td>
<td>2/1-2/4</td>
<td>1/8</td>
<td>1/9</td>
<td>2/5</td>
<td>2/-2/2</td>
<td>1/5-1/8</td>
<td>2/-2/2</td>
</tr>
<tr>
<td>Duty</td>
<td>7/-</td>
<td>7/-</td>
<td>7/10</td>
<td>8/-</td>
<td>10/-</td>
<td>10/-</td>
<td>10/-</td>
</tr>
<tr>
<td>Total</td>
<td>9/-1-9/4</td>
<td>8/8</td>
<td>9/7</td>
<td>10/5</td>
<td>12/-12/2</td>
<td>11/5-11/8</td>
<td>12/-12/2</td>
</tr>
<tr>
<td>(2) Malt</td>
<td>4/4</td>
<td>4/8</td>
<td>3/2-4/8</td>
<td>3/3-4/6</td>
<td>2/6-3/6</td>
<td>2/6-3/6</td>
<td>3/5-3/7</td>
</tr>
<tr>
<td>Duty</td>
<td>7/-</td>
<td>7/-</td>
<td>7/10</td>
<td>8/-</td>
<td>10/-</td>
<td>10/-</td>
<td>10/-</td>
</tr>
<tr>
<td>Total</td>
<td>11/4</td>
<td>11/8</td>
<td>11/-12/6</td>
<td>11/3-12/6</td>
<td>12/6-13/6</td>
<td>12/6-13/6</td>
<td>13/5-13/7</td>
</tr>
<tr>
<td>Less:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malt drawback</td>
<td>10/4</td>
<td>10/6</td>
<td>9/10-11/4</td>
<td></td>
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### TABLE 35: SPIRITS PRICES IN SCOTLAND (per proof gallon)

<table>
<thead>
<tr>
<th>Year</th>
<th>1825</th>
<th>1830</th>
<th>1853</th>
<th>1856</th>
<th>1861</th>
<th>1865</th>
<th>1876</th>
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</thead>
<tbody>
<tr>
<td>RUM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) Jamaican</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duty</td>
<td>2/7</td>
<td>2/8</td>
<td>2/4</td>
<td>2/8</td>
<td>2/10</td>
<td>2/7-2/9</td>
<td>2/1-2/2</td>
</tr>
<tr>
<td>Total</td>
<td>6/11</td>
<td>7/-</td>
<td>7/4</td>
<td>7/8</td>
<td>13/-</td>
<td>12/9-12/11</td>
<td>12/3-12/4</td>
</tr>
<tr>
<td>(2) Foreign</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duty</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2/3</td>
<td>1/9</td>
<td>1/4-1/6</td>
</tr>
<tr>
<td>Total</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>12/2</td>
<td>10/5</td>
<td>10/5</td>
</tr>
<tr>
<td>BRANDY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duty</td>
<td>3/7</td>
<td>3/8</td>
<td>7/4-8/2</td>
<td>10/2-11/2</td>
<td>9/6-14/6</td>
<td>5/10-9/4</td>
<td>4/7-5/3</td>
</tr>
<tr>
<td>Total</td>
<td>18/4</td>
<td>18/4</td>
<td>12/2</td>
<td>12/2</td>
<td>10/5</td>
<td>10/5</td>
<td>10/5</td>
</tr>
<tr>
<td>GENEVA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duty</td>
<td>2/3½</td>
<td>3/1</td>
<td>2/1-2/8</td>
<td>2/9-2/10</td>
<td>2/2-2/4</td>
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<tr>
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<td>20/4</td>
<td>21/5</td>
<td>14/3-14/10</td>
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<td>12/7-12/9</td>
<td>12/5-12/6</td>
<td>-</td>
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<tr>
<td>AGUA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) Grain</td>
<td>2/1-2/4</td>
<td>1/8</td>
<td>1/9</td>
<td>2/5</td>
<td>2/-2/2</td>
<td>1/5-1/8</td>
<td>2/-2/2</td>
</tr>
<tr>
<td>Duty</td>
<td>2/10</td>
<td>3/4</td>
<td>4/8</td>
<td>8/-</td>
<td>10/-</td>
<td>10/-</td>
<td>10/-</td>
</tr>
<tr>
<td>Total</td>
<td>4/11-5/2</td>
<td>5/-</td>
<td>6/5</td>
<td>10/5</td>
<td>12/-12/2</td>
<td>11/5-11/8</td>
<td>12/-12/2</td>
</tr>
<tr>
<td>(2) Malt</td>
<td>4/4</td>
<td>4/8</td>
<td>3/2-4/8</td>
<td>3/3-4/6</td>
<td>2/6-3/6</td>
<td>2/6-3/6</td>
<td>3/5-3/7</td>
</tr>
<tr>
<td>Duty</td>
<td>2/10</td>
<td>3/4</td>
<td>4/8</td>
<td>8/-</td>
<td>10/-</td>
<td>10/-</td>
<td>10/-</td>
</tr>
<tr>
<td>Total</td>
<td>17/2</td>
<td>18/-</td>
<td>5/10-9/4</td>
<td>11/3-11/6</td>
<td>12/6-13/6</td>
<td>12/6-13/6</td>
<td>13/5-13/7</td>
</tr>
<tr>
<td>Less:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malt drawback</td>
<td>6/2</td>
<td>6/10</td>
<td>4/8-8/2</td>
<td></td>
<td></td>
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Brandy has always been seen by other writers as occupying a particularly important place in the development of the Scotch whisky industry. Writing in 1951, Sir Robert Bruce Lockhart stated that:

"Whisky, in fact, was almost unknown in England when men still living today were born. In his book 'A Moving Commission' Mr. Winston Churchill writes: ‘My father could never have drunk whisky except when shooting on a moor or in some very dull chilly place. He lived in the age of brandy and soda.’" 65.

Later, Lockhart went on to say that "In England, Scotch whisky drove out brandy as the favourite spirit." 66 In R.J.S. McDowall's book "The Whiskies of Scotland" 67 Churchill's remark was repeated as was the statement that "whisky has taken the place of brandy." The reason he gave for this was that "the introduction of whisky was no doubt greatly aided by the disease of the vines in France and Spain which led to a great shortage of wine and brandy, which were until then the drinks of the well-to-do." 68 The most recent and sophisticated version of this argument appeared in David Daiches' book. 69 Yet again, Churchill was called upon in evidence and the vine disease argument was further extended:

"Between 1858 and 1863 there was a great deal of importation into France of American vines for grafting purposes. It was the imported American plants that brought the deadly insect which invaded Europe and devastated French vineyards. It was first observed in France in 1865, and after that French wine production fell steadily year by year until the middle eighties... In the 1880s the vineyards of the Grande Champagne the centre of the Cognac district, were terribly devastated and the production of Cognac brought almost to a standstill. One of the expedients resorted to by cognac producers in this crisis was to blend a very little cognac with other spirits made from a variety of raw materials. In the 1890s it was impossible to refill cognac stocks, and the British brandy drinker had to look elsewhere for a comparative spirit." 70.

Can the evidence of the consumption of brandy and the price of brandy be used to sustain these arguments? As Table 34 and 35

f.n. Tables 34 & 35: Malt drawback 1/- per gallon 1825 - 1/2 thereafter until 1855 when withdrawn.
64. Where possible the prices have been cross-checked with sources such as parliamentary papers and business records. These suggest that the order of magnitude is correct.
68. R.J.S. McDowall, op.cit. p.5.
show, at all times down to 1860 brandy was the most expensive of spirits. Although in 1825 and 1830 it would, at its duty-free price, have been a successful competitor with malt whisky, the high level of customs duty made it more expensive even than Geneva. Despite the substantial fall in customs duty by the time of the Free Trade Treaty, it remained the most expensive of spirits. This was almost certainly because of substantial problems on the supply side, associated with phylloxera, which pushed up French distillers' prices in the 1850s and early 1860s. Before 1860 (See Graph 11) the market for brandy remained severely restricted although sales did increase in the 1850s as customs duty was lowered. The most important rise took place after 1860 and in 1876 the peak year for consumption was reached when 4.49 m.p.g. were drunk. Consumption declined after 1876 but brandy's fall from grace was hardly as dramatic as the phylloxera argument indicates. Moreover, how large was this brandy market which Scotch whisky reputedly took over? Measured at its peak—a measure which puts the most favourable emphasis on the phylloxera argument—it was smaller than either the gin or rum markets. Even in the 1890s when the Cognac district was hardest hit, British brandy consumption was still over 2 m.p.g. so that although Scotch distillers may have had an extra two million gallons added to their market (the difference between brandy consumption in the peak year and the 1890s—equivalent to a 6% increase in the consumption of home produced spirits at 1890s consumption levels if brandy drinkers switched entirely to home produced spirits,) brandy had still not simply been pushed out of the British market.

The second part of Daiches argument that Cognac producers may have used British spirits for blending purposes in the 1890s is equally weak. Whisky exports were rising in the 1890s but there was little sign of any marked jump such as the phylloxera argument would suggest. Nor was export activity directed towards continental countries, the Empire and the United States absorbed most whisky. French distillers, already faced with high raw material prices, were unlikely to turn to British spirit for blending. Much nearer home in Germany lay an almost infinite supply of the cheapest blending

70. D. Daiches, op. cit. p. 63
agent in Europe: German plain spirit. This spirit which was imported into Britain forms the bulk of the Excise category 'other spirits'. Made from the potato crop of Prussia, in years of bountiful harvest it formed an export surplus against which the British distiller could not compete even at home.\footnote{See G.B. Wilson, \textit{op.cit.} p. 28. The large imports in the 1870s of this spirit were one factor in bringing about the amalgamation of Scottish grain distillers into the Distillers Company Ltd.} To concentrate on the failure of the vine harvest also ignores the reaction of the French Government to the crisis. Wine was not the only raw material from which French distillers were able to work. French excise law responded to the crisis by permitting the use of grain for distilling.

One other point about the phylloxera argument may be made. By the 1890s France was no longer the sole supplier of brandy. Admittedly, by definition, the finer marks such as cognac could only come from France, but an alternative and cheaper substitute readily available in Britain was brandy from Empire sources.\footnote{Separate statistics for Geneva imports exist from 1870.}

Although no statistics exist to prove the point,\footnote{The word 'gin' is an abbreviation of "geneva". This is adapted from genever or jenever, the Dutch name for juniper. Dutch distillers had an enviable reputation in the eighteenth century – John Stein the Lowland distiller for example, spent some time in Holland studying their techniques – but their product Geneva enters into the history of the British distilling industry mainly as a smuggled commodity. From the end of the 17th century a prohibitive customs duty was levied on imports of Geneva with the aim of encouraging distillation from home grain supplies.} customs duty, as well as the existence of a satisfactory home produced substitute, limited the market for the Dutch spirit, Geneva (or Hollands)\footnote{The word ‘gin’ is an abbreviation of “geneva”. This is adapted from genever or jenever, the Dutch name for juniper. Dutch distillers had an enviable reputation in the eighteenth century – John Stein the Lowland distiller for example, spent some time in Holland studying their techniques – but their product Geneva enters into the history of the British distilling industry mainly as a smuggled commodity. From the end of the 17th century a prohibitive customs duty was levied on imports of Geneva with the aim of encouraging distillation from home grain supplies.} At its duty free price it would have been able to compete successfully with most home produced spirits, but with customs duty it became the second most expensive spirit after brandy. Some proof of the limiting effect of customs duty on both brandy and geneva consumption may be found in the frequent complaints of the imitation and adulteration of foreign spirits. In support of his thesis that "the Excise was a great burthen on the country and did no good" one Edinburgh spirit dealer appearing before the Parnell...
Commission maintained that "...if any man goes to a respectable house five or ten miles out of Edinburgh, and calls for a glass of brandy or Hollands, he will get the greater part Scotch spirits."  

Where high duties reigned, the unsuspecting or indiscriminating consumer was likely to be fobbed off with a cheaper article. Alternatively none but the rich could afford the genuine article. The duty reduction in 1860 brought Geneva prices much closer to home produced spirits but Hollands remained a fairly exclusive drink and by 1870 only just over 300,000 proof gallons were imported.

Alone among imported spirits rum had the reputation of being a beverage of the working classes. In 1840 it was the most popular spirit with a market of over 2\(\frac{1}{2}\) m.p.g., more than double that of brandy. Did the temperance reformers much beloved "demon run" hold out any terrors for the home distiller? Although at no time between 1825 and 1860 could rum have undercut the cheapest home produced spirit, grain whisky, it did pose a threat to malt whisky. The fact that it was backed by colonial interests made the reduction of duty one of the most sensitive issues for British distillers. The 2d. per gallon surcharge which was levied on rum whilst it was granted as compensation for the additional costs which Excise restrictions placed on the home distillers was seen as one way of limiting the competition from colonial distillers.

In 1860 British West Indian rum lost its favoured place in the British market but falling sugar prices together with a wider area of supply brought rum prices down and consumption increased. In 1875 when peak consumption was reached at 5.4 m.p.g. rum was selling at 10/4 to 12/6 p.p.g. only 2d. more than grain whisky. Consumption fell after 1875 but rum remained the most popular of all imported spirits.

Differences in consumption patterns, the growth on national markets, and the varied level of customs duty on imported spirits

74. 7th Report, Part II, Spirit Dealers and Retailers, p.12.
77. See R.W. Beachey, op.cit., p.75.
make the picture of the spirit market in the first half of the
nineteenth century, a varied, not to say, complex one. With
imported spirits the gradual liberalisation of trade was the
most marked feature, although the effect on consumption patterns
after 1860 was perhaps less than might have been expected. An
increased excise duty in 1860 more than compensated for the loss
of customs revenue and although more rum and brandy was drunk after
1860 than before, the most significant shift in consumer preference
took place amongst home produced spirits. It was the increased
consumption of whisky from the 1870s, displacing, most of all, gin,
and to a lesser extent, brandy, that emerged as the dominant
feature of the spirit market in the second half of the nineteenth
century. Although per capita consumption for the U.K. as a whole
reached a peak in 1875, total consumption went on growing until
1900 when an all-time record of 45.8 m.p.e. of spirits were con-
sumed. The bulk of this was Scotch whisky and for the Scottish
distiller the golden days of high profits and dividends lay ahead.
In 1860, however, his main problem was coping with the depressed
state of the Scottish market after fiscal harmonisation and the
duty increase in 1860.
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MAP 7 (a) Number of Licensed Distilleries (1822)
The map is based on excise collections:

O - Orkney
C - Caithness
L - Linlithgow
I - Inverness
A - Aberdeen
F - Fife
S - Stirling
P - Paisley
G - Glasgow
E - Edinburgh
A - Aberdeen
T - Teviotdale
N - North
S - South

Ayr dd
A.S/N - Argyll South/North

The map represents one distillery.
MAP 3(a): Number of Licensed Distilleries (1833)
NUMBER OF LICENSED DISTILLERIES 1833

d represents one distillery

The map is based on excise collections

C - Caithness  L - Linlithgow  A.N. - Argyll North
I - Inverness  S - Edinburgh  A.S. - Argyll South
E - Elgin      H - Haddington  ayr
A - Aberdeen   G - Glasgow
M - Montrose   D - Dumfries
F - Perth      S - Stirling
F - Fife

The map is based on excise collections.
CHAPTER FIVE

THE SCOTTISH INDUSTRY AFTER 1823

"a competition in the trade"¹

(1) THE NEW ENTRANTS

Although the 1821 Distillery Act had pushed the boundaries of licensed distilling further north, areas such as Campbeltown, Islay, Banffshire and Invernesshire remained firmly in the hands of the illicit distiller. To the Excise, the most gratifying result of the 1823 reforms was the large increase in licensed distilling in precisely those areas which had hitherto been the province of the smuggler. As a comparison of the Maps of licensed distilleries in 1822 and 1833 shows (See Maps 7a and 8a), the effect of the reforms was nothing less than dramatic.

In the South Argyll collection which covered Islay and Campbeltown, two of the main centres from which illicit spirit entered the Glasgow market, the number of licensed distilleries increased from eight in 1822 to thirty-five in 1833. The Aberdeen and Inverness collections, which between them had only eleven licensed distilleries in 1822, had thirty-seven in 1833. Even areas where the Excise had previously not dared to venture such as upper Banffshire responded to the reforms and in 1833 there were twenty-seven licensed distilleries in the newly formed Elgin collection. The influx into the distilling industry was not confined to areas once dominated by illicit distillers. In Perthshire, one of the areas favourably influenced by the 1821 Act, a further increase in the number of licensed distilleries took place. The same was true of relatively much better policed areas in Lowland Scotland. In the Haddington collection, which covered the fertile East Lothian farming area, numbers rose from six to seventeen. In the west, there were thirty-four licensed distilleries in the Glasgow and Ayr collections compared with eighteen in 1822. Even Dumfriesshire,

an area not hitherto noted for either illicit distilling or licensed production, had four distilleries by 1833. The distilling industry in the 1820s appears to have been regarded as one with particularly rosy prospects by a large volume of entrepreneurial talent.

Why should this have been so and what sort of people did the industry attract? On the demand side the behaviour of consumption after the reduction in duty was undoubtedly an important factor. Although it was argued in Chapter Four that much of the increase in consumption was more apparent than real, simply being a diversion of spirit from illicit to legal channels, the duty reduction still held something of a windfall gain for whisky drinkers. This was especially true of urban areas where there was keen competition amongst spirit dealers. As William Collins told the Select Committee on Drunkenness:

"...So much were the population excited in Glasgow in 1822 by the expected reduction of the duty, and so diligent were the spirit dealers in advertising the day in which the duty would be reduced and cheap whisky could be obtained, that I recollect on that day, when coming down from my residence through Gallowgate, that the public houses were not only crowded, but the people were out on the pavement at some of the larger shops..." 2.

Transitory, though the wildest effects of the reduction may have been, legal spirit consumption in Scotland increased 287% between 1823 and 18363 despite additions to duty in 1825 and 1830. If this was not sufficient to tempt people into distilling, whisky consumption had one other important feature for the prospective entrant: its near universality in Scottish life. To quote Collins again:

"...I may mention, in the first place, that so much has spirit drinking become associated with all our customs and practices in Scotland, that there is scarcely an event in life, scarcely a circumstance that occurs, not a transaction can be done, or a change can be effected, with which spirit drinking is not associated; it is associated with our births, and with our deaths, with our marriages and baptisms; it is associated with a man's entry on any employment, with his apprenticeship, with

3. See Graph 8c, p. 137 above.
GRAPH 12: Scotland - Number of Licensed Distillers and Rectifiers (1815-1905)
SCOTLAND - NUMBER OF LICENSED DISTILLERS AND RECTIFIERS (1815 - 1905)

SOURCE - G.B. Wilson, Alcohol and the Nation, Table 23.

BAR CHART: Number of Distilleries founded in each decade 1810/19 to 1890/99.
(Based on the foundation dates of distilleries in existence in 1900. See page 227 below.)
"His change of employment in the same work; it is the symbol of hospitality where friends meet, and forms the complimentary usage in all the intercourse of life, among the middling and lower orders; it is employed in making bargains, at the payment of accounts, at fairs and roups, and every possible circumstance of life. And that is the greatest difficulty we have to contend with; it has struck its fibrous roots into everything so deeply, that to tear up the spirit drinking practices, is like tearing up the whole social system of society..." 4.

What caused William Collins to despair, was inspiration to the distillers. Their source of inspiration was not restricted to the home market for amongst the reforming measures which brought England under similar distillery regulations to those in Ireland and Scotland in 1825, was an easing of the conditions that had kept access to the English market in the hands of "the destructive monopoly". The reputed, legendary profits of the great Lowland distilleries who worked for the English market acted as a swift stimulant to investment in the distilling industry. Old distilleries were enlarged and new distilleries founded specifically to cater for the expected increase in demand. It was (see Graph 12) between 1823 and 1825 that the largest rise in licensed distilleries took place. The assessment of what the English market would bear was wildly over-optimistic. Despite "the intrinsic excellence" of Scottish spirits, malt whisky was not yet in great demand in England and the existing Lowland distilleries were fully capable of increasing their output to meet the quite different demand for spirit for rectification. Increased imports of West Indian rum at the new preferential duty also provided a rival for Scotch whisky. Most important of all, the sharp trade recession of 1826 restricted English spirit consumption. As stocks of Scottish spirits mounted in London warehouses, many of the newly founded distilleries collapsed. This setback appears to have mainly hit Lowland distilleries but it precipitated the start of the first post-reform fall in licensed distilleries.

In discussing the troubles of the distilling industry in 1826 'The Scotsman' pointed to the failure of what it called "the

4. B.P.P. 1834, Vol.VIII, Report from the Select Committee on Drunkenness, p.139.
5. The Scotsman, May 20th, 1826, p.318.
weaker brethren" in the trade. In addition to being an industry whose basic processes were widely understood, at a practical, if not yet at a theoretical level, the amount of capital required to set up in business was not prohibitive. A forty gallon still could be purchased for between £100 and £150 in Glasgow in 1831, and whilst this amount of investment was high in comparison with the cost of say, a handloom, it might be reduced in a number of ways. Farmers working on a part-time basis could share the cost of a still. Drawing on their own supplies of grain and utilising existing buildings for malting and mashing lowered the initial costs of entry even further. So too did the Wallace Commission's recommendation that distillers be allowed to warehouse spirits free of duty by easing the problem of the supply of capital to finance duty payments between production of the spirit and its sale. The emergence of a class of small-scale farmer-distillers within the framework of licensed production in the 1820s was one of the most striking effects of the 1823 reforms. Excise Officers from collections where smuggling had been rife before 1823 were unanimous in reporting this beneficial change to the Parnell Commission. Describing the small-scale crofting distillers in the Highland areas of Perthshire, Thomas Dumbreck the collector said "it is astonishing the difference which has taken place about Aberfeldie and Loch Tayside." The illicit distiller had disappeared from his area. Abraham Moffat, the collector for South Argyll thought that "illicit distilling is almost knocked up altogether". He also noted that "in Islay the distillers are all farmers", something that was not true of Campbeltown where the distillers worked entirely at manufacturing and were divorced from agriculture.

Although 'knocking up' the illicit distiller was a substantial achievement in view of the pre-reform situation, the stability and viability of the new industrial structure were highly dubious. It was argued above that in the legitimate trade before 1823 techno-

7. 'Part time' in the sense of distilling only when the harvest was in: the large distillers did not work the whole year round but stopped in the summer when fermentation was difficult to control.
10. See above, p. 113. ff.
logical change had made small still production increasingly obsolete. In a sense what the exoise reforms did, albeit for quite valid policy reasons, was to turn the economic clock back. The reforms created a group of small distillers at a time when factory production looked like pointing the way to the future development of the distilling industry. It was a sort of Gandhian philosophy which temporarily supported "the weaker brethren" as industrialisation seemed to put competitive power into the hands of the large distiller. It must be said too that many of the weaknesses inherent in the manner in which the illicit distiller operated were carried over into licensed production. The low yield of spirit, the waste of spent grains, the uneven quality of the product: all these militated against the commercial success of former smugglers. Very few novice licensed distillers could rely on the sort of help which George Smith of Glenlivet secured from the factor to overcome these hurdles. Inevitably then the first heady rush into licensed production produced a heavy harvest of failures and the number of licensed distillers began to fall after 1825 (See Graph 12).

Although many of the new entrants to the licensed industry after 1823 may have once been illicit distillers it is doubtful, in view of the spread of licensed distilling in areas where smuggling had been far less prolific, whether they constituted a majority. In an economy still predominantly agricultural, distilling along with brewing and flour milling, offered the richer farmer, with surplus capital to invest, an opening into a processing industry. In both the Highlands and the Lowlands the distilling industry was a substantial force for agricultural improvement. This gave landlords an incentive to invest in the industry. Local distilleries provided employment and gave "a ready and convenient market for barley".\footnote{11} Spent grain enabled large quantities of livestock to be fattened: Kilbagie distillery waste fed 700 cattle and 850 acres were cultivated in conjunction with the distillery.\footnote{12} At Grange distillery in Burntisland "700 cattle are fed which at £15.10.0 per head produce £10,850."\footnote{13}

\footnote{11} The New Statistical Account (N.S.A.), Vol.13, p.120.  
\footnote{12} N.S.A. Vol. 8, p. 128.  
\footnote{13} N.S.A. Vol. 9, p. 416.
As well as the direct demand for grain from the distilleries, which put cash into the tenant farmer's pocket, barley cultivation occupied an important place in the scheme of rotation as the following questions to Archibald Dunlop by the Select Committee on the use of molasses makes clear:

"Is there much barley grown in the county of Haddington and in the best Agricultural parts of Scotland? - There is an increasing growth of barley; wheat used to be the staple article of cultivation in East Lothian, as affording the best price and greatest return to the farmer, but the necessities of the tenantry have obliged them to carry this cropping too far, and the cultivation of barley has in consequence increased, and this year I have little doubt there will be 100,000 quarters of barley raised in East Lothian.

Do you consider the growth of barley essential to good farming and to the best improved system of husbandry? - The cultivation of barley has always been considered a part to one of the best systems of farming, and again the best preparation for laying down lands in grass.

Without a certain proportion of barley occasionally, you cannot expect to raise good crops of oats or wheat? - The greater variety that can be given to land, the more profitable will the system of farming be, and barley husbandry is one of the most favourable we have for cultivation." 14.

With the main price fall after the Napoleonic Wars concentrated in wheat,15 the distillers' demand for barley was an important factor in enabling Scottish farmers to make a less painful readjustment than English farmers. If barley cultivation was increasingly important in the Lothians, the area most specialised in wheat and with the greatest natural advantage, how much more important it must have been in an unsuitable area like Sutherland where high wartime prices tempted farmers into wheat production.16 In the Lothians, Neil Ryriss had reported to Stein, Dewar in 1809 that "there is very little barley now grown."17 By 1831 there was an "increasing growth of barley in East Lothian" and in the late 1830s the case with which distillers were able to secure the support of the Lowland tenantry in their campaign to amend the Excise laws surrounding the trade to England suggests that the light barleys grown in the Lothians had

become an even more important crop.18.

Such considerations help to account for the landowners' favourable attitude towards distillers. Because of the possibilities for soil improvement distillers in East Lothian got a preference over other applicants in the letting of farms19 and of the nine owners of the eleven large distilleries in the Haddington collection, seven were also farmers. 20 Archibald Dunlop in 1831 was renting 318 acres from Sir Hew Dalrymple Hamilton and 377 acres from the Earl of Haddington for which he paid £2,166 in rent. No doubt, the Lowland distilleries were by the very scale or their operations marked out from the rest of the industry but the important lesson was not lost on other landowners and landowners were amongst those who put capital into distilling after 1823. The Duke of Atholl supplied the capital for Edradour distillery, built in 1837 and Lord Belhaven invested £90,000 in a distillery at Wishaw. 21 Both premises were then leased to tenants. Glenury distillery in Stonehaven built in 1836 was likewise erected at the Laird's expense. 22 Aided by the more permanent nature of the excise system after 1823 the enlargements to older established distilleries in the 1820s and 1830s may also have drawn on landowners' capital.

Not all the attempts at emulating Lowland landowners met with success. Ian Anderson, an Edinburgh solicitor, inherited the family estate at Stroquhan in Dunfriesshire in 1824. 23 It was then £23,000 in debt. A man of considerable enterprise and resources he had contemplated forming a company "for the purpose of making a

18. Customs and Excise Records W.B.No.56. Petitions from tenantry in Haddington, Dalkeith and Edinburgh in support of distillers. The distillers were complaining about having to pay the full English duty on spirits shipped to England, being subject to the sea risk of that duty, having spirits examined three times before going into consumption, and not receiving credit on duty payments.
19. Report from Select Committee on Molasses etc. p. 80.
22. A. Barnard, op.cit. p.269.
a railway between Sanquhar and Dunfries" in 1824, he evolved a
plan for improving the value of his lands by building a distillery.
In a stock raising area his main need was to improve the value of
his pasture and his objective was, in addition to making a profit
from the sale of whisky, to create a "Feeding Establishment" at
the distillery and to use the manure from the cattle and sheep for
improving his land. Glenesland distillery was to be an extensive
one involving capital expenditure of over £5,000 and in order to
augment his own funds he granted a heritable bond on part of the
estate to the Bank of Scotland receiving a cash advance in return.
Unfortunately however, he discovered after less than a year's dis-
tilling that although "our distillery concern has still a favoura-
ble aspect if we could keep clear of bad debts... the Trade generally
is a bad one."24 Low spirit prices and bad debts produced a num-
ber of bankruptcies including that of John Thompson, "the greatest
merchant that ever lived in Dumfries." The failure threw "a
dreadful gloom over this quarter" which extended as far as the
Directors of the Bank of Scotland who increased their demand for
security and at the same time restricted the amount of accommoda-
tion they were prepared to grant. Although probably a wise pre-
caution from the Bank's point of view given the state of the whisky
market, it placed Anderson in an almost impossible position for, as
he reminded the Bank, "you must be aware that from the state of my
titles it is impossible for me to look for assistance from any other
quarter than the Bank of Scotland."25 The troubles in the whisky
market did not however, altogether wipe out the beneficial effect
of the establishment of the distillery on the estate, as Anderson
made clear in a letter explaining how he intended to extricate him-
self from the Bank:26

"...the very abundant crop on the ground this season has caused
a depression both in the Corn and Spirit markets, such as no
one could have calculated upon. I have the satisfaction,
however, of informing you that my Feeding Establishment has
succeeded remarkably well, and the effect produced upon the
land from the manure of that Establishment exceeds my own
expectations.

"I had intended to keep up the Farming Establishment another year, with the view of showing the effect of the Distillery upon it. But as I have reason to believe that the Public are already satisfied that the ground is worth a much higher rent than it would have brought previous to the erection of the Distillery, I have advertised the greater part of the ground...to be let at Martinmas next, and whenever it is let I shall inform you how much the rent exceeds... (the bank's) valuation. I propose also at the end of the year either to take in a partner or partners of some capital, or to let the work to some respectable person or firm. If the latter plan is adopted I will of course pay up the debt to the Bank and get a reconveyance."

Anderson's optimism about the improved condition of the estate was justified by the result of the roup. The average rent per acre came out at £4.11.6 instead of £3.16.3 which was the Bank's valuation. Despite what Anderson described as "the very considerable success that has attended my undertaking" it proved impossible to find anyone prepared to take the lease of the distillery and with his financial problems distilling came to a stop at Stroquhan. The implication of Anderson's venture was not that distilling was an unsatisfactory way of securing agricultural improvement but rather that Stroquhan was an unsatisfactory location for a distillery of the scale of Glenesland. The site was isolated from any major urban market. Dumfries the nearest town was over eight miles away and the cost of taking out spirits and bringing in grain and fuel made it, as the reporters to the New Statistical Account pointed out, "doubtful if it would have ultimately been profitable." In the condition of the whisky market in the early 1830s high cost producers did not last long.

In addition to former illicit distillers, farmers and landowners, the distilling industry also attracted new entrants from allied trades. The stimulus given to spirit consumption persuaded some brewers to move into distilling and leasing redundant breweries was one other way of economising on capital. At least four of the twenty malt distilleries in the Aberdeen collection in 1831 were

28. They were Devanha distillery; Strathdee distillery; Union Glen distillery; and Glengarrioch distillery.
situated in former breweries. Maltsters, as suppliers of the main raw material for illicit distilling, as possessors of credit, and with established trade connections also figured prominently amongst new entrants. In Islay, six of the twelve distillers in 1831 had been maltsters.

To some extent, categorising new entrants to distilling by their former occupation runs a danger of creating a misleading impression: what is striking about the background of some new distillers is the ease with which people accumulated capital and moved from one occupation to another. The case of William King, a distiller at Largs who was declared insolvent in 1831 may serve to illustrate the point. King started as a farmer in Largs in 1816 with a capital of between £50 and £60. In 1819 he became a grain merchant and in the spring of 1823 a maltster. January 1824 saw him installed as the tenant of a distillery in Largs with a capital of £100 which he had realised from the sale of farm stock. This sum he then increased by bank borrowing with loans of £400 each from the Greenock Bank and the Commercial Bank. On his father's death in 1825 he received an inheritance of over £600 which he put into the construction of a malt barn and repairs to the distillery. Having thus increased the value of the property he took out a bond on it along with his house for £1,300 through the Greenock Bank to finance the day to day running of the business. Whether this proved insufficient or the Banks demanded repayment of their loans is not clear, but by the time of his bankruptcy he had borrowed over £1,500 from an aunt, two sisters and a brother. Trade credit also figured largely in his final accounts (See Table 36). Excluding debts to his relatives the largest sum, £1,300 was owed to seven Glasgow grain

**TABLE 36: CREDITORS OF WILLIAM KING, DISTILLER AT LARGS (1831)**

<table>
<thead>
<tr>
<th>Item</th>
<th>£</th>
<th>s</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family</td>
<td>1,583</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>Farmers</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Grain Merchants</td>
<td>1,314</td>
<td>18</td>
<td>1</td>
</tr>
<tr>
<td>Brewers</td>
<td>390</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Maltsters</td>
<td>273</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>Others</td>
<td>492</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>£4,161</strong></td>
<td><strong>8</strong></td>
<td><strong>2</strong></td>
</tr>
</tbody>
</table>

By comparison with the great wave of distillery expansion at the end of the nineteenth century one group who appear to have been conspicuously absent from distilling after 1823 was the spirit dealers. Neither directly by actually running distilleries, nor indirectly by putting up capital do they appear to have played an important part at this time. One Edinburgh spirit dealer who did so was Archibald Ainslie. Belonging to a family Neil Ryrie once described as "the keenest and the meanest... ever dealt with" 31 Archibald Ainslie gave Andrew Stein a loan of £2,000 to enable him to complete the purchase of Kirkliston distillery on condition that Stein accept Ainslie's son as a partner. 32 Keenness and mean­ness still seem to have been Ainslie's motive force for the 10% rate of interest on the loan (subsequently increased to £10,000) was so high that the partners considered it "in breach of the usury laws." In addition to Ainslie the other backers of the enter­prise were a malster, John Burton of Newburgh and a wood merchant, John Dudgeon who "took no active part in the management." Although the high rate of interest probably helped to account for the failure of the company in 1832 there was no shortage of people willing to buy the distillery and it was sold to Thomas Allan, an Edinburgh banker who subsequently let it.

Although spirit merchants do not appear to have been active in financing distilleries after 1823 it is possible that the Campbeltown distilleries may be an exception. The scale of production of the Campbeltown distilleries was larger than in the rest of the Highlands suggesting that they had access to sources of finance outside Campbeltown. The close connexion with the Glasgow market probably encouraged Glasgow spirit merchants to invest in the indus­try. Otherwise, the absence of spirit dealers was an apparent feature of the distilling industry in the 1820s. Why should this have been so?

"the applications of a class equally little deserving of sympathy at the expense of the public, candidates for the privilege of dram selling." 33.

The reasons lie partly in the development of the wholesaling and retailing sides of the whisky trade and partly in the nature of the distilling industry after 1823. According to Wechie, 34 along with the fall in the price of whisky, after the reduction in duty, "went a vast increase in the facilities for acquiring drink." Insofar as he was arguing that the number of spirit retailers increased in the 1820s this was undoubtedly correct (See table 37).

### TABLE 37: LICENCES TO DEALERS AND RETAILERS IN ALCOHOLIC LIQUORS - SCOTLAND 1800-1860

<table>
<thead>
<tr>
<th>Year</th>
<th>Dealers</th>
<th>Retailers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Spirits</td>
<td>Beer</td>
</tr>
<tr>
<td>1800</td>
<td>1,127</td>
<td>-</td>
</tr>
<tr>
<td>1805</td>
<td>1,720</td>
<td>-</td>
</tr>
<tr>
<td>1810</td>
<td>1,914</td>
<td>-</td>
</tr>
<tr>
<td>1815</td>
<td>823</td>
<td>-</td>
</tr>
<tr>
<td>1820</td>
<td>123</td>
<td>-</td>
</tr>
<tr>
<td>1825</td>
<td>74</td>
<td>38</td>
</tr>
<tr>
<td>1830</td>
<td>523</td>
<td>32</td>
</tr>
<tr>
<td>1834</td>
<td>539</td>
<td>26</td>
</tr>
<tr>
<td>1840</td>
<td>452</td>
<td>3</td>
</tr>
<tr>
<td>1845</td>
<td>412</td>
<td>17</td>
</tr>
<tr>
<td>1850</td>
<td>418</td>
<td>37</td>
</tr>
<tr>
<td>1855</td>
<td>402</td>
<td>29</td>
</tr>
<tr>
<td>1860</td>
<td>359</td>
<td>45</td>
</tr>
</tbody>
</table>


However, the truth of the matter was that easy facilities for anyone wishing to set up as a whisky retailer had long existed in Scotland and the expansion in retail spirit trading in the 1820s simply followed the increased demand for whisky. In 1756 the first steps had been taken to bring ale houses and tippling houses under

33. B.P.P. 1834 Vol. VIII Report from the Select Committee on Drunkenness, p. 250.
34. S. Wechie, op.cit. p. 83.
a licensing system. As befitted a country where whisky drinking was widespread, spirit selling was not confined to inns or ale houses, grocers, provision merchants and numerous small traders also sold whisky. In an attempt to bring these people within the framework of a licensing system, a cheap licence to retail whisky only was introduced in 1793. In an attempt to regulate the flow of illicit spirit, the collection and policing of licence duty was made the responsibility of the Commissioners of Excise with the condition that no liquor licences were to be issued to any person who did not produce a justice's certificate. As a measure of social control aimed both at limiting the numbers of those engaged in retailing and ensuring the good character of retailers it was only too clearly a failure. Applications for certificates were seldom refused; laxity in control being justified on the grounds that to refuse a licence was a restriction on the liberty of the individual and that the number of spirit retailers was best regulated by free trade principles.

As with the Beer Act of 1830 in England, so in Scotland the licensing system became a battleground between free traders and restrictionists. Alexander Campbell, the Sheriff-Substitute of Renfrewshire, was one of those who condemned the laxity of the licensing system:

"...as if the morals and happiness of the working classes ought to be matter of free traffic for the benefit especially of persons who, tired of honest industry in their trades, desire to earn a living by operating as landlords of tippling houses..."

The struggle between free traders and restrictionists was not, however, one between the spirit trade and temperance advocates. Although most Scottish spirit dealers would have agreed with the Glasgow dealers that "the J.P. certificate is a most degrading and unnecessary thing" their dislike of it was not based on any love of free trade principles. Rather they objected both to its arbitrary nature when it was strictly applied: "an omission will throw a man

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35. 20 Geo III, c 12, s 10.
37. 48 Geo III, c 143.
40. 7th Report, App. 128, p. 370.
out of trade, 41 and to the fact that it singularly failed to control the number of retailers:

"There has been for many years a loud and just complaint in Scotland that there are too many in the trade, the very best proof that the certificates system has been no check." 42.

One result of the system was an excessive number of licensed premises in relation to the population with, according to William Collins, one spirit dealer to fourteen families in Glasgow, one to fifteen in Port Glasgow, one to eighteen in Renfrew, one to twentyseven in Paisley and "more people employed in the preparation and sale of intoxicating liquors alone, than are employed as bakers, confectioners, butchers, fishmongers, poulterers, grocers, victuallers, gardeners, fruitellers and all classes who are employed in the preparation and sale of articles of food." 43.

Although excessive competition rather than excessive drunkenness was the spirit dealers' main concern, it is probable too that some foresaw the dangers which the unbridled activities of publicans might hold for the long term future of the trade. Prohibition of distilling 44 might well be ruled out because of loss of revenue, damage to the agricultural interest and popular feeling but equally other reactions including moral suasion, abstinence campaigns, counter attractions and pressure for higher spirit duties could, in the long run, bite into the whisky market. More immediately, the "licensed pestilential dram shops" posed a direct economic threat to the larger spirit dealer.

According to one temperance advocate:

"In Scotland, the taking of a public house and selling spirits is the last resource of a man who had failed in every other business. A man may set up a whiskey shop or low public house in Scotland without 5/- capital; if he has 30/- he is rich in some places, and the families of such low publicans are generally ruined." 45.

41. 7th Report, App. 128, p. 370.
42. 7th Report, App. 128, p. 370.
43. H.P.P. 1834 Vol VIII, Report from the Select Committee on Drunkenness, p. 136.
44. Prohibition was discussed in the 1830s. See p.248 of Report from the Select Committee on Drunkenness.
(193)

It is only too clear from the manner in which these businesses were conducted that not just their families were ruined but also substantial spirit dealers and distillers. Although the Excise Licensing Act of 1825 created two classes of traders: the dealer, who paid a £10 licence and was not allowed to sell in quantities of less than two gallons, and the retailer, who paid a licence of £2 and could sell in quantities however small,46 most dealers also maintained retail premises.47 At the retail level they thus faced competition from the "shoebens", "divans", dram shops and spirit cellars. Unlike the gin palaces which revolutionised the style and appearance of English public houses48 in the 1830s, meanness, squalor and total lack of customer amenity characterised whisky retailers. This was not just an urban phenomenon. In the country too "there are many small retailers...who have a room with a chair and a table in it, who take upon themselves to sell whisky without control..."49 A room, a table, a chair, a cask of whisky; in this situation profit margins were cut to a minimum. Moreover these drinking dens were a fertile source of bad debts, one of the main causes of bankruptcy amongst spirit dealers. Nor was the spirit dealer able to make up for this uncontrolled section of

46. 7th Report, Part II, pp.4-6.
47. B.P.P. 1834, Vol. VIII, Report from the Select Committee on Drunkenness, p.137.
48. A grocer, one of the governors of the poor for the parish of St. Margaret in Westminster gave this description of a public house conversion: "a public-house nearly opposite to my residence, where the consumption of spirits was very trifling, was taken for a gin-palace, it was converted into the very opposite of what it had been, a low dirt public-house, with only one doorway, into a splendid edifice, the front ornamented with pilasters, supporting a handsome cornice and entablature, and ballustrades, and the whole elevation remarkably striking and handsome; the doorways were increased in number from one, and that a small one only 3 or 4 feet wide, to 3 and each of those 3,8 to 10 feet wide; the floor was sunk so as to be level with the street; and the doors and windows glazed with very large single squares of plate glass, and gas fittings of the most costly description; the whole excited the surprise of the neighbourhood; and certainly from the boldness of the design, and the elegance of its execution, justifying the term palace quite as much as the new building at Limeico is entitled to that designation." Select Committee on Drunkenness, p. 274. The Glasgow spirit cellar with its "little green curtain to protect the female drinkers from observation" hardly bears comparison.
49. 7th Report, App. 124, p.358.
the trade by control over the private family trade. Distillers were able to sell whisky direct for consumption in quantities as low as nine gallons so that the spirit dealer faced competition in this market too. "We would erect distilleries on our own" Charles Dickson, a Burntisland spirit dealer, told the Parnell Commission "but we are unable to do so."50 It is this fiercely competitive environment which explains the absence of the spirit dealers from distilling after 1823.

The picture of an undercapitalised and overcompetitive retail trade should not be overdrawn. Low profits which might have deterred some were offset by the spectacular progress of others. Archibald Ainslie was not the only spirit dealer able to loan £10,000 for a distillery. Thomas Harvey,51 "a kenspeckle Glasgow whisky merchant" began life as a carter in Port Dundas. With money made in carting he opened a single dram shop in Dunlop Street about 1820. This became the base for a chain of dram shops. With the profits made from "Harvey's divans" he was able to establish a distillery to supply his shops at a cost of £20,000 and to buy the estate of Westthorn. This cost £20,500 and he spent an additional £10,000 on a mansion house to grace the estate.

William Teacher,52 over a longer period, also created a series of multiple retail outlets. He was 19 when he opened a dram shop in Anderston in 1830. His capital then was about £200. By the middle of the century he held 18 retail licences in the Glasgow area. Multiple trading of this nature, with bulk buying and ultimately investment in distilleries was, however, a much more characteristic feature of the whisky trade in the last quarter of the nineteenth century. The creation of integrated businesses with spirit dealers moving into distilling was associated with the rise of proprietary blends and the desire to control the supply of the whiskies which constituted the main elements in the blend. In the 1830s with few whiskies being sold under proprietary names and with plenty of competition amongst distillers there was little incentive for whisky merchants to seek control over supplies.

51. Detail from article in 'The Scotsman', May 7th 1969, p.11.
52. Detail from article in 'The Scotsman', October 9th 1968, p.10.
In addition to the formation of temperance societies in Scotland there were signs of a legislative reaction to the problem of drunkenness. The Home-Drummond Act of 1828 reaffirmed control of the retail trade by the granting of certificates and for the first time attached the condition to the licence that holders should not sell drink during the hours of divine service. Due to this condition being interpreted in the courts as giving permission for public houses to open on Sundays—something which had hitherto been barred by the common law of Scotland on sabbath observation—except during the hours of divine service, the effect of the act was to curtail rather than strengthen magistrates' powers. Although local regulations were used by reforming magistrates to control hours of opening, it was not until 1854 that the retail trade was brought under stricter control. The Forbes-Mackenzie Act abolished the system of selling liquor in grocers' shops for consumption on the premises, closed all public houses, except hotels, between 11 pm. and 9 am. and ended the sale of liquor on Sundays except in hotels, and then only to lodgers and bona fide travellers. Although hailed as a success and described as "the most important landmark in the history of temperance legislation in Scotland" its effect in curbing the number of retail traders and whisky consumption was doubtful. The number of retail licences had in fact been declining since 1829 when 17,371 licences were issued, perhaps suggesting that the rise in whisky consumption after 1823 was not as marked as the excise figures suggested. Whisky consumption was already falling before the Act came into effect because of the duty increase in 1853 and the downswing in the trade cycle. Consumption continued to fall after 1854 but it seems more reasonable to attribute this to the duty increases which hoisted excise duty from 4/8 in 1853 to 10/- in 1860. Still, as the Board of Inland Revenue commented about the Act:

"...its provisions are so restrictive, that unless there had been a change in the habits of the classes, particularly the middle classes, who have an influence on legislation, such provisions could never have become law, nor have been carried out by the Executive." 57.

53. 9 Geo IV c.58.
55. The Licensing (Scotland) Act 1853 (16 & 17 Vict, c 67).
56. S. Wechle, op.cit. p.97.
The "altered habits of Scotchmen" might, in the long run, do more harm to the whisky market than the duty increases necessary to achieve fiscal unification.

(III) "A BARE TRADE"59 COMPETITION AND INDUSTRIAL STRUCTURE

Describing the illicit distillers in England, the Parnell Commission pointed to one of the great anomalies in the distilling industry:

"that, while the business is carried on by the licensed manufacturers at so extraordinary an expense of machinery and capital, spirits may also be produced by the most simple and accessible means, and at the most trifling expense."

This simple but profound truth was as applicable to the Scottish distilling industry. The industry which attracted such a varied range of people: former smugglers, farmers, landlords, maltsters, brewers, bankers and spirit merchants, and tapped such a wide variety of sources of capital: from banks, family, landed interest and trade credit, assumed a structure of production ranging from the very small to the exceptionally large (See Table 38 A).61.

58. Ibid.
60. 7th Report, p. 37.
61. Sources for Tables 38 (A) and 38 (B):
   For 1817: B.P.P. 1818, Accounts and Papers, Accounts relating to the Distilleries in Scotland, Table No. V, pp.4-6.
### Table 78 (A): Distillers and Output 1817, 1822, 1833

#### Highlands

<table>
<thead>
<tr>
<th>Scale of Output in Gallons</th>
<th>1817</th>
<th>1822</th>
<th>1833</th>
<th>Amount Produced in the Range and (as % of total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 24,999</td>
<td>36 (95)</td>
<td>57 (98)</td>
<td>130 (88)</td>
<td>166,425 (70)</td>
</tr>
<tr>
<td>25,000 - 49,999</td>
<td>2 (5)</td>
<td>1 (2)</td>
<td>16 (10)</td>
<td>356,369 (89)</td>
</tr>
<tr>
<td>50,000 - 74,999</td>
<td>-</td>
<td>-</td>
<td>1 (1)</td>
<td>1,264,368 (64)</td>
</tr>
<tr>
<td>75,000 - 99,999</td>
<td>-</td>
<td>-</td>
<td>1 (1)</td>
<td>71,032 (30)</td>
</tr>
<tr>
<td>100,000 and over</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>562,140 (29)</td>
</tr>
<tr>
<td>Total</td>
<td>38 (100)</td>
<td>58 (100)</td>
<td>148 (100)</td>
<td>237,457 (100)</td>
</tr>
</tbody>
</table>

#### Lowlands

<table>
<thead>
<tr>
<th>Scale of Output in Gallons</th>
<th>1817</th>
<th>1822</th>
<th>1833</th>
<th>Amount Produced in the Range and (as % of total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 24,999</td>
<td>29 (54)</td>
<td>24 (51)</td>
<td>34 (48)</td>
<td>106,248 (6)</td>
</tr>
<tr>
<td>25,000 - 49,999</td>
<td>7 (13)</td>
<td>8 (17)</td>
<td>12 (17)</td>
<td>275,769 (13)</td>
</tr>
<tr>
<td>50,000 - 74,999</td>
<td>9 (17)</td>
<td>5 (11)</td>
<td>9 (13)</td>
<td>304,166 (8)</td>
</tr>
<tr>
<td>75,000 - 99,999</td>
<td>4 (7)</td>
<td>4 (8)</td>
<td>4 (5)</td>
<td>504,054 (26)</td>
</tr>
<tr>
<td>100,000 and over</td>
<td>5 (9)</td>
<td>6 (13)</td>
<td>12 (17)</td>
<td>305,108 (15)</td>
</tr>
<tr>
<td>Total</td>
<td>54 (100)</td>
<td>47 (100)</td>
<td>71 (100)</td>
<td>662,787 (37)</td>
</tr>
</tbody>
</table>

#### Limits of Range:

- **Highlands**
  - Upper: 43,208, 43,581, 87,012
  - Lower: 324, 632, 166

- **Lowlands**
  - Upper: 164,760, 185,491, 395,763
  - Lower: 260, 617, 617

**Notes:**

1. The figures for 1817 and 1822 are for the production of malt and grain whisky. Those for 1833 are for malt whisky only. In 1833 there were at least another 11 grain distilleries. All were located in the Lowlands and 8 of them had outputs of over 100,000 gallons in a range from 106,154 gallons to 514,042 gallons.

2. In 1817 the range of output for the 5 Lowland distilleries over 100,000 gallons was from 106,154 gallons to 184,760 gallons. In 1822 for 6 distilleries it was 101,217 to 185,491 gallons. In 1833 for 12 Lowland distilleries it was 101,994 to 395,763 gallons.
In Table 38 (A) the licensed producers in the Highlands and the Lowlands have been grouped according to the size of their outputs in 1817, 1822 and 1833. The Table shows the number of distilleries in each output range, the percentage that this constituted of the total number of distilleries, the total amount produced by each group and the percentage that this contributed to the total industry output in the Highlands and Lowlands.

Taking an output of less than 25,000 gallons as covering small scale production, it can be seen that the Wallace Commission's aim of encouraging "men of little capital to set up small distilleries" was indeed remarkably successful. Even after splitting the industry into its Highland and Lowland sections in both areas the number of small distilleries increased after 1823. Whilst this result was intended in the Highlands, the concurrent increase in the Lowlands reversed after 1823 the previous trend towards the elimination of the small scale distiller. Despite this revival it was in the Highlands that small scale production predominated. In 1817 all but two of the thirty-eight Highland distilleries had outputs of less than 25,000 gallons and by 1822 when there were fifty-eight distilleries, only one distilled over 25,000 gallons. Although by 1833 eighteen Highland distilleries had outputs over 25,000 gallons, small scale production remained the dominant characteristic and the range of production extended from the trifling 166 gallons distilled by John McDonald & Co. of Caithness to the enormous 87,042 gallons produced by Andrew Bannerman of Tullibardine (Perth Collection). If the range of output of less than 25,000 gallons is further sub-divided (Table 38 (B)) the extreme smallness of many of the new licensed distilleries in the Highlands is further emphasised. So far as the contribution to total output is concerned it can be seen from Table 38 (A) that although the bulk of Highland

---

62. The figure of 25,000 gallons is taken as a yardstick in preference to an average because (i) over a period of sixteen years an average would be misleading, (ii) over such a wide range of output an average would not be very meaningful, and (iii) it accords with distillers' own descriptions of their output. The figures for output are best quoted within ranges because capacity could be altered with striking ease in the distilling industry.

63. 7th Report, p. 56.
TABLE 38 (B): SMALL SCALE PRODUCERS

<table>
<thead>
<tr>
<th>Scale of Output in Gallons</th>
<th>Number of Distilleries in the Range</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Highland 1817</td>
</tr>
<tr>
<td>0 - 4,999</td>
<td>25</td>
</tr>
<tr>
<td>5,000 - 9,999</td>
<td>4</td>
</tr>
<tr>
<td>10,000 - 14,999</td>
<td>4</td>
</tr>
<tr>
<td>15,000 - 19,999</td>
<td>3</td>
</tr>
<tr>
<td>20,000 - 24,999</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>36(95%)</td>
</tr>
</tbody>
</table>

spirit continued to come from small producers (64% in 1833) an increasing proportion was coming from larger distilleries.

The contrast with the situation in the Lowlands could not have been greater. In the Lowlands the number of small-scale distilleries increased between 1817 and 1833 but by the latter date they no longer constituted a majority, and in terms of total industry output they were a much less significant section than in the Highland industry producing a mere 8% of total output in 1833. From 1817 to 1833 the number of very large producers (over 100,000 gallons) in the Lowlands increased and by 1833 they turned out 58% of total output. The statistics for 1817 and 1822 do not distinguish between malt and grain whisky production but in 1833 there were at least eleven grain distilleries. The smallest grain distiller, Thomas Spears of Leith produced 36,157 gallons and the largest, James Haig of Lochrin 514,042 gallons. Of the eleven grain distilleries only three distilled less than 100,000 gallons. Their exclusion from the 1833 column in the table means that the role of the large-scale Lowland distillery is accordingly understated.

Whilst the need to curb illicit distilling dictated the policy of encouraging the small producer, doubt has already been cast on the ability of the small distiller to survive in a competitive environment. This doubt about the viability of the small
distiller and the stability of the industrial structure in the long-term is reinforced by examining the number of licensed distillers in the industry after 1823. Graph 12 (above, page 181) shows the number of licensed distillers and rectifiers in Scotland between 1815 and 1905. As there were seldom more than a dozen rectifiers in Scotland, the bulk of the figures is made up of distillers. By the criterion of the number of distillers, the picture that presents itself is one of a declining industry after 1825. In each decade down to 1870 the number of licensed distillers in Scotland fell.

When did the fall occur? Table 39 lists the changes in the number of licensed distillers and rectifiers in Scotland between 1822 and 1870.

**TABLE 39: CHANGES IN THE NUMBER OF LICENSED DISTILLERS AND RECTIFIERS IN SCOTLAND (1822-1870) 64.**

<table>
<thead>
<tr>
<th>Year</th>
<th>Change</th>
<th>Total</th>
<th>Year</th>
<th>Change</th>
<th>Total</th>
<th>Year</th>
<th>Change</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1822</td>
<td>-17</td>
<td>136</td>
<td>1840</td>
<td>-2</td>
<td>215</td>
<td>1860</td>
<td>-2</td>
<td>134</td>
</tr>
<tr>
<td>1823</td>
<td>+20</td>
<td></td>
<td>1841</td>
<td>-17</td>
<td></td>
<td>1861</td>
<td>-1</td>
<td></td>
</tr>
<tr>
<td>1824</td>
<td>+42</td>
<td>336</td>
<td>1842</td>
<td>-16</td>
<td></td>
<td>1862</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1825</td>
<td>+158</td>
<td></td>
<td>1843</td>
<td>+4</td>
<td></td>
<td>1863</td>
<td>-1</td>
<td></td>
</tr>
<tr>
<td>1826</td>
<td>-64</td>
<td></td>
<td>1844</td>
<td>+10</td>
<td>178</td>
<td>1864</td>
<td>-2</td>
<td></td>
</tr>
<tr>
<td>1827</td>
<td>-15</td>
<td></td>
<td>1845</td>
<td>-2</td>
<td></td>
<td>1865</td>
<td>+1</td>
<td>131</td>
</tr>
<tr>
<td>1828</td>
<td>-6</td>
<td></td>
<td>1846</td>
<td>+5</td>
<td></td>
<td>1866</td>
<td>+1</td>
<td></td>
</tr>
<tr>
<td>1829</td>
<td>+10</td>
<td></td>
<td>1847</td>
<td>-2</td>
<td></td>
<td>1867</td>
<td>-4</td>
<td></td>
</tr>
<tr>
<td>1830</td>
<td>-3</td>
<td>253</td>
<td>1848</td>
<td>-6</td>
<td></td>
<td>1868</td>
<td>-1</td>
<td></td>
</tr>
<tr>
<td>1831</td>
<td>-10</td>
<td></td>
<td>1849</td>
<td>-1</td>
<td></td>
<td>1869</td>
<td>-2</td>
<td></td>
</tr>
<tr>
<td>1832</td>
<td>-7</td>
<td></td>
<td>1850</td>
<td>-7</td>
<td>167</td>
<td>1870</td>
<td>0</td>
<td>126</td>
</tr>
<tr>
<td>1833</td>
<td>0</td>
<td></td>
<td>1851</td>
<td>-1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1834</td>
<td>-3</td>
<td>237</td>
<td>1852</td>
<td>-7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1835</td>
<td>-2</td>
<td></td>
<td>1853</td>
<td>-10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1836</td>
<td>-6</td>
<td></td>
<td>1854</td>
<td>no figures</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1837</td>
<td>+4</td>
<td></td>
<td>1855</td>
<td>-4</td>
<td>145</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1838</td>
<td>-12</td>
<td></td>
<td>1856</td>
<td>-1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1839</td>
<td>-6</td>
<td></td>
<td>1857</td>
<td>-8</td>
<td></td>
<td>1858</td>
<td>+2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1859</td>
<td>-2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

64. Notes: (1) Increase; (2) Decrease, compared to previous year.
At first, between 1822 and 1825 the number of licensed distillers increased sharply. An increase of 220 licensed distillers brought the number in the industry up from 116 in 1822 to 336 in 1825. There then followed what might be called an economic 'massacre of the innocents'. The increase in duty in 1825, the setback in the English market and the decline in home consumption in 1826 thinned out 85 distillers from the trade between 1826 and 1828. The recovery in consumption after 1826 engendered enough optimism by the end of the decade for numbers to increase by 10 in 1829. In the 1830s the decline continued. With the exception of 1833 when there was no change in the numbers of licensed distillers, and 1837 when there was an increase of four, each year saw fewer and fewer distillers. An increase in duty in 1830, a subsequent fall in consumption between 1830 and 1832, and relatively weak recovery to 1836 brought the number of distillers down to 231. The last two years of the 1830s and the first three of the 1840s saw an acceleration in decline. Numbers fell by 53 over these five years. Although consumption had been falling from 1836 and the fall was hastened by the duty increase in 1840, the fall in the number of distillers was more severe than was accountable by this factor alone. Recovery in spirit consumption set in after 1843 bringing with it an increase in the number of licensed distillers in 1843, 1844 and 1846 but the continued upswing in consumption to a peak in 1852 did not prevent a further slump in the number of distillers. Fiscal harmonisation and the increased duty in 1860 lowered Scottish consumption and in 1861 further falls in the number of distillers left 133 in the trade. Despite the recovery in consumption after 1861, numbers continued to fall except in 1865 and 1866 and by 1870, the low point for the century, there were only 126 distillers in Scotland.

In an industry where output varied over such a wide range simply to plot the changing industrial structure by the number of distillers is not very satisfactory. Neither is an explanation for the decline based solely on duty changes, falling consumption and
MAP 9: Number of Distilleries in Scotland (1863)
NUMBER OF LICENSED DISTILLERIES 1863

\[ d \] represents one distillery
cyclical fluctuations. Numbers are anonymous and general changes in demand influenced the whole industry. What is really wanted is information about the type of distiller who failed in the face of these circumstances and equally, the nature of the distillers who overcame these problems. How much more specific can the picture of industrial decline be made?

In the first place, in which areas did the fall occur? In the absence of detailed excise returns it is not possible to map the distribution of the industry in each decade down to 1870. However, in 1864, almost at the nadir of the long-term fall, Charles Tovey in his book "British and Foreign Spirits"65 numbered the distilleries in Scotland by their excise collections. Map 9 is based on his figures. His figures are not unambiguous. He mentions for example, that in 1863, 128 distilleries were entered for production but actually includes 139 distilleries in his list. Also the excise collections in 1863 were not contiguous with those of 1833. Stirling seems to have become the main collection point for the distilleries in Fife, whilst Dundee and Brechin had replaced Montrose. In the map, the larger number of distilleries (139) is plotted. Whilst this has the effect of lessening the fall in the number of distilleries, it also accords with the practice of distillers in closing temporarily when times were bad. A silent distillery may not have been earning money, but equally it was loosing none. In an old distillery capital costs were long written off, repairs and maintenance could be carried out, and production easily restarted if conditions improved. In this sense 'capacity' was a relatively flexible concept in distilling.

With these qualifications in mind, what picture emerges from the map? Compared to 1833 all collections except Dumfries and Montrose (now composed of two collections, Brechin and Dundee) had lost distilleries. Losses were not, however, evenly distributed throughout the country (Table 40).

65. C. Tovey, British and Foreign Spirits (1864), p. 358.
Argyllshire (both North and South) still contained the largest number of distilleries as in 1833, but it had lost 13 of its distilleries. Perth, the collection which like Argyll had so impressed excise officers as an example of the beneficial effects of the 1823 reforms, had lost most. Twenty-six of its forty distilleries had gone by 1863. After Perth, Aberdeen and Haddington witnessed the next largest fall. Two-thirds of the distilleries in Aberdeen had disappeared and in Haddington only one of the seventeen distilleries in 1833 remained. Predominantly urban collections had fared little better. Edinburgh had lost two of its four distilleries and Glasgow thirteen of its twenty-four.

For four collections, Aberdeen, Elgin, Inverness and Perth the picture of industrial decline can be made a little more specific. By comparing the scale of output in 1833 of the distilleries surviving in 1863, with the scale of output of all distilleries in the collection of 1833, an indication can be given of the type of distillery which survived.

**TABLE 40: DECLINE IN THE NUMBER OF DISTILLERIES BETWEEN 1833 AND 1863**

<table>
<thead>
<tr>
<th>Collection</th>
<th>Numbers</th>
<th>Collection</th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aberdeen</td>
<td>16</td>
<td>Glasgow</td>
<td>13</td>
</tr>
<tr>
<td>Argyll (North &amp; South)</td>
<td>13</td>
<td>Haddington</td>
<td>16</td>
</tr>
<tr>
<td>Ayr</td>
<td>6</td>
<td>Inverness</td>
<td>5</td>
</tr>
<tr>
<td>Caithness</td>
<td>4</td>
<td>Linlithgow</td>
<td>5</td>
</tr>
<tr>
<td>Dumfries</td>
<td>0</td>
<td>Perth</td>
<td>26</td>
</tr>
<tr>
<td>Edinburgh</td>
<td>2</td>
<td>Stirling</td>
<td>5</td>
</tr>
<tr>
<td>Elgin</td>
<td>10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Argyllshire (both North and South) still contained the largest number of distilleries as in 1833, but it had lost 13 of its distilleries. Perth, the collection which like Argyll had so impressed excise officers as an example of the beneficial effects of the 1823 reforms, had lost most. Twenty-six of its forty distilleries had gone by 1863. After Perth, Aberdeen and Haddington witnessed the next largest fall. Two-thirds of the distilleries in Aberdeen had disappeared and in Haddington only one of the seventeen distilleries in 1833 remained. Predominantly urban collections had fared little better. Edinburgh had lost two of its four distilleries and Glasgow thirteen of its twenty-four.

For four collections, Aberdeen, Elgin, Inverness and Perth the picture of industrial decline can be made a little more specific. By comparing the scale of output in 1833 of the distilleries surviving in 1863, with the scale of output of all distilleries in the collection of 1833, an indication can be given of the type of distillery which survived.

**TABLE 41: SCALE OF OUTPUT IN 1833 OF MALT DISTILLERIES SURVIVING IN 1863/64; COMPARED TO ALL DISTILLERIES IN THE COLLECTION**

<table>
<thead>
<tr>
<th>Scale of Output in Gallons</th>
<th>Number of Distilleries in the Range</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Aberdeen</td>
</tr>
<tr>
<td></td>
<td>Elgin</td>
</tr>
<tr>
<td></td>
<td>Inverness</td>
</tr>
<tr>
<td></td>
<td>Perthshire</td>
</tr>
<tr>
<td></td>
<td>All Survivors</td>
</tr>
<tr>
<td></td>
<td>All Survivors</td>
</tr>
<tr>
<td></td>
<td>All Survivors</td>
</tr>
<tr>
<td></td>
<td>All Survivors</td>
</tr>
<tr>
<td>0 - 4,999</td>
<td>7</td>
</tr>
<tr>
<td>5,000- 9,999</td>
<td>7</td>
</tr>
<tr>
<td>10,000- 14,999</td>
<td>2</td>
</tr>
<tr>
<td>15,000- 19,999</td>
<td>2</td>
</tr>
<tr>
<td>20,000- 24,999</td>
<td>2</td>
</tr>
<tr>
<td>25,000 and over</td>
<td>0</td>
</tr>
</tbody>
</table>
As Table 41 shows, the heaviest casualties were amongst the small-scale distilleries, and in general the chances of survival increased with size. Not always though for there were some notable exceptions. For example, in the Perth collection neither of the two distilleries with outputs of over 25,000 gallons survived. The casualties included Tullibardine distillery which had produced more malt whisky than any other in the Highlands in 1833. Although the same comparison cannot be made for other collections, it is clear that whilst size may have enhanced the chances of survival, it did not guarantee success. Some of the largest malt and grain distilleries in Scotland in the 1820s and 1830s were located in the Haddington collection but by 1863 there was only one distillery in the collection, and the great distilling families like the Dunlops and the Aitchisons, who had figured so prominently at the Parliamentary enquiries were gone from the trade.

Even if size did not guarantee success there is no doubt that as the number of distillers declined, the average size of output in the remaining distilleries increased (Table 42).

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of (1) Distilleries</th>
<th>Total Quantity Distilled (000 pf. gns)</th>
<th>Average Quantity Distilled (pf. gns.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1825</td>
<td>336</td>
<td>8,225</td>
<td>24,479</td>
</tr>
<tr>
<td>1830</td>
<td>258</td>
<td>9,881</td>
<td>38,306</td>
</tr>
<tr>
<td>1835</td>
<td>237</td>
<td>9,133</td>
<td>38,535</td>
</tr>
<tr>
<td>1840</td>
<td>215</td>
<td>8,822</td>
<td>41,032</td>
</tr>
<tr>
<td>1845</td>
<td>178</td>
<td>9,419</td>
<td>52,915</td>
</tr>
<tr>
<td>1850</td>
<td>167</td>
<td>11,638</td>
<td>69,688</td>
</tr>
<tr>
<td>1855</td>
<td>145</td>
<td>11,284</td>
<td>77,820</td>
</tr>
<tr>
<td>1860</td>
<td>134</td>
<td>13,312</td>
<td>99,343</td>
</tr>
<tr>
<td>1865</td>
<td>131</td>
<td>14,503</td>
<td>110,709</td>
</tr>
</tbody>
</table>

So far the following characteristics of the Scottish distilling industry after 1823 have been outlined: the initial increase and subsequent decline in the number of licensed distillers, the timing and location of the decline, and the tendency towards a larger

66. Note to Table 42: (1) includes rectifiers as well which has the effect of understating the increase in the average quantity distilled. Source: G.B. Wilson, op.cit. Tables 4 and 23, App. F.
scale of production. Before attempting to explain these features two other related developments which affected the industry must be discussed.

As Graph 8o (above, page 137) shows, production in Scotland was well in excess of consumption. At first sight this looks like chronic and perpetual overproduction. The gap, which widened after 1823, was almost certainly due to two factors. The first was the new facility for depositing spirits in bond without paying duty. One vital piece of information in analysing the effect of this concession is however missing: the changes that took place in the level of stocks from year to year. Not until 1870 are figures available for the level of stocks held in warehouses. In that year 6.448 m.p.g. of spirits were in bond in Scotland, over 1 million gallons more than the 5.364 m.p.g. consumed in Scotland. Although most distillers pointed to the help which duty free bonding gave them in economising on working capital there was in general very little discussion about the role of stocks in the industry. The evidence from bankruptcy papers suggests that distillers regarded bonding simply as an easy means of holding whisky until a buyer could be found. Although David Lamb, the manager of Guthrie, Martin & Co. distillers in Brechin, did point out to the Parnell Commission that "North Country whisky in particular requires to be kept some time before it is reckoned fine," it was not until later in the century, probably from about the 1850s, that the improvement which spirit underwent through ageing was generally recognised and production for stock became a quite deliberate activity.

The second factor which accounts for the gap between production and consumption was that part of the output of Scottish distilleries was shipped to England. This was the long standing trade in grain spirit for rectification supplied by the Lowland distillers. Again, there are no statistics for this trade until 1860.

68. See Tovey's comments on immature whisky being sold in England, op. cit. p. 150.
GRAPH I3: United Kingdom - Quantities of Spirits Distilled and Charged for Consumption (1820 - 1874)
Million Proof Gallons

British Spirits:
Quantities distilled
Quantities charged for consumption
and Exported

UNITED KINGDOM

1820 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 74

2.5 5.0 7.5 10.0 12.5 15.0 17.5 20.0 22.5 25.0 27.5 30.0 32.5 35.0 37.5 40.0 42.5 45.0

Quantities distilled
Quantities charged for consumption
and Exported
except for the one year, 1833, when 2.575 m.p.g. of Scottish spirit were sold in England. The difference between Scottish spirit production and consumption in 1833 was 3.158 m.p.g. so that shipments to England accounted for 81% of the difference. One factor which had helped to keep this trade in the hands of the large distillers was the absence of any provision for duty-free warehousing in the English excise system. In 1848 the right to warehouse spirits free of duty was extended to England easing the financial problems of Scottish distillers and merchants selling in England. The effect of this on the relationship between production and consumption in the United Kingdom as a whole can be traced on Graph 13 which shows the widening gap between the two after 1848. Although Graph 13 suggests that production and consumption were in remarkably close harmony before 1848 such a conclusion would be misleading. The fragmentation of the U.K. spirit market both because of the different levels of excise duty and the different types of spirit consumed means that the figures bear little relationship to the circumstances of the individual distiller. What mattered to him was the market situation for the type of spirit he was making. It was here that the second development affecting the Scottish industry arose.

Malt whisky "long established by the prevailing taste as the national beverage" of Scotland received a boost with the introduction of the malt drawback. As the aim of the drawback had been to encourage "men of little capital" to establish distilleries it had not been the intention to extend the drawback to the Lowland distilleries "in which as much malt spirits have been made in three months as could have been made by nearly a hundred of the small Highland distilleries in the same time."

Legislative intentions notwithstanding, a movement away from the production of grain spirit took place in the Lowland industry. As large Lowland distillers like Archibald Dunlop pointed out in the 1830s "there is very little raw grain spirits sold in Scotland now", and this was despite the

69. II and I2 Vict., c.122.
70. 7th Report, p. 56.
lower price of grain whisky. Grain whisky that was being produced was sold either for rectification in England or for mixing with malt whisky. Up until 1830 both malt and grain distillers shared a common pot still technology. Section A of Table 43 covering pot still output shows the fall in grain spirit production as the demand for malt whisky increased.

**TABLE 43: SCOTLAND - MALT AND GRAIN WHISKY PRODUCTION BY TYPE OF STILL (1828 - 1860)** 72.

<table>
<thead>
<tr>
<th>Year</th>
<th>Pot Still</th>
<th>Patent Still</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Malt</td>
<td>Grain</td>
</tr>
<tr>
<td>1828</td>
<td>4.822</td>
<td>4.208</td>
</tr>
<tr>
<td>1830</td>
<td>5.704</td>
<td>3.890</td>
</tr>
<tr>
<td>1835</td>
<td>5.706</td>
<td>2.849</td>
</tr>
<tr>
<td>1840</td>
<td>5.816</td>
<td>2.457</td>
</tr>
<tr>
<td>1845</td>
<td>6.135</td>
<td>1.207</td>
</tr>
<tr>
<td>1850</td>
<td>6.203</td>
<td>0.148</td>
</tr>
<tr>
<td>1855</td>
<td>4.704</td>
<td>0.051</td>
</tr>
<tr>
<td>1860</td>
<td>5.018</td>
<td>nil</td>
</tr>
</tbody>
</table>

During the 1830s the development of the patent Coffey still gave the distillers a new method of making grain whisky cheaply and in large quantities. As section B of Table 43 shows, it was not until the 1840s that the patent still made a significant impact on the whisky market and its development will be discussed in Chapter Six. The economics of switchover from grain to malt whisky under the impact of the malt drawback provides some of the answers to the changing characteristics of the Scottish industry between 1823 and the appearance of the Coffey Still.

How then is the decline in the number of distilleries to be explained? In 1831 Archibald Dunlop told the Select Committee on the Malt Drawback that:

72. Source for Table 43: B.P.P. 1908-9, The Royal Commission on Whisky and Other Potable Spirits, App. T. Note (1) in 1855 all raw materials were made duty free and there was a substantial amount of experimentation with a variety of raw materials. The figure of 6,840 m.p.g. includes 3,861 m.p.g. of spirit made from molasses and 0.523 m.p.g. made from sugar. Both may have been for industrial rather than potable use.
"...the improved system raised a competition in the trade that has not allowed it to be so profitable to the manufacturer as the licence system was, and which has not yet subsided."  73.

To the same Committee, John Harvey of Yoker distillery said "this speculation has been long of curing itself in our trade; I do not know when it will come about, but it must cure itself, or the distiller will be ruined." 74 He also stated that "there has scarcely been any profits since 1825 in Scotland." Just as they were certain about the unprofitable state of the trade, so the large distillers were sure about where the blame lay:

"I have seen very frequently in the trade that some of the very smallest distillers have often annoyed us and kept down the price of spirits more than the large distillers, as a large distiller has a large stake, but a small one has not, and he will go on and has done, and a small quantity of spirits might keep the market down a whole year." 75.

Undoubtedly this analysis contained a grain of truth. With more capital and greater access to trade credit the large distiller could afford to hold back from the market when spirit prices fell. For the small farmer-distiller, whisky was a cash crop and getting it sold was essential to his survival. James McLaren, a Scottish excise officer showed acute awareness of the small distiller's dilemma:

"I do not think the profit is very great, there are so many of them in the business, and so many of them poor, that they are obliged to come into the market to raise money, and perhaps sell their goods cheaper than they can afford: but if they escape bad debts, I am of opinion the price they get for their spirits just now may pay them, but only a bare trade." 76.

Here was no exercise of economic choice, but the harsh necessity to enter the market and take what it offered. Lack of alternative opportunities had pushed many into illicit distilling before 1823 and only the reduction of duty made them become licensed. The duty

75. B.P.P. 1831, Vol VII, Report from the Select Committee on the Use of Molasses in Brewing and Distilling, p. 79.
76. 7th Report, App. 101, p. 302.
increases in 1825 and 1830 pushed some of these back into their old ways and the brief resurgence of illicit distilling in the early 1830s reflected their inability to compete in the licensed industry. These duty increases also affected the profits in the licensed industry for with the supply of whisky growing faster than consumption it proved impossible to pass the duty increases on to the consumer. In this sense distillers could justifiably talk about bearing the burden of duty increases.

An explanation for the fall in the number of licensed distilleries must almost certainly begin then with the 'unwisdom' of fiscal policy, but do spirit duty increases provide the whole explanation?

Spirit duty was but one variable in the distiller's balancing equation between licensed and illicit production. The level of grain prices and lack of alternative economic opportunity also entered the equation. So too did all the weaknesses of the illicit distiller's method of production: the low yield of spirit, the waste of spent grains, the uneven quality of the spirit and poor quality distilling equipment. In a competitive environment these were formidable handicaps even without allowing for "the want of pecuniary means" which drove small distillers into the market. Although the long run viability of the small distiller was suspect for these reasons it was also true that the 1823 reforms radically altered the competitive position between large and small distiller. From a reconstruction of the cost figures given by two distillers, John Harvey of Yoker and John Beith of Campbeltown to the Select Committee on the Malt Drawback, a comparison between the economics of large and small scale malt whisky production in Highland and Lowland locations can be made.

What were the circumstances of the two men? John Harvey, following in his father's footsteps, became a distiller in 1806. He

77. 7th Report, App. 120, p. 345.
79. 7th Report, App. 26, p. 149.
80. Ibid, at pages 116 and 123.
owned Yoker distillery which was located six miles north-east of Glasgow and was about "1½ miles to the Clyde by canal". He had distilled both malt and grain whisky at one time but following the introduction of the malt drawback confined himself to making malt whisky. Through his sister and brother, who owned and managed Port Dundas distillery, he retained an interest in grain distilling although the consumption of grain whisky was, he thought, "falling off very much." The impetus given to malt whisky production by the drawback had persuaded him to erect additional malt barns at Yoker; an investment which he feared would be worthless if the malt drawback was removed. Barley for malting came from Dumfries, Montrose and Ireland. He had also bought foreign barley, but this and Irish barley he did not consider as good as home grown for malting. Despite his malting facilities he bought some malt in bulk from outside suppliers at a cost of 53/4 per quarter (p.qr.) almost 7/- less than it cost him to make it. Once the malt had been mashed he worked from a gravity of 50°, not the lowest that was permitted by the 1823 Act, but lower than had been allowed before 1823. Good malt he reckoned as yielding 2 gallons of spirits per bushel or 16 gallons p.qr., and from his 3 wash and 3 low wines stills he distilled between 115 and 120,000 gallons of malt whisky per year. An output of this size needed 18 men, 5 of whom were employed in the malt houses. Most of his whisky went to the Glasgow market where it sold at 6/2 per proof gallon, but he also had sales of about 10,000 gallons a year in Ireland.

John Beith of Campbeltown had been only five years in distilling, but by 1831 he possessed "three very small works" which together produced between 20 and 25,000 gallons of malt whisky; an output about one-sixth that of Harvey. Where Harvey made about 3,000 gallons in a period, 81 Beith only made 500 gallons, but was certain that "small works make the best whiskey". Despite the presence in Campbeltown of malsters, he made all his own malt using bere from Argyllshire and Ireland. This bere malt gave him a yield of 12

81. In the distilling industry a period is the time taken to brew and distil a quantity of grain. Excise law prohibited working on a Sunday and the rest of the week was normally distributed Monday to Thursday in brewing and Thursday to Saturday distilling.
gallons per quarter; 4 gallons less than Harvey got from barley malt. He dried his malt with turf but his stills were fired by coal which had to be brought into Campbeltown. Like Harvey, nearly all Beith's whisky went to Glasgow but it sold for 8/- per proof gallon, substantially higher than Harvey's.

Columns (a) and (b) present the cost of production for these two distilleries.

### TABLE 44: COST OF PRODUCTION OF MALT WHISKY (1831)

<table>
<thead>
<tr>
<th></th>
<th>(a) John Harvey</th>
<th>(b) John Beith</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yoker Distillery, Lowland</td>
<td>Campbeltown Highland Malt.</td>
</tr>
<tr>
<td>(1) Grain per qr.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malting barley</td>
<td>36/-</td>
<td>30/-</td>
</tr>
<tr>
<td>Malt duty (barley)</td>
<td>20/8</td>
<td>16/8</td>
</tr>
<tr>
<td></td>
<td>56/8</td>
<td>46/8</td>
</tr>
<tr>
<td>(2) Manufacturing Cost per quarter</td>
<td>3/-</td>
<td>3/-</td>
</tr>
<tr>
<td></td>
<td>59/8</td>
<td>49/8</td>
</tr>
<tr>
<td>(3) Yield of Spirits gallons per qr.</td>
<td>14</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>(4) Cost per Gallon</td>
<td>4/3</td>
<td>3/8</td>
</tr>
<tr>
<td></td>
<td>3/4</td>
<td>4/10</td>
</tr>
<tr>
<td></td>
<td>4/1</td>
<td>3/6</td>
</tr>
<tr>
<td>(5) Add Spirit Duty per gallon</td>
<td>3/10</td>
<td>3/10</td>
</tr>
<tr>
<td></td>
<td>3/10</td>
<td>3/10</td>
</tr>
<tr>
<td></td>
<td>3/10</td>
<td>3/10</td>
</tr>
<tr>
<td></td>
<td>3/10</td>
<td>3/10</td>
</tr>
<tr>
<td></td>
<td>3/10</td>
<td>3/10</td>
</tr>
<tr>
<td>(6) Less Malt Drawback per gallon</td>
<td>1/2</td>
<td>1/2</td>
</tr>
<tr>
<td></td>
<td>1/2</td>
<td>1/2</td>
</tr>
<tr>
<td></td>
<td>1/2</td>
<td>1/2</td>
</tr>
<tr>
<td></td>
<td>1/2</td>
<td>1/2</td>
</tr>
<tr>
<td>(7) Transport cost per gn. to Glasgow</td>
<td>1/2</td>
<td>1/2</td>
</tr>
<tr>
<td></td>
<td>1/2</td>
<td>1/2</td>
</tr>
<tr>
<td></td>
<td>1/2</td>
<td>1/2</td>
</tr>
<tr>
<td>(8) Final cost of Production</td>
<td>6/11</td>
<td>6/5</td>
</tr>
<tr>
<td></td>
<td>6/0</td>
<td>6/3</td>
</tr>
<tr>
<td></td>
<td>7/7</td>
<td>6/10</td>
</tr>
<tr>
<td>(9) Price obtained</td>
<td>6/2</td>
<td>3/-</td>
</tr>
</tbody>
</table>

Notes: (i) Labour, fuel, yeast, capital charges, etc. are all included in item (2).
(ii) Figures exclude income from spent grains. Harvey reckoned this as being worth a deduction of 4/- per quarter in item (1).
Some comment on the construction of the table will make the subsequent analysis easier to follow. Both distillers calculated their figures starting with the cost of their major raw material (item 1). In Harvey's case this was barley and it cost him 16/- per quarter more than the bere that Beith used. Bere was recognised both for excise and distilling purposes as a poorer quality grain. It cost less to buy, bore a lower malt duty, and yielded less spirits than barley. Malt duty which the distillers then added was 4/8 per quarter less on bere, so that the difference between the total cost of grain for the two distillers increased from 6/- to 10/8 per quarter, after malt duty was added. Item (2) the manufacturing cost, was stated by both distillers to be 3/- per quarter. This uniformity is surprising in view of the difference in the scale of output of the two distilleries. Without a detailed breakdown of the elements which it must be assumed the distillers included in their manufacturing costs: capital charges, fuel, yeast, and labour, it is not possible to say why this should have been so. As both distillers shared a common pot still technology it is possible that with this batch process capital costs per unit of output were equal, though when the manufacturing cost is spread over the yield of spirits (see below) a slight difference in favour of Harvey emerges. Regardless of what can only be assumed the important point was that in relation to the final cost of production, manufacturing cost was a negligible (but not necessarily unimportant) part of the total. From the cost of grain, malt duty and manufacturing charges the distillers then calculated a cost per gallon (item 4) using the yield they normally obtained; 16 gallons for Harvey and 12 gallons for Beith. Although both distillers gave single figures, the figures have been calculated here using a range of yields. Most distillers admitted fluctuations in yield as the malting quality of grain varied from one purchase and one harvest to another depending on moisture content and storage conditions. Indeed, one simple way of improving yields was by careful purchasing and storage free from vermin and damp. Both distillers then added spirit duty (item 5) to their cost of production. This was

82. The determination of the quality of malting barley is a good deal more complicated than this today, but until the 1900s the commercial valuation of malting barley was determined on the purely physical basis of the appearance and condition of the grain. Ripeness and moisture were the only two variables that entered distillers' calculations.
a practice which did not recognise the economic principle that
the consumer bears the burden of excise duty but it had solid
reasoning in the current condition of the whisky market. Duty
was paid when spirit passed out of bond and the distiller bore
the cost of it until the whisky merchant paid him. Given the
difficulty of passing the burden on to the consumer in the 1830s
the inclusion of spirit duty was legitimate. The drawback on
malt (item 6) was calculated per gallon of spirits produced regard-
less of the raw material (so long as it was home grown) and was
then deducted by the distillers. Transport costs (item 7) were
then included to give (item 8) a final cost of production per
gallon. The last item (9) is the price which the distillers
maintained their spirits were fetching in the Glasgow market. One
element not included is income from the sale of spent grains. In
Campbeltown these were run to waste, but at Yoker Harvey calculated
that the sale of spent grains reduced the cost of grain to him by
4/- per quarter or 3d. per gallon on a yield of 16 gallons. Such
income was one of the advantages of an urban location. Cattle
feeding was an important secondary activity in Lowland distilleries
and even as late as 1887 when the role of distillery fed cattle in
the urban food supply had changed markedly, Yoker distillery was still
renowned for its dairy herd.83 One further calculation is necessary
before analysing the figures. This is the contribution of each
item to the total cost of production (Table 45).

<table>
<thead>
<tr>
<th>Yield of Spirits gns.p.qr</th>
<th>14</th>
<th>16</th>
<th>18</th>
<th>10</th>
<th>12</th>
<th>14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grain</td>
<td>2/7 (37%)</td>
<td>2/3 (35%)</td>
<td>2/- (33%)</td>
<td>3/- (39%)</td>
<td>2/6 (37%)</td>
<td>2/1½ (34%)</td>
</tr>
<tr>
<td>Malt Duty</td>
<td>1/6 (22%)</td>
<td>1/3½ (20%)</td>
<td>1/2 (20%)</td>
<td>1/7 (21%)</td>
<td>1/4 (19½)</td>
<td>1/1½ (18%)</td>
</tr>
<tr>
<td>Manufacturing Cost</td>
<td>2 (3%)</td>
<td>2½ (4%)</td>
<td>2 (3%)</td>
<td>3½ (4%)</td>
<td>3 (4%)</td>
<td>2½ (4%)</td>
</tr>
<tr>
<td>Net Spirit Duty (i.e. less Malt Drawback)</td>
<td>2/8 (38%)</td>
<td>2/8 (42%)</td>
<td>2/8 (44%)</td>
<td>2/8 (35%)</td>
<td>2/8 (39%)</td>
<td>2/8 (43%)</td>
</tr>
<tr>
<td>Transport Costs</td>
<td>½ (neg)</td>
<td>½ (neg)</td>
<td>½ (neg)</td>
<td>1 (1½)</td>
<td>1 (1½)</td>
<td>1 (1½)</td>
</tr>
<tr>
<td>Total Cost</td>
<td>6½/11½(100%)</td>
<td>6½/5(100%)</td>
<td>6½/0½(100%)</td>
<td>7½/7½(100%)</td>
<td>5/10(100%)</td>
<td>6½/2½(100%)</td>
</tr>
</tbody>
</table>

83. A. Barnard, op.cit. p. 41. Barnard reported that the distillery had a
herd of 120 cows and a dairy "where the churns are all driven by steam
power, and the butter is made in the most approved principle. Glasgow
is only six miles off, and the butter is sent there daily, and fetches
the highest price in the market."
Table 45 shows the overwhelming importance of duty in the total cost of production. Taking both malt duty and the net spirit duty (i.e., excise duty minus the malt drawback) together, the percentage of total cost attributable to duty ranged from 60% to 64% with Harvey and from 56% to 61% with Beith. The effect of the two types of duty on the cost of production was not, however, the same. With malt duty a higher yield could offset the duty. Thus as Harvey's yield rose from 14 to 18 gallons malt duty fell from 1/6 (22%) to 1/2 (20%) per gallon. Spirit duty, based on each gallon distilled, was a flat rate charge and could not be offset. Indeed, as the other cost elements fell with rising yields the proportion of total cost taken up by spirit duty increased. The implication of this in relation to changes in the level of spirit duty was important. For the industry as a whole the reduction in spirit duty in 1823 lowered the duty element in total costs. For a brief period distillers had much more scope for influencing their total costs. Once excise duty began to rise again an increasingly smaller proportion of the total cost of production was open to influence by the distillers and competition became limited to a small part of the total price of whisky. Paradoxically, complaints about excessive competition in the 1820s may simply have reflected the distillers' problems in adjusting to this unusual state of affairs in a hitherto highly priced product.

In comparing the significance of the various items in the distillers' costs it is important not to overstate the importance of spirit duty. Precisely because it was a flat rate charge and therefore invariable at any one point in time, it was the other cost items, including the apparently insignificant manufacturing cost, that were sensitive to changes in yield. It was these items — as well as the price the distiller was able to obtain for his spirit — that ultimately influenced the outcome of the competitive struggle.

84. See below, p. 216.
The effect of varying yields, in addition to off-setting malt duty, can be seen from Table 44. As it shows, Beith despite paying less for his grain, paying a lower malt duty and having the same manufacturing cost, had a higher cost per gallon than Harvey because his yield of 12 gallons was less than Harvey's. On the distillers' stated yields of 12 gallons and 16 gallons, their total costs of production came out at 6/10 and 6/5. Beith, the smaller producer was therefore the higher cost producer.

This was something that the malt drawback made little difference to. At first sight it might be thought that because Beith paid a lower malt duty, the malt drawback by being calculated on the number of gallons of spirit produced irrespective of whether the spirit was made from barley malt or bere malt would give Beith a greater advantage. However, at a yield of 12 gallons Beith paid 1/4 per gallon malt duty (Table 45) and received a drawback of 2/6. On 16 gallons yield Harvey paid 1/3½ malt duty per gallon and received 2/6, a negligible difference. Only if the yields of the two distillers had been equal for example, at 14 gallons would the malt drawback have given Beith a greater advantage. So long as the Highland malt distiller had a lower yield than the Lowland malt distiller the influence of the malt drawback on the competitive position of the Highland distiller was slight.

Where the malt drawback was important however, was in the competition between grain and malt whisky. Unfortunately no figures for the cost of grain whisky were stated before the Select Committee on the Malt Drawback but from the known methods of production of the grain distillers, it is possible to construct an example of the cost of production of grain whisky.

The table assumes that the grain distiller was buying barley at the same price as Harvey. In accordance with grain distilling practice, the mash (item 1) only contained 9th qr. of duty paid malt and 8th qr. raw grain, i.e. unmalted barley. Manufacturing costs (item 2) are assumed to be the same as Beith and Harvey,
TABLE 46: COST OF PRODUCTION OF GRAIN WHISKY (1831)

<table>
<thead>
<tr>
<th>Hypothetical Lowlands Grain Whisky</th>
</tr>
</thead>
</table>

(1) Grain per qr. Mixed Grain: *(3/4th qr. duty paid malt) 7/1 (3/4th qr. barley) 24/6 32/7*  
(2) Manufacturing Cost per quarter 3/-  
(3) Yield of Spirits per qr. grain 18  
(4) Cost per gallon 1/11  
(5) Add Spirit Duty (No Malt drawback) 3/10  
(6) Transport cost 1  
(7) Final cost of production 5/10  

though because of the smaller amount of malt that was used in grain distilleries the manufacturing cost would almost certainly have been lower. Malting was a labour intensive process as most of the operations had to be done by hand. At 18 gallons the spirit yield (item 3) again lessens the true competitive advantage of the grain distiller who was usually able to draw at least 20 gallons from his mixed grain mash. Spirit duty (item 5) was the same but no malt drawback was given on mixed grain mash. Transport costs (item 7) are added at the rate of 1d. per gallon, the same as Beith's. Even after calculating these figures so as to give the grain distiller the smallest advantage it can be seen from comparing Table 44 and Table 46 that the grain distiller retained a competitive edge. This would have been much greater if the malt drawback had not existed. Removing the malt drawback (item 6 in Table 44) by adding it to the final cost of production (item 8 in Table 44) gives the following comparative costs at the distillers' stated yields: Beith 8/-, Harvey 7/7 and grain whisky 5/10. With the malt drawback they were: Beith 6/10, Harvey 6/5,
grain 5/10. Consumer preference for malt whisky was mightily aided after 1823 by the malt drawback.

But how important to the small distiller's survival was his higher cost of production? Beith's great advantage over both the Lowland malt and grain distillers was the higher price which his spirit fetched. At 8/- per proof gallon he made a profit, even with his lower spirit yield of 1/2 per proof gallon. On Harvey's own calculations he was selling at a loss with costs of production of 6/5 and a price of 6/2. How are these different prices to be explained?

"Quality is the first recommendation of whiskey, price the second", this had been Woodbine Parish's dictum in 1816 and it seems to have held good in the post-reform period. Consumer belief in the intrinsic virtues of the small still product gave the Highland distiller a premium and a profitable price for his whisky. On the continued existence of this premium as much as on the malt drawback the fate of the Highland distiller hung and it is this which helps to explain the malt distiller's antagonism to the imitations and adulteration of Highland malt whisky by spirit dealers.

What appeared after 1823 was not one single price for whisky but a spectrum of prices for different whiskies and distilleries. At the end of the 1830s there were two legal distilleries in Glenlivet both making "best quality whisky". One was George Smith's at Upper Drumin. The other was at Aucherachan. It had just been enlarged, employed four men and produced 300 gallons of whisky a week with a yield of just over 14 gallons per quarter. The proprietor of Aucherachan also had a distillery in Buchan:

"...but he finds, after the most careful and repeated trials that, with the same hands and materials, he cannot produce a spirit equal to what he obtains in Glenlivet. For the

"latter, of which he never knows what it is to have a stock, there is a demand to all quarters of the world — its fame as well as quality being equal to that of any smuggled whisky. The chief market, however, is among private families, though even the spirit dealers readily allow 6d. per gallon more than for whisky distilled in Buchan." 87.

Even after allowing for parochial chauvinism it was clear that if the small distiller could establish a reputation for his product a premium price gave him a monopoly element which protected him from competition. By carving out, not a section of the mass market, but a share in a more specialised and quality conscious market the small distiller could survive under "the open system". Although the malt drawback was important in enabling the small distiller to overcome his initial weakness, it was not, despite the outcry when it was removed in 1855, vital to his long run success. By 1855 when all raw materials for distilling were allowed duty free and the drawback ended many distillers had already gone from the trade and there was no marked acceleration in decline after 1855 (see Graph 12, page 181). Failure to establish a reputation for quality and a premium price probably accounts for the disappearance of a good many of the distilleries founded after 1823.

(IV) THE HIGHLAND DISTILLER AND HIS MARKET

"There are great exertions made for pushing it abroad."

Simply to say that the Highland distiller had to establish a reputation for quality poses more questions than it answers. What was meant by quality? How could a Highland distiller establish a reputation in Lowland markets?

To some extent the task was already done. Illicit spirits had established a reputation for quality. The Wallace Commission on their visit round the north-eastern districts in 1822 had noted in Perth that illegal spirits were "universally preferred." The superior flavour was attributed to three things: the low gravity of the wash, the slowness of distillation, and the addition of honey. The reformed excise system by allowing the distiller to work from a range of gravities and by basing duty on the quantity of spirits distilled, involved nothing which prevented the smuggler's method of production from being used. By the 1830s legal spirits were said to have improved markedly in quality. Emphasis on the mystique of the smuggler's whisky became an important selling point with Highland malt whiskies. The Glenlivet whiskies were said to be equal in fame and quality to any smuggled whisky. Whisky from Balblair distillery in Rossshire was of "unequalled flavour"; this pre-eminence being attributed to "the use of peat maybe as fuel, or old smugglers secrets." Probably the most important of the smugglers secrets was his slow distillation technique. A direct result of his freedom from the pressures of the old excise system which had forced the Lowland distillers into rapid distilling, this enabled a proper fractionation of the different portions of the spirit to take place. It was the traces of the aldehydes, esters and higher alcohols present in malt whisky which gave it a different flavour. It was the distiller's art to ensure the right proportion of these compounds in his whisky.

89. 5th Report, App. 101, p.324.
90. 7th Report, p. 50.
"There are great exertions made for pushing it abroad": so the Campbeltown distillers told the Parnell Commission.92

The figures for the disposal of Highland malt whisky suggest that these exertions met with some success. Of the 1,002,293 gallons of malt whisky distilled in the Highlands in 1830, 483,803 gallons were being sold in Lowland markets, whilst a small but growing trade was being done in England where just over 14,000 gallons were consumed (see Table 29, page 161). Despite these exertions the local market remained the most important for the Highland distiller and this was one more reason for the decline in the number of small Highland distillers.

How did the Highland distiller approach his market? The survival of some of the papers of the Beauly Distillery Company93 enables the marketing methods of the early licensed distillers to be established. The company, which was founded in 1824, had a short life of just under four years and as one of the casualties its failure also tells something about the conditions facing Highland malt distillers at this time.

The partners in the company were an Inverness businessman called Shepperd and Alexander Fraser the factor for Lord Lovat. Neither took an active part in the running of the business but appointed an experienced distiller, A.H. Hennie as manager; a reliance on Lowland entrepreneurial talent which was not uncommon in the Highland distilling industry. The distillery was of a considerable size. With a wash still of 445 gallons and a low wines still of 255 gallons, it was capable of making about 10 puncheons a week or between 30,000 and 60,000 gallons of whisky a year, and according to the insurance valuations the buildings, plant, machinery and stocks were worth £3,750. Before distilling commenced in April, 1825, the company sought out agents in Edinburgh and Leith. The aim was to find an agent who could guarantee all debts on whisky sales and who would advance two-thirds of the price of whisky shipped to him in cash. In return the agent was to have either a

93. S.R.O. RR.15, 207-209. Subsequent references are taken from 209.
percentage on the amount sold or "so much a gallon". The first spirit dealers approached rejected the offer of the agency:

"...they decline entering into the Arrangement on the principle of Guarantor. I suspected as much as I know the Edinburgh and Leith houses are very averse to guaranteeing." 94.

In a trade prone to bad debts expecting the agent to bear the full risk was unrealistic and Rennie suggested to the partners that they drop the principle. This they agreed to do and Rennie found an agent in Leith, George Thomson, for them. This was in February 1825 and in March, Rennie told Thomson:

"...We are making all possible haste to get into the market, but it will be three weeks or a month yet before we can mash. Everything that I can do, will be done, and no expense spared to make a fine article and of course according to its quality we will expect a price." 95.

The first mash took place in April and by then the company had decided to charge 8/- per 11 over proof gallon; a figure reached after a comparison with the prices which two old established local distilleries, Teaninich and Clynelish, were getting. Teaninich was selling at between 8/6 and 9/- and Clynelish at between 10/- and 12/- so that the new firm was undercutting to attract customers. Hardly started the company had already sacrificed two principles: the guaranteeing of debts and the higher price for quality. Shortly after, their agent Thomson sacrificed a third by accepting bills from dealers instead of cash. Rennie’s annoyance at this was partly offset by the "most excellent sale" which the firm’s whisky was having in the Beauly area. Locally they were getting 8/- and "we are not prepared to sell below that price in the South." 96.

At the end of 1825 two events over which the firm had no control affected the whisky market. Grain prices rose and the company was obliged to put 6d. per gallon on its price and then spirit duty was increased by 4d. Beauly distillery was affected by the

95. ibid, at 5th March 1825.
96. ibid, at 26th October 1825.
general fall in whisky consumption and by March 1826 Rennie was appealing to John Macpherson, who had been appointed agent in Glasgow, for help:

"...Can nothing be done in your market with our article. Our sales here have dwindled away to nothing. From October last up to 1st February we never had 50 gallons at a time in stock, at present we have 2,500...and if some is not disposed of soon we must stop working for want of vessels to hold our stock. Our prices since the change of measure have been 7/9 10 up, and 9/6 11 up, but we mean this week to lower 3d. per gallon..." 97.

The fall in home sales set the company looking for a market in England and through an Inverness merchant, Rennie made contact with John Jamieson a London spirit dealer. The attraction of the London market was not just the need to replace declining home demand:

"...Our demand has hitherto been so great that we have not yet exported any to England, but as I am given to understand that North Country whisky is selling both readily and at high prices, I should have no objections if we can agree upon terms and if you recommend it to make you a small consignment on trial. You may therefore advise me on what terms you are inclined to undertake our agency - present state of your market - and how the business is generally conducted in London - whether the English duty should be paid on shipping here or when landed in London, in short, I will thank you to give me all the information in your power as to the general mode of conducting trade with you..." 98.

"all the information in your power"; it was clear that the company was totally in the dark as to what was expected in the London market and reliance on the agent's advice was going to be great. Still, no doubt the company was displaying courage in taking the risk of trusting an agent merely on the recommendation of a third party. Jamieson agreed to try a few puncheons in the London market and Rennie emphasised the quality of Beauly whisky:

"the Spirit I make is purely from malt and in point of quality is much esteemed in this part. It has I believe undoubtedly the preference of any legally distilled spirits in Invernesshire. It is not remarkable for any particular taste or flavour being rather of a mild silent flavour.

97. ibid. at 15th March 1826.
98. ibid. at 13th February 1826.
"Such as I would think might take in your market it has no past reck gout..." 99.

Quality, obviously, could mean something other than the essential characteristics of the smuggler's product and might vary according to the market. Although the consignment was successfully sold by Jamieson only a small profit was made on the deal. Despite the higher prices obtainable in London, agent's commission and freight charges meant that profit in the English trade was less than in the home market and the company's enthusiasm for the venture accordingly waned.

At home meanwhile, the collapse of the whisky market in 1826 brought with it the familiar pattern of liquidity problems. The first sign of this was when spirit dealers began paying for whisky by bill in an effort to lengthen credit terms. Ronnie, an experienced distiller, was well aware of this ploy: "I know the tricks of the Spirit dealers well, and that is one of them - buying for cash and afterwards paying by bill."100.

In February 1826 George Thomson, the Leith agent stopped payment but "accounts being clear we loose nothing there". This was good fortune, but as sales slumped the inevitable mechanism of contraction asserted itself. As orders stopped, stocks built up and the distiller found himself with no cash coming in and grain bills to be met. This mechanism points to one type of collapse which the excise reforms could do nothing to alleviate. Financial collapse almost inevitably hit the small distiller with the least capital resources, hardest. It probably accounts for the decimation which took place in their ranks. Largely due to the security which the partners of the Beauly Distillery Company could offer the Bank of Scotland in exchange for a cash credit, the distillery survived the 1826 depression.

Despite this the troubles of the fledgling company were not at an end. On a recommendation "by individuals of the highest

99. ibid. at 8th March 1826.
100. ibid. at 21st January 1826.
respect in Edinburgh" the firm appointed a new agent, James Calder, to replace the insolvent Thomson. Dependent for his income on commission Calder was anxious to push Beauly whisky as much as possible. Although commission agreements ensured that the agent's income was commensurate with his activity on the firm's behalf, they also ran the risk that in the hands of an inexperienced agent, consignments of whisky might be given to dealers and retailers of dubious stability. And so in Calder's case it proved to be. Two puncheons which with duty came to £200, "no trifle to lose in these times",101 were despatched by Calder to a Liverpool firm. No payment was ever received. In what seemed to Rennie to be "more like a swindle than anything else",102 a similar amount of whisky was handed over by Calder to an Edinburgh firm who shortly afterwards went into liquidation. After four months the Beauly Distillery Company had lost all confidence in Calder and had stopped employing him. Finishing with Calder could not however undo the damage he had done as Rennie explained to the Edinburgh lawyers brought into tidy up the mess which was Calder's agency:

"...the loss we will sustain by the employment of such an unprincipled fellow is already great and from what I can see will be still more, for I have little hope of any of the Bills running being paid. Of the £557 of Spirits sold; £329 has turned out Bad Debts; £132 still doubtful and only £176 paid!!!" 103.

Later Rennie was to describe Calder as "that vagrant of an agent" and "the most infamous rascal that ever escaped hanging"104 but while venting his feelings no doubt soothed his anger over the debacle, it did little to retrieve the affairs of the firm. Another agent in Edinburgh was appointed, on even more favourable terms to the agent, but by then the financial burden of Calder's bad debts, together with the fact that the distillery was producing at less than half its full capacity and having to cut prices for ready cash, meant the end for Beauly distillery and in April 1828 the firm suspended operations.

101. ibid. at 10th February 1827.
102. ibid. at 24th March 1827.
103. ibid. at 28th April 1827.
104. ibid. at 2nd June 1827.
Not all agencies ended in disaster. George and John Smith of Glenlivet distillery made an agency agreement with the Edinburgh firm of Andrew Usher & Co. in 1844 which lasted to their mutual enrichment until 1919 when the Usher's retired from the whisky trade. Robert Fraser & Co. of Brackla distillery did likewise. Such successes will be examined later, but the declining numbers of distillers in the 1820s and 1830s suggests that failure was more typical than success.

What were the lessons of the Beauly Distillery Company's failure? The first was that the relative isolation of the Highland distiller made him heavily dependent on advice by so-called "respectable individuals" in appointing agents. Without actually being located in the major distribution centres for whisky of Edinburgh, Leith, and Glasgow and being au fait with current trade gossip and rumours, the Highland distiller was acting very much on blind faith. Rennie once described Calder "as totally void of honour as honesty" and there was something more than a smack of shady dealing in Calder's transactions. This was the second lesson. The distilling industry had not long emerged from an illicit background and spirit dealing attracted more than a fair share of dubious characters. New to an abrasive commercial environment, some at least of the Highland distillers fell prey to such individuals. "All the tricks of change alley" was what the Scottish Board of Excise had said "the knowing agents of the Lowland distillers" were capable of, and the Highland distiller probing for a market in the South was prone to exchanging his spirits for bad debts and worthless whisky bills. The emphasis on respectability, reputation and credit-worthiness which was to mark the whisky trade later in the nineteenth century suggests an attempt to rid the trade of its more profligate elements. At the same time the collapse of the Beauly Distillery Company cannot be divorced from the crisis of 1826 in the whisky market. The duty increase and the rise in the grain markets could not be passed on
when consumption fell. Due to its size and the partners’ financial resources the company survived the depression. Its response in seeking sales in England was enterprising but unprofitable and ultimately its fate as with most Highland distillers was bound up with what happened in the home market.

For the Highland distiller this meant reliance on local sales, but given the state of the Highland economy, its poverty, and declining population this was an insecure base for long-run success. The Beauly Distillery Company was not alone in experiencing an unsteady local market. Joseph Mitchell, the Superintendent of Highland Roads, Bridges and Railways, described the attempt of one Highland landlord, Stewart Mackenzie, to retrieve the affairs of his estate through distilling:

"...No doubt Mr. Stewart Mackenzie did many foolish things with the best intentions, in the hope of increasing the revenues of his estates. As an instance he built a large distillery at Stornoway, because peat was convenient and abundant, while he had to import grain, coal, and skilled labour, and export his whisky, for he was undersold in the island by distilleries more favourably situated. Of course this speculation was a great loss, as were also others of a similar nature which I could name. There was little chance of popularity when rigid economy was absolutely required among a population so wretched and low in the scale of civilization..." 105.

Larger landowners than Stewart Mackenzie found that their improvement plans foundered on the same intractable problem. Clynelish distillery was built by the Marquis of Stafford in 1819 as part of his coastal strip resettlement plan at Brora. The first tenant, James Harper started in business with £1,500 in 1820. In seven years he lost £1,000 in distilling. His failure in 1827 106 was put down to bad debts, unsuccessful speculations; "especially making barley purchases at the end of 1825 to the extent of 4,000 bolls of which a greater part was manufactured at a loss on account both of the high purchase price, the inleakage of the grain, and by its being deteriorated by keeping, and also from the price of aqua having declined 25 - 30% in a few months - and an almost total cessation in the demand for spirits in the South Markets."

A man of charitable precepts he was said to have borrowed £50 and pawned his wife's gold watch for "payments to certain poor necessitous labourers in his neighbourhood." The poor might not be able to afford his whisky but they just as surely consumed his capital. Christian charity may have been an unusual contributor to failure, but Highland poverty made much of the post-reform investment in distilleries yet another wasted feature of a wasting economy.

If the fate of the Highland distilling industry after 1823 smacks of failure as much as the rest of Highland economic history a dismal tale should still not be exaggerated. Although the fall in the number of licensed distillers after 1825 suggests a declining industry and although the great wave of distillery construction in the 1820s was never again equalled, there was a substantial number of new distilleries founded in the 1830s and 1840s. An attempt to trace these new distilleries has been made and the bar chart at the bottom of Graph 12 (above page 181) records the numbers. It is based on two sources: Alfred Barnard's book "The Whisky Distilleries of the United Kingdom" published in 1887 after a tour round all of the distilleries in the United Kingdom and the records of Scottish malt Distillers Ltd. 107 The chart records the foundation date of all Scottish distilleries in existence in 1900. Together the two sources give a comprehensive picture, but the chart is only a partial measure of the new entrants to distilling because as Graph 12 shows many distilleries had sunk without trace by the time of Barnard's visit. Still, it shows that despite the overall fall in the number of distilleries, new distilleries were being created. Even in the 1850s and 1860s when fiscal harmonisation severely depressed Scottish whisky consumption there were still people prepared to invest in distilling. Most of these new establishments were pot still distilleries and they included many which were to establish a high reputation in the nineteenth century:

Talisker (1830), Benrinnes (1835), Glenfarclas (1836), Dalmore (1839), Glen Grant (1840) and Rosebank (1840). Some of these will be considered later, meanwhile the 1830s saw a technological change taking place in the Lowland industry which was to radically influence the development of the whole whisky trade.
## CHAPTER SIX

**CONTINUOUS DISTILLATION AND THE COFFEY STILL**

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CHAPTER SIX

CONTINUOUS DISTILLATION AND THE COFFEY STILL

(I) INTRODUCTION

The development which was to profoundly influence the distilling industry not just in Scotland but in the whole of the United Kingdom, was the successful innovation of a still that turned spirit production from a batch process into a continuous one. In the long catalogue of attempts to design a still which would operate continuously, the Coffey still, patented in 1830, stands out as the one which offered the greatest practical advance. Once the Coffey still had been successfully established, two processes for spirit distilling existed in the industry. Today the same two systems exist side by side; there can be few industries whose central processes were set out by the 1830s and have remained substantially unchanged ever since. Despite this interesting feature of the industry surprisingly little information is available about the circumstances surrounding the innovation and its diffusion. Research by other writers based on the business records of the firm which took over the manufacture of Coffey stills has uncovered some of the details, but left many questions tantalisingly unanswered. The initial parts of this chapter rely heavily on their work. At the same time some speculative questions about the circumstances surrounding technological advance in the distilling

3. i.e. methods of distilling. There have of course been changes in malting, mashing and the other ancillary processes.
industry will be posed. As no records have survived for the
distillers who first tried out the Coffey still the answers are
by no means definitive, yet, it still seems worthwhile in view of
the fundamental impact of the Coffey still to pose the questions.
Overall the aims of this chapter are threefold: to sketch in some­
thing of the background to the search for a continuous method of
distilling, to explain the principles of the Coffey still, and to
discuss the relationship between excise control and innovation.

(II) - THE SEARCH FOR A METHOD OF CONTINUOUS DISTILLATION

The goal of securing a method of distilling which would
allow spirit production to proceed continuously was one to which
many people in both Europe and America applied themselves in the
early years of the nineteenth century. Ranked by talent, contrib­
butors to the solution ranged from a man like Edouard Adam who
was variously described as "an illiterate workman" and "an obscure
person, unacquainted with science and ignorant of the art he inten­
ded to improve" to Laurent Solimani, Professor of Chemistry at
Montpellier University. 6 Whatever the nature of their skills, these
men were all attempting to overcome the limitations attaching to the
pot still, the most widely used and accepted distilling vessel.
Given that the principle behind distillation - the recognition of
the differing degrees of volatility of the substances engaged in the
operation - was generally understood, the problem was one of trans­
lating the principle into efficient practice; this may explain why
the talents of the contributors ranged so wide. Empiricism and
practical tinkering in the distillery had as much to offer as pure
science at this stage of development.

6. R. Wilson, op.cit, at 18th October 1962.
PLATE I: ADAM'S STILL

PLATE 2: BERARD'S STILL
The pot still suffered from several challenging weaknesses. It had to be filled, distilled, emptied and re-charged. This delayed the rest of the production process in the distillery, virtually denying any economies of scale which might be had from investing in larger maltings, mash tuns and fermenting backs. With the pot still the first distillation produced a rather weak concentration of alcohol and a second or even third distillation was needed to increase the alcoholic strength. Re-charging and inadequate concentration raised the cost of fuel and labour involved in the distilling process. In addition to the higher costs of production, securing a proper fractionation of the separate portions of the spirit so that the final product was not tainted with too large a proportion of secondary constituents was a difficult task. When poor quality raw materials were used inadequate concentration and fractionation left the spirit marked by the flavour of the raw materials. The fact that the still was heated by fire was also a disadvantage. Raising the contents of the still to boiling point was a slow process. Wear and tear on the still from repeated heating and cooling was high, and there was the ever present danger of spoiling the flavour of the spirits by charring the solid matter in the wash.

In the forty years between 1780 and 1820 a variety of devices were developed aimed at overcoming these difficulties. Argand\(^7\) in 1780 invented the pre-heater. By passing the hot vapours coming off the still through a coil (or worm) immersed in wine instead of water he cut the cost of fuel and the time required to distil a charge. The hot vapours condensed on passing through the coil forming spirit, whilst the wine became heated prior to distillation. In 1801 Adam\(^8\) (See Plate I) added a series of egg-shaped vessels to the neck of the still. These vessels were filled with wine and the vapour coming off the still passed through them. As it did so it carried off some of the alcohol in the wine increasing the strength of the condensate. Final condensation then took place in a pre-heater. Four years later Berard\(^9\) (See Plate II) patented a still with a partial condenser attached. This enabled the

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PLATE III: CELLIER-BLUMENTHAL'S STILL
less concentrated liquid to be condensed in the partial condenser and then returned to the still for re-distillation. The enriched vapour then passed on to a pre-heater where it was finally condensed.

All of these improvements used the traditional pot still as their starting point. As the number of modifications to the traditional design multiplied the equipment became increasingly complex. Of the wealth of devices which other writers have found from examining patents issued at this time many remained ideas on paper only, incapable of practical application because of their very complexity. None amounted to continuous operation and all were heated by fire with the disadvantages that that involved. By about 1810 it seemed that the attempt to adapt the pot still for continuous distillation had run into a blind alley. The way out was found in 1813 by Callier-Blumenthal\(^\text{10}\) (see Plate III) and the route he chose was not based on the pot still. This he discarded entirely using instead a distilling column which acted as an analyser with a rectifying head. The distilling column was placed on top of two boilers and the boilers were filled with wine ready for distillation. On top of the column and linked to it through a pre-heater was a vat containing more wine for distillation. When the wine in the boilers began to boil the warm vapour rose up the distilling column. As it did so it met cold wine descending from the vat. The rising vapour condensed on the descending wine and broke down - or analysed - into the separate portions of spirit. At the same time the heat in the ascending steam carried off alcohol from the descending wine imparting heat to the wine. The most condensed liquid, and the highest strength, was finally condensed or rectified, at the top of the column and in the pre-heater through which the wine flowed. The spirit could then be drawn off at the head of the column. As for the descending wine it was weak in alcohol by the time it reached the boiler at the bottom of the column but any alcohol not distilled by the rising steam would be finally driven off by heating in the boiler. A tap leading from the boiler enabled the spent wine to be run off.

\(^{10}\) See Underwood, Wilson and Nithsdale.
Blumenthal had achieved continuous distillation his still was not free from problems. Direct fire employed in heating made the still difficult to control. Solid matter in the wine tended to block up the distilling column. This made the still less suitable for distilling operations in countries like Britain and Germany where thick grain or potato wash was being distilled. The still was, however, used on a fairly wide scale by French and Belgian wine distillers.

So far the main impetus in the search for a continuous method of distillation had come from France. The period between 1780 and 1820 seems to have been one of extraordinary inventive and adaptive capacity in the French wine distilling industry. The same cannot be said of Britain, where, at least in the second half of the period, there was little attempt to modify the existing still design and search for a system of continuous distillation. Why was this? Did French technology simply fail to transmit across the Channel, perhaps because of war, or did the reason lie in the nature of the distilling industry in Britain? Although the Napoleonic Wars may provide part of the reason in that there was much more active discussion in Britain in the 1820s of the achievements of the French chemists and distillers than there was during the wars; the real reason would seem to lie in the circumstances of the British distilling industry.

The qualification that British distillers made little attempt to modify still designs at least in the second half of the period 1780 to 1820 is important and provides a clue to the answer. The variations in the structure of the distilling industry within the United Kingdom have already been discussed. So far as Scotland was concerned it was shown how distillers, especially in the Lowlands, were very active in experimenting with techniques during the closing decades of the eighteenth century. Most of the enthusiasm for innovation originated in the attempt by the Excise

12. To judge from the evidence given by chemists at the Excise Commissions.
13. See above, Chapter Four.
14. See above, Chapter One.
from 1786 to levy duty on the capacity of the still. This gave
the distiller a considerable incentive to maximise the through-
put of the still and so minimise the duty on each gallon of spi-
rit produced. Although at no time during the existence of the
still capacity duty did Scottish distillers achieve a system of
continuous distillation, pre-heaters and new shapes of still were
very much a feature of this period. After 1800 when the still
capacity duty was dropped this fiscal incentive to innovate dis-
appeared. None of the excise systems between 1800 and the 1823
reforms contained the same obvious reward for innovation. The
failure of the still capacity duty also carried an important
lesson. It showed clearly the clash between technology and con-
sumer preference. Technically, it was perfectly feasible to
design a still which would distil rapidly, but the quality of
the spirit suffered. In the shallow and wide bottomed stills
charring was a much greater risk and proper fractionation of the
spirit was less easily secured. Increasing consumer resistance
and the consequent preference for the illicit distillers' product
contributed to the demise of the still capacity system. Once the
disastrous courtship with the English excise system had been
broken off and the process of excise reform after 1816 begun,
Scottish distillers reacted to the consumer preference for a malt
spirit (which was latterly aided by the introduction of the malt
drawback) by extending their productive capacity within the limits
of the traditional pot still process.

As a technological problem continuous distillation was
a search for a method of producing a highly concentrated and pure
form of alcohol. However, repeated condensation or rectification
robbed the spirit vapour of the majority of the flavouring ele-
ments which were the very factors that made malt whisky so attrac-
tive to consumers. This was one reason why experimentation with
continuous distillation was so noticeably absent from Scotland.
It does not however, provide the whole answer for within the total
British spirit market there were areas where a highly rectified spirit was desired. One was the grain whisky market in Ireland. Irish distillers worked from a mixed mash of barley, rye and oats and subjected the spirit to three distillations producing a strong spirit but one low in secondary constituents. Here a system of continuous distillation might well provide a product satisfactory to consumer tastes. Although for the legal distiller this was a relatively small market, after 1823 legal consumption rose markedly (See Table 47) and offered a favourable stimulus to the search for a method of continuous distillation.

**TABLE 47:** SPIRIT CONSUMPTION  
(Annual Average '000s proof gallons)

<table>
<thead>
<tr>
<th>Years</th>
<th>Ireland</th>
<th>England</th>
</tr>
</thead>
<tbody>
<tr>
<td>1800-4</td>
<td>2,858</td>
<td>3,990</td>
</tr>
<tr>
<td>1805-9</td>
<td>3,615</td>
<td>4,640</td>
</tr>
<tr>
<td>1810-14</td>
<td>4,734</td>
<td>4,811</td>
</tr>
<tr>
<td>1815-19</td>
<td>3,886</td>
<td>4,751</td>
</tr>
<tr>
<td>1820-24</td>
<td>3,960</td>
<td>4,260</td>
</tr>
<tr>
<td>1825-29</td>
<td>8,701</td>
<td>6,645</td>
</tr>
<tr>
<td>1830-34</td>
<td>8,850</td>
<td>7,561</td>
</tr>
<tr>
<td>1835-39</td>
<td>11,596</td>
<td>7,688</td>
</tr>
</tbody>
</table>

Source: G.B. Wilson, op.cit. Table 3.

The other was the English gin market. Prior to the extension of the excise reforms to England in 1825 and the reduction of duty this was the biggest legal market. Consumption was however virtually stagnant between 1800 and 1825 and moreover the market was tightly controlled by the English gin distillers at times operating in conjunction with the Scottish grain distillers. Prior to 1825 there was then little incentive for innovation from either the demand or the supply side of the market. After 1825 consumption rose and moreover, the excise reforms in Scotland removed the impediments which had kept the trade with England restricted to a few large distillers.
By the 1820s there were areas of the British spirit market where the underlying patterns of consumer preference were favourable to a spirit produced by continuous distillation and market conditions held out some incentive for innovation. This did not mean that the way ahead was trouble free. In particular the attitude of the excise authorities remained, as will be discussed, a source of irritation and delay, but the underlying circumstances were more favourable than at any time since the breakthrough in distilling technique on the Continent.

(III) - Saintmarc, Stein and Coffey

Between 1826 and 1832 seven different designs for continuous stills were experimented with in distilleries in the United Kingdom. Of the seven designs only three achieved any practical success. These were the designs patented by Jean Jacques Saintmarc, Robert Stein and Aeneas Coffey. Of the three only Coffey's entered into widespread use. These figures suggest that whilst the period was generally favourable for innovation, any single explanation for successful innovation in the distilling industry would be misleading. Although not enough information is available about the inventors, their designs and the way they attempted to market them, it seems likely that as with innovation in other industries, the perseverance of the individual inventor and sheer good fortune were important factors in determining the initial success of particular designs.

Of the three inventors Saintmarc's career was probably the oddest. In 1815 he was a veterinary surgeon attached to the French army. After Buonaparte's defeat Saintmarc took up distilling and in 1823 he came to England to seek financial backing for a distillery where brandy would be made from potatoes. Despite the widespread consumption of a range of spurious spirituous concoctions, brandy from potatoes was not apparently acceptable to the English spirit drinker and the venture resulted in three years in a loss approaching £50,000. In 1825, however, Saintmarc took out a patent on the still he had designed for the distillery. Its basis was a fire heated pot still with a number of rectifying chambers imposed on it and it gave continuous distillation producing a pure spirit which reached a strength as high as 50° over proof according to the Excise examiners at the first trial. Largely because of its concentrative and cleansing qualities Saintmarc's still was adopted not by distillers, for making spirits from wash, but by rectifiers working with raw spirits. Although fire heated and adapted from the pot still, the productive capacity of Saintmarc's still was far in excess of the traditional design. In the rectifying trade it was credited with an output of 1,000 gallons of gin an hour. Saintmarc subsequently adapted his still for making spirits from wash and the modified design was adopted in three Irish distilleries. No information is available on the way Saintmarc attempted to market his new design but the limited number of his stills installed by distillers, even after the design had been modified, was probably due to the fear expressed by one distiller that the spirit "was made too pure by being divested of too much of the 'essential oil'."

This "essential oil" was almost certainly the substance that later came to be known as fusel oil. Chemically, fusel oil is a combination of the higher alcohols and certain derivatives of the yeast and raw materials used in distilling. In appearance it is an oily liquid with a pungent and acrid odour. In pot still

18. R.C.W. ibid.
distillation the distillate consists of three portions: foreshots, spirits, and feints. Fusel oil is present in the feints. The dividing point between each portion is not, however, exactly determined and some of the substances in the feints impart important flavouring characteristics to pot still whisky. If the spirit portion is entirely robbed of these flavouring characteristics a relatively tasteless mixture of ethyl alcohol and water is all that remains. It is the secondary characteristics that account for the diversity of flavours amongst malt (pot still) whiskies. Hence arises the conflict between a technically efficient form of distillation and a method which produces a spirit with pleasant secondary characteristics.

Saintmarco had taken up distilling relatively late on in his career. Robert Stein, the inventor of a continuous still which achieved some popularity in Scotland, had been a distiller all his life and belonged to one of the most prominent of Scotland's distilling families. It was at the Stein distilleries that rapid distillation techniques had been experimented with in the 1780s. In August 1828, Stein sought Excise permission to experiment with his new still design in his brother's distillery at Kirkliston. The officials who attended the experiment reported that "the spirits produced, from the absence of the essential oil, are much more pure and wholesome than those produced by common distillation." They also commented that "to separate this oil in the process of distillation has engrossed the attention of many practical distillers, but hitherto with but little success." As the Stein's had tended to specialise in grain whisky, spirit production for the English gin market (where new flavouring elements were added to the spirit) their enthusiasm for a still design which would produce a "pure" spirit was understandable.

Unlike Saintmarco, Stein did not base his design on the pot still. The still was columnar in shape. Before entering the

19. See above, p.11 ff.
20. R.C.W. ibid.
still, the wash passed through three copper vessels during which its temperature was raised nearly to boiling point. The copper vessels, called wash heaters, were jacketed cylinders. In the first one, the cold wash was heated by the spirit vapour which was just about to enter the worm; in the second, the wash was further heated by the spent wash in the jacket of the copper vessel, and in the third, the heated wash was all but vaporised by the steam and alcoholic vapours coming direct from the still into the surrounding jacket. As with other continuous stills heat transfer was an important feature of the design. When the wash finally entered the still it went into a series of chambers into which steam was pumped at the same time. The chambers were separated by a fine hair cloth diaphragm and as the wash entered them a disperser sprayed the wash into a fine mist. The steam coming into the chambers met this mist and alcoholic vapour was carried off through the diaphragm. The vapour was then led back into the copper jackets where it condensed on the cold wash entering the still. The rectifying effect was thus continuous and the spirit produced was the strongest that had ever been made in actual manufacturing with a strength ranging from 65° to 70° over proof. Apart from the high strength of the distillate, the great advantage of Stein's still was its heat economy. The latent heat of the raw steam was well utilised, whilst the specific heat of the spent wash contributed in preparing the new wash for distillation. As the spirit vapours first met partially warmed and then cold wash in the copper cylinders condensation was partial and skilfully graduated. By raising steam in a separate boiler, Stein also avoided the problems attaching to the application of direct heat to the still. One defect of the still was that copper salts, arising from the action of the hot and acid wash on the coppers, were frequently observed in the distillate. These had to be separated in the spirit receivers after settling.

Stein's still at Kirkliston was the first patent still to be erected in Scotland. In 1833 two more distilleries adopted Stein's still, Cameronbridge in Fife and one in Glasgow. One curious feature
of these installations in view of later developments when patent
stills became entirely associated with the production of grain
whisky was that, until 1835, malt was exclusively used as the raw
material. This was surprising because the continuous still with
its high rectifying quality produced a very pure alcohol without
the secondary flavouring constituents found in malt whisky. Malt
was a more expensive raw material than grain and there seemed
little point in using malt when the spirit lacked the features of
malt whisky. Most of the Stein stills were erected in Lowland dis-
tilleries but between 1841 and 1843 one was worked at a malt dis-
tillery in Islay. Even as late as 1843 when thirteen Scottish
distilleries operated patent stills (four 'Steins' and nine 'Coffeys')
wholly malt mashess were being used at five of them. Although there-
after most patent still distillers worked from mixed grain mashess,
Excise records still show a single patent still distiller working
exclusively from malt. A combination of factors probably explain
this rather odd feature of the diffusion of the patent stills.
Although they produced a pure form of alcohol it was not a neutral
spirit i.e. flavourless ethyl alcohol and skilful distillation
would have enabled some of the flavour of an all malt mash to be
retained. This would have been important in making patent still
spirit acceptable to consumers for the innovators were competing
with an established preference for malt whisky. In addition there
may have been cost advantages to be gained from using an all malt
mash whilst the malt drawback was still in existence. The absence
of cost data for the Stein still makes this and its other economic
implications hard to gauge. Its heat economy probably made running
costs lower and if its capital costs were higher than the pot still,
the greater output of which it was capable may have lowered the
capital cost per unit of output. Whatever economic advantages
the Stein still had over the pot still, the fact that it was rapidly
displaced by Coffey's design suggests that it was by no means the
perfect solution to the problem of continuous distillation. Although
Cameron Bridge distillery continued to operate a Stein still down to

1908 most other distillers switched to the Coffey still and kept the Stein still for reserve production capacity.

Whilst Stein's still stands as Scotland's contribution to the development of the continuous still, it was an Irishman Aeneas Coffey who invented the still which was to become known as the patent still.23 More is known about Aeneas Coffey than any of the other inventors so far discussed but despite this there remain many unanswered questions about the way he developed his new still.

Coffey was born in Dublin in 1780. He was educated at Trinity College but the nature of his studies is not known. His father was an engineer and Aeneas, according to his grandson "was of a very scientific nature." In 1800 he entered the Irish Excise with an appointment as a gauger, waiter and searcher. In 1813 he was promoted to one of the Sub-Commissioners of Inland Excise and Taxes, a post in which he was actively engaged in attempting to suppress illicit distilling and in which on a raid on smugglers he suffered a fractured skull and two bayonet wounds in the thigh whilst the four soldiers with him were "disarmed and severely beaten."24 Marked out as a man of "integrity, intrepidity and resource"25 in a service not then renowned for such characteristics, Coffey ultimately rose to become Inspector-General of the Excise. He retired from the service in 1824 and set up in business as a distiller at the Dock Distillery in Dublin.

This choice of the distilling industry for a second career made Coffey in a very real sense the personal embodiment of a complaint which distillers had long had against the excise system. By law excise officers had complete access to the distiller's premises and the information they picked up moving from distillery to distillery gave them an expert knowledge of the business. In a trade which was still more of a craft or an art than a science based manufacturing process, excisemen were privy to the most guarded of the distiller's secrets. The tools of the exciseman's trade, the

23. Detail drawn from Wilson, Slater, Nithsdale and R.C.W.
25. A.W. Slater, ibid.
hydrometer and the saccharometer, also put him in a position of
advantage. As Thomas Smith of the Mile End distillery in White-
chapel said, when commenting on the use of the latter instrument
by the Excise:

"There is one objection I have to it, however, that it
learns the Excise officers to become brewers, which is
not quite fair to us, who are at great expense in acquiring
a knowledge of our business. We should not like to put it
in the power of an officer to become a practical distiller;
and, I submit that the Government, in seeking to raise an
immense duty on our trade, ought not also to seek the means
of depriving us of that trade. There could be no means of
destroying the trade of a particular manufacturer so likely
as by enabling Excise-officers to carry from house to house
all that he could pick up of the practical part of the trade." 26

It may have been precisely this kind of expertise picked up 'on
the job' which enabled Coffey to perceive the weaknesses in the
traditional pot still design and the way in which they might best
be overcome.

Of the period between his retirement in 1824 and his
application for a patent on his new still in 1830, the crucial
years when much of his research and experimental work must have
been carried out, little is known. According to another Dublin
distiller John Haig,27 Coffey ran into problems both with his
design and with the Excise during these years. Coffey made his
first still from iron:

"it came into contact with the wash, and the acid of the
wash, acting on the iron, produced hydrogen gas, which
gave a bad flavour to the spirits." 26

This is an interesting piece of evidence for it suggests that
Coffey was certainly no chemist. The dangers of contamination
from the use of iron in still construction had been recognised at
the end of the eighteenth century and an elementary mistake of
this nature was surprising for a man who spent his career in close
touch with the distilling industry. Possibly, for an experimental
design iron was cheaper than copper and it may also have been an

easier metal to work from in view of the complex interior of the still.

If that error suggests some detachment on Coffey's part from the practical problems of the distiller, the design itself indicated a thorough knowledge of the advances and weaknesses of other continuous still designs. Plate IV shows the design used by Coffey in his patent specification of 1830. It consists of a column, the bottom half of which is the analyser and the top half the rectifier. Low pressure steam supplied by a separate boiler was fed into this column at the bottom. On the top right hand side is the tank containing the wash to be distilled. The wash was fed by gravity through a series of coiled pipes into the top of the distilling column. In the analyser, the steam coming in from the bottom of the column met the wash on the plates marked (a). A mixture of alcohol vapours and uncondensed steam (the equivalent of low wines in a pot still) rose up to the level of the rectifier. The boiling spent wash ran down to the bottom of the column and was used to pre-heat the fresh incoming wash in the tank marked (b). In the rectifier at the top of the column the alcohol mixture was progressively cooled to separate out the potable spirit. The hot vapours rising through the rectifier partially condensed on the long coil through which the wash was flowing. When the almost pure spirit vapour reached the top of the column it passed over into a chamber (marked c) where it was further cooled by incoming wash. Final cooling took place on a worm, not shown in the diagram, and the spirit was then run into the spirit store.

A comparison of Plate IV with Plate V will help to show the basic nature of the early model. Plate IV is gravity fed; there are no pumps in the model. Plate V shows the modifications and refinements which had been added by about 1840. In Plate V the modern distinctive two column shape has appeared. The analyser is on the left and the rectifier on the right. The wash is pumped from

a reservoir (A) up the pipe (B) and passes down the coiled pipe, (CC), where it is heated by the ascending vapour in the rectifier. It then goes up pipe (D) into the highest section of the analyser (E). It descends from section to section through the tubes (F) and the spent wash escapes through pipe (G).

Steam is passed into the analyser by the pipe H, and causes the wash to boil so that by the time it has reached the bottom it is completely deprived of alcohol. The ascending vapours pass through the perforations in the plates and bubble through the liquid on them, a portion of the aqueous vapour being condensed by this, and the descending wash heated, by each washing.

On reaching the top of the column, the concentrated alcoholic vapour passes through the pipe (J) into the bottom of the rectifier (K), and then ascends through perforated plates similar to those in the analyser (lacking in the initial model). The ascending vapour is not washed by the wash in the rectifier, but by the liquid formed by the partial condensation of the vapour. In the upper part of the rectifier there are shelves which compel the vapour to take the same zigzag course as the pipes which convey the wash downwards. The purified vapour then passes through the pipe (L) to a worm where it is condensed.

In this improved model the mixture of weak spirit and fusel oil, condensed in the rectifier flows into a reservoir (M), from which after the separation of the fusel oil it is pumped to the top of the analyser, where it mixes with the descending wash.

What then had Coffey achieved with his design? According to A.W. Slater\(^\text{30}\), Coffey's still was "an absolutely new conception based on the fundamental principles of contra-flow and heat exchange." This verdict is difficult to accept without qualifications. Coffey's still was not the first continuous still, nor was it the first to use the principles of contra-flow and heat exchange. It did, however,

\(^{30}\) A.W. Slater *ibid.*
break away entirely from the traditional pot still pattern and by using steam it overcame the problems connected with the direct application of fire to the still. All these features combined to give the still an extraordinary efficiency and it is this that marks it out as an important technological achievement. It produced a concentrated spirit containing between 86 and 96% alcohol in a continuous and rapid operation. The heat exchange between the steam and wash cut the cost of fuel and in subsequent modifications this economy was increased by using the boiling spent wash to pre-heat the water for the boiler supplying the steam.

A verdict on Coffey's achievement which simply rested on the principles behind his design would be inadequate. For Coffey seems to have been the only one of the continuous still designers to terminate his distilling activities and devote himself to exploiting the commercial possibilities of his design. From his base in Dublin he first of all tapped the Irish market and by 1833 had sold at least seven stills. The Irish market did not, however, seem the most promising. In England the gin market offered a much wider potential and by 1835 he had transferred his business to London, the centre of the gin distilling and rectifying trades. It was from this base that he began selling his stills, first to the English gin distillers and then in the 1840s to the Lowland distillers in Scotland.

Although the greater potential in England was an obviously important factor in pulling him away from Ireland, prior to the move he had been experiencing difficulties with the Excise. Both Haig and Coffey were supervised by the same exciseman, a Mr. Pape:

"...I may also mention that in the same district Mr. Coffey's distillery is likewise included, and that has been idle for the last two years, entirely in consequence of the harrassing conduct of this supervisor; and I have heard him declare, that he will never light a fire again in his distillery till this man is removed, as he feels himself unable to bear up against him, and dreads the Exchequer..." 32.

31. His firm was located at Bromley-by-Bow, close to distilleries and with an ample supply of skilled labour in the area.
Haig was giving evidence to the Parnell Commission and in its report that Commission roundly condemned excise interference as "a discouragement to the free exercise of ingenuity, skill and resources and to all attempts at invention or improvement." 33.

(IV) - INNOVATION, THE EXCISE AND THE CHEMIST

This accusation, if true, would be a powerful factor in explaining the apparent absence of attempts at innovation in the British distilling industry. But was it true? When the Parnell Commission reported in 1834 the distilling industry had had over a decade's experience of the 1823 reforms. For the excise the reformed system was an attempt to combine "the interests of the manufacturer with the security of the revenue" 34 and to avoid imposing conditions which would damage the quality of the spirit. The distiller was to be left as much freedom as possible in determining his production methods and, in general, distillers were full of praise for the reformed system. Their freedom was however, very much freedom under the law. The revenue law prescribed detailed regulations covering the whole of the manufacturing process from malting to warehousing and the distiller was at all times "under lock and keys" 35 in the conduct of his business. The debate between distillers and the Excise in the 1830s concerned the minute details of revenue control: Was it essential to the security of the revenue

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that the bottoms of fermenting vessels should be secured with
to locks, and only crown locks at that, "made by some favoured mono-

37. See above pp. 51 ff.
38. Seventh Report, p.11.

polist and charged for most extravagantly"?36 Was it essential
that there should be a gap between brewing and distilling of
twelve hours or that malt and grain whisky should be made in two
separate works, or that malt should lie for twenty-four hours in
deposit before use, or that a distiller could only ship spirits
in casks containing not less than eighty gallons? Although each
of these questions when considered separately might simply appear
to reflect the individual distiller's annoyance at petty and irk-
some regulations, in the context of the 1830s the debate between
distillers and the Excise involved two major principles. The first
was the issue of free trade in relation to the distilling industry
and the second, the extent to which the revenue law was compatible
with technological advance in the industry.

The application of free trade principles to the conduct
of the spirit trade in the United Kingdom had been an important
part of the process by which the 1823 reforms had been reached.37
In the political climate of the 1830s the distillers' attack on
"the multiple and complex regulations"38 which still governed the
trade provided ammunition in abundance for the free trade cause.
How much distillers were influenced in their agitation against the
Excise laws by the freeing of the beer trade in 1830 it is hard to
say, but some at least found common cause with free trade reformers.
Thus John Moubray of Cambus distillery, referring to the prohibition
on distillers switching from malt to grain whisky production, argued
that:

"...the law was evidently to favour a very few of the large
houses in Scotland, and to hurt all the rest; it is only
putting a restriction on free trade in the article whisky,
which in these days of reform ought not to be tolerated." 39.

Although Moubray saw the existing Excise regulations as
favouring the larger producers, it would be difficult to discern in
the evidence to the Parnell Commission any split between large and small distillers on the question of further excise reform. If a radical distiller could be defined as one who wanted further easing of excise control then all distillers, large and small alike, were radical reformers in the 1830s. One of the largest producers, Archibald Dunlop, was even able to relate the favourable moral effects of a further reduction in spirit duty to two other currently popular radical causes: the paper tax and soap duties. Although the Parnell Commission recommended a reduction in spirit duty, Dunlop's analogy did not command wider support. Spirit duty raised too high a revenue and spirits were not "a moral species of beverage." A free trade in whisky did not therefore follow a free trade in beer and duty equalisation throughout the United Kingdom which the Parnell Commission, true to free trade principles, saw as "a leading object of consideration" occurred in precisely the manner the Commission rejected:

"...it must be out of the question that the attempt at carrying this equalisation into effect should be made by raising the rate of duty... to a par with England..." 42.

Only an impish nationalist would have pointed out that it was Scottish and Irish spirit drinkers with their higher consumption and lower levels of duty who bore the burden of this exercise in moral economy.

The Parnell Commission's advocacy of a further easing of excise restrictions also fell on deaf ears. The continuing shadow of the illicit distiller, especially in Ireland, and the evidence of fraudulent practice amongst licensed distillers delayed reform and it was not until 1860 that a new Spirits Act substantially relaxed excise control. By then the distilling trade was judged to have "a higher character" 43 a new and less cramping method of control had been evolved, 44 and most important of all, the impending free trade

41. G.B. Wilson, op. cit. quoting Brougham in the debate on the Beerhouse Act of 1830.
42. Seventh Report, p. 92.
43. J. Scarisbrick, op. cit. p. 78.
treaty with France made it imperative, if the home distillers were to compete successfully, that all restrictions not absolutely essential to the security of the revenue be removed.45

The second issue, the extent to which excise surveillance inhibited technological change, involves more complex considerations. What parts of the distilling process were open to improvement? How aware were distillers of technological advance? What was the attitude of the excise authorities to innovation? How large a gap existed between the theory and practice of distilling? What commercial pressures existed to favour or inhibit innovation? All of these are questions which should surely be posed in attempting to judge whether technological change was retarded by the close control of the excise system. Posing them is however, a great deal easier than answering them given the paucity of documentary material for this stage of the industry's development.

In a self congratulatory report issued in 185746, the Commissioners for Inland Revenue, the body responsible for superintending the spirit duty after 1848, pointed to the beneficial effects of the 1823 reforms. The Act, the report stated, "had the singular merit of combining great additional security to the Revenue, with the release of the Distiller from many of the trammels under which he had hitherto conducted his operations..." In the 1830s not all distillers were quite so convinced of the benefits of the system. To some it simply seemed that they had exchanged one set of unsatisfactory regulations for another. Especially where innovation was concerned, it was felt that the excise system by being designed around the method of production then in use in the early 1820s placed a straightjacket on experimentation. Thus William

44. This was achieved mainly by putting the final stage of the distilling process - the emergence of the spirit from the worm end - under control. The worm end was now enclosed in the spirit safe, a large brass box with glass sides. Taps on the outside enabled the stillman to check the separate portions of the spirit and its strength, but the spirit could not be extracted.

45. This should not be taken to imply that the distiller had complete freedom. Complaints about excise control continued, and in 1874, the North of Scotland Malt Distillers' Association, a trade association with a membership drawn from the Highland malt distillers, was formed largely around the continuing grievances felt by the distillers about the excise system.

Fraser of Brackla distillery in reply to the question of whether the excise restriction on the strength of worts prevented "the application of science to an improved mode" said:

"Yes. I cannot see how I could benefit by it, for the present state of the law occasions a great loss to us. I have myself at this moment a son attending the Chemistry classes in Edinburgh, and if the Excise laws will be such as to allow him to carry on the business of a distiller by using his own scientific knowledge, I intend that he should succeed myself: but if the law is restricted as at present (for now an illiterate and an educated man have an equal chance) there is no inducement for a gentleman to enter into that profession." 47.

Whilst Fraser's willingness to invest in human capital and his fear that the investment would be rendered worthless because of the excise restrictions may be presumptive evidence of the damaging effects of the excise system on innovation, he unfortunately did not go on to indicate the areas where his son's chemical knowledge might secure immediately applicable benefits. He was however, convinced that in improvements distilling was "quite in its infancy with us in the Highlands". By any standards, though, Fraser was a quite remarkable individual. A retired army officer, he had settled in the Highlands at the end of the Napoleonic Wars and set up in business as a licensed distiller with the help of capital subscribed by local landowners and magistrates who hoped that this would quell illicit distilling. A loss of £2,500 in the first two years caused his partners to withdraw. Fraser bought them out and by the 1830s he was selling more malt whisky in the London market than any other distiller. With this kind of ability and endurance it was not surprising that he should view the excise system as an unnatural restraint on the free exercise of his talents and as a hindrance to innovation.

How much, though, did chemistry have to offer the distiller? The answer varied according to the part of the production process under discussion. Where still design was concerned some distillers

47. Seventh Report, App. 120, p. 345.
felt that chemical knowledge derived from laboratory experiments was inappropriate when applied to handling practical problems. Dr. Andrew Ure, a chemist much impressed by the new continuous still designs, gave evidence in 1831 to the Select Committee investigating the use of molasses, on the ability of the new stills to separate "at one operation the noxious and offensive oil present in grain whisky." George Dunlop of Linton distillery rejected the continuous still and was challenged:

"Is not the process of distillation a chemical process, and may not an experienced chemist, who understands the theory of chemistry, be better able to give an opinion on that point than a person who does not understand the theory of chemistry?"

Dunlop's reply was that of the practical distiller:

"We understand how to conduct our work, and to make the most use we can from our grain; but we could not conduct our work on that principle."

And it is noticeable that the three successful continuous still designs all came from men with practical experience in the distilling industry rather than from laboratory chemists.

In other parts of the distilling process an even sharper lack of harmony between practice and theory was displaced. Grain distillers had, for example, been aware since the 1780s that a small portion of malted barley in a mixed grain mash would convert the starch in the unmalted grain into sugar. Not until 1847 did chemical analysis isolate "diastase" as the critical agent. Similarly, the work carried out in 1803 on the relative yields of English barley, Scottish barley and bigg by the Edinburgh chemists at the request of the Excise concerned about the effects of an equal malt duty on grains of differing qualities confirmed what distillers had in practice long suspected. The stage of the production process where chemistry had least to offer the distiller was fermentation. "Can you state with regard to your attenuation, in what degree you may expect a good result?": was what the Wallace

Commission asked Robert More of Bonytown distillery near Linlithgow:

"It depends upon so many contingencies I cannot state it precisely. I have set two tuns at Bonytown, and we uniformly fill two tuns from one brewing; and so minute are the circumstances on which fermentation depends, and so much does the science of fermentation appear to me to be yet in its infancy, that those tuns in all circumstances similarly conducted will produce a different result, which we cannot account for; generally speaking it is not the case, but I mean to say sometimes it is." 50

Sometimes the one, sometimes the other; More's puzzled thoughts were not likely to be aided by science. Not until Pasteur, working on the practical problems of a beet sugar distiller, unravelled the nature of yeast in 1855 could science begin to offer an explanation for poor results from fermentation and even then the scientists' remedy to the problem of bacterial infection, cleanliness and more cleanliness, was, as in the brewing industry, in line with the best distilling practice. Before the same Commission George Dunlop had emphasised the need for great attention to cleanliness: "because if there is the least acidity in our tuns, it destroys our fermentation." 51

Was it possible then, that even without the intervention of excise restrictions, Fraser's investment in his son's chemistry lessons was likely to yield little in the way of practical results? Perhaps not, for even without knowing the true nature of fermentation, the analytical discipline which chemistry offered by way of testing, measuring and comparing results of different brewing and distilling periods might make for a more scientific approach towards practical problems. Even the Excise system possibly aided this process, for the distiller was required by law to maintain stock books detailing the amount of grain mashed and the yield of spirit. 52 Whilst the absence of distillery records makes it impossible to be dogmatic about how much of the chemists' laboratory experiments rubbed off on the practical distiller in the 1830s, evidence from later in the nineteenth century suggests that the distilling industry like the brewing trade was still in "the dark ages" in this pre-Pasteur period. The grain whisky firms who merged to form the Distillers

51. Fifth Report, App. 72, p. 204.
52. Though Sigsworth discounts the usefulness of brewers' analysis books.
Company Limited in 1877 were, for example, amazed to see how widely the spirit yields varied amongst the constituent distilleries.\textsuperscript{53} One beneficial result of the merger was the free flow of information between the firms which enabled the new company to begin seeking the causes of the differing yields.\textsuperscript{54} That such a search should have been delayed until the industry moved beyond the individualistic and competitive stage of its development suggests that competition itself and the secrecy with which the individual distiller covered his works were barriers to the spread of a scientific approach. The malt whisky distillers did not experience the same degree of concentration of ownership as the grain distillers and they made almost no use of applied science until after the First World War. As late as 1925 an eminent distilling chemist was able to state that:

"the application of science in the forms of chemistry, physics and biology, to the control of pot still distillation processes is still in its infancy after a long series of intermittent attempts to make practical use of laboratory work." \textsuperscript{55}

Amongst the malt distillers, however, craft mystique and an unwillingness to alter the production processes in case the spirit was detrimentally affected reinforced individual ownership as barriers to the use of science.

If the distilling industry was still in "the dark ages" in the 1830s there were chemists who believed the same to be true of their own advice. The Professor of Chemistry at Edinburgh University, Thomas Thomson, in his book on Brewing and Distillation published in 1849, said of previous works:

"These books are reprehensible, on account of the air of mystery in which the subject is invested." \textsuperscript{56}

Significantly, his book contained a section of "practical instructions" by an Edinburgh brewer, William Stewart showing how the

\textsuperscript{53} Distillers Company Limited, Board Minute Books (hereafter D.C.L.B.M.B) No. 1, 13th June 1877, at p.112.

\textsuperscript{54} Though the form the search took of a comparison between different distilleries was in itself unscientific as the distilleries used different grain and yeast and what was needed was a comparison between different brewing and distilling periods at the same distillery.
laboratory work might be carried out in actual manufacturing conditions, suggesting at least the beginning of a response by chemists to the criticisms of practical men.

The complexity of the relationship between the excise system and technological advance should not be allowed to mask one other feature of the debate between the distillers and the Excise. This was the fact that despite the distillers' criticisms of excise restrictions most distillers welcomed the reformed system. This apparent contradiction may be explained by the security which the reforms held for the distillers' investments. Prior to 1823 "the very great alterations" in the distillery laws had been "expensive and very ruinous to the trade". After 1823 the reformed system offered distillers some degree of protection for their investment. The gradual diminution in illicit distilling removed one source of unfair competition and to those distillers with experience of the pre-reform period the restrictions seemed a small price to pay for a curb on innovation. And a curb rather than a total prohibition on innovation was what seems to have been involved in the reformed system.

A would-be-innovator wishing to alter his method of production had first to petition the Board of Excise. The Board of Excise after relating his request to the requirements of the revenue law then passed it on to its administrative master, the Treasury. The Treasury attached whatever conditions it thought necessary for safeguarding the revenue and permitted an experiment to be carried out. If the trial proved successful and there was no danger to the revenue a Treasury Order was issued sanctioning the general use of the innovation. This was the procedure which

56. T. Thomson, Brewing and Distilling (With Practical Instructions by William Stewart) (Edinburgh, 1849).
57. See above, p. 135.
Saintmarc, Stein and Coffey all followed. It gave the Excise and Treasury absolute control over innovations which involved any deviation from the requirements of the revenue law, though how generous and speedy the authorities were in permitting experiments seems to have varied. In Saintmarc's case three years elapsed between his first application for permission to experiment and the granting of a Treasury Order. Possibly as a pioneer applying in the midst of the introduction of the excise reforms to England, he bore the brunt of the delay in securing permission, for Stein's request was passed in two years and Coffey's in two months.

Both Stein and Coffey had to agree to the same condition that was imposed on the use of the Saintmarc still before receiving general permission. Patent stills by processing spirit in one operation did away with one of the checks used by excise officers in securing the spirit duty. Based on the pot still process, the 1823 Act raised three accounts against the distiller in calculating the amount of spirit he produced. The first was on the amount of wash, the distiller being charged for 1 gallon of proof spirit for each \( 5^\circ \) of attenuation per 100 gallons of wash. The second was the quantity of low wines (i.e. the product of the first distillation) from the wash, and the last the spirit and feints distilled from the low wines. With wash entering a patent still and spirits leaving it the Excise lost the intermediate check on the quantity of low wines. Saintmarc was therefore required by the Treasury to attach crown locks to all the openings on his still; to run the wash from the wash charger directly into the still by means of a close metal pipe, and to provide a close safe through which the spirits could run into the spirit receiver. Although designed to protect the revenue it was the distiller and not the Crown who bore the cost of such alterations and fittings. This, when added to the delays in obtaining sanction accounts for the anger and frustration which distillers felt when confronted by the revenue laws.

59. R.C.W. App. T.
60. J. Scarisbrick, op. cit. p. 74.
In Coffey's case this was aggravated by the "harassing behaviour of Mr. Pape the Collector." The Excise and Treasury laid down directions for the conduct of experiments but the exact interpretation was usually decided by the local excise official at the distillery. Coffey had petitioned the Treasury in July 1832 that his still might be used under the same conditions as Saintmarc's and Stein's, i.e. that the spirit should not be required to be run through a low wines still. The Dublin Collector, Mr. Pape, insisted however, on treating the spirits from Coffey's still as low wines and ordered him to comply with the revenue law by running the spirits through a low wines still even though they were already in a finished state. This, as Coffey pointed out, exposed the revenue to risk and was a ridiculous way of complying with the law's requirements. Asinine local officials might always be short-circuited by further direct appeals to the Board of Excise but again this imposed delays on the innovator. Another restriction, pointed out by John Haig which detracted from the appeal of the Coffey still was that distillers were forbidden to send out spirits at a strength higher than 220 over proof. The origin of this restriction lay in the legal separation of the distilling and rectifying trades. Spirits of greater strength were described as spirits of wine and as a pure form of alcohol were used for industrial purposes by druggists, perfume manufacturers and varnish makers. They sold for a higher price and would have been a valuable outlet for patent still distillers. The Coffey still Haig was working from ran off spirits as high as 640 over proof, but the spirits could not be sold until they were reduced to 250 o.p. The spirits then went to the rectifiers "to be raised up to the strength from which they were reduced." Haig's application for permission to by-pass the rectifiers and sell direct to the manufacturers was rejected. It was not until the Methylated Spirits Act of 1855 allowed the addition of a denaturant, crude wood naptha, to spirits of wine and the duty free use of methylated spirits that the industrial alcohol market really opened up for the patent still distiller.

61. Seventh Report, App. 144, p. 421
63. Seventh Report, p. 65.
If the meaning of innovation is extended to cover new commercial practices then the kind of restriction which prevented the patent still distillers from selling direct to the industrial alcohol market may be seen as just as important as those which delayed the introduction of the still itself. Indeed the restrictions which curtailed new commercial practices were more pervasive because they hampered spirit dealers and pot still distillers as well as patent still distillers. Thus the excise requirement that spirits could only be shipped in casks of not less than eighty gallons was held by the Glasgow distillers to be hindering their attempts at developing an export trade:

"The first whisky that went out to Calcutta was so discoloured, and changed in taste, in consequence of the heat of the climate extracting the colour and taste of the wood that the agents could not sell it; some put into bottles was sold at a high rate; if the rest had been allowed to be put into bottles it would have sold to advantage." 63.

Similarly, this restriction and the absence of duty free bonding facilities in England was held to be preventing the Scots distillers from expanding their share of the English market. Not until 184964 was duty free warehousing extended to England. The introduction of allowances for natural waste in warehousing in 1853 and the relaxation of a range of other restrictions in 186065 including the prohibition on the use and sale of yeast made in the distillery put the spirit trade in a freer position to seek out new markets. The Spirits Act of 1860 also established the principle for the first time that distillers should be compensated for the increased cost of production which the revenue laws entailed. Following the announcement in February 1860 of the impending free trade treaty with France which allowed the import of foreign spirits at the same duty as home produced spirits the distillers claimed and gained an export rebate of 2d. per proof gallon and an import surcharge of 5d.66 as compensation for their increased cost of manufacture.

64. Act II & 12 Vict. c.122.
66. 2d. on colonial spirits. For the basis of the distillers' claims see J. Scarisbrick, op.cit. p.80.
Between the 1823 reforms and the Spirits Act of 1860 the distilling industry presents a rather paradoxical picture. Free trade principles underlay the reforms yet on closer examination the distiller can be seen as remaining very much restrained by the requirements of the revenue law. It would be wrong though to see those restrictions as a barrier to the distiller applying new techniques from the chemist, largely because the distiller had little to gain from laboratory work. In the area of new still design the excise laws were a fertile source of irritation and delay but only if the meaning of innovation is extended to cover new commercial practices did the laws absolutely prevent the adoption of new techniques.
CHAPTER SEVEN

THE DIFFUSION OF THE COFFEY STILL AND
THE RISE OF THE PATENT STILL DISTILLER

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CHAPTER SEVEN

THE DIFFUSION OF THE COFFEY STILL AND THE RISE OF
THE PATENT STILL DISTILLER

"The patent still is a box of tricks"; James Talbot Power,
Irish Pot Still Distiller (1908) 1.

(1) INTRODUCTION.

In 1830 twenty three million proof gallons of spirit were distilled in the United Kingdom. Of this total a mere 1.1% was produced by means of patent stills. By 1840, when output at 23.6 m.p.g. was little higher than in 1830, patent stills accounted for 24.4%. Ten years later 55.0% of a United Kingdom spirit production of 25.9 m.p.g. was made in patent stills. In just twenty years patent stills had achieved a dominant position in the industry yet this period has received remarkably little attention from other writers. In most accounts the arrival of the Coffey still is described and then discussion moves on to the attempts by the Scottish patent still distillers to negotiate a trade agreement in 1856. This agreement signalled the beginning of attempts by Scottish patent still distillers to share markets and control the productive capacity which Coffey's invention had given them. It was abortive but the ideas behind it found renewed expression nine years later when the Scotch Distillers' Association was formed. This Association forged links with the Irish and English patent still distilling interests and from it sprang the Distillers Company Limited (D.C.L.), an amalgamation of six Scottish patent still distilleries in 1877. Important as the succession of events between 1856 and 1877 was, it does not justify the neglect of the twenty years after 1830 for this was the critical period when the Coffey still spread and gained a growing share of total output.

1. R.C.W., Minutes of Evidence, Vol.1, Cmd. 4181 (1908), Qn.1914, p.65.
2. See e.g. R.B. Lockhart, op.cit., pp. 60-61; D. Daiches, op.cit. pp. 56-62.
In the next chapter the background to the desire for combination and the formation of the D.C.L. will be discussed. The present chapter starts with a statistical outline of the spread of the Coffey still and the growth in the output of patent still spirit. Developments in England and Ireland will then be described. For Scotland the existing arguments about the impact of the Coffey still will be considered and in particular how they relate to the nature of the investment decision which the arrival of the patent still involved. Finally, capital/output ratios for the pot and patent still processes will be used to explain some of the different features of the two sections of the Scottish distilling industry.

The discussion will be easier to follow if certain definitions are made clear from the outset. In what follows the Coffey still and the patent still are treated as synonyms. Although other forms of patent still existed, no distinction was ever drawn in the statistical sources between different types of patent still. Such evidence as there is suggests that Coffey's still had established its supremacy by the late 1840s and in trade usage the terms Coffey still and patent still were used interchangeably. The other definition concerns the distinction between malt or pot still whisky and grain or patent still whisky. Before the advent of the patent still both grain and malt whisky were distilled in pot stills. In Scotland, grain whisky, that is, spirit distilled from a mash of malted and unmalted grain, came to be made almost entirely in patent stills by 1860. References to grain distillers and patent still distillers therefore amount to the same thing. Although throughout the nineteenth century a small amount of malt whisky, that is, spirit made from an all malt mash, was distilled in patent stills the overwhelming bulk came from pot stills. Pot still and malt whisky are the same. The Irish position was (and is) slightly different. Very little Irish whisky, never more than 300,000 p.p.g. whether distilled by means of pot or patent stills was made from an entirely malt mash. Nearly all Irish whisky was made from mixed grain mashess.

3. See above, p. 239.
4. See above Table 43, p. 207.
5. See above, p. 239.
The Irish pot still distiller making Irish malt whisky used a mash of malt, barley, rye, oats and occasionally wheat. Initially, the Irish patent still distiller used the same raw materials but during the 1860s he switched, like the Scottish grain distiller, to maize and except for a small proportion of malt needed to saccharify the starch in the maize dropped most of the other grains. Despite these differences in raw materials, Irish distillers referred to malt or pot still whisky and grain or patent still whisky. In England no malt spirit was made at any time in the nineteenth century. Mixed grain mashes were used by both pot and patent still distillers, but, by 1850 the pot still had been entirely displaced from the English distilling industry. Most spirit made in England went for rectification into gin, but in the last quarter of the nineteenth century some was sold for consumption as whisky usually after blending with Irish or Scottish malt whisky. One final point about these definitions is that they all concern potable spirit. From 1855 a new market, almost wholly the preserve of the patent still distiller, opened up in the production of methylated spirit for industrial purposes. This consumed a wide range of raw materials including rice, millet, dari, sorghum, mangold wurzel, locust beans, dates, currants, sugar and molasses, the last two being quantitatively the most important. Denaturing, by the addition of crude wood naptha (methyl alcohol), marked the legal boundary between potable and non-potable spirit. Some of these raw materials, especially molasses from which rum is made, were also used to produce potable spirit. Excise statistics for potable spirit were collected under the general heading of British Plain Spirits and therefore do not reveal the description under which the spirits made from these varied raw materials entered into consumption.

Whilst this makes life exceptionally trying for the historian attempting to unravel the distillers' different markets, it places him in exactly the same position as the nineteenth century spirit drinker. The best justification for the present pedantic

6. Potatoes seem to have been the raw material for the illicit distiller's 'poteen' they were very rarely used in the licensed industry.
GRAPH 14: Number of Distilleries Using Patent Stills (1828 - 1860)
GRAPH 15 (a): England - Output from Pot and Patent Stills
(1828 - 1907)
ENGLAND: OUTPUT FROM PATENT AND PATENT STILLS (1886-1907)
GRAPH I5 (b): Ireland - Output from Pot and Patent Stills (1828 - 1907)
GRAPH 15 (a): Scotland - Output from Pot and Patent Stills (1828 - 1907)
SCOTLAND - OUTPUT FROM POT (....) AND PATENT (____) STILLS 1828-1907
exercise is that the spirit drinker had, in fact, precious little protection from mis-description. The legitimacy of different trade descriptions aroused a prolonged and bitter controversy in the industry closely associated with the relative economic fortunes of the pot and patent still distillers and this exercised the not inconsiderable talents of a Select Committee of the House of Commons in 1890/91 and a Royal Commission in 1908/09.

(II) THE STATISTICAL OUTLINE

It was the latter body which assembled much of the information that enables the spread of the patent still to be established. Graph 14 is based\(^\text{7}\) on figures presented by the Excise to the Royal Commission on Whiskey on 1908/09. It shows the number of distilleries using patent stills between 1828 and 1860. Helpfully, as there were differences in the rate at which the patent still spread, the figures were calculated separately for England, Scotland and Ireland. Graph 14 shows the separate figures as well as the overall total for the United Kingdom. Table 48 presents a summary of the statistics.

<table>
<thead>
<tr>
<th>Year</th>
<th>England</th>
<th>Scotland</th>
<th>Ireland</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1830</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>1840</td>
<td>4</td>
<td>2</td>
<td>13</td>
<td>19</td>
</tr>
<tr>
<td>1850</td>
<td>10</td>
<td>13</td>
<td>16</td>
<td>39</td>
</tr>
<tr>
<td>1860</td>
<td>6</td>
<td>12</td>
<td>8</td>
<td>28</td>
</tr>
</tbody>
</table>

Numbers of distilleries operating patent stills say nothing of the growth in output of patent still spirit. Graphs 15 a, b and c show patent still output for England, Ireland and Scotland respectively.

\(^{7}\)R.C.W., App. T, Table VII. The statistics were divided to show the differing raw materials used in Scotland, England and Ireland and allowance has been made for this in calculating each country's total.
between 1827 and 1907. For comparison the output of pot stills is also shown. When comparing pot and patent still output one point to bear in mind is that the latter figures include spirit produced for non-potable purposes. By 1890 almost 1 m.p.g. of spirit were methylated and the industrial alcohol market then amounted to 5% of total U.K. patent still output. Tables 49 and 50 show for the period 1830/70 summaries of the data used in the graphs and Table 51 shows the proportion of U.K. output produced by means of the patent still.

TABLE 49: Patent Still Output (000's proof gallons).

<table>
<thead>
<tr>
<th>Year</th>
<th>England</th>
<th>Scotland</th>
<th>Ireland</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1830</td>
<td>-</td>
<td>144</td>
<td>106</td>
<td>250</td>
</tr>
<tr>
<td>1840</td>
<td>3,257</td>
<td>670</td>
<td>1,031</td>
<td>5,758</td>
</tr>
<tr>
<td>1850</td>
<td>5,747</td>
<td>5,258</td>
<td>3,267</td>
<td>14,272</td>
</tr>
<tr>
<td>1860</td>
<td>8,012</td>
<td>6,886</td>
<td>2,299</td>
<td>17,197</td>
</tr>
<tr>
<td>1870</td>
<td>7,569</td>
<td>8,603</td>
<td>3,126</td>
<td>19,298</td>
</tr>
</tbody>
</table>

TABLE 50: Pot Still Output (000's proof gallons)

<table>
<thead>
<tr>
<th>Year</th>
<th>England</th>
<th>Scotland</th>
<th>Ireland</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1830</td>
<td>4,604</td>
<td>9,594</td>
<td>8,595</td>
<td>22,793</td>
</tr>
<tr>
<td>1840</td>
<td>2,609</td>
<td>8,274</td>
<td>7,020</td>
<td>17,903</td>
</tr>
<tr>
<td>1850</td>
<td>-</td>
<td>6,351</td>
<td>5,345</td>
<td>11,696</td>
</tr>
<tr>
<td>1860</td>
<td>-</td>
<td>5,704</td>
<td>4,122</td>
<td>9,826</td>
</tr>
<tr>
<td>1870</td>
<td>-</td>
<td>5,969</td>
<td>4,219</td>
<td>10,188</td>
</tr>
</tbody>
</table>

TABLE 51: Total Output Both Types of Still (000's proof gallons) and Percentage Produced in Patent Stills.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1830</td>
<td>23,043</td>
<td>1.1%</td>
</tr>
<tr>
<td>1840</td>
<td>23,661</td>
<td>24.4%</td>
</tr>
<tr>
<td>1850</td>
<td>25,968</td>
<td>55.0%</td>
</tr>
<tr>
<td>1860</td>
<td>27,023</td>
<td>63.1%</td>
</tr>
<tr>
<td>1870</td>
<td>29,486</td>
<td>65.5%</td>
</tr>
</tbody>
</table>

As Graph 14 shows the total number of distilleries using patent stills rose almost continuously between 1828 and 1850. The
patent still was not, however, adopted at an even rate throughout the United Kingdom. Coffey made his first sales in Ireland and with the main consumer demand for a whisky which closely resembled that produced by the patent still, Irish distillers responded enthusiastically to the innovation. By 1840 thirteen distilleries, more than in any other part of the United Kingdom, had installed patent stills. Despite this, total patent still output in Ireland (see Table 49) was very much less than in England.

IIa. England: Coffey’s prediction that the English gin market would provide a more suitable base for his still manufacturing business proved to be accurate. Although it was not until 1836 that Coffey secured his first contract for the installation of a patent still at Messrs. Currie & Co.’s distillery at Broxley, the supremacy of the patent over the pot still came most rapidly in the English market, and, by 1850 all English distillers worked from patent stills. The market for Coffey’s still was broader than the figures in Table 48 indicate for it was also used by rectifiers. Within the English distilling industry the decision to invest in the patent still could be made on technological grounds alone. Given its greater alcohol producing efficiency and the absence of any substantial demand for malt whisky the decision was uninfluenced by questions of consumer taste. Although the patent still had a much greater productive capacity no marked change in the structure of the English distilling industry followed the diffusion of the Coffey still. English spirit consumption displayed a rising trend from the excise reforms of 1825 to the duty increase in 1856 and this expanding market enabled the entire English distilling industry to convert to the patent still without any new industrial structure emerging. By 1852 there were twelve distilleries in England, the same as in 1833 and all were operating patent stills. This relatively trouble-free transition was not long maintained. English spirit consumption was not so badly hit as Scottish or Irish by
fiscal harmonisation and the duty increase of 1860, but the fall that occurred was sufficient, against the background of the greater productive capacity of the Coffey still, to lead to competition and a fall in the number of distilleries. Competition within England was not the only problem: Scots and Irish distillers also looked to the English market for their salvation from troubles at home. From twelve in 1852 the number of English distilleries had fallen to eight by 1860. In the 1860s these survivors faced another problem. This was the growing import of foreign spirit and in the face of this competition some of them turned to seeking trade alliances with the Scottish and Irish patent still distillers.

IIb. Ireland: England was the only part of the United Kingdom where the Coffey still established total dominance. In Ireland, pot and patent still distillers enjoyed a rough parity by the 1850s. This parity, however, reflected the patent still distillers' capture of markets formerly held by the pot still distillers. In Ireland, the consumption of legally produced spirits rose from the excise reforms until 1838. Between 1838 and 1842 it fell drastically, largely under the impact of Father Matthew's famous total abstinence campaign.8 Once consumption began to recover, the trends in the output of pot and patent still spirit were different. Pot still whisky did not regain its lost customers, and, from 1843 production hovered between four and five million proof gallons. Over the same period patent still output rose from 1½ m.p.g. to 4 m.p.g. The number of patent still distilleries did not grow proportionately. In 1843 there were nine patent still distilleries in Ireland. This represented a fall of four from the peak number of thirteen in 1840. By 1850 numbers had increased to sixteen but although patent still output continued rising to 1857, the number of patent still distilleries declined. Irish spirit consumption fell from 1853 to 1863 but the fall in numbers was associated with two other factors. The first was a growth in productive capacity in Irish patent still distilleries (Table 52).

This, as Table 52 shows, also happened in Scotland and England. The overall rise in output per distillery in all three countries is not surprising. The productive capacity of the Coffey still (as will be discussed) rose over time and offered substantial economies of scale. Production could therefore be expected to become increasingly concentrated in a smaller number of distilleries. Inter-country differences on the scale revealed by Table 52 are striking, but difficult to explain. Part of the difference arises from the basis on which the statistics are calculated. Total patent still output was divided by the number of distilleries operating patent stills. Not all these patent stills were Coffey stills, and, as in Ireland and Scotland there were other, less productive types of patent still this depresses the level of output per distillery. If anything, however, this factor should have operated to lower Scottish output most of all for the Stein still was more widely used in Scotland in the 1840s than were the other types of continuous still present in Ireland. Two other explanations may be suggested. The first arises from the fact that early Coffey stills were less productive than later improved designs. As the Irish distillers were the first to adopt the Coffey still, the original less productive model may account for their lower figures. The second suggestion is that the Irish distillers for some reason failed to reap the full economies of scale offered by the Coffey still. Both the Scottish and English patent still distillers captured far larger markets than the Irish. Also, they were geographically located on urban markets whilst in Ireland the patent still industry seems to have been much more widespread. Relatively small

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local markets may have kept capacity in check. Without a more
detailed knowledge of the Irish industry it is not possible to be
too dogmatic and, as the most recent history of the Irish whiskey
trade \(^{10}\) does not examine these features of the Coffey still, these
suggestions must remain speculative.

The second factor that accounts for the falling number of
Irish patent still distilleries was competition from Scotland, and
the success of the Scottish incursions into the Irish market suggests
that the Irish patent still distillers were higher cost producers.
In Scotland, as in Ireland, the home market declined between 1852 and
1860 under the impact of fiscal harmonisation. In October 1856,
six Scottish patent still distillers reached an agreement designed to
allocate spirit to different markets. Prior to this another reac-
tion to the fall in the Scottish home market was an attempt, espe-
cially by grain distillers in the West of Scotland, to gain sales in
Ireland. There are no statistics for Scottish spirit sales in
Ireland until 1860. In that year 890,000 gallons were imported from
Scotland. How much of this was patent still spirit is not known
but it amounted to 15% of total Irish spirit consumption of 5.95 m.p.g.
and 39% of an Irish patent still output of 2.299 m.p.g. A dent in
the Irish home market of this scale did not leave prices unscathed
and when linked with falling consumption and growing productive capa-
city adequately explains the changing number of Irish patent still
distillers.

A shrinking home market also thinned out the ranks of the
Irish pot still distillers but the response of Irish pot and patent
still distillers to the same unfavourable environment was different.
In the 1860s the pot still distillers sought and gained sales in the
English market. Based on the great Dublin whisky houses the sales
campaign emphasised the distinctive qualities of Irish pot still whisky.
The campaign was not marred by false modesty. "The finest whisky
manufactured" was what the Dublin distillers claimed for their product

\(^{10}\) E.D. McGuire, \textit{ibid}.

\(^{11}\) This and the following comments are taken from an advertisement
paid for by the Dublin Whisky Distillery Co. headed "A Protest
against Blending", \textit{Wine Trade Review}, January 15th, 1874 pp.XVII.
and they staked this claim on the raw materials; the finest home-grown Irish grain and pure Dublin water, and the exclusive use of the pot still: "No Dublin distiller would permit a 'Patent Still' inside his premises, as by doing so he should forfeit his reputation for the production of real Dublin whisky". For a while the campaign worked. Their product was more expensive for the Dublin distillers "pay the highest prices for all their materials" but it enjoyed a fashionable popularity with some English spirit drinkers. A campaign emphasising unique qualities involved a simultaneous attack on all other types of whisky including patent still spirit and blended whiskies. This provoked the first split within the trade.

Although the Irish patent still distillers attempted to benefit from the popularity of Dublin whisky by means of blending, this did not happen until the 1870s. Their immediate response to the problem of the decline in the Irish market was to seek an agreement with the Scotch Distillers' Association, a trade association formed in May 1865 by the Scottish grain distillers.

In Scotland (See Graph 15 c) it was in the 1840s that the patent still became well established. From under a million gallons in 1840 output rose to over 5 m.p.g. by 1850. This rise was set against the background of falling production amongst the pot still distillers and little expansion in demand. By 1854 patent still output had passed pot still, and, with the exception of one year, 1879, remained ahead.

Because of this rapid rise other writers have sought an explanation for the spread of the patent still in some of its main characteristics:

"The virtues of the patent still are speed, relative cheapness and independence of geographical locality." 13.

12. The real reason for its higher cost was the use of the pot still, a more expensive process.
13. R.B. Lockhart, op.cit. pp. 59-60 and also for following quotations.
This was Sir Robert Bruce Lockhart's verdict on the patent still and it has been echoed by most other writers on the Scottish distilling industry. The verdict was based on three features of the Coffey still. The first was its enormously enhanced productive capacity compared with the pot still: "a large grain whisky distillery can produce as much whisky in a week as the average malt whisky distiller produces in his nine months season." The second was the use of a mixed grain mash in which unmalted cereals "preferably maize...rye and oats" displaced malted barley, a more expensive raw material. The third feature was the low element of risk attached to the choice of a location for a patent still distillery. Investment in a malt or pot still distillery, Lockhart argued, might well be lost because the whisky might have the wrong flavour:

"For reasons which are not satisfactorily explained by the nature of the soil and the water and which so far defy chemical analysis the characteristics of malt whiskies differ in the most baffling manner. Hence comes the well known reluctance of successful malt whisky distillers to alter the slightest detail of the technique which they have always used. Patent stills are free from this handicap. They produce no magic elixir, but can be established anywhere without detriment to the product."

A more sophisticated version of this argument, relying less on magic and more on chemistry, was advanced by a geographer Dr. M.C. Storrie in 1962 and used to explain the fact that the patent still distilleries were located in the Lowlands. She pointed out that the Coffey still by distilling the various alcohols and fusel oils at different heights in the rectifier enabled them to be drawn off separately and this produced a much more pure form of ethyl alcohol than the pot still process. Since the resulting spirit was much purer, the character of the raw materials and water mattered less. Highland water and peat supplies were not important, and, as the patent still distillers used only a small percentage of malting barley "the new grain distilleries were set up where greater supplies could be obtained locally or imported from England."

In addition:

14. C.f. the quotation on p.206 above relating to malt and grain distilleries prior to the patent still.
"Continuous distillation day and night meant production cheaper by one-third as well as greater production. The grain spirit was more suitable than the malt whiskies for consumption by townspeople since there were fewer unpleasant after effects. These new distilleries then were situated in the cities and towns of the Lowlands." 17.

How helpful are these arguments in explaining the spread of the patent still in Scotland and, in particular how do they relate to the circumstances of the individual distiller deciding whether to invest in the new patent still process or to continue with the traditional process?

As an innovation the Coffey still was being introduced into an industry which, in Scotland as in Ireland, was very widespread. In both countries at the beginning of the nineteenth century there were very few places which did not possess a distillery. Distilling was an integral part of an agrarian economy. Local grain markets were tapped and most distilleries supplied their immediate neighbourhood with whisky, though in both countries there were groups of distillers actively engaged in seeking expanding market opportunities beyond their immediate locality. In Scotland, the Lowland grain distillers had established a place in the English market and in the 1830s Highland malt distillers were seeking sales in the Lowlands. A few courageous Highland distillers were even attempting to find outlets in the London market. Although both groups used the pot still process the scale of operations was much larger in the Lowlands. An urban market with mass sales was what attracted the Lowland grain distiller and any innovation which reduced costs whether it be the introduction of steam power or an alteration in the constituents of his mash to save malt duty was readily accepted. Despite this the industry was still widely diffused throughout the Lowland area. In the Highlands the localised nature of the industry was still very evident and the prospect of creating a demand for inferior qualities of local grain was an important factor in persuading landlords to invest in distilleries. Yet there were some signs

of change. The emergence of a spectrum of prices for the different qualities of whisky from different distilleries helped to explain the ability of certain distilleries to survive and raised questions about the advantages attached to "the nature of soil and water" in particular localities. Not, however, until the Highland railway expansion in the 1850s and 1860s created new opportunities for the malt distiller did potential investors begin to scrutinise the factors which gave some distillers premium prices for their output. Then the map of the Highland distilling industry did begin to change. In the 1830s, however different the characteristics of the two sections of the Scottish distilling industry were, they were both widespread and this was the background in which the innovation of the Coffey still took place.

Changes in raw materials, especially the use of a mixed grain mash and the introduction of maize are held to have been responsible for the location of the patent still distilleries in the Lowlands. How valid is this argument? It has already been shown how the Scottish grain distillers, using the existing pot still technology, had cut the amount of malted barley in the mash to economise on malt duty. Although the malt drawback by aiding the effective expression of a consumer preference for malt whisky had persuaded some grain distillers to switch back to malt, the essential point is that grain distillers were fully aware of the possibility of using a mixed mash well in advance of the appearance of the Coffey still. The unmalted portion of the mash was usually composed of barley and oats though occasionally wheat, when prices were low, and beans and peas might be used. Oats in small amounts were used because of the larger husk which aided the drainage of liquor from the mash tun. Maize, which Lookhart held to be an important factor in explaining the lower cost of patent still spirit, was not in fact used at all until the early 1860s. It was not therefore an important element in investment decisions about the patent still in the 1830s and 1840s. Until the repeal of the Corn Laws home supplies of

18. And other raw materials.
grain were mainly used and even after 1846 it was not until imported grains, including maize, fell in price that grain whisky distillers altered the contents of their mash tuns.

Storrie raises the question of the after effects of drinking malt whisky and this merits some comment. Most writers on Scotch whisky attribute the popularity of blended whiskies in the second half of the nineteenth century to their lighter flavour. Malt whiskies, it is agreed, were full bodied, difficult to digest, and ill-suited to urban men employed in sedentary occupations. Grain whisky, because it contained fewer of the secondary constituents, was less fully flavoured and when mixed with malt whiskies made them acceptable to a wider market. The trouble with this argument (apart from the fact that there were good economic reasons for the spread of blending) is that it echoes just a bit too much the blenders' own advertisements. The cheapest blends were those which contained the highest proportion of grain whisky. These were sold predominantly in working class markets and neither the Glasgow shipwrights or the Newcastle colliers could be said to have worked in sedentary occupations. Storrie's argument, rooted as it is in one of the undoubted characteristics of the patent still (its ability to produce a pure spirit), is more appealing and finds support in recent research on the causes of hangovers. This has suggested that where equal quantities of different spirits are consumed, the more highly rectified spirits do indeed have less unpleasant after effects. This is because hangovers are caused by the dehydrating effect of alcohol on the body and spirits which contain large quantities of secondary constituents have a greater dehydrating effect. Yet, how relevant is this argument to the establishment of patent still distilleries in the Lowlands? It seems hard to believe that only townpeople would have welcomed a purer spirit even if new industrial routines demanded less irregular, more sober habits. It also flies against the contemporary opinion that grain spirits were less pure and wholesome than malt whisky, the very belief that

20. Despite repeal a customs duty was maintained on maize until June, 1869.
the blenders' and grain distillers' advertising was designed to counteract.

Although most writers have noted that the Lowland distillers alone adopted the patent still, none have traced the origins of the patent still firms. This is unfortunate because it is in the origins of these firms that the true nature of the investment decision facing distillers can be found. In fact there was simply no wave of new distilleries built around the patent still process. Most of the distillers who adopted the patent still were already established in the Lowlands and the nature of their investment decision was to either convert their premises for patent still production or extend their distilling capacity by adding a patent still. Table 53 will help to show this:

**TABLE 53: Origins of Scottish Patent Still Distilleries**

<table>
<thead>
<tr>
<th>Distillery</th>
<th>Foundation Date</th>
<th>Output in 1887 (m.p.g.)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cameron Bridge, Fife</td>
<td>1824</td>
<td>1.3</td>
<td>1827, Stein still 1830s, Coffey Converted to patent still in 1840s.</td>
</tr>
<tr>
<td>Glenochil, Stirling</td>
<td>1746</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Yoker, Glasgow</td>
<td>1770</td>
<td>0.6</td>
<td>Patent from c.1840</td>
</tr>
<tr>
<td>Port Dundas, Glasgow</td>
<td>1787</td>
<td>2.6</td>
<td>Patent from 1852 Patent Malt 1855</td>
</tr>
<tr>
<td>Carsebridge, Alloa</td>
<td>1792</td>
<td>1.7</td>
<td></td>
</tr>
<tr>
<td>Glen Mavis, Bathgate</td>
<td>1800</td>
<td>0.08</td>
<td></td>
</tr>
<tr>
<td>Cambus, Clackmannan</td>
<td>1806</td>
<td>0.9</td>
<td></td>
</tr>
<tr>
<td>Kirkliston, West Lothian</td>
<td>1825</td>
<td>0.7</td>
<td>Patent from 1828</td>
</tr>
<tr>
<td>Adelphi, Glasgow</td>
<td>1826</td>
<td>0.5</td>
<td>Converted to patent in 1876.</td>
</tr>
<tr>
<td>Bo'nness, West Lothian</td>
<td>1830</td>
<td>0.87</td>
<td></td>
</tr>
<tr>
<td>Saucel, Paisley</td>
<td>1832</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Caledonian, Edinburgh</td>
<td>1855</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td>North British, Edinburgh</td>
<td>1885</td>
<td>1.3</td>
<td>Selling patent in 1845, said by wit- ness at R.C.W. to be first in Scotland. Closed c.1865.</td>
</tr>
<tr>
<td>Haddington, East Lothian</td>
<td>?</td>
<td>?</td>
<td></td>
</tr>
<tr>
<td>Seggie, Fife</td>
<td>1810</td>
<td>?</td>
<td></td>
</tr>
</tbody>
</table>
It is based mainly on Barnard\textsuperscript{22} and lists the foundation dates of the patent still distilleries operating in 1887 (except Haddington and Seggie distilleries which had closed by 1865).\textsuperscript{23} Including Haddington and Seggie fifteen distilleries are listed. As the Table is based on distilleries operating in 1887 does it adequately cover all the patent still distilleries in existence between 1830 and 1887? It is possible to check the representativeness of the table against the known number of distilleries using the patent still in the period 1828 to 1860.\textsuperscript{24} During that period the maximum number was seventeen in 1856. Only two distilleries in the table, Bo'ness and North British were established as patent still distilleries after 1860 which leaves a coverage of thirteen out of seventeen. This indicates that the majority of the distilleries which took up the patent still were already in situ in the Lowlands.

What has to be explained then is not so much the spread of the Coffey still, but rather its limitation. Why was investment in the patent still limited to so few distilleries and distilleries which were already in existence? The profile of the patent still distilleries can be more clearly defined. Table 54 shows the output of both malt and grain distilleries in 1833\textsuperscript{25} which are believed to have adopted the patent still process in the nineteenth century.

<table>
<thead>
<tr>
<th>Distiller</th>
<th>Location</th>
<th>Output</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Moubray</td>
<td>Cambus, Stirling</td>
<td>278,315</td>
<td>2</td>
</tr>
<tr>
<td>James Stewart</td>
<td>Paisley</td>
<td>233,528</td>
<td>3</td>
</tr>
<tr>
<td>John Bald &amp; Co.</td>
<td>Cardross, Stirling</td>
<td>187,291</td>
<td>4</td>
</tr>
<tr>
<td>John Haig</td>
<td>Cameronbridge, Fife</td>
<td>179,664</td>
<td>5</td>
</tr>
<tr>
<td>John &amp; William Harvey</td>
<td>Yoker, Glasgow</td>
<td>175,745</td>
<td>6</td>
</tr>
<tr>
<td>Charles &amp; David Gray</td>
<td>Adolph, Glasgow</td>
<td>163,749</td>
<td>8</td>
</tr>
<tr>
<td>John Stein &amp; Co.</td>
<td>Clarkmann, Stirling?</td>
<td>101,994</td>
<td>12</td>
</tr>
<tr>
<td>Patent Distillery Co.</td>
<td>Kirkliston, Lothian</td>
<td>65,644</td>
<td>18</td>
</tr>
</tbody>
</table>

Total distilleries in Rank: 72.

\textsuperscript{22} A. Barnard, \textit{passim}.
\textsuperscript{24} H.C.W., App. T. viii.
Those with a question mark are ones were some uncertainty exists about whether or not they adopted the patent still. The distilleries have been ranked according to the place of their output in the total list of all malt and grain distilleries. For the malt distilleries the conclusion seems inescapable that it was the largest producers who converted to the patent still. Except for John Stein and the Patent Still Distillery Co. all the malt distillers were amongst the top ten producers. In John Stein’s case it is not clear whether he definitely operated patent stills, and the relatively low position of the Patent Still Distillery Co. may be explained by the fact that this was a new firm founded in 1832 to take over Kirkliston distillery after the bankruptcy of the previous owner. 26 Fewer of the top ten grain distillers appear in the list. The output of the grain distillers was, however, still very large for the Lowland industry as a whole. Also, the first two places in grain spirit output were held by James Haig of Lochrin and Thomas Haig of Bonnington. George Haig operated a patent still at Inverkeithing 27 and the family later concentrated all its production of grain spirit at Seggie and Cameron Bridge. For both malt and grain distillers it can be said that it was the large-scale distiller who invested in the patent still. Why was this?

27. N.S.A., Fife, p.244. Written in 1836 the contributor refers to “a large distillery in which whisky is made... by Coffeys patent steam apparatus...”
Traditionally, the advantage of the patent over the pot still has been seen in terms of its lower variable costs. Because of the interchange of heat in the operation of the still lower fuel costs are held to have been one of the still’s great attractions.\footnote{See R. Wilson, \textit{op.cit.}, W.S.T.R., 16th November 1962 at p.1542.} Coffey himself in his contracts promised that coal consumption would be reduced to one quarter of the pot still process and his contemporary, John Haig, stated that the advantage of the Coffey still was that it saved “three-quarters of the coal in the distilling process and one-quarter of the coal used in the whole process.”\footnote{Seventh Report, App. 144, p. 421.} Although the prospect of lower variable costs might well make investment in the patent still attractive, an argument based on lower variable costs in general and fuel costs in particular, hardly seems consistent with either the observation that large scale producers turned to the patent still or the pattern of costs in the pot still process. Lower variable costs would surely be equally attractive to all distillers especially if the commercial background was – as distillers repeatedly asserted – one of intense competition in the trade.

Moreover, how important were fuel costs in the pot still process? In Chapter Five (above pp. 211-213) the cost structures of malt and grain distillers in 1831 were examined. Table 55 is based on the figures for John Harvey (above Table 44 a) and for a hypothetical grain whisky distiller (above Table 46). It shows the percentage contribution of the main elements to the total cost of production of a gallon of malt and grain whisky. Spirit duty has been excluded so as to show the price at the distillery. Manufacturing costs which included labour, fuel, yeast and capital charges amounted to 7% of total cost in the case of malt whisky and 8% for grain. The accounting principles behind the figures are not known but the figures were not challenged at the time and two points may be drawn from them. First, fuel costs were unlikely to have been a very large part of manufacturing costs and therefore an explanation for investment in patent stills based upon fuel saving seems inadequate. Second, although fuel costs were
unimportant total manufacturing costs of 7 to 8% may well have offered scope for a reduction through investment in patent stills.

To gain any reduction in manufacturing costs involved a sizeable fixed capital investment. Unlike the pot still whose size could be scaled down to suit the needs of small producers, the patent still’s very continuity made it an expensive investment. Not merely was the still itself costly; Coffey’s initial contracts
stated prices ranging from £1,850 to £2,500 per still, but to gain the full benefit from continuous production larger boilers, pumps, mash tuns, maltings, refrigerators and other ancillary equipment was needed. A comparison with the cost of setting up the Beauly Distillery Company, one of the larger scale malt whisky distilleries, may indicate just how expensive the patent still was. The insurance valuation for that distillery amounted to £3,750 and this included buildings, plant, machinery and stocks. The two copper stills were valued at £200 and were capable of distilling 50-60,000 gallons of malt whisky annually. If the insurance valuation was anywhere near the true investment figure then clearly a Coffey still costing between £1,850 and £2,500 put fixed investment on a totally different level from that of the pot still process and this would explain the presence of only the largest firms amongst the ranks of the patent still distillers.

The high level of fixed investment should not, however, be exaggerated. Take the position of a large scale pot still distiller contemplating investing in a Coffey still: what he wanted was a still which would give him either an equal or a greater output than he was getting from the pot still process. This involved not the replacement of a single pot still but of a battery of pot stills and a true comparison of investment costs would have to allow for this. John Haig made this point in his evidence to the Parnell Commission. After stating that the Coffey still itself was not cheaper, he remarked: "though as you only need one still in place of four, then it is cheaper."32 What would resolve the rather ambiguous nature of this statement would be a comparison of the capital/output ratios of the two processes. For the early period of the diffusion of the Coffey still in the 1830s and 1840s, there is simply no data from which capital/output ratios can be calculated. However, a judicious blend of qualitative evidence from trade writers and quantitative material presented to

30. R. Wilson, op.cit. 16th November, 1962, p.1542.
the Royal Commission on Whiskey may help to establish the differences between the two processes.

What most struck nineteenth century writers when describing the patent still and what has always impressed every subsequent commentator was the prodigious output. Charles Tovey in 1864 wrote:

"As an instance of the enormous size of some of the distilleries in the United Kingdom, we may mention some of Coffey's stills at Edinburgh, Glasgow and other places, work off 2,000 gallons of wash per hour, and one upwards of 3,000 gallons. There are several of equal magnitude and it is stated that those now at work, or being erected, are capable of distilling half a million gallons of wash per day, yielding, on an average 11 to 12% of proof spirit."

Barnard, a trade journalist with an ever open eye for the achievements of Victorian technology, began his tour round the distilleries of Scotland at Port Dundas distillery. Entering the still house, "a lofty structure forming the main body of the building", he was shown three Coffey stills. These "handsome town-like vessels" were seventy feet high and fed by pumps "of immense power.... capable of throwing from 400 - 600 gallons per minute to a height of forty feet." Port Dundas was then producing over 2½ m.p.g. of whisky per annum, but it was at Caledonian distillery in Edinburgh that Barnard saw the Coffey still that was "said to be the largest in Europe." Caledonian was one of the rare exceptions in the patent still business for it had been custom built as a grain whisky distillery in 1855. In 1884 it was "the second largest grain distillery in the United Kingdom, and in all respects it may be called the model Distillery of Europe, as it contains every improvement of machinery and new patent known in distilling." From its giant Coffey still spirit flowed at the rate of 1,000 gallons per hour and the six warehouses where the spirit was stored were, Barnard noted, "enormous buildings covering three acres of ground." One of them "a new lofty Gothic structure" was "a notable object

33. C. Tovey, *British & Foreign Spirits* (1864), pp. 18-19.
from the railway as you approach the Haymarket station." On his tour Barnard visited all the whisky distilleries in the United Kingdom, then numbering 151. His descriptions of the patent still distilleries repeatedly carry the impression of the sheer magnitude of their output and the physical impact of their operations on the observer.

The problem remains, however, of trying to attach some quantitative measure to these impressions. In evidence to the Royal Commission on Whiskey, James Calder\textsuperscript{34} presented figures for the amount of capital then needed (i.e. in 1908) to establish pot and patent still distilleries and the relative outputs that would be achieved. Sections I and II of Table 56 show the cost and output figures.

\textbf{TABLE 56: Capital/Output Ratios in Pot and Patent Still Distilleries (1908)}

\textbf{I.: Pot Still Distillery}

<table>
<thead>
<tr>
<th align="center">Capital Cost of Malt Distillery</th>
<th align="center">Output (p.g. p.a.)</th>
<th align="center">Price per p.g.</th>
</tr>
</thead>
<tbody>
<tr>
<td align="center">£20,000 to £25,000</td>
<td align="center">40,000 – 80,000 p.g.</td>
<td align="center">2/10 – 3/8 (1908)</td>
</tr>
</tbody>
</table>

\textbf{II.: Pot Still – Capital/Output Ratio}

<table>
<thead>
<tr>
<th align="center">Capital Cost of Malt Distillery</th>
<th align="center">Proof Gns. per annum</th>
<th align="center">Price of Output (£)</th>
<th align="center">Capital/Output Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td align="center">£20,000</td>
<td align="center">40,000</td>
<td align="center">2/10</td>
<td align="center">£5,666</td>
</tr>
<tr>
<td align="center">£20,000</td>
<td align="center">40,000</td>
<td align="center">3/8</td>
<td align="center">£7,333</td>
</tr>
<tr>
<td align="center">£25,000</td>
<td align="center">80,000</td>
<td align="center">2/10</td>
<td align="center">£11,333</td>
</tr>
<tr>
<td align="center">£25,000</td>
<td align="center">80,000</td>
<td align="center">3/8</td>
<td align="center">£14,666</td>
</tr>
</tbody>
</table>

\textbf{III.: Patent Still Distillery}

<table>
<thead>
<tr>
<th align="center">Capital Cost of Grain Distillery</th>
<th align="center">Output (m.p.g. p.a.)</th>
<th align="center">Price per p.g.</th>
</tr>
</thead>
<tbody>
<tr>
<td align="center">£100,000</td>
<td align="center">1 – 1.5 m.p.g.</td>
<td align="center">1/6 – 1/7</td>
</tr>
</tbody>
</table>

\textbf{IV.: Patent Still – Capital/Output Ratio}

<table>
<thead>
<tr>
<th align="center">Capital cost of Grain Distillery</th>
<th align="center">Million p.g. p.a.</th>
<th align="center">Price</th>
<th align="center">Value of Output (£)</th>
<th align="center">Capital/Output Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td align="center">£100,000</td>
<td align="center">1.0</td>
<td align="center">1/6</td>
<td align="center">£75,000</td>
<td align="center">1.33 / 1</td>
</tr>
<tr>
<td align="center">£100,000</td>
<td align="center">1.0</td>
<td align="center">1/7</td>
<td align="center">£79,166</td>
<td align="center">1.26 / 1</td>
</tr>
<tr>
<td align="center">£100,000</td>
<td align="center">1.5</td>
<td align="center">1/6</td>
<td align="center">£112,500</td>
<td align="center">0.81 / 1</td>
</tr>
<tr>
<td align="center">£100,000</td>
<td align="center">1.5</td>
<td align="center">1/7</td>
<td align="center">£118,750</td>
<td align="center">0.80 / 1</td>
</tr>
</tbody>
</table>
The right hand column shows the range of selling prices for malt and grain whisky in 1908. A range of prices is necessary because of the different prices between distilleries. This was much wider for malt, a more differentiated product, than for grain. The prices are for new whisky. Although the retention of whisky in bond for maturation became important from the 1870s and added to the value of whisky, the benefit went to the stockholder who was not necessarily a distiller. From the point of view of investment in a new distillery, capital gains from maturation were not secured immediately so that calculating the value of output on the basis of the price of new whisky presents a fairer comparison. Sections II and IV of the table show the capital/output ratios for the two processes. As Calder stated a range of capital costs and outputs the capital/output ratios have been calculated to allow for this and the varying price of whisky. The resulting ratios show that in all instances the patent still process had a much lower capital/output ratio.

If these ratios are accepted as they stand certain important implications follow from them. Because the Coffey still was expensive its use was confined to the larger scale distillers. However, because it offered a greatly enhanced productive capacity, the unit costs of production were lower. High costs of entry restricted the number of patent still distillers but those who could afford the entry fee gained a lower cost of production. These results are important for they explain most of the main features of the spread of the Coffey still in Scotland. The lower cost of production explains the dramatic rise in patent still output in the 1840s which, because of the stagnation in demand, was accomplished at the expense of the pot still (See Graph 150). Although the price reducing effect of the Coffey still must have been partly offset by the increase in spirit duty in 1840, the competitive position of the pot still distillers was more seriously affected.

In the 1850s Scottish spirit consumption (See Graph 80, page 151) fell heavily but patent still output, after falling between 1850 and 1853, rose from 5.3 m.p.g. in 1853 to 7.1 m.p.g. the following year. This rise was associated with an increase in the number of patent still distilleries and in 1856, the year when the first trade arrangement was established amongst grain distillers, there were seventeen patent still distilleries. This was the largest number since the Coffey still had been introduced to Scotland, but although patent still output rose, after 1860 the number of patent still distilleries declined. The background to this fall was one of an expanding gap between consumption and production in the Scottish distilling industry (See Graph 80). Although the number of both pot and patent still distilleries was falling, the rise in the number of patent still distilleries up to 1856 presented a more serious problem for the grain distillers. One additional Coffey still meant a larger proportional jump in output than one additional pot still and this is reflected in the discontinuous shifts in the graph of patent still output. Attempts to control the output of patent still spirit therefore became crucial to the grain distillers, and, because the high costs of entry limited the number of patent still distilleries combination was a much more feasible proposition.

In the next paragraph some of the difficulties involved in using the capital/output ratios will be discussed. Before doing this it will be helpful, having accounted for the effects of the capital/output ratio, to consider exactly what costs savings were available from investment in the patent still. Were contemporaries right in saying that once a patent still was installed fuel costs were lower? Or were labour costs lowered as a result of the greater productive capacity? Again, there is a data problem: No cost figures exist for the period when the Coffey still was being rapidly installed and statistics for a later date will need to be used.
Table 57 presents the percentage breakdown of variable costs per gallon for a grain distillery and a Highland malt distillery in 1925. The output figures are included simply to show the difference in scale. As the Table makes clear, once the different constituents of the mash are taken into account, the greatest savings were to be found in fuel and labour costs. Only 3% of the total variable cost in grain distilling was attributable to fuel; in malt distilling 13%. The wage and salary bill was also lower in grain distilling, 8% as opposed to 13%. It seems, then, that the patent still, once established, did offer significant cost reductions.
Although the capital/output ratios for 1908 offer a useful tool for analysing the effects of the Coffey still, it would be wrong to accept the figures uncritically. They were, after all, calculated from data presented in 1908 and to use them to explain developments between 1830 and 1856 may simply be to invite a response that conditions were very different by 1908. Also, there are problems associated with the theoretical assumptions behind capital/output ratios which may undermine their credibility. It will be useful to examine these difficulties now and in doing so to further highlight other aspects of the Coffey still.

Capital/output calculations show the relationship between a stock of capital and a flow of output. Theoretically, two assumptions are made. The first is that resources are fully employed so that true opportunity costs are shown. In the context of the distilling industry in 1908 this is a risky assumption to make. The late Victorian boom in spirit consumption was over, demand was falling and excess capacity was present in the industry. Very few investors were optimistic about the industry’s prospects and little new investment was taking place. Although Calder’s figures were likely to have been accurate as his business interests covered both pot and patent still distilleries, his estimates were not a recommendation for further investment but a hypothetical exercise for the benefit of the Royal Commission. Whether he discounted the figures to allow for this unfavourable situation is not clear but it seems likely that he was simply stating the maximum possible outputs for a given amount of capital expenditure on the two processes. An adjustment — and this would meet the criticism that capital/output ratios measure gross and not net capital expenditures — could be made to the capital expenditure figures by introducing depreciation. This, on Calder’s figures, would increase the superior position of the patent still for he calculated depreciation at 1d. per gallon on grain whisky and 6d. to 9d. on pot. The second assumption lies in the nature
of the production function. Output is assumed to be a function solely of capital and there should be no possibility for substitution between other factors of production and capital. As the comparison between the pot and patent still processes is one between different units of capital embodying different degrees of technological progress the problem of substitution seems less important. Yet, even if there was no possibility for substituting (say) labour for capital in the stills themselves, the Coffey still was a much more potent force in making for innovation in the earlier stages of production.

Its productive capacity put pressure on distillers to seek labour saving opportunities in such manual operations as malting. The introduction of pneumatic malting\(^35\) from the early 1860s was one way of economising on a labour intensive process. Similarly the passage of materials through the distillery became mechanised under the impetus of the Coffey still. Again, Barnard was very much struck by this feature in the Caledonian distillery.

The distillery:

"has the advantage of two lines of railway right through the works...The grain is delivered in bulk-covered waggons with sluice flap bottoms (the only ones of the kind we have seen in Scotland) each holding 50 quarters of grain. Arriving at the grain department the attendant unbolts the trap, and the grain falls into a sluice in the middle of the six-foot way into a continuous screw, which almost in an instant sends it to the elevators...carrying it up to the top floors, and delivering it by the screws, to the various grain departments — thus doing away with manual labour..." 36.

Large quantities of liquid as well as grain had to be moved around the distillery and new distilleries like Caledonian and later, North British, were laid out on 'the Tower principle'.\(^37\) By raising the grain to the mash tun and then allowing the worts to descend by force of gravity throughout the distillery, capital in the form of

35. Pneumatic malting: grain was placed in a cylindrical drum. This could be revolved so that the grain turned in much the same way as with floor maltings. The great advantage of pneumatic malting was that by drawing hot (or cold) air through the grain in the drum the rate of germination could be controlled. This made for more even working in summer and winter.

36. Barnard, op.cit., p.20
steam pumps could be saved. Over time it was not only the ancillary stages of production that changed. The productive capacity of the Coffey still also increased. Cambus distillery, one of the early patent still distilleries, installed a still capable of producing 250 gallons of spirit per hour. High by existing pot still standards, by the 1870s its output was only a quarter of that in Caledonian distillery.

From the point of view of the capital/output ratio it is quite possible that an increased demand for grain whisky influenced the amount of capital, rather than that the causation ran solely from capital to output. Increases in the capacity of the patent still do not however, seriously detract from the usefulness of capital/output ratios for comparative purposes for in the pot still distilleries capacity was also increased. In pot still distilling increased capacity took a different form. Output was raised only in part by increasing the size of pot stills. Much more commonly increased output was achieved by expanding capacity in the processes prior to distilling, and by adding to the number of pot stills. The reason for this was the pot still distiller's fear that any alteration in his distilling plant would alter the nature of his product. "Alterations" the manager of Glenside distillery in Campbeltown told Barnard "would not improve the whisky or increase the sale." Because the pot still process produced a much less pure form of alcohol the character of the raw materials, the water and the shape of the still, determined the flavour of the product. This put a high premium on preserving traditional techniques. As Andrew Jameson the Managing-Director of John Jameson & Son, the Irish pot still distillers told the Royal Commission on Whiskey:

"As a matter of fact, in the distillery we have all one product, and we have tried to stereotype the processes which have been handed down to us that produce that product; and as regards the mash, and the chemistry and the science

37. Pot still distilleries were also constructed on this principle. 38. A. Barnard, op.cit., p.82.
"of malting and drying the corn and everything of that sort, we use the chemistry as much as we can, but as to the actual process of distilling, we would never depart from what has been handed down to us." 39.

An important consequence of these different attitudes was that the patent still distillers, because they felt much less constrained by considerations of quality, were able to respond much more rapidly to changes in raw material prices and techniques. Grain distillers switched to rye, a lower cost grain, when import prices fell and this in turn lowered their costs of production. A source of revenue in yeast sales was also available for the grain distiller but not the pot still distiller. The Spirits Act of 1860 eased the restrictions on the use and sale by distillers of yeast made in the distillery. Yeast production however, needed a different type of mash 40 and this altered the flavour of the spirit. In patent still distilleries this could be removed by re-distilling which was inexpensive using the Coffey still.

One last contrast between the pot and patent still distilleries was that the patent still distilleries which were established in the second half of the nineteenth century were free to choose their location according to the kind of factors mentioned by Storrie. 41 The number of new patent still distilleries was, however, small. Between the peak year of 1856 and the beginning of the whisky boom in the 1890s, very few, probably not more than three additional patent still distilleries were established in Scotland. These included two conversions from pot still distilleries, Do'ness (West Lothian) and Loch Katrine (Glasgow), and one specifically created for grain distilling, North British (Edinburgh). In the boom of the 1890s one pot still distillery, Dundashill (Glasgow) added a patent still to its distilling capacity and two new grain distilleries, Gartloch (Glasgow) and Ardgowan (Greenock) were founded. Close proximity to the principle blending centres from which the main demand for grain whisky came was the main

39. R.C.W., St. 1712, p.59.
40. With a proportion of rye. This favoured the growth of yeast cultures.
factor influencing their Lowland location but their physical layout reflected transport and raw material changes. North British for example, was located at Gorgie on the western part of Edinburgh's suburban railway line. A branch line ran into the distillery and railway trucks bringing maize and barley from the Port of Leith could be emptied straight into underground hoppers. A supply of town water was readily available as also was cooling water from the Union Canal. Sewage disposal, a matter of some importance given the large quantities of spent water, was also easy at Gorgie as the site was close to one of the city's principal sewers. 42.

Andrew Jameson denounced the patent still as "a box of tricks". The use of the capital /output ratios for 1908 enables most of the still's tricks to be explained. At the same time the ratios embody both increases in capacity and economies of scale which were only gained over a period of time, so that it is the general evidence of the gap between the two processes rather than the precise magnitude of the ratios which is important. The rapidity with which patent still output increased in the 1840s suggests that the still's advantages existed and were recognised from the beginning. Had capital/output ratios been available for this period it is unlikely that their message would have been so very different.

42. The Union Canal "being upwards of 90 feet above the level of the field the water would rise by gravitation to the height of any ordinary buildings." This and other locational factors were reported to the promoters' meeting. The North British Distillery Co. Ltd., Board Minute Book No. 1, 23rd October 1885. (Hereafter cited as N.B.D.C., B.M.B.)
CHAPTER EIGHT

PROBLEMS OF ASCENDANCY, THE TRADE ASSOCIATIONS AND
THE FORMATION OF THE DISTILLERS COMPANY (1856 - 1877)

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CHAPTER EIGHT

PROBLEMS OF ASCENDANCY, THE TRADE ASSOCIATIONS AND THE FORMATION OF THE DISTILLERS COMPANY (1856 - 1877)

"There seems to be a cloud gathering which, if not dispelled, may burst upon us, and the sooner, therefore we endeavour to avert it the better..."

(John Ha1d, Carsebridge Distillery to Robert Stewart, Kirkliston Distillery 14th September 1876).

I. INTRODUCTION

In 1822 Thomas Smith of the Mile End Distillery in London had thought that it was inevitable that the distilling trade should fall into a few hands. As in the brewing industry "the application of machinery to various parts of the manufacture" would mean that the competitive advantage would lie with the larger producer. In Scotland the tide which had seemed to be running in favour of the large distiller was reversed as a result of the excise reforms. For a brief period the small distiller was given an opportunity to establish himself in the legitimate trade, but, in the 1830s, the introduction of the Coffey still again swung the competitive struggle in favour of the large producer. It was not the Coffey still alone that was responsible for this for in wholly pot still distilleries the scale of output also rose. The great productive capacity of the Coffey still made it, however, the most striking symbol of the successful establishment of "factory distilling" and by the middle of the nineteenth century, the contrast between the pot and patent still distilleries was evident. In 1854, the year when the output of patent still spirit passed that of pot for the first time, there were thirteen patent still distilleries in Scotland. Their combined output was over 7 m.p.g.

Malt distilleries numbered 119, a fall of 49 over the past ten years, and they shared an output of 42.2 m.p.g. The position was little different in the United Kingdom as a whole. In 1860, twenty-seven million proof gallons of spirit were distilled. 63% came from patent stills and these were concentrated in a mere twenty-eight distilleries.

Although the patent still distillers' star appeared to be in the ascendant, the growing output of patent still spirit was accompanied by intense competition amongst the patent still distillers. In Scotland the period from 1856 to 1877 was marked by the attempts of the patent still distillers to limit the degree of competition amongst themselves. Inevitably, given the homogeneous nature of the spirit produced by the Coffey still and the unification of the U.K. spirit market in 1858, a solution to excessive competition could not be found in Scotland alone. Irish and English grain distilling interests had also to be brought into the discussions. Whilst distillers were not the only businessmen to seek to temper the forces of competition in an age of laissez-faire, their efforts to do so provide an interesting contrast between the ideology of the period and the reality of the industrial situation.

The outline of the attempts by the patent still distillers to combine can be fairly readily established. In October 1856 the first trade arrangement was negotiated. The parties were six Lowland grain distillers and its object was to establish an agreed allocation of the trade in patent still spirit. It only lasted for a year and was not renewed. In May 1865 a second trade arrangement was entered into, known as the Scotch Distillers' Association. This Association was extended to cover certain Irish and English patent still distillers. Its objects were both price and output control and it lasted with varying degrees of success and membership until 1876. In 1877 the Distillers Company Limited, an amalgamation of six Lowland grain distilleries, was formed. The following
year, a third trade arrangement, the United Kingdom Distillers' Association, was founded, mainly on the initiative of the D.C.L. Because it had the backing of the D.C.L. this Association was more successful than its two predecessors and it did not break up until September 1888.

In this chapter the problems facing the grain distillers between 1856 and 1877 will be discussed. In one respect the study of the activities of the distillers now becomes much easier, for, as 1877 is approached, business records become available. The records of the first two associations have not survived but W.H. Ross in the introductory chapters of his History of the Distillers Company described some of their work. From 1877, the Board Minute Books of the D.C.L. are available as also are the minutes of the United Kingdom Distillers' Association.

II. THE TRADE ARRANGEMENT OF 1856

Who were the members of the first trade arrangement and what persuaded them to join? Table 58 shows the membership of the first two associations and the allocation of output between members. For the purposes of the first association it is the column headed 1856 in Table 58 that is relevant. In the discussion on the diffusion of the Coffey still, the background to the association was explained in terms of the falling consumption of spirit in Scotland, the growing output of patent still spirit and the discontinuous shifts in the graph of output as more firms adopted the patent still. The feasibility of combination was explained by the relatively small number of patent still distillers. Although all of these factors were important, they form a group of necessary

rather than sufficient conditions for the establishment of the association. To find the sufficient conditions two other factors, the nature of the markets for grain spirit and the place of grain costs in the price of spirit, must be introduced.

### Table 58: Membership and Output Allocations in the Trade Associations of 1856 and 1865

<table>
<thead>
<tr>
<th>Firm</th>
<th>Distillery</th>
<th>Allocation of Output (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1856</td>
<td>1865</td>
</tr>
<tr>
<td>Menzies, Bernard &amp; Craig</td>
<td></td>
<td></td>
</tr>
<tr>
<td>John Bald &amp; Co.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>John Haig &amp; Co.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>McNab Bros. &amp; Co.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robert Moubray</td>
<td></td>
<td></td>
</tr>
<tr>
<td>John Crabbie &amp; Co.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Macfarlane &amp; Co.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>John Haig &amp; Co.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Walker &amp; Co.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R. Harvey &amp; Co.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

By 1856 three main markets existed for grain spirit. The first and probably the most important quantitatively was the sale of grain spirit for consumption as whisky in Scotland, either on its own or for mixing with malt whisky. Until the 1870s most of this spirit was sold "hot from the still" without undergoing maturation. The second was the long-standing 'export' market in England where grain spirit was sold for rectification into gin. The last and newest market was the methylated spirit market created by the Act of 1855 which allowed the duty free use of denatured spirit. As well as being the newest market it had two other distinguishing features. Although described as a market for grain spirit, it was also supplied by patent still spirit made from other raw materials of which the most important was molasses. Molasses were cheaper to distil but dear to transport and the competitive advantage in the production of molasses spirit lay with distilleries possessing

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3. Denatured spirit: spirit rendered unfit for potable purposes by the addition of a noxious substance. Originally crude wood naptha was used.
harbour or canal facilities where bulk shipments could be delivered. By 1860 a mere 149,000 gallons of spirit were methylated amounting to 0.1% of total U.K. patent still output. Scottish distillers supplied 52,000 gallons or 29% of the methylated spirit market. It was not, at this stage of the industry's development, an important factor in the formation of combinations and not until 1878 did distillers try to regulate the price of spirit for methylation.

For the Scottish grain distillers it was developments in the home and English markets that mattered. Table 59 shows the quantities charged for consumption and the quantities distilled in England and Scotland averaged for the ten years period to the formation of the Association.

**TABLE 59: Average Quantities Consumed and Distilled 1846/1855**

<table>
<thead>
<tr>
<th>Period</th>
<th>Quantities Charged for Consumption (m.p.g.)</th>
<th>Quantities Distilled (m.p.g.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>England</td>
<td>Scotland</td>
</tr>
<tr>
<td>1846/50</td>
<td>8.921</td>
<td>6.750</td>
</tr>
<tr>
<td>1851/55</td>
<td>9.748</td>
<td>6.435</td>
</tr>
</tbody>
</table>

In the English market, consumption was growing; So too was the output of the English distilling industry but not sufficiently to match demand, and this left an unfulfilled demand to be met by Scottish and Irish distillers. It is not until 1860 that statistics are available for the interchange of spirits between the countries of the United Kingdom. In that year 5.061 m.p.g. of Scottish and 1.406 m.p.g. of Irish spirit were sold in England. Not all of this

4. Molasses was cheaper to work because no maltings, grinding mills etc. were needed.
5. A.W. Slater, *ibid.* appears to relate the Methylated Spirits Act and the formation of the association, but even after 1878 when prices were set the market was still less free than the home market.
6. Source: G.H. Wilson, *op.cit.*, Table 4. H.C.W., App. T for Patent spirit. Notes: Due to the interchanges of spirit the "Quantities charged for consumption" do not measure actual consumption. As more spirit went from Scotland to England than from England to Scotland real Scottish consumption is overstated and real English understated. For Consumption the calculation is from 1851 to March 1856.
was patent still spirit but given the small demand for malt whisky the bulk of it must have been. The buoyant nature of the English market meant that the Scottish distillers problems originated in the home market.

At home, consumption was falling prior to 1855. Overall output was not increasing much but patent still output was expanding markedly. The growth of grain spirit production clearly created conditions where competition could become excessive, but what was the nature of this competition? Descriptions of the product of the Coffey still have ranged from "...a bland grain spirit... the product of a technological process rather than a craft..." to "surgical spirit." So far as competition between grain distilleries was concerned the distinguishing feature of grain spirit was, paradoxically, the lack of a distinguishing feature. Grain spirit came close to being a homogenous product. This meant that competition was not distorted by considerations of quality. Price was the most important consideration especially when most grain spirit was sold new from the still. In a period of over-production distillers competed by cutting prices, increasing discounts for bulk purchases, paying the cost of transport from the distillery to the customer and lengthening credit terms. Whisky merchants became adept at playing one distiller off against another in competition for orders.

How much scope though was there for cutting costs as a response to competition? In Table 56 (above p. 280) the cost of a gallon of whisky produced by the pot still process was divided into

7. I.A. Glen, Introduction to A. Barnard, op.cit.
9. Homogeneity: the Coffey still, as was discussed in Chapter Six, produces a very pure spirit relatively low in secondary flavouring constituents. Grain spirit is not, however, a neutral spirit, i.e. pure ethyl alcohol. It is possible, using the Coffey still, to vary the quantity of secondary constituents but only within relatively narrow limits compared to the pot still. Grain whisky therefore comes very close to being a homogenous product and if a blender was to alter the grain whisky component of his blend by buying from a different distillery, this would have far less impact on the final product than switching amongst different malt whiskies. For a modern account of the chemical analysis of Scotch grain whisky see M. Pyke, The Manufacture of Scotch Grain Whisky, Journal of the Institute of Brewing, Vol. LXXI, No. 3, May-June, 1965.
its various elements. Grain costs amounted to 88% and 92% of the cost of a gallon of grain and malt whisky respectively. It is not until the early 1880s that there are comparable figures for the Coffey still process. These indicate that in the period 1881/86 grain accounted for between 56% and 67% of the price (excluding duty) of a gallon of grain whisky.

In the 1850s grain costs were likely to have occupied a larger place in the cost of production, for by the 1880s grain distillers had almost entirely switched to using imported maize and maize prices fell heavily at this time. Also, under the United Kingdom Distillers' Association spirit prices were slightly more effectively regulated. In the 1850s then, grain was the preponderant influence on the distiller's costs. Was there any way he could reduce this cost? In theory there were three ways in which he might do so. He could attempt to increase the yield of spirit per quarter of grain and thus spread the cost of grain over a larger output. He could vary the components of the mash to take account of the relative prices of different grains. Lastly, he could try to forecast the future course of grain prices and advance or postpone his purchases accordingly.

For the 1850s there is no evidence from business records about the yield of spirits but even without this problem there are good reasons for disregarding increased yields as an effective answer to competition. Raising yields was not an infinite possibility. There was a limited quantity of starch available in any grain for conversion into saccharine matter. Careful attention to purchasing might raise the quality of the grain being used but there were no really effective tests for checking grain samples. Once the grain was mashed the density of the worts, and thus the quantity of saccharine matter extracted, could be checked by the saccharometer but this instrument had been in use since the end of the eighteenth century, and most of the gains in yield from its use must have already

been achieved. A yield of 18 gallons per quarter was considered the average in the 1830s, for grain distillers and a yield of 20 gallons, good. By 1847 when the Inland Revenue laboratory tested the relative yields of barley, malt, sugar and molasses for the purpose of removing the customs duty on the latter two raw materials, 18 gallons was the figure they accepted. Yields do not therefore seem to have altered and an improved yield did not offer an effective way of cutting costs.

An alteration in the contents of the mash had been the way the grain distillers undercut malt whisky. Again, however, lowering the amount of malted barley in the mash was not an infinitely repeatable measure. A minimum amount of malt (about 10% of the total mash) was required to saccharify the rest of the mash. In the unmalted portion of the mash substitution was possible between barley, rye and oats but the different starch content of each grain was known and relative prices tended to reflect this, so that the scope for profitable substitution was limited. Not until the use of maize in the 1860s was there an alternative grain available which would allow costs to be cut.

A keen eye for the state of the grain market was an essential skill for a distiller. It would, though, be difficult to generalise about how successful speculation was as a means of reducing costs. Speculation was a two-edged weapon and bankrupt distillers often blamed unwise speculation as the cause of their downfall. With the repeal of the Corn Laws and more importantly, rail and shipping improvements, imported grains became much more competitive. The organisation of the grain trade also seems to have become much more sophisticated. By the 1870s most distillers hedged their bets on the future course of prices by buying part of their grain requirements in the futures market and part in the spot. New forms of company organisation also enabled the distiller to exert some influence on the price of his raw material. Amongst the benefits from

amalgamation, the D.C.L. gained discounts on its bulk purchases of imported grain, and, by establishing a specialised grain buying department it was able to adjust its purchases to more closely allow for price fluctuations.

For at least twenty years after the repeal of the Corn Laws however, the grain distiller drew the bulk of his grain requirements from the British farmer. He had little or no scope for influencing the price of his major raw material, and, it seems unlikely that he had any way of reducing the overwhelming influence of grain on his total costs. If this interpretation is correct it should enable the problems facing the Scottish grain distillers in the early 1850s to be explained. If grain costs were a given and unalterable item in the distiller's calculations, control of spirit prices would become a very desirable aim. What needs to be established are the changes which occurred in the margin between the distiller's costs and the price he obtained for his spirit. In Table 60 an attempt is made to do this. Because of data problems it relies heavily on a number of assumptions and it will be worth explaining its construction. In Column A the distilling seasons between 1853 and 1867 are listed. A 'season' ran from September of one year to the following June so that season 1853 covers the period from September 1852 to June 1853. Grain, when home supplies were the main source, was purchased in the Autumn and in Column B the Midlothian Farmer's price for barley for the previous year is quoted. For season 1853 the barley price is therefore that of 1852. Midlothian barley was of high quality and fetched the highest price of all Scottish barley. Columns C and D list the price of grain spirit. From 1853 to 1864 the only price series available is that for the London market. From 1865 to 1867 Scottish prices become available. Later evidence suggests that at this time London and Scottish prices did not differ widely, probably by no more than 1d. or 2d. per gallon. Two prices, for September and March, are shown. September prices were the opening filling prices for the season.

TABLE 60: The Distiller's Margin and Grain and Spirit Prices 1853-1867

<table>
<thead>
<tr>
<th>Season</th>
<th>Barley</th>
<th>Grain Spirit</th>
<th>Wage Change in</th>
<th>Cost of Grain on Yield</th>
<th>Margin</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>1853</td>
<td>29/5</td>
<td>1/9</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1854</td>
<td>36/4</td>
<td>1/2</td>
<td>-</td>
<td>4.23 45 480.9</td>
<td>1/7 1/5</td>
</tr>
<tr>
<td>1855</td>
<td>35/1</td>
<td>2/6</td>
<td>-</td>
<td>-3.4 -21.0</td>
<td>1/11 1/9</td>
</tr>
<tr>
<td>1856</td>
<td>40/6</td>
<td>2/8</td>
<td>2/4</td>
<td>4.15 4 6.6 -6.6 2/3 2/0</td>
<td>5 8 1 4</td>
</tr>
<tr>
<td>1857</td>
<td>36/4</td>
<td>2/11</td>
<td>2/3</td>
<td>7.4 -0.2 9.3 -3.1 2/0 1/9</td>
<td>10 1/1 1/1</td>
</tr>
<tr>
<td>1858</td>
<td>36/5</td>
<td>2/3</td>
<td>1/8 4</td>
<td>-2.1 -28.7 -41.0 1/4 1/9</td>
<td>21 5 21</td>
</tr>
<tr>
<td>1859</td>
<td>36/8</td>
<td>1/12</td>
<td>-</td>
<td>-17.8 -25.0</td>
<td>1/9 1/6</td>
</tr>
<tr>
<td>1860</td>
<td>37/6</td>
<td>1/8 4</td>
<td>1/10 4</td>
<td>4.18 4 5.1 415.3 2/2 1/1</td>
<td>4 -2 -2 3</td>
</tr>
<tr>
<td>1861</td>
<td>40/5</td>
<td>2/2 4</td>
<td>2/1</td>
<td>7.9 1/0 4 419.5 421.9 2/6 2/0</td>
<td>2 1/2 1/4</td>
</tr>
<tr>
<td>1862</td>
<td>31/3</td>
<td>1/11</td>
<td>-</td>
<td>-7.2 - 2.0</td>
<td>1/8 1/6</td>
</tr>
<tr>
<td>1863</td>
<td>28/1</td>
<td>2/2 4</td>
<td>1/8 5</td>
<td>-10.1 4 4.3 -10.7 1/6 1/5</td>
<td>4 7 1/4 3/4</td>
</tr>
<tr>
<td>1864</td>
<td>28/8</td>
<td>1/8 4</td>
<td>+</td>
<td>2.1 -14.5</td>
<td>1/7 1/5</td>
</tr>
<tr>
<td>1865</td>
<td>25/6</td>
<td>1/8</td>
<td>-</td>
<td>-11.0 - 2.4</td>
<td>1/5 1/3</td>
</tr>
<tr>
<td>1866</td>
<td>34/4</td>
<td>1/10</td>
<td>1/8</td>
<td>+34.6 4 10.0 0.0 1/21 1/2</td>
<td>- 1/4 -2 1/4</td>
</tr>
<tr>
<td>1867</td>
<td>37/10</td>
<td>2/7</td>
<td>-</td>
<td>+10.0 4 40.9</td>
<td>2/1 2/0</td>
</tr>
</tbody>
</table>

Notes:
Column A: Distilling Season - this covers the period from September to June so distilling season 1853 runs from September 1852 to June 1853.
Column B: The price series for barley is the Midlothian Farmers. The prices quoted relate to the previous year. Distilling began at the end of the harvest and continued through to the summer of the following year. Thus grain prices for 1852 cover the barley used in the distilling season 1853.
Column C: Grain spirit prices from 1853 to 1864 are for the London market. From 1865 to 1867 they are for the Scottish market. Two prices, for September and March (Column D) are shown. September prices were the opening filling prices for the season. As market conditions varied so did prices and the March price is included when available.
Column E: Shows the percentage change in barley prices compared with the previous year.
Column F: Shows the percentage change in spirit prices compared with the previous year.
Column G: Shows the percentage change in March prices - compared with the September prices of the year before.
Column H: This shows the 'cost' of grain for an assumed yield of 18 gallons per quarter and Column I, 20 gallons per quarter. The 'cost' of grain excludes manufacturing costs and assumes a 100% barley mash.
Column J: The margin between price and costs:
J equals C minus H
K equals C minus I
L equals J minus H
M equals J minus I
GRAPH I6 : Distiller's Margin (1853 - 1867)
They were usually based on an incomplete knowledge of the state and of demand from the spirit dealers so that subsequent changes were not uncommon. When available, March prices have been included. The prices exclude all forms of discount and were therefore the highest a distiller might expect. Columns E, F and G show the percentage changes in barley and spirit prices compared with the previous year. Columns H and I show the 'cost' of grain per gallon for the two yields of 18 and 20 gallons. The cost is only the price of grain in the market divided by the yield. It excludes manufacturing costs and is based on the assumption that the distiller worked from a 100% barley mash. This is clearly unrealistic as at least 10% of the mash would have been malted and therefore more expensive. The important point though, is that on those figures the cost of grain would have been at its very lowest. From the price of spirit and the cost of grain the margins open to the distiller at the different sets of prices can be calculated. This is done in Columns J, K, L, and M. As discounts were excluded from spirit prices and manufacturing costs from grain prices the margins are the widest which could have existed.

In the absence of distillery records the table is very much an exercise in hypothetical history. Yet, some conclusions may be drawn from it. The first is simply that, measured in year to year percentage changes, the distillers faced large fluctuations in both his buying and selling markets. The second, and this can be seen from Graph 16, is that from 1854 to 1860 margins declined sharply. Bearing in mind that the assumptions behind the table were calculated to produce the widest possible margin the period may be seen as one of very low profits and, between 1859 and 1861, actual losses. After 1860 margins recovered but from 1863 to 1866 they declined again.

The background to the formation of the Association of 1856 was then, one of shrinking margins. The solution which the distillers attempted involved an allocation of the trade in certain agreed proportions. Existing sales were added together and allocations given
to each firm on the basis of the proportion that its sales bore to the combined sales. According to W.H. Ross the total average weekly quantity of spirits sent out for home consumption by the combined firms was 60,000 proof gallons. In a 40 week season this gave combined sales of 2.4 m.p.g. and in a full calendar year 3.12 m.p.g. 13 From the percentage allocations each member's sales can be derived:

TABLE 61: Output Allocation and Sales (1856)

<table>
<thead>
<tr>
<th>Distillery</th>
<th>%age Allocation</th>
<th>Actual Sales Assuming Combined Deliveries of</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>A: 2.4 m.p.g.</td>
</tr>
<tr>
<td>Caledonian</td>
<td>41$\frac{1}{2}$</td>
<td>0.996</td>
</tr>
<tr>
<td>Carsebridge</td>
<td>15</td>
<td>0.360</td>
</tr>
<tr>
<td>Seggie</td>
<td>13$\frac{1}{2}$</td>
<td>0.324</td>
</tr>
<tr>
<td>Glenochil</td>
<td>11$\frac{1}{2}$</td>
<td>0.276</td>
</tr>
<tr>
<td>Cambus</td>
<td>10$\frac{1}{2}$</td>
<td>0.252</td>
</tr>
<tr>
<td>Haddington</td>
<td>8</td>
<td>0.192</td>
</tr>
<tr>
<td><strong>100%</strong></td>
<td></td>
<td><strong>2.400</strong></td>
</tr>
</tbody>
</table>

C: Total Scottish Patent Still Output in 1856 was 6.992.
A, as percentage of C equals 34\% 
B, as percentage of C equals 45\%

The table underlines the importance of Caledonian's membership in the Association and indeed, the foundation of this distillery the previous year with its additional capacity probably heightened the desire for an Association. How realistic though was the solution adopted? It involved not a reduction of output but (something less dramatic) an agreement to accept a standstill so far as sales were concerned. Hopefully, if sales were not increased there would be less competition between members and ultimately, if sales were not increased output might be stabilised. No provision was made for price fixing, it being felt that an agreement to hold sales to existing levels would remove any incentive for price cutting. What

13. The full year's figures are included but it is very unlikely that a full year was actually worked. In times of overproduction distillers began to stop working about the end of April.
would happen though if one member reduced his prices? With a relatively homogenous product he might expect to attract sales away from the others, but no provision existed for checking that members deliveries did not exceed the agreed proportions. There was no central secretariat for checking members' deliveries or any system of penalties for overshooting the sales levels. Moreover, the agreement covered too few grain distilleries to be really effective. On the most favourable assumption of combined sales of 3.12 m.p.g. the Association only controlled 45% of Scottish patent still output. With only six of Scotland's seventeen patent still distilleries in the Association, with control of less than half of the supply, and with no agreement on prices it was hardly surprising that the Association lasted for only one year.

III. THE SCOTISH DISTILLERS' ASSOCIATION 1865

"If one can believe the reports handed down, the period (between 1857 and 1865) was one of keen competition amongst the rival distillers and more than one reached the verge of bankruptcy. It is even said that one large distiller had circulars printed calling a meeting of his creditors when a proposal to bring about another Trade Agreement took shape and caused him to hold his hand." 14.

This was Ross's description of the period between the breakup of the first and the formation of the second Association. The trade memory on which he relied may well have understated the severity of those years. Excise records indicate that five of Scotland's seventeen grain distilleries vanished from the trade between 1856 and 1860. Margins, as Graph 16 shows, were at their lowest in

1860 and even though they widened later they did not reach the same levels as in the late 1850s. This lean period provided the impetus for a renewed attempt at combination.

The Scotch Distillers' Association of 1865 was a great improvement on the abortive affair of 1856. It seems to have been the inspiration of John Haig and his law agent, W.S. Fraser. This time the aim was to cover price, sales and if possible "conditions of sale". This last included such things as discounts, warehouse rents, and credits; all items which ate into distillers' profit margins and which, if not made uniform, opened the door to a sort of submerged, but nonetheless real, form of price competition. They were besides, items which, unlike raw material prices, a distillers' combination might realistically strive to control.

The new Association began with a membership of six distilleries. These were not, however, the same as in 1856. By 1865 Haddington distillery had, in Ross's euphemistic phrase, "dropped out of the race". John Haig had closed Seggie and transferred to Cameron Bridge. The closure of these two distilleries reduced grain distilling capacity. So too must the bankruptcies of the late 1850s and they also provided an object lesson to the survivors of the dangers of uncontrolled competition. As important as this was the inclusion in the membership of Port Dundas distillery. Judged by scale of output this was a giant distillery, larger even than Caledonian, and its membership meant that the bulk of Scotland's patent still capacity was now within the Association. In addition to the members there were probably another five patent still distilleries in Scotland. The biggest of these was Saucel. It had a large interest in the methylating trade and in 1868 agreed to the Association's price and output regulations for methylated spirit. Yoker distillery, another of the outsiders, joined in 1866. This left Kirkliston, Adelphi and possibly Glen Mavis outside the Association. These might prove troublesome competitors but they were smaller-scale

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15. According to Barnard this distillery had a "Goffey's patent malt still."
GRAPH 17: Output from Patent Stills in England, Scotland and Ireland (1828 - 1907)
OUTPUT FROM PATENT MILLS: SCOTLAND —— IRELAND ——— ENGLAND (1838-1907)
producers by patent still standards and were unlikely to be able to exert too great an influence on total output. With the formation of the Association it seemed that the output of grain whisky in Scotland was now under control. Or was it?

Graph 17 shows the output of patent still spirit in England, Ireland and Scotland. Two years after the establishment of the Association, patent still output started picking up from the doldrums of the early 1860s and between 1867 and 1877 output rose from 6,295 m.p.g. to 11,790 m.p.g. Admittedly, consumption was also increasing but at a slower rate and some part of the increased output of grain whisky was again at the expense of malt. Even allowing for both these factors, however, overproduction of grain whisky was evident.

Almost from the outset of the Association, English and Irish grain distillers had expressed an interest in negotiating an agreement with the Scotch Distillers' Association to limit output. No records exist to enable their motives to be established exactly but the explanation which best seems to fit is as follows. Prior to the formation of the Scotch Distillers' Association overproduction had been much greater in Scotland. The decline in Scottish consumption after 1850 left a large surplus of grain whisky seeking a market and Scottish grain distillers sought sales in both England and Ireland. It is possible that transport costs and longer credits made these sales unremunerative, but with overproduction at home accompanied by diminished profit margins these sales enabled Scottish grain distillers to maintain production close to capacity and lower unit costs. By the 1860s the Scottish distillers were selling more spirit in England and Ireland than vice versa. Irish distillers had also secured a foothold in the English market, and together, Scottish and Irish distillers were making a sizeable impression. Scottish sales in Ireland were much smaller than in England but in relation to the total output of the Irish patent still distillers they occupied,
nonetheless, a significant section of the market.

TABLE 62: Spirit Imports and Patent Still Output

<table>
<thead>
<tr>
<th></th>
<th>1860/64</th>
<th>1865/69</th>
<th>1860/64</th>
<th>1865/69</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Scotland</td>
<td>Ireland</td>
<td>Total</td>
<td>Scottish</td>
</tr>
<tr>
<td><strong>England</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spirits Imported from:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Scotland</td>
<td>4.144</td>
<td>2.858</td>
<td>5.251</td>
<td>7.626</td>
</tr>
<tr>
<td>B. Ireland</td>
<td>1.113</td>
<td>1.022</td>
<td>3.880</td>
<td>7.382</td>
</tr>
</tbody>
</table>

| **Scotland**   |          |         |        |          |      |
| Spirits Imported from: |         |         |        |          |      |
| A. England     | 0.006    | 0.007   | 0.036  | 8.221    | 0.1%  |
| B. Ireland     | 0.006    | 0.029   | 0.036  | 7.163    | 0.5%  |

| **Ireland**    |          |         |        |          |      |
| Spirits Imported from: |         |         |        |          |      |
| A. Scotland    | 0.717    | 0.353   | 0.784  | 2.180    | 35%   |
| B. England     | 0.067    | 0.052   | 0.405  | 1.985    | 20%   |


For a trade arrangement to be reached, however, both parties had to have something to exchange. The Scottish distillers could offer a reduced output, but what about the English and Irish distillers? By 1860, England and Ireland each had eight patent still distilleries. In October 1866, five of the Irish grain distilling firms, three from Cork and one each from Londonderry and Dundalk, signed an agreement with the Scotch Association. Under this both sides agreed to supply the home market in fixed proportions: 7 m.p.g. to the Scotch Association and 1.4 m.p.g. to the Irish. On the basis of these figures the Scots were offering control of 98% of Scottish grain whisky output and the Irish 76% of their grain whisky production.
The same day that the agreement was signed the price of grain spirit was raised. The English distillers held a rather different view of output restriction. The English distilling industry was divided into two groups, the London and the Provincial distillers. The former and majority group produced grain spirit for making into gin, whilst some of the latter sold grain spirit directly for consumption. As such they were active competitors with the Scottish grain distillers, especially in the North-East of England where grain whisky had a large sale amongst the mining communities. One Scottish distiller, Archibald Walker, 16 already had a foot in the English camp. In addition to Adelphi Distillery in Glasgow, his home base, he also owned Vauxhall distillery in Liverpool. He agreed to join the Association. The London distillers took the view that any restriction of output should come first from the Scottish side; overproduction was a Scottish, not an English problem. In exchange, the London distillers would undertake to raise the price of spirit and in August 1865 they did so. An increase in grain spirit prices in Scotland followed almost immediately. In all, the agreement with the London and Irish distillers enabled the Scotch Distillers Association to raise grain spirit prices from 1/6 to 1/8. On its own a twopenny rise may not seem significant, but it was a rise of 11% and it was spread over a combined Scottish output of 7 m.p.g.

The newly established harmony between the Scottish and English distillers did not last long. Shipments of Scottish grain spirits into London, although lower than in the period prior to the agreement, did not fall sufficiently and at the beginning of 1866 London distillers reduced their price hoping to curtail Scotch deliveries. The Scotch Distillers' reaction to this was interesting.

16. It is a pity more is not known about Walker for he stands out as one of the most dynamic entrepreneurs in the Scottish distilling industry. In 1834 he was a partner in the firm of C & D Gray who ran Adelphi distillery. In 1857 he became the sole owner and built up a firm which, by 1869, controlled Vauxhall in Liverpool and Limerick distillery in Ireland making it the first firm to possess distilleries in all three branches of the U.K. distilling industry. His son (also Archibald) was educated at Loretto and Trinity College, Oxford. Trained as a chemist, he was instrumental in establishing yeast production at Adelphi and Vauxhall. Adelphi was sold to the D.C.L. in 1902 and Walker appointed a director of that firm.
Instead of cutting back, the Association agreed to subsidise those distillers who shipped to London by making up the difference in price between what was to be obtained in London and the price in other markets. This involved a levy on members not engaged in the London trade and it indicates both the complex administrative structure which the Association had now formed and the importance which the Scotch Distillers attached to keeping the London market open. London sales helped to clear the home market and with the Association acting as a near monopoly at home, prices could then be maintained or better still, raised. London sales kept output up and unit costs down whilst the higher profits in Scotland could be used to subsidise sales in London. It was in fact a form of dumping only made possible by the formation of the Scotch Distillers Association. As a tactic in a trade war it suffered, however, from the weakness that it could be used just as effectively by the other side and the London distillers did indeed threaten to ship spirits to Scotland. This threat resulted in a new agreement with the London distillers in June 1866 by which the Scots agreed to restrict shipments to 25,750 gallons per week or 1.339 m.p.g. in a full year whilst the London distillers raised their prices.17

In September, 1865 the price of grain spirit in Scotland was 1/6 p.p.g. Two years later it had risen to 2/7. This was the highest level yet and the ability to raise prices in this manner was a direct result of the trade agreements. It was also critically important for the profitability of the trade, for in 1867 grain prices reached a post-repeal peak. The distillers' demand for grain was too small to influence the level of grain prices but control of spirit prices offered one way of restoring margins and passing on the increased cost of grain. Price fixing was not the only possible response to the situation in the grain market and in the 1860s imported maize was rapidly substituted for barley in the mash tun.

17. Scottish spirit imports into England averaged 4.144 m.p.g. between 1860/1864 and 2.858 m.p.g. in 1865/1869. These are Excise statistics which include both malt and grain whisky but the bulk of the imports were almost certainly grain whisky.
IV. THE PATENT STILL DISTILLER AND THE GRAIN MARKET

The opportunity to introduce maize was a direct result of the growth of the international grain trade. From the 1860s, the grain distillers increasingly looked overseas for their grain supplies. Maize was an entirely new raw material and a grain not grown in the United Kingdom, but even home produced grains such as barley and oats became displaced by foreign supplies. Exactly when purchases of imported barley and oats became important is not quite clear. Saurbeck's index of commodity prices\textsuperscript{18} does not contain a series for imported barley and oats, but for wheat, American supplies became increasingly competitive in the 1870s. Table 63 shows the grain purchases of the D.C.L. in 1877.\textsuperscript{19}

\begin{table}[h]
\centering
\begin{tabular}{lcccc}
\hline
Type of Grain & Total Quantity Purchased (qrs) & Type as % of Total Purchases & Home Supplies (qrs) & Home Supply as %
\hline
Barley & 40,402 & 19.78 & 841 & 2.08
Maize & 157,483 & 77.12 & 0 & 0.00
Oats & 5,197 & 2.54 & 342 & 6.58
Rye & 14 & 0.02 & 14 & 100.00
Others (i) & 1,117 & 0.54 & 17 & 1.52
\hline
Total all types & 204,213 & 100.00 & 1,214 & 0.59
\hline
\end{tabular}
\caption{Grain Purchases of the D.C.L. in 1877 (Quarters)}
\end{table}

Note (i): Wheat 817 quarters, malt 300 quarters.

By then with maize amounting to 77%, barley 19% and oats 2% of the mash the pattern typical of the modern patent still distilling industry had become established. Home grown supplies amounted to only a mere 0.59% of total purchases. Except for a very small amount of rye, home grown grain accounted for only 6% of oats and 2% of barley purchases. The movement away from home supplies of grain was not simply a function of relative prices. Maize had a higher

starch content than barley. Foreign barley and oats could be bought in larger 'parcels' and the quality was more uniform than home-grown grain. This and the fact that imported barley was more thoroughly ripened made storage and working easier. Imported barley also had a lower nitrogen content which reduced the risk of bacterial infection during fermentation. 20

The switch to imported supplies was very rapid and by 1884 the D.C.L. was buying foreign grain entirely. For the grain distilling industry the use of imported supplies effectively severed the long standing connection with the British farmer. It also created yet one more difference between the patent and the pot still distiller. In the 1870s Canadian and American farmers produced the bulk of the D.C.L.'s maize purchases, although a small amount also came from the countries round the Black Sea. Barley came from North Africa and the Baltic with oats being drawn from the latter area also.

In some respects the divorce of the grain distillers and the home farmers was surprising. At least until the 1830s distilling had been regarded as an integral part of the agrarian economy. Distillery demand was seen as especially important because it absorbed poor quality barley which might otherwise only find a market as feeding stuff. Policy measures such as the customs duty on imported spirits and the prohibition on the use of molasses had been justified because they saved the home farmer's trade with the distillers from external competition. The assumed harmony of interest between the farmer and the distiller did not survive the onset of "factory" distilling. The large scale distiller wanted high quality raw materials with a high spirit yield, and he wanted them at the lowest possible price. As a grain buyer his interest was in low, rather than high prices. George Dunlop was both farmer and distiller but, "I hold a different opinion from my neighbours about corn; I do not care how cheap corn is." 21 In the long term this kind of attitude

20. It was not until 1902-1906 that a series of chemical tests for establishing nitrogen content were devised. See H. Hunter, The Barley Crop (1926), p. 49.
exposed weaknesses in the policy of establishing distilleries to create a market for tenants' grain. It also made transparent the anomalous position of the sort of small farm–distiller who emerged in a county like Perthshire following the 1823 reforms. Full expression of this attitude was limited both by the existence of the Corn Laws and the organisation of the grain trade. Except in years of high home prices the Corn Laws kept the distillers' demand limited to home grown grain. This though was not always regarded as a handicap by distillers and their attitude to the Laws was decidedly ambivalent. George Dunlop's brother, Archibald, was just as keen on getting his raw materials at the lowest possible price but he felt that the Laws were beneficial because they offered a stable supply of grain and enabled prices to be forecast. 22 In an industry where grain was such a large element in costs these seemed attractive benefits. Moreover the distillers' limited experience of foreign grain in the late 1820s had been unsatisfactory. The grain was not kiln dried before shipping and deteriorated during the voyage making it useless for malting. As imported grain, and this affected the malt distiller, spirits distilled from it did not qualify for the malt drawback. The malt drawback was thus an additional protective barrier for the home farmer. 23

All these arguments apply to the grain distillers, and only to them, for the malt distillers' grain purchases were significantly different. As this retained barley as an important item in the local economy of Northern farmers, it will be worth breaking off from the narrative of the grain distillers' problems in the 1860s and examining the malt distillers' place in the grain market. The malt drawback ended in 1855 and with it the financial incentive for the malt distiller to use home grown grain. Malt, the imported cereal to which the patent still distillers turned, could not be used to produce pot still malt whisky. Working from an all malt mash, the malt distillers' choice lay between home and imported barley. Imported barley entered the United Kingdom in increasing quantities from

the second half of the 1860s, beginning the long slide in barley prices. Barley reached a post-repeal peak at almost the same time as maize, in 1868. In that year the Midlothian flars was 43/7 per quarter; in 1896, the lowest point for barley prices between 1868 and 1914, it was 21/8. The malt distiller, like the grain distiller, faced falling raw material prices but did he also react in the same way by buying foreign barley because of its better quality? Two problems are involved in attempting to answer this question. The first is simply the difficulty of generalising about the behaviour of an industry composed of a great many small producers. In 1860 there were 111 malt distilleries and only 12 grain distilleries in Scotland. By 1908 the respective figures were 142 and 8, and clearly generalising from the experiences of a single malt distillery is a lot less safe than using the grain purchasing practices of the Distillers Company to explain the behaviour of the grain distillers. The second difficulty is that the malt distilling industry exhibited a marked regional pattern of location. By the 1870s the malt distilleries were clustered into four main groups. These were the Lowland, Islay, Campbeltown and Highland malt distilleries. The bulk of the available evidence relates to the last group which was predominantly concentrated in the Eastern Highlands around Speyside and the Moray Firth. This group, however, accounted for the majority of Scottish malt distilleries. Table 64 shows the barley purchases of one Highland malt distillery, Glen Albyn distillery in Inverness. Glen Albyn was built in 1892, just at the start of the whisky boom of the 1890s. Like many of the new distilleries established at that time one partner, James Mackinlay, was a blender from Leith and the other, John Birnie, a distiller. Column C shows foreign barley purchases as a percentage of total purchases. The pattern, if such it can be called, is rather curious. How is it to be explained? As

27. John Birnie had been a Partner in the firm of Gregory & Co. who owned Glen Albyn distillery. The partners squabbled and John Birnie left to found Glen Albyn on a site directly opposite Glen Albyn. In 1906 the Mackinlay-Birnie partnership became a private limited liability Company and John Walker & Sons Ltd came in as co-shareholders.
the partner responsible for distilling operations it was John Birnie's preferences that determined the firm's grain purchases and John Birnie, like most other malt distillers, held an implicit belief that home grown barley made the best whisky. This belief was very much part of the craft mystique which surrounded malt distilling and originated in the malt distiller's fear that any alteration in technique would ruin his product. In the early 1900s it gained a new raison d'être when the malt distillers attempted to pre-empt the exclusive use of the title "Scotch whisky" for their product. Scotch whisky, it was claimed by some of the more extreme protagonists, could only be used to describe malt whisky distilled by the pot still process from a mash entirely composed of home grown barley. Even after the campaign failed the malt distillers' trade association was still asserting that "foreign barley was not so suitable for Pure Malt Whisky Distillation."  

28. Sources: Glen Whor distillery records, Grain Purchase Books.  
29. North of Scotland Malt Distillers' Association Records, Memorandum by John Grant, Distiller, Glenfiddich and Balvenie Distilleries... regarding the Extra Whisky Duty...and its effects on Pure Highland Malt Whisky Distillation, 1909.

<table>
<thead>
<tr>
<th>Season</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>Season</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Sept./Aug.)</td>
<td>Total</td>
<td>Foreign</td>
<td>B/A%</td>
<td>(Sept./Aug.)</td>
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</tr>
<tr>
<td>1894/95</td>
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<td>4,236</td>
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<td>4,062</td>
<td>500</td>
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<td>1911/12</td>
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<tr>
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<td>5,368</td>
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<td>14%</td>
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<tr>
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<td>0%</td>
<td>1915/16</td>
<td>5,940</td>
<td>3,673</td>
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</tr>
<tr>
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<td>0</td>
<td>0%</td>
<td>1917/18</td>
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</tr>
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<td>2,631</td>
<td>1,590</td>
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<td>1918/19</td>
<td>3,474</td>
<td>3,487</td>
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<tr>
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<td>2,668</td>
<td>1,638</td>
<td>61%</td>
<td>1919/20</td>
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<td>644</td>
<td>9%</td>
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<tr>
<td>1904/05</td>
<td>2,948</td>
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<td>0%</td>
<td>1920/21</td>
<td>7,462</td>
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<td>1905/06</td>
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<td>300</td>
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<td>0</td>
<td>0%</td>
<td>1922/23</td>
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<td>46%</td>
</tr>
<tr>
<td>1907/08</td>
<td>4,637</td>
<td>975</td>
<td>21%</td>
<td>1923/24</td>
<td>11,462</td>
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</tr>
<tr>
<td>1908/09</td>
<td>5,114</td>
<td>1,131</td>
<td>22%</td>
<td>1924/25</td>
<td>13,590</td>
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<td>46%</td>
</tr>
<tr>
<td>1909/10</td>
<td>3,419</td>
<td>0</td>
<td>0%</td>
<td>1925/26</td>
<td>15,590</td>
<td>7,462</td>
<td>48%</td>
</tr>
</tbody>
</table>

TABLE 64: Barley Purchases at Glen Whor Distillery (1894-1922)
Birnie, at the start of the distilling season, looked to local farmers for his barley supplies and the Glen Morh contract books reveal a close relationship with local growers, few purchases being made beyond a twenty mile radius of the distillery. In the boom of the 1890s, however, malt whisky production grew rapidly—from 7.7 m.p.g. in 1890 to a peak of 15.8 m.p.g. in 1898—and due to competitive purchasing by other distilleries local supplies were insufficient, and the firm was forced to buy in foreign grain. It is this which accounts for the appearance of foreign barley between 1894 and 1899 in Table 64. After 1898 malt whisky production contracted, the pressure on home supplies eased, and Birnie reverted to the customary practice of "buying grain round the door." From 1898 until the First World War the appearance of foreign barley in Glen Morh purchases was explained by one thing: the state of the local harvest. As another malt distiller, Col. George Smith Grant of the Glenlivet distillery, explained to the Royal Commission on Whiskey:

"In a good season we get our barley from Morayshire, or Banffshire, or Aberdeenshire but if the season is a backward season and there is a poor harvest we go abroad for example, Denmark and get the best barley we can procure." 30

Before the same Commission, A.M. Cowie of Mortlach distillery, echoed Birnie's belief that the better quality of foreign grain was no great advantage:

"Despite their soundness, it is no great advantage to use cheaper Black Sea and Danubian barleys because the cost of labour and fuel are the same in both. Also from light Danubian barleys you would never get the same quality of spirit. You do not get the same thickness and body in the whiskey." 31

On the question of the cost of home versus imported barley, most distillers would have been less dogmatic than Cowie. By purchasing direct from the farm, the distiller cut out the grain merchant's commission and handling charges were also lower. There was another advantage in buying locally. In the North-East beef and dairy

30. R.C.W. Qn.9154, p.278.
cattle were important, and farmers were more ready to buy draff for animal feeding from distillers who took their barley. In the boom years, draff, partly because of the quantity produced and partly because of the low price of competitive feeding stuffs, posed a serious disposal problem for distillers. This subsidiary advantage was one additional reason for buying local supplies.

After 1918 this pattern of grain buying changed markedly. Malt whisky enjoyed a short post-war boom; output reached 13.2 m.p.g. in 1923, but thereafter a period of "almost uninterrupted decline in demand" set in until by 1933 output was down to a mere 285,000 proof gallons. A depression on this scale did not leave Northern barley growers unscathed, and they reacted by seeking an import duty on foreign barley. More interesting than this, however, was the malt distillers' behaviour during the period of readjustment to declining demand. The malt distillers were "compelled...to overhaul their businesses to secure the maximum of economy and efficiency. As a result they began to use imported barley, which was available in large quantities of uniform quality." Barley purchases in the 1920s were drawn from a wide range of countries: Denmark, Rumania, Chile, Tunisia, Canada and Australia. Older distillers remember that by comparison with the Scottish crop, Danish and Australian barley "was beautifully dressed, had a consistent quality with only 10 to 12% moisture and was easier to store and work." Low priced foreign barley was, of course, a reflection of the prevailing international grain surplus and the challenge it offered to home barley was a serious factor in reducing the quantity and the price of home grown barley used by distillers. Like the grain distillers before them, the malt distillers, "realised at last that all they were buying was starch and they wanted as high a percentage of starch as

32. N.S.M.D.A. Minute Book No. 2 at 3rd July 1896.
34. N.S.M.D.A. Minute Book No. 6 at 2nd March 1928.
35. Committee on Scottish Barley, p. 5.
36. Interview with ex-members of the Management Committee of the Malt Distillers' Association — W.J. Craig, manager of Miltonduff Distillery in 1920s.
This attitude coincided with a closer scrutiny of many of the traditional processes surrounding malt whisky production during which cherished, but scientifically untested, beliefs received a severe knocking. The increased attention to chemical checking of malt distilling results arose for much the same reason. As S.H. Hastie, the first chemist to be employed in a malt distillery, explained the change:

"before the War there was insufficient commercial pressure on the malt distillers to persuade them to adopt a scientific approach. Science would have come in but all good Scotch whisky could be sold." 38.

The crisis in Highland malt distilling in the inter-war period was also a crisis for Northern barley growers. The pot still distillers drew their main supplies of barley from nine Northern counties: Aberdeen, Angus, Banff, Inverness, Kinardine, Moray, Nairn and Ross and Cromarty. Most surveys of the drink trade's role in farming in the United Kingdom have used one criterion to assess its importance: the percentage of total agricultural output purchased. Whilst this criterion is legitimate for the United Kingdom as a whole, it tends to mask the heavy degree of regional dependence in Scottish farming on the distilling industry. Even within the nine counties from which most supplies were drawn there were striking variations in the degree of local dependence. The Scottish agricultural census of production of 1931 showed that in the nine counties, 54% of the barley grown was used in distilling; for the counties of Banff and Moray alone, however, the figure was 84%. Bearing in mind that these figures were calculated during a period of acute depression and after the malt distillers had begun to switch to foreign grain the impression is gained that the historical dependence of the Northern counties must have been even higher.

37. Interview - S.H. Hastie, distiller's chemist in 1920s.
38. Interview - S.H. Hastie, distiller's chemist in 1920s.
39. See for example, G.B. Wilson, op.cit. pp. 219-221.
40. Committee on Scottish Barley, p.5.
Viewed in the context of the pressures facing Scottish farmers as a result of the internationalisation of the grain trade after 1870, the different grain purchasing patterns of the malt and grain distillers raise some interesting speculations. The separation of the patent still distillers from the home farmer from the 1870s meant that at the very time when the home grain farmer faced international competition, he lost yet another market with the disappearance of the grain distillers' demand. If the individual grain distilleries exhibited local purchasing patterns as the malt distillers still did at a later date, then it is almost certain that the greatest loss was felt by the Lowland farmer. By contrast, the Northern farmer continued to find an important outlet for his grain at this very critical time. The malt distillers' demand did not prevent barley prices falling, but the growing output of malt whisky in the last thirty years of the nineteenth century gave the Northern farmer a market which was more remunerative than the only other alternative for barley, as a feedingstuff. His hold on this market, however, became increasingly insecure as the malt distillers' fortunes slumped and finally met its most serious challenge in the switch to foreign barley in the 1920s.

Until the 1860s then, the grain distillers' attention was firmly on the state of the home harvest and barley prices in particular. With the increasing use of imported raw materials it was maize prices that now came to dominate the meetings of the distillers' trade associations. From 1867 to 1897 the trend in maize prices was downwards and this raised a new problem for the grain distillers. Dealers had regarded the grain distillers' price setting activities with a somewhat jaundiced eye. Yet, when grain prices were rising the dealers acquiesced in the distillers' efforts recognising the problems which their suppliers faced. Falling grain prices cast

price fixing in a rather different light. Dealers expected the benefit to be passed on to them by way of reduced spirit prices and when distillers continued to fix prices relations between the two groups became distinctly sour. By 1869 rumours had begun to circulate that the dealers would establish a co-operative distillery to circumvent "the monopolising tyranny" of the grain distillers.

Price fixing to take account of changes in grain prices was not the only way in which the Scotch Distillers' Association attempted to shift margins in the distillers' favour. In 1874 the grain distillers managed to introduce a charge for warehouse rent on spirits stored, in distillers' warehouses. The increase in the quantity of spirits in bond was partly a result of overproduction, and partly a response to the increasing demand for a mature spirit. That grain distillers were able to introduce the charge against the opposition of the wholesale dealers was a measure of the power of the Association. The charge had first been proposed in 1865 but, because of the dealers' ability to play one distiller off against another in the struggle for sales, it had never been regularly enforced. Warehouse rent enabled the grain distillers to recoup their outlay on the construction of bonded warehouses and the establishment of the charges was about the last positive act of the Scotch Distillers' Association.

In 1872 the old agreement of 1865 was due for renewal. Yoker distillery, after a disagreement about its allocation of points, had already dropped out of the Association. Walker took the opportunity presented by renewal to withdraw as well. This left as members the original six grain distilleries who had formed the Association in 1865. Although the introduction of warehouse rent seemed to point to the continuing value of the Association it was in many respects an unsatisfactory compromise between competition and full amalgamation. It had not solved the problem of overproduction, and, so long as members were granted points on the basis of their existing

42. Ibid, p. 250.
43. See below p
sales, it would fail to do so. As the fairly frequent readjustment of points makes clear it faced the difficult problem of dealing with members who wished to expand by accommodating them at the expense of other members. Recriminations and disputes usually followed any readjustment of points. Price fixing was a rather loose guideline for members. When the D.C.L. set about reorganising its pricing system a mass of secret rebates was uncovered. So long as the Association remained a loose confederation of interests no individual distiller could risk antagonising a large customer who demanded special terms. The duplication of sales effort also ate into profit margins. Each of the six distilleries that eventually formed the D.C.L. had its own team of agents and salesmen: all selling the same product and all knocking on the same dealers' doors. The lack of an aggressive pricing policy meant that it was impossible to prevent the emergence of new competitors, and in the early 1870s two new patent still distilleries were established. One of these, Bo'ness, was a conversion from a pot still distillery, and the other, Bankhall in Liverpool, was entirely new. Both raised the old bogey implicit in the patent still process of a new distillery meaning a large jump in output. Bankhall in particular, as a custom built patent still distillery, embodied all the latest techniques. It was located next to the Canada dock of the Mersey and specially designed to handle bulk shipments of maize and molasses. Its Coffey still could distil 4,000 gallons of wash per hour and by the extensive use of steam power, labour costs were at a minimum. For its proprietors, R.W. Preston & Co. a long established firm of wine merchants, it was a venture into a new field and one which despite the distillers' complaints about unremunerative prices could still seem attractive to investors. In England this paradox was explained by a rapid increase in consumption in the 1870s whilst in Scotland, although consumption was only growing slowly, much of the growth was at the expense of malt whisky and conversion from pot to patent still was an effective way of meeting this demand.

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V. The Formation of The Distillers Company

"I have been thinking a good deal of what passed between us yesterday, and am more and more impressed as to the necessity of action. There seems to be a cloud gathering which, if not dispelled, may burst upon us, and the sooner, therefore, we endeavour to avert it the better."

The cloud burst which John? Bald of Carsebridge distillery feared might sweep the grain distillers out of business was only in part due to the appearance of these new competitors. Another menace which troubled the grain distillers was the growth of competition from imported spirit. In the 1870s the consumption of imported spirit was increasing and by 1875, imported spirits held about 20% of the U.K. market. The main growth was in brandy and rum but it was a third category, German spirit, which caused the most anxiety amongst the patent still distillers. In relation to U.K. spirit production these imports were not very great, amounting in 1875, the peak year of import, to 2.795 m.p.g. or 7.6% of total U.K. spirit production. They were, however, in direct competition with home produced patent still spirit and here imports equalled 11.5% of total U.K. patent still production. As a high quality almost neutral spirit they could be used for blending, rectification and methylation. Worse still, their attractiveness was increased by their exceptionally low price. German spirit was made mainly from the Prussian potato crop and formed an export surplus on which a government bounty was paid. Between 1870 and 1875 when British grain spirit was selling at between 2/- and 2/6 p.p.g., German spirit was being offered for 8d. to 1/- p.p.g. Yet, what could the Association do to challenge these imports? It could and did gloomily minute the arrival of German spirits in Glasgow and Leith and it despatched a petition to the British Government seeking protection. The most effective challenge would have been to meet the competition directly. A short sharp spell of undercutting would have involved some of the members in losses and without

46. See above, Chapter 4, p. 165.
47. The latter two uses were where most competition occurred. See the Report of The Select Committee on British and Foreign Spirits, B.P.P. 1890/91, Vol. XI, p.v.
either some form of subsidy or profit equalisation no member was prepared to undertake the task.

The failure to eliminate new entrants and curb German competition underlined the inadequacy of the Association. It was not solving the grain distillers' major problems. Yet the proposal for a more effective solution, in the form of amalgamation of the grain distilleries into one Company under the Limited Liabilities Acts, came from outside the Association. It was the shared brain-child of Robert Stewart, the owner of Kirkliston distillery and his accountant, Alexander Moore of Glasgow. Possibly as an outsider Stewart was better able to perceive the weaknesses of the Association. In any event, Stewart and Moore circulated a memorandum round the grain distillers in December, 1875 pointing to the advantages to be derived from a closer union. The grain distillers, the memorandum pointed out, were "already associated for the protection of their common interests." An amalgamation would consolidate these advantages and at the same time "afford other and important benefits which the Association cannot give." Partners in the existing firms would exchange ownership of their distilleries for shares in the new company, and this would "greatly simplify personal and family arrangements." Individual responsibility for the management of the distilleries would be exchanged for a shared responsibility as Directors of the new company. Substantial economies in the purchase of raw materials and in selling costs, especially by the elimination of duplicate agencies and tighter control of credit, would be gained. "The annoyance of undue competition would also be avoided, and the possible interference with the trade from new sources would not be so likely." The management of improvements in the distilling process "and their practical application" would be more satisfactory, whilst if extensions to the distilleries were wanted they could be undertaken at the distilleries which "offered the greatest advantage at the least cost for the purpose designed." A breakdown in production at any distillery "would not be felt" by an amalgamated company and lastly, "the regulation of supply for the demand would
at all times be more under their control than it can be under the present arrangements."

To what extent these advantages were actually achieved remains to be seen but one point about the form of the proposed amalgamation is worth noting. Unlike many of the companies formed under the Limited Liability Acts the aim was not to attract public subscriptions of capital and secure a bonus for the proprietors. The capital of the company was to be equal to that of the capital employed by the firms participating in the amalgamation. Independent arbiters were to value each distillery, assess its capability for making profits and to fix its capital value. Stock in the new company would then be paid to the owner in exchange for the transfer of his property. Nothing was to be allowed for goodwill. Here then was no bolt hole for independent proprietors, by way of the Limited Liability Acts, out of an industry suffering from severe competition. There would be no bonus element, no public subscription and the new company "would be entirely under the direction of men practically acquainted with the business."

The attitude of the members of the Association to these proposals was, with one exception, entirely favourable. Daniel Macfarlane of Port Dundas whose support would be vital to the formation of the company because of the size of his output was favourably disposed. A powerful company would have control of markets both in purchase and sale and "might stamp out" German competition. John Bald of Carsebridge felt that the uniformity in conditions of sale which the company would create, would remove the bad feeling amongst the dealers. The amalgamation would be "an Association in perpetuity" enhancing the value of "our properties" and increasing profits. Of the membership of the Association only Graham Menzies of Caledonian distillery was not prepared to join the proposed company. For Menzies, personal circumstances rather than scepticism about the likely benefits from amalgamation prevented him from joining. His son, W.G.D. Menzies, had just completed his education at Rugby and
at the age of 19 had been made a partner in the family firm. Continued family possession of the distillery remained attractive to the son. There was in addition another obstacle to Menzies' participating. In 1865 in an attempt to remove their surplus output from the Scottish market the firm had taken a lease on Tooley Street distillery, a London rectifying business. Whilst it had proved a useful outlet it had never been very profitable. Menzies felt it would be undervalued and wanted time to see if it could be put on a paying basis. Also the absorption of Tooley Street into what was otherwise an exclusively Scottish amalgamation raised legal difficulties. 48 Although Menzies remained outside the amalgamation until 1885 his firm operated in close liaison with the D.C.L. by virtue of a trade agreement signed in January 1877 with the promoters of the D.C.L. This provided for a complete exchange of information on customers, agencies and sales. Prices were to be uniform and profits to be equalised through a system of penalty payments for overproduction. Through Menzies' brother, a partner in the firm of J. Stewart & Co. who owned Saucel distillery, this firm was also brought into the agreement. Saucel produced both malt and grain whisky and under the agreement it was barred from producing patent still whisky. This marked the first reduction in grain distilling capacity as a result of the closer union of interests. Harvey & Co. of Yoker distillery, one of the firms which had withdrawn from the Scotch Distillers' Association because of a disagreement about the points allocated to it, expressed a desire to participate in the amalgamation but again the same difficulty about its share led to the firm breaking off the negotiations and it was not until May 1918 that Yoker distillery was eventually bought by the D.C.L.

Two other proposals discussed by the promoters also fell through. Amongst the grain distillers, Daniel Macfarlane, had felt that the amalgamation would be greatly strengthened by the inclusion of an equal number of malt distilleries and some of the principal spirit merchants. This would have made the company much more truly

integrated covering both malt and grain whisky and wholesaling. Whether these proposals fell through because of lack of support amongst the other grain distillers, or lack of interest amongst the malt distillers and spirit merchants is not quite clear.

Highland malt distillers had since 1874 been trying to solve their own problems through a trade association, the North of Scotland Malt Distillers' Association, and possibly they preferred to wait and see if the Association would effectively cure their difficulties rather than join with their competitors, the grain distillers. For the dealers the amalgamation carried with it the possibility of reduced output and higher prices. Their interest then was in the failure, rather than the success of the amalgamation. As the amalgamation involved a large reorganisation of the participating firms and a renegotiation of the agreements with the London and Irish distillers, the grain distillers no doubt felt that the addition of the spirit merchants and the malt distillers would add to the complications of the amalgamation. A combination of reasons then kept the D.C.L. exclusively based around the grain distillers.

By December 1876, six firms had agreed to join the amalgamation. They were:

<table>
<thead>
<tr>
<th>TABLE 65 : Original Membership of the D.C.L.(1877)</th>
</tr>
</thead>
<tbody>
<tr>
<td>D. Macfarlane &amp; Co.</td>
</tr>
<tr>
<td>John Bald &amp; Co.</td>
</tr>
<tr>
<td>John Haig &amp; Co.</td>
</tr>
<tr>
<td>McNab Bros. &amp; Co.</td>
</tr>
<tr>
<td>Robert Moubray</td>
</tr>
<tr>
<td>Stewart &amp; Co.</td>
</tr>
</tbody>
</table>

Of the six firms the amalgamation posed the greatest adjustment problems for John Haig & Co. Unlike the other participants who had confined their activities to distilling, the Haigs had a spirit

49. The North of Scotland Malt Distillers' Association was formed on 20th January 1874. Its membership was drawn from distillers in the area "North of the Grampians," and initially, thirty-six out of forty-nine distilleries in the area joined. The objects of the Association were "to increase the friendly interchange of ideas amongst themselves, the removal of all obstructions to the proper carrying on of their business not only as regards improvement in the Excise Laws but also for the making of new arrangements as to the customs of sales which would put both buyer and seller on
dealing business at their Cameron Bridge distillery. The Haig family wished to maintain this trade but the other grain distillers, fearful of an unfavourable reaction from the wholesale trade, objected. Cameron Bridge distillery was duly purchased by the D.C.L. and Haigs moved their dealing business to nearby Markinch. Under the arrangement for the transfer of the business Haigs were obliged to purchase all their spirits from the D.C.L. Purchases were to be on the same terms as outside dealers but dealers' suspicions of a secret deal between the D.C.L. and Haigs did nothing to resolve the unfavourable reaction the distillers feared. For John Haig in his 75th year, the amalgamation marked the satisfactory culmination of long attempts by him to secure a closer union of the grain distilling interests.

Between December 1876 and the registration of the D.C.L. on the 24th April 1877 the independent valuations of the distilleries were carried out, the shares in the D.C.L. divided amongst the participants and new negotiations with the London and Irish distillers opened. In July, 1877 when these negotiations were still continuing, W.H. Haig, the secretary of the D.C.L. wrote to his cousin John A. Haig of Dundalk distillery explaining the motives behind the formation of the D.C.L. and assuring him of the Company's peaceful intentions:

"...I am afraid Murray must have misunderstood the remarks made by the Scotch Distillers. The object of this Company is to prevent the competition among ourselves, which we found on the increase, to the detriment of all of us; and as we had all worked so harmoniously with the Irish Distillers, and especially with your Dundalk House, it was thought better to have some understanding on the point, as the price might occasionally vary a little. We have no wish whatever to harass the trade, and I would rather be at peace with Dundalk than at war. I think some arrangement might be come to. The season does not begin until October and if Mr. Murray is willing I shall be glad to meet him, at first privately, when we might possibly agree on a basis to be submitted to the Board of this Company afterwards. This letter is quite private and is not written at all in my capacity of Secretary of this Company. Combination here, was and is absolutely necessary if

49. (contd.) "...on a more equitable footing and ensure a uniformity of practice."
50. An Irish grain distiller.
"we are to have a paying price at all. Walker at present keeps his price ½d. and ld. under our price and thereby gets the cream of the trade. We do not wish to lower our price, but occasionally we have the power of accepting a less price than the one agreed on thereby upsetting Walker's calculations. If Murray were in league with us, we could furnish him with a list of these and all sales every week if such was part of the arrangement. As to your remark about increasing the consumption by lowering the price, this reduction must be so trifling as never to reach the pocket of the consumer. In this country I never heard of the nature of the gill being raised or reduced, and that is an argument which may safely be left to take care of itself." 52.

"Combination...was and is absolutely necessary"; in 1877 the Scottish grain distillers through the Limited Liabilities Acts found a new institutional framework which might be used to solve the problem of excessive competition. The trade associations of 1856 and 1865 had been staging posts on route to the formation of the D.C.L. At no time, however, had they provided a wholly satisfactory solution. The productive capacity offered by the Coffey still, the weakness of the Scottish market, the threat of competition from British distillers outside the association and, for a period, German distillers, made amalgamation "absolutely necessary". In addition to reducing competition, amalgamation promised other benefits not to be found in the trade associations. In 1877 these benefits had yet to be won, but the D.C.L. and its close ally Caledonian, with an output of 8.8 m.p.g. accounted for 75% of Scottish grain spirit production. Within the context of the United Kingdom the new company possessed a third of the patent still output and dealers, malt distillers and outside grain distillers waited to see how this market power would be wielded.

51. Of Vauxhall, Adelphi and Limerick Distilleries.
52. D.C.L. Letter Book No. 1, at 20th July 1877.
CHAPTER NINE

THE DISTILLERS COMPANY AND THE PROCESS OF AMALGAMATION
(1877 - 1881)

Contents:

I. Introduction 325 - 327
II. Capital and Management 327 - 338
III. Pricing 339 - 342
in effect the essential trade environment, in which to see the
development of the Distillers Company and to assess the extent to
which the management of the D.C.L. achieved the objectives that
prompted the amalgamation. The present chapter has a more modest
aim: it is to establish some of the main features of the Company
during the first four years of the amalgamation. The emergence of
the large-scale company has provided the basis for a number of
hypotheses about British business between 1870 and 1914. By
1905 the Distillers Company was ranked 45th (measured by capita-
ilisation) amongst the fifty largest British industrial companies
and in both chapters an effort will be made to relate the experience
of the Distillers Company to these hypotheses.

Whilst reading the discussion of these issues it will be
worth bearing in mind the sources that are available. The minute
books of the D.C.L. Board and the U.K.D.A. have survived. The
former give the main decisions made by the Board, and occasionally
record the grounds on which they were taken. Seldom, however, is
the information available to the Board noted. The Association
minute books are similar in style with somewhat more space devoted
to the rules and regulations of the Association. Beyond these two
sources little else has survived. Although the D.C.L. was ultimately
to absorb all but one of the members of the Association, a parti-
cularly thorough spring cleaning operation, ordered by the D.C.L.
Board in 1916, removed nearly all correspondence books and distillery
records not then (i.e. in 1916) relevant to the Company’s activities.
Records for the original six pre-amalgamation firms were probably
destroyed at this time. Another major difficulty arises from the
loss of the Company’s accounts. No accounts for the pre-amalgamation
firms exist, and, although the D.C.L. became a public company in 1880,

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2. See P.L. Payne, The Emergence of the Large-Scale Company in Great
   Britain, 1870-1914. Econ.hist.2nd Series, Vol.XX, No. 3 December 1967,
   pp. 519-542.
3. There were 52 firms in the list. The average capitalisation was
   £4,418,420 and the D.C.L.’s capital was £2,049,000. See Payne, op.cit.
   Table I, p. 539.
4. c.f. Tucker, C.A. "Business History: Some Proposals for Aims &
   ironical that the D.C.L.’s Edinburgh lawyers possess a room, full of
   almost daily correspondence from 1877, most of it quite useless for
   historical purposes.
prior to 1900, only three sets of balance sheets remain. These were "abstracts" of the true balance sheet for presentation to the shareholders and constructed so as to give a minimum of information. From 1880 a summarised form of the profit and loss account is available, but without such essential supplementary information as output, sales, assets and capital employed its usefulness in assessing the Company's true financial position is strictly limited. As in earlier chapters it will be necessary to resort to a range of substitute measures in an attempt to fill the gaps caused by this loss of source material.

II. Capital and Management

Once agreement had been secured on the principle of amalgamation the promoters turned their attention to establishing the detailed basis on which the new Company would operate. Many of the decisions made during the early months of 1877 had an important influence on the Company's initial development and it is worth taking a closer look at them. At the same time this will enable the main features of the new Company to be established.

The context in which they were made is also important. The first meeting of the promoters took place on the 8th of November, 1876. On the 1st of May 1877, the Distillers Company commenced trading. During these six months the distilleries were valued, the capital fixed, shares allotted, a new headquarters established, a trade agreement with McKenzie & Co. negotiated, and a start made to overhauling the agencies and pricing system. All this was done whilst the six firms continued trading and amalgamation, then as now,

6. In the offices of the D.C.L.'s legal advisor, W.S. Fraser, in Castle Street, Edinburgh.
imposed a substantial additional burden on management and staff alike. As one former clerk later wrote of this period:

"I well remember the extra clerical work the formation of the Company occasioned in the office. For some months we were on duty from 9 a.m. until 10 or 11 p.m., while for a week or ten days towards the end of May 'all night sittings' were the rule, the 'closure' being applied at 5 a.m." 7.

Conclusions drawn from the decisions made during this period are best considered against the ever present desire of the promoters to see the new Company underway as soon as possible.

From the outset it seemed that the quickest way to achieve this was to appoint the existing proprietors as managers of their distilleries. 8 In doing this the promoters hoped to speed the transfer of the distilleries to the Distillers Company and, "to reap the benefit of the personal connection," 9 that the proprietors had with the spirit dealers. This latter consideration was not unimportant given the dealers' suspicions about the Company's intentions. As a temporary measure the arrangement had undoubted merits. It did, however, open the way for a severe conflict between the proprietor's interest in his distillery and the larger interest of the D.C.L. As soon became clear, it counteracted the fragile harmony that the years of severe competition had forced on the grain distillers.

The vendors were both managers and Directors. Table 66 shows the membership of the first Board.

<table>
<thead>
<tr>
<th>Director</th>
<th>Distillery</th>
<th>Family Relationship</th>
<th>Period of Office</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daniel McFarlane</td>
<td>Port Dundas</td>
<td>Father of Robert McF.</td>
<td>Resigned 1881</td>
</tr>
<tr>
<td>Robert McFarlane</td>
<td>Port Dundas</td>
<td>Eldest Son of Daniel McF.</td>
<td>Resigned 1880</td>
</tr>
<tr>
<td>John Bald</td>
<td>Carsebridge</td>
<td>Grandfather of J.H.</td>
<td>Died 1885</td>
</tr>
<tr>
<td>John Bald Harvey</td>
<td>Carsebridge</td>
<td>Grandson of J.H.</td>
<td>Died 1917</td>
</tr>
<tr>
<td>John Haig</td>
<td>Cameron Bridge</td>
<td>Father of W.H.</td>
<td>Died 1878</td>
</tr>
<tr>
<td>Hugh Veitch Haig</td>
<td>Cameron Bridge</td>
<td>Eldest son of J.H.</td>
<td>Died 1902</td>
</tr>
<tr>
<td>Robert Stewart</td>
<td>Kirkliston</td>
<td>-</td>
<td>Resigned 1888</td>
</tr>
<tr>
<td>Alexander McNab</td>
<td>Glencochil</td>
<td>-</td>
<td>Resigned 1888</td>
</tr>
<tr>
<td>Robert Moubray</td>
<td>Cambus</td>
<td>-</td>
<td>Died 1885</td>
</tr>
<tr>
<td>William Henry Haig (Secretary)</td>
<td>Second son of J.H.</td>
<td>-</td>
<td>Died 1884</td>
</tr>
</tbody>
</table>
With no outside shareholders and control resting with men "practically acquainted with the business", the first Board was drawn entirely from the former proprietors and their families. At some meetings the boardroom must have had the appearance of an old men's club. Two of the directors, John Haig and Alexander Mc Nab, were over seventy. Haig, already seriously ill, died in 1878, and took little part in the early work of the Company. McNab, despite his age (74 in 1877) remained a most active, if stubborn, member of the Board. Three directors, John Bald, Daniel McFarlane and Robert Moubray, were in their late sixties. In the case of McFarlane, Bald and Haig, the next generation was provided for by the inclusion of offspring, all already active in distillery management, on the Board. Although deaths and resignations removed all but two of the original directors within twelve years of the Company's formation, new directors were drawn from the proprietors' families. In 1885 with the merger between the Distillers Company and Menzies & Co. (Caledonian), the partners of the latter firm joined the Board. Apart from this new source of recruitment, it was not until 1896, that two directors were appointed from outside the original family firms. Both these directors came from blending firms. Four years later the first non-family salaried official, W.H. Ross, gained a seat. Reflecting the delicate unity of the Board, and the coalition on which the Company was based, no fixed chairman was appointed. It was not until 1888 that the first permanent Chairman, Andrew Drysdale, one of the partners in Menzies & Co., was appointed. One consequence of the absence of a fixed Chairman was that leadership and initiative rested with the Company secretary—William Henry Haig, who, at thirty-six, was the youngest member of the Company.

One move, partly designed to break the proprietors' links with their distilleries, was the establishment of a new headquarters, entirely separate from the distilleries at 12 Torphicen Street near the Haymarket Station in Edinburgh. Torphicen Street was not considered ideal; it was too far from the centre of town and too noisy.

7. J.C. Berry, Cameron Bridge - Fifty Years Ago, D.C.L. (G) July 1927, p.142.
8. D.C.L., B.M.B. No. 1 at 9th November, 1876.
but in the rush to get the Company going, the first available offices were purchased. The choice of Edinburgh for the location of the head office also highlighted the Company's important position in the spirit trade in the East of Scotland. None of the distilleries were located in Edinburgh, but once the agreement with Menzies & Co. had been signed, the two firms controlled all the grain distilleries in the East of Scotland. This was one immediate result of the amalgamation, and so long as the agreement with Menzies & Co. was maintained, a regional "monopoly" of grain whisky supplies existed. Spirit prices in Edinburgh and Leith were much easier to maintain and few complaints about underselling came from agents. The consequences of this feature of the Company's trade were important. It gave the Distillers Company a stable and profitable base. It meant, however, that Port Dundas, the largest distillery in the Company and a Glasgow based concern, faced a different market situation from the other distilleries. Port Dundas faced outside competition in the West of Scotland spirit market and it began to bear the brunt of competition in lost orders and reduced profits. Daniel McFarlane and his eldest son, Robert, the original proprietors and now the managers, drew the conclusion that Port Dundas was not experiencing any benefit from the amalgamation. This sparked off a dispute which rumbled on until 1881 and is worth looking at, as it shows the difficulties involved in fusing the Company into an effective unit.

In defiance of the D.C.L. Board the McFarlane's struck out on an independent sales and pricing policy which, once the U.K.D.A. had been formed, put the D.C.L. in breach of the Association's rules, incurring heavy penalties and questioning the D.C.L.'s sincerity in seeking sales and price restrictions. The Board wanted an explanation for the McFarlane's behaviour but Daniel McFarlane bluntly refused to attend Board meetings.

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10. The distillery nearest to Edinburgh was Kirkliston in West Lothian. Furthest away was Port Dundas in Glasgow. The others were: Carsabridge near Alloa, Cameron Bridge in Fife, Glenochil near Menstrie, and Cambus by Stirling.
"The Board deeply regret the line you persist in taking up with regard to your attendance at meetings here, but they beg to point out that although the board cannot enforce your attendance as a Director, yet as Manager of Fort Dundas you must bear in mind that you are subject to the orders of the Board in the same way as any other paid Manager." 12.

Whilst this clearly spelled out the change in status and authority of the original proprietors now that they were simply "paid Managers", the rest of the letter indicated more was at stake than just the question of the Board's authority:

"the Directors bid me express their extreme sorrow at the differences that now exist between you and them, instead of feelings of cordial friendship and goodwill, we are all so interested in the Company that no part of the vast concern can suffer without the whole suffering. You, the largest shareholder, are most interested in its success and the Board therefore would ask you if it is your opinion that the course you are now pursuing is the one most likely to conduce to the profit of the Company which is synonymous with your own? Further, what would be the fate of the Company if each Director were to act as you are now doing? It would simply collapse."

In the original amalgamation agreement, provision had been made for independent arbitration in the case of disputes between the former proprietors and the new Company. The D.C.L. Board now suggested that this should take place. The mediator's report came down firmly on the side of the Board:

"...while it must be difficult for Managers of Distilleries who before the formation of the Company were the uncontrolled proprietors of their works to divest themselves of the feeling that they are still to some extent independent, it is essential to the working of the Company that this feeling should be got rid of, and that the Board should be regarded by every Manager as the supreme authority in the regulation of the Company's business." 13.

Robert McFarlane resigned from the Board shortly before the mediator reported. Mediation did not, however, end the dispute. Old Daniel

McFarlane was still running Port Dundas and still on the Board. Accusations of underselling by one distiller against another continued to be made and in July 1880, Robert Moubray proposed that the Company appoint a Chief Salesman "with a view to prevent for the future, questions as to undersales or underquotations by managers or agents, as well as misunderstandings." The Salesman was to superintend sales, distribute orders amongst the distilleries and have full powers to examine their books. His salary was to be £750 a year which, Alexander McNab thought, was "an excessive extravagance for a salesman." Moubray's proposal was accepted "whereupon the Directors expressed their regret at all past unpleasantness and withdrew all charges which they may have made against one another." 14

Whilst this solved, or rather shelved one cause of the dispute between the McFarlanes and the Board (for no Chief Salesman was actually appointed and inter-distillery disputes over sales continued) another row was brewing over a proposal to transfer to the public sufficient D.C.L. shares to enable the Company to obtain a Stock Exchange quotation. When the D.C.L. was formed no public share issue was anticipated and the Company's capital was controlled by the original proprietors. Initially, Alexander Moore, Robert Stewart's accountant, had recommended a nominal capital of one million pounds divided into 1,000 shares of £1,000 each. The distillers, however, felt that one million pounds was insufficient to allow for future expansion, whilst the high denomination of shares would not make for easy transfer. As a result the Distillers Company began with a nominal capital of two million pounds and shares of £50 each. Twelve thousand shares (£600,000) were issued to the proprietors in part payment of the purchase price of the distilleries and the balance was to be met by the issue of Mortgage and Ordinary Debentures. In 1878, once the working capital requirements of the D.C.L. had been established, £246,000 Mortgage and £60,000 Ordinary Debentures were issued. Not only was this an exceptionally conservative financial structure, employing

14. ibid. at 2nd July, 1880.
a low element of gearing, but the closed nature of the Company, without access to public sources of capital, meant that it was entirely reliant on retained profits or on further subscriptions from the Directors, for future expansion. Moreover, without a public share issue, interest in the Company's prosperity and success was very narrowly based. As the Company, initially on its own and then, after 1878, through the U.K.D.A., attempted to shift profit margins against the dealers it was faced with increasing hostility. A public share issue, if the spirit dealers participated, might help to remove their ill feelings, especially if, as was first proposed, the qualifications for Board membership were cut from 100 shares to 2 and two seats on the Board placed at the disposal of the new shareholders. The spirit dealers might then elect some of their fellows to the Board and be in a better position to understand the distillers' problems. The final consideration pointing to the need for a public share issue arose out of the difficulties of transferring shares. After John Haig's death, the family wished to sell some of his holdings but the lack of an open market made it difficult to assess their true worth. His Trustees were forced to hold on to the shares and, given the age structure of the Board, the problem of liquidating holdings was likely to become increasingly pressing.

In May 1880, the Board met to discuss the question of a public issue. The plan was to reduce the nominal capital to one million pounds and the share denomination to £10 "as these are generally preferred by the public." Sixty-five thousand shares would be issued, of which two-thirds (43,334) would be offered to the public at a price of £13.10.0, to enable the Company to gain a Stock Exchange quotation. This change in the firm's capital meant that the unpaid portion of the existing shares would have to be called up. To do this the reserve was to be paid as a dividend to the existing shareholders, and they would use this to pay the call. All the Directors agreed to these proposals. However, the

15. D.C.L., B.M.B. No. 2 at 5th May 1880.
suggestion that two places on the Board might be made available to whisky merchants was not, and, as Daniel McFarlane had been suggesting ever since the amalgamation was first mooted, that some dealers and malt distillers should be involved in the D.C.L., he now withdrew his assent to the share offer and was duly outvoted.

On the 16th of June 1880, the prospectus was issued. It began with an account of the amalgamation which bore some, but not too much, relationship to reality:

"These firms were all old-established Houses, several of them having been in existence for about a hundred years. They all possessed large connections, and carried on a highly prosperous trade - their main object in amalgamating being to secure the benefit of combined experience and the advantage (which manufacturing and trading on a large scale can alone command) of reduced expenses and increased profits."

There then followed an explanation of why the public was being invited to subscribe:

"When these Houses were amalgamated it was proposed to offer a portion of the Shares of the new Company to the Public, but it was decided that it would be better to restrict the Membership for the first three years to the Partners of the Amalgamating Firms until the Company was consolidated, and its success thoroughly established. These objects, having been accomplished by the successful working of the Company for the past three years, the Directors...offer to the Public 43,334 £10 shares."

In fact no public issue had been contemplated at the beginning, and to say that the firm's success was thoroughly established hardly matched the evidence of the schism within the Board.

The response to the share offer was exceedingly disappointing. By the 7th of July only 6,844 of the 43,334 shares on offer had been applied for. The Board advised the applicants that "the shares have not been applied for to such an extent as to enable the Company to obtain at present a quotation on the leading Stock Exchanges of
the Kingdom”. Applicants were now given the opportunity to withdraw. By the 14th of July applications for more than a third of the shares had been withdrawn, leaving 4,466 shares to be allotted. Almost three years later, in March 1883, the Company obtained a quotation on the Glasgow and Edinburgh Stock Exchanges. Not until October 1886 was a London quotation secured. Two reasons have been advanced to explain the poor response. Ross believed the high premium of £3.10.0 per £10 share to be one reason, as the price of £13.10.0 "was no doubt regarded at that time as the full value". In relation to the promised dividend of 13% there may have been something in this. The other suggestion was that Scottish issues were still tainted by the collapse of the City of Glasgow Bank two years before. This might, however, have been expected to deter English investors most of all, but an examination of the share register at May 1881, when 6,374 shares had been allotted, shows that 24.9% of the shares were held south of the border. By contrast, only 22.3% of the shares were held by investors from the four major Scottish cities. Where the issue drew its largest support (52.8%) was from the smaller market towns of Scotland.

This pattern raises some intriguing questions. Most successful industrial share issues relied on attracting the urban middle class, the group increasingly able to invest. The urban middle class were also the strongest supporters of the temperance movement. Did the moral scruples of the Scottish middle class hold them back from investing in the Distillers Company? The question is, alas, quite impossible to answer. The share register did not give a sufficiently comprehensive breakdown of occupations to enable any check on the type of investor to be carried out. Outside the Scottish cities, the share register gives the impression that spirit dealers and publicans were the most common share buyers. This suggests perhaps, that it was simply the failure to attract the dealers in the great blending centres that accounted for the poor response. Later, in the 1890s, wine and spirit merchants were great

17. This figure excludes the Directors’ holdings equal to 81.13% of the issue.
18. Distilling firms usually made a point of noting if a shareholder was a wine and spirit merchant or distiller.
investors in their own trade and, even before the late Victorian boom in the distilling industry, the North British Distillery Company in 1885 was able to draw its entire capital of £75,000 from spirit dealers. 

Less than £15,000 was raised by the D.C.L. in the great blending centres of Glasgow, Dundee, Aberdeen, Edinburgh and Leith. The issue was unsuccessful because it did not attract the very people it was designed for.

It may be doubted whether Daniel McFarlane, the major supporter of the proposal to attract the dealers, drew much pleasure from the unfortunate outcome of the share issue. In October 1880 he resigned as manager of Port Dundas, and in November announced, that he "was anxious to sever his connection with the Company." His lawyers offered "on behalf of Mr. McFarlane, either to take back Port Dundas distillery on the same conditions as those on which it was bought by the Company, or that the Company buy up Mr. McFarlane's shares at the price of £13,10.0." The Board declined both offers. Mr. McFarlane now refused to pay the call on his shares made the previous June, and by way of reply the Board, for a time, withheld the interest on his debentures. With Daniel McFarlane now permanently absent from Board meetings and refusing to take part in the day to day management of Port Dundas his second son, Richard, took over the distillery - without Board sanction. "Mr. Richard" had recently returned from America and he now proceeded to carry out a series of trials with a new mashing process which he had learnt in the States. This resulted in a heavy fall in spirit yields. The Board appointed a new manager to Port Dundas with instructions to bring Richard under control, whereupon Richard announced his intention to start a new grain distillery. Relations between the Board and the McFarlanes were so impaired that an outside mediator was again brought in to see if he could end the quarrel. In March 1881 the mediator, a Mr. Rentoul, and W.H. Haig, the D.C.L. secretary met Richard McFarlane. Haig reported to the Board as follows:

19. The circumstances surrounding the North British Distillery Co. were rather different. It was established by the dealers to compete against the D.C.L. See Chapter Ten below.
21. The process involved mashing maize with an increased amount of Acid and Lime or Chalk than was customary and without Salt, Oats, barley or other grain. The acid was probably sulphuric acid which was capable of converting the starch into sugar. Chalk was used to neutralise the surplus after mashing.
"Mr. Rintoul and I then discussed the position of matters if the Board's ideas were rejected by Mr. Richard McFarlane. Mr. Rintoul pointed out the damage to the distilling trade if Mr. Richard started a new distillery. I replied that so far as that was concerned the Distillers' Association was in a very critical position as Mr. Calder had given notice of withdrawal from that body, and if there was to be a fight one distillery more or less would not make much difference. It would be worse for Mr. McFarlane than for us, for he would be losing money both in the Company and in the distillery and in fact would be burning his candle at both ends - at all events I remarked 'rather than go through the rows with Mr. McFarlane as formerly we would face the new distillery and a fight'..." 23.

That confrontation in fact marked the end of the dispute with the McFarlanes. The mediator proposed that a joint or assistant manager be appointed as security against any further " rash experiments". Mr. Richard was to be given a seat on the Board and his father would resign. With Richard McFarlane's appointment and his father's resignation, the three year dispute came to an end.

The dispute between the McFarlanes and the Board had many facets. It arose out of the isolated position of Port Dundas, was exacerbated by the failure to attract the dealers to the share issue, and culminated in the arrival of the McFarlane heir apparent. At each stage the McFarlanes challenged the supreme authority of the Board and their ability to do so owed much to the fact that as vendors they retained the management of their distillery. This feature of vendor-management had been held to be accountable for many of the problems that hindered large scale companies between 1870 and 1914. Thus Professor Payne has argued:

"Except in those cases in which the original firm became large and powerful under the leadership of one or two men - in effect, in those cases where growth had taken place through internal expansion or by acquisition - the basic weaknesses of the giant British concerns stemmed from the great extent to which the vendors retained their hold over their businesses when mergers took place." 24.

More particularly, in the case of the Distillers Company, W.H. Ross - the first non-family salaried official to reach the Board - argued:

22. James Calder of the Bo'ness Distillery Company.
"the arrangement...had this distinct disadvantage that each manager was inclined to regard the distillery under his charge as still his own and to shape his policy as if the other distilleries were still his competitors. Strange as it may seem, it was many years before this feeling was overcome, and it was only after the removal of the original vendors from the direct management and the placing of control under one head with staff of well qualified officials under him, that the real benefits of the amalgamation were realised." 25.

Ross gained his seat on the Board as Managing Director in 1900. Four years later, John Bald Harvey, the last of the vendor-managers resigned as manager of Carsebridge distillery, only a fortnight after ill-health forced Richard McFarlane to retire from Port Dundas distillery. Even after the settlement of the dispute with the McFarlanes, distillery managers continued to be appointed from the heirs of the vendors. Indeed, the heirs seemed to be regarded as natural successors and only if no heir was available was a salaried official appointed. At the same time, however, the heirs were far less powerful figures than the original vendors. As the D.C.L. share capital expanded they held an increasingly smaller proportion of the total capital. The decisions left open to them as distillery managers also shrank, especially after the first permanent Chairman of the Board was appointed in 1888 and major decisions concerning investment, pricing, sales and grain buying were firmly concentrated in the Board. In effect, they became salaried officials liable to the same contractual conditions of employment as any other manager. After 1889, none became members of the Board.

25. W.H. Ross, op.cit. at April, 1923, p.52.
III. Pricing

The dispute with the McFarlanes and the failure of the share issue were only two of the problems confronting the Board. The amalgamation had promised greater control over price and output and, following the appointment of the Board, Alexander McNab and W.H. Haig were given the task of drawing up a plan for the conduct of the Company's business. No copy of the plan has survived but, from Haig's correspondence with the Directors, it is clear that the first priority was to establish a uniform pricing system and to rationalise the agencies. The importance of the former task can best be judged from the manner in which the old Association's price fixing had been circumvented by alterations in "the conditions of sale." Similarly, excessive duplication of agencies had been one of the main topics discussed by the distillers in the period leading up to the amalgamation. McNab and Haig requested each distillery to furnish a list of agents, the names of all customers and the terms of settlement, for the three years prior to the amalgamation. As was to be expected, given the inability of the old Scotch Distillers' Association to solve the problem of excessive competition, the returns showed that each distillery possessed a vast vanguard of agents and travellers. Between them the six distilleries employed over a hundred agents and almost two hundred travellers. Not all of these were on fixed contracts and salaried, but even so there was clearly considerable scope for savings. The pricing policy of each distillery varied widely. Although, following the Association's resolution on warehouse rent, all charged for storing customers' spirits, the other conditions of sale were extremely diverse. Some paid carriage from the distillery to the dealer; some to the dealers' customers. The length of credit varied from two to six months; its cost from nil to "Scotch overdraft rate". Some distillers supplied casks for filling, free of charge; others granted special allowances for dealers' own casks. Further enquiries revealed a system of discounts for large orders which, whilst an accepted and normal business practice, had, in

grain distilling, been carried to excess until even the smallest buyer was receiving a discount. The remedy was obvious: a new scale of allowances must be drawn up as well as a common code of terms of settlement, and agents and managers instructed to take orders only in accordance with this code at "strictly nett" prices.

As the new code involved an attempt to shift sales margins against the dealers the question was whether the D.C.L. had sufficient market power to accomplish this by itself? In the East of Scotland there was little difficulty in introducing the system. Menzies & Co., whose assent to the conditions was vital, were agreeable. Elsewhere, however, the situation was more difficult as Haig explained to Andrew Drysdale, Menzies' London partner:

"We do our best to get the highest price we can, but as in Glasgow and Liverpool there are several outside distillers, the Directors wish to have some liberty to grant concessions as they see necessary. Our opponents keep their prices at £3d. and 1d. per gallon under the Company's price and consequently they are getting the orders we want most. Outsiders must be met if we are to keep our place in the market."

Both firms agreed that an element of flexibility was needed and that where a strong case could be made, special concessions might be granted. Distillery managers and agents were now instructed that Board sanction must be obtained for special discounts. Initially, the Liverpool market was selected for a trial reduction. Haig informed the agent, John McGaan, that:

"The Directors today had under discussion the advisability of selling to particular customers at a little under the agreed price. Messrs. Young & Co. were especially named. The Board resolved that you may sell that firm a limited quantity at 1/11, 2½ off provided you are absolutely certain that they are being supplied by Walker or Preston at that price; further in event of a sale being made strict secrecy must be observed both by you and Messrs. Young. The Directors will consider this a test of whether or not to allow the concession to any other houses." 28.

27. D.C.L., L.D. No. 1 at 11th July 1877.
28. ibid. at 18th July 1877.
"strict secrecy must be observed"; indeed, but in spirit dealing just about the worst kept secret was that someone had received a special discount. The concessions scheme only lasted from July until October 1877 and in that period the D.C.L. suffered a severe loss of goodwill amongst both dealers and competing distillers. Dealers who had received no discount were not unnaturally upset by concessions to others when they paid the full price under the D.C.L. code, and dealers who had received allowances used them as a bargaining counter with other distillers. Haig had warned that "for the sake of the Company it will be well to please the dealers at first, before putting on the screw too tight." 29 Neither rigid prices or partial concessions pleased the dealers. The absence of sales and profits figures makes it difficult to assess the overall effects of the new policy. There are, however, certain pointers which indicate that, in markets outside the East of Scotland, Distillers Company sales slumped quite badly. The Board was sufficiently concerned about the Company's position in Belfast that W.H. Haig was despatched to report on the state of the trade. The general opinion amongst the blenders there was that "the Company has lost orders for this season on account of the restrictive policy introduced last May." 30 Agents' reports carried the same message. In Perth "Mr. John Dewar is much hurt and says it is the last time he will ever give an order." 31 Dewar, in fact, continued to buy from the D.C.L. but for Arthur Bell, his fellow dealer in Perth, the D.C.L. pricing policy was the beginning of his disenchantment with the Company which led ultimately to him placing his grain spirit orders with other distillers. 32

The conclusion drawn by the D.C.L. from its abortive attempt to shift profit margins against the dealers was important. The Company, despite its alliance with Menzies & Co. and the huge productive capacity both controlled, could not act alone where price was concerned. Output did not equal market power and other distillers must be brought into a new and wider trade agreement if the problem was to

29. ibid. at 9th June 1877.
30. D.C.L., B.M.S. No. 1 at 31st October 1877.
31. D.C.L., B.M.B. No. 1 at 9th June 1877.
32. Arthur Bell & Sons Ltd. Letter Book at 24th April, 1880.
be effectively tackled. W.H. Haig had already drawn the same conclusion and acting independently contacted his cousin at Dundalk distillery. This was in July 1877. In October formal negotiations began with the Irish grain distillers. McNab and Moubray were given the responsibility of bringing the Scottish and Provincial English grain distillers into a new agreement and by May 1878, a draft agreement had been prepared. Four months later the first meeting of the U.K.D.A. was held.

33. D.C.L., B.M.B. No. 1 at 10th October 1877.
34. See above, p.324.
CHAPTER TEN

"THE WHISKY PARLIAMENT": THE UNITED KINGDOM

DISTILLERS' ASSOCIATION (1878–1888) – A BUSINESSMEN'S PARLIAMENT IN THEORY AND PRACTICE

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CHAPTER TEN

"THE WHISKY PARLIAMENT": THE UNITED KINGDOM
DISTILLERS' ASSOCIATION (1878-1888) - A BUSINESSMEN'S
PARLIAMENT IN THEORY AND PRACTICE.

I. INTRODUCTION

The troubled affairs of the Distillers Company during its first four years provide a useful introduction to the United Kingdom Distillers' Association. If once independent distillers found unity difficult to achieve within the organization of a limited liability company, how would a trade association hold a wider group of distillers together? Would a trade association be more successful in pushing sales margins against the dealers? The U.K.D.A. was formed on the initiative of the J.C.L., the largest firm in the grain distilling industry. It lasted for ten years during which it sought to control the sale and price of patent still spirit. It occupied an important place in the affairs of the grain distillers, but after it collapsed the trade association, as a mechanism for controlling competition, was not again relied upon. Instead, after an interval during the whisky boom of the 1890s, mergers and take-overs came to be regarded as the most effective solutions to the grain distillers' problems.

Because the U.K.D.A. stands as the final attempt by grain distilling firms to blunt competition without undergoing full amalgamation, a study of its affairs helps to illuminate the attitudes of one sort of Victorian industrialist to competition. Sometimes explicitly, sometimes implicitly, these attitudes were expressed in the formal constitution on which the Association was based and which the chapter begins by examining. The late Victorian entrepreneur has passed,
or is passing, "from damnation to redemption."¹ The next section seeks neither to damn or to redeem but simply to see whether the grain distillers found their salvation through the constitution. Ultimately, the U.K.D.A., like its predecessors, was challenged by new entrants to grain distilling. This time, however, the challenge was different for it involved the movement of the spirit dealers into grain distilling. One challenger, the North British Distillery Company, stands out because of the unique way it moulded limited liability to enable the dealers to enter grain distilling. The fourth section of the chapter describes the formation of this company, which still remains today as one of the few independent grain distilleries outside the D.C.L. The chapter ends by relating the U.K.D.A. to the general discussion on the place of Trade associations in the British economy during "the Great Depression."

II. MEMBERSHIP AND CONSTITUTION

The draft agreement of May, 1878 began with the following declaration:

"taking into account that hot and dry weather is an expensive time for making spirits we hereby bind ourselves from the 24th July 1878 until 11th November 1878 to ask for our patent grain spirits 2/- per gallon proof, carriage paid, with ld. off to large buyers but in no case to accept of less price than 1/7 net cash per gallon proof, during the whole of the above period, so that sufficient time may be allowed to arrange quantities between the parties."²

while higher costs of production during the summer months did eat into distillers' profit margins it is hard to believe that this provided the main motive for the agreement, or that the announcement was

¹. D.N. McLuskey & L.G. Sandberg, FROM DAMNATION TO REDEMPTION: Judgments on the Late Victorian Entrepreneur, Explorations in Economic History, Fall 1971.
². D.C.L., B.M.H. No. 1 at May 1878.
other than a cop to spirit dealers. Most summers (if they were hot and dry) involved higher costs and unless distillers were faced with a backlog of orders the customary practice was to cease distilling about May or June and use the period until Autumn for repairs. As the declaration makes clear, the arrangement was a stop-gap measure to limit competition until the distillers could "arrange quantities". Between May and October, when final agreement was reached, two draft arrangements were made. By comparing these arrangements it is possible to establish the membership of the Association and the problems the negotiations involved.

### TABLE 67: Signatories to Draft Trade Agreements of May, September and October 1876

<table>
<thead>
<tr>
<th>Scottish Distillers</th>
<th>May</th>
<th>September</th>
<th>October</th>
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<tbody>
<tr>
<td>D.C.L. Six grain distilleries</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One Irish Pot still Dist. m.</td>
<td>8.8</td>
<td>8.8</td>
<td></td>
</tr>
<tr>
<td>Menzies &amp; Co. Caledonian m.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>J. &amp; W. Harvey Yokor m.</td>
<td>0.472</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>J. Calder &amp; Co. m.</td>
<td>0.375</td>
<td>0.385</td>
<td></td>
</tr>
<tr>
<td>A. Walker Loch Katrine (Adelphi) m.</td>
<td>see English distillers</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>English Distillers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>R.W. Preston &amp; Co. Dawksall, Liverpool m.</td>
<td>0.660</td>
</tr>
<tr>
<td>A. Walker Vauxhall, Liverpool m.</td>
<td>1.746</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Irish Distillers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Walker Limerick</td>
<td>see English distillers</td>
</tr>
<tr>
<td>Cork Distilleries Co.</td>
<td>-</td>
</tr>
<tr>
<td>D. Watt &amp; Co. Londonderry</td>
<td>1.5</td>
</tr>
<tr>
<td>M. Brown &amp; Co. Dundalk</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>m: membership</th>
<th>Total Output</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>13.551</td>
</tr>
<tr>
<td></td>
<td>13.341</td>
</tr>
</tbody>
</table>


The column headed May 1878 in Table 67 shows that six firms, controlling thirteen distilleries,\(^3\) signed the initial agreement. Membership was drawn from the Scottish and Liverpool distillers,

\(^3\) All but one were grain distilleries. The D.C.L. had just bought Chapelizod, a pot still distillery in Dublin. Archibald Walker also owned Limerick distillery but that was not included in the price agreement.
suggesting that Mackay and Moubray had been much more successful in their negotiations than Haig was with the Irish distillers. Compared with the membership of the old Distillers' Association of 1865-76 there were some significant new participants. Ho'ness, the distillery which had been enlarged and converted from pot to patent still in 1876, and Bankhall, the new patent still distillery in Liverpool, both signed. Together they had shown the inability of the old Association to control productive capacity. Archibald Walker had withdrawn from the old association in 1872. He now came back into the fold bringing his three distilleries with him. As competition from Walker and Preston, the Liverpool distillers, had forced the D.C.L. into its concession scheme, their adherence was especially welcome. John Harvey of Yoker, like Walker, had also been in the last Association, but, always an erratic supporter, had dropped out after a dispute over his quota. He had also declined an invitation to participate in the D.C.L. amalgamation. From the point of view of the Distillers Company, the inclusion of Yoker and Loch Katrine, both Glasgow distilleries, held the prospect of a reduction in the pressure on Port Dundas from outside competition.

Haig's difficulties with the Irish distillers are not recorded but the most likely explanation is that the negotiations were sticking over the question of the Irish quota. The initial proposal for the Association involved an attempt to control output. Spirit consumption in Ireland had been declining since 1876, and the Irish were probably holding out for a larger share of total Association output than the size of the Irish market warranted. One move, possibly designed to pressure the Irish distillers into joining was the purchase by the D.C.L. in January 1878, of Chapelizod a pot still distillery in Dublin. Ostensibly the D.C.L.'s intention was to manufacture "Dublin whiskey" which was still enjoying some popularity. Ross described this as an unsound venture born out of "the first

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4. For all practical purposes the old Association finished in 1872 when Harvey and Walker withdrew.
5. Walker's Scottish distillery is described as Loch Katrine in the U.K.D.A. minute books. It was also known as Adelphi distillery and Walker continued to trade under the name of the original owners, Charles and David Gray. There was another Loch Katrine distillery, a pot still malt distillery, owned by Bulloch, Lade & Co. In 1872 Bulloch, Lade & Co. unsuccessfully attempted to prevent C & D. Gray selling their whisky as "Loch Katrine" whisky.
blush of enthusiasm surrounding the new Company. Given the state of the Irish whisky market and the subsequent unhappy history of Chapelizod this was fair comment. However, the possibility of using Chapelizod as a patent still distillery was discussed at the time and, the threat to the Irish distillers of additional competition may have been a useful tactic. One thing is clear: without the Irish distillers in the Association, any attempt to raise prices ran the risk of opening the door to Irish sales. In early September, Haig reported to the D.C.L. board that the Irish distillers were ready to join the new Association. The column headed September 1878, in Table 61 shows its composition.

Three Irish firms, the Cork Distilleries Company, David Watt & Co., and Malcolm Brown & Co. shared a single quota. The first firm was the most interesting of the three. The Cork Distilleries Company had been formed in 1867 to facilitate the merger into one group of four pot still distilleries in Cork and a patent still distillery at Midleton. In the 1880s the pot still distilleries were substantially rationalised, three of them being closed and production concentrated on the remaining one. Irish pot still spirit was excluded from the Association agreement, and excluding the four Cork distilleries, together with the D.C.L.'s Chapelizod distillery, this left nine firms controlling sixteen grain distilleries in the Association.

It was Ross who described the United Kingdom Distillers' Association as "the Whisky Parliament". His description arose from "the bickerings and banterings" amongst those whose interests were to a large extent opposed to each other..." but there were, however, other features of the Association that made the description even more apt. At the heart of the Association was a formal "constitution" containing eighteen clauses. Drafted by W.S. Fraser, the D.C.L.'s lawyer and secretary of the Association, it expressed the maximum amount of agreement that could be secured amongst the Scottish, Irish and Provincial English distillers. The preamble read:

6. W.H. Ross, op.cit. at July 1923, p.82.
7. It was re-named Phoenix Park distillery but was the least profitable of the D.C.L.'s distilleries and was closed down from 1893 to 1899.
   It restarted as a patent still distillery and operated until 1922.
8. The pot still distilleries were those at North Wall, the Green, Watercourse Road and John's Street. It was at North Wall that production was concentrated. See: J.E. McCruro, op.cit. pp. 375-381.
The Distillers, believing it to be for their mutual advantage to enter a trade arrangement with a view to secure remunerative prices for the spirits produced by them hereby agree to form themselves into an Association.\textsuperscript{10}

The agreement was to run for five years. The next two clauses introduced a new principle into the method by which remunerative prices would be secured. In the past, attempts had been made to control either output or sales. The U.K.W.A. was different. It started by taking the productive capacity of all the members and then their total deliveries (sales) to the home market over the past year. Total Association deliveries were divided amongst the members in proportion to their percentage of total productive capacity. The significance of this scheme was first, that it gave each member a home sales quota which had a direct relationship to his productive capacity, and second, that as export and methylated spirits markets were left free from control, any member could expand his productive capacity if sales in these markets merited an increase. Also, as no limit was placed on stocks of spirits, members might use their productive capacity to build up stocks for maturation. The importance of these free markets was probably that they allowed the distillers to keep their productive capacity up and lower unit costs. Any distiller might expand except in the home market. To insure adherence to the home deliveries quota, the agreement included a system of penalties for excess deliveries and bonuses for deficiencies. Initially, these stood at 4d. and 3½d. per proof gallon respectively. These were large sums, equivalent to 16.6% and 14.5% of the Association's selling price. That the penalty was intended to deter over-deliveries is clear, but it also had another result. Distillers paid transport charges to their customers. The greater the distance of the customer from the distiller, the higher was this cost, and, as the D.C.L. warned its managers when it came near to its quota: "the price will not afford a fine and cheap sales at heavy expenses of delivery should be avoided".\textsuperscript{11} The effect was

\textsuperscript{9} W.H. Ross, \textit{op.cit.} at October 1923, p.130.  
\textsuperscript{10} U.K.W.A. \textit{A.B.} No. 1 at 20th November 1878.  
\textsuperscript{11} D.C.L., \textit{B.M.B.} No. 4 at 15th April 1885.
to check distillers attempting to gain sales in their opponents' local markets.

The agreement involved an arrangement for mutual aid. Where a member was prevented from producing by an accident, he could call on other members to supply him at the Association's price, or, he could simply claim the bonus for deficiencies. Provision was made for excluding outside competitors. No member was allowed to buy spirits from non-members, whether British or foreign, for sale at home. There was one further provision relating to output, which reflected a desire to prevent new grain distilleries and a fear of further amalgamations:

"No member shall be entitled to start a new Distillery or have an interest in any other Distillery during this agreement."

Campbeltown and Islay malt whisky distilleries, as well as Irish pot still distilleries, were excluded from this provision.

The agreement also recognised certain parts of the trade arrangement existing between the D.C.L. and Menzies & Co. With the formation of the Association there was no longer any need for these two firms to have a separate agreement on price and output. These provisions were accordingly suspended for the duration of the Association. Their agreement had, however, continued the links established by the old Association with the London distillers. Under this, shipments to London were fixed at the level set in 1866 of 1.339 m.p.g. They were still running at this level when the position of London sales was considered by the new Association. For a number of reasons the London market posed the Association with some difficult problems. Originally, London sales had been used to clear the home market and the restriction of 1.339 m.p.g. had been agreed with the London distillers after they had hit back by sending low priced shipments North. Amongst the Scottish distillers, only the D.C.L. and Menzies & Co. appear to have been selling in London. Deliveries
amounted to 16% of the D.C.L. 's and 28% of Menzies' total sales (by volume). Both firms wished to continue the trade. But what was the position of the London distillers? London, described by one distiller, as "the spirit market of the world", bore the brunt of the competition from imported spirits. Competition from German spirit was one of the factors involved in the D.C.L. amalgamation, but German and by the early 1880s, American spirits posed a greater threat to the London distillers than they did to the Scots or the Irish. "Being neutral in quality", these spirits were much more akin to the spirit produced by the London distillers for gin making. Scottish and Irish grain whisky, being made for blending and maturing purposes, was less like imported spirit and suffered less from foreign competition. During the old Association, London prices had normally been lower than in the rest of the United Kingdom, mainly because foreign spirits depressed London prices but also because the Association had raised home prices. To maintain London deliveries and clear the home market the Association had subsidised London sales. One question was whether or not the subsidy should be reintroduced. Besides the difficult problem of creating a method of calculating the subsidy there were three issues that had to be borne in mind. First, there was the position of the Provincial English, that is, the Liverpool distillers. Both Liverpool houses made spirit for rectification into gin and spirit for sale as grain whiskey. Both, like the Scots distillers, regarded the London market as a dumping ground for surplus output; they would require a share of the D.C.L.-Menzies delivery quota. Besides, they faced another provincial distiller, Thomas Board of Bristol, who was outside the Association. If they adhered to the Association price, how would the Bristol firm react? Second, there was the attitude of the spirit dealers to be taken into consideration. Foreign spirits were said to be "the main factor determining the price of London made spirits." but, for the Association, the critical influence was the level of the corn market. If prices were fixed at a higher level than London prices as the Association intended, how would the dealers behave? To

12. R.C.W. Qn.8599 at p.265.
13. i.e. flavourless. W.H. Ross, op.cit. at January 1924, p.5.
a large extent this depended on the availability of alternative sources of supply and this raised the third point, the reaction of the London distillers themselves. Despite the greater productive capacity of the U.K.D.A., the competitive relationship with the London distillers was not, and had never been, a one way affair. Might the London distillers again send spirits North?

The Association wished to maintain a uniform as well as a remunerative price. How could these diverse interests be coalesced? London sales, it was agreed, should be kept at the level of 1.339 m.p.g. and members were not to do "anything inconsistent with the obligations of the Scottish distillers" under that arrangement. The D.C.L. and Menzies & Co. agreed, however, to create space in their London quota for any other member, English or Irish, wishing to sell surplus spirit in London. To maintain a uniform price the subsidy would be revised. This was to be calculated as follows: an excess of 2d. per gallon on the London Credits price of Scottish patent still spirits over the minimum price fixed by the Association for patent still spirits in Scotland was taken as par. If the Scottish price was nearer the London price than 2d., or above it, the shippers of Scottish spirits were to receive a subsidy equal to the difference between the Scottish price and par. If the opposite applied, that is, London prices were more than 2d. higher than Scottish, the shipper paid a subsidy to other members. Both subsidies were to be assessed on the total deliveries of all the members to the home market. The secretary of the Association was to assess par, and by using his first statement of the London subsidy, a practical example will help to clarify the complex nature of this scheme:

"The net average price obtained by members...in the Home Market other than London, after deducting from the minimum price of patent grain spirits in these markets in respect of dealers' allowances was 1/8.364d. per proof gallon. The London Credit price of Scotch spirits in order to be at par with the other markets price should exceed this by 2.405d. per proof gallon. That is it should have been 1/10.769d. But the London Credits price was only 1/8. Thereby leaving an excess in favour of the

15. U.K.D.A. M.B. No. 1 at 20th November 1878.
16. The London Credits price was the price including three months credit on the spirit and duties."
"Scotch price of 2.769d. or 2½d. per gallon and accordingly in terms of the 11th Article of the Association Agreement a subsidy of 2½d. per gallon is payable to the London shippers" 17

Laissez-faire capitalism, it might be said, had been refined to three decimal places.

Just how these complex arrangements worked during the life of the Association, will be discussed shortly. Before doing so, two other features of the distillers' Parliament must be mentioned.

With total deliveries fixed for the five years duration of the Association two important decisions had to be taken by the members. Prices were to be fixed "from time to time", and also the rates of penalty and bonus. In what way were these decisions to be made? From Table 67 it can be seen that the D.C.L. and Menzies & Co. with a combined output of 8.8 m.p.g. accounted for 66% of the total. Their dominant position contrasts with the relatively small outputs of other members and, by the criterion of output, it might have been expected that they would have as large a say in decision-taking. In fact, this was not the case, for, like the Parliament it was, the Association had a voting system. Table 68 shows the distribution of voting power and each member's percentage of total output.

<table>
<thead>
<tr>
<th>Firm</th>
<th>Votes</th>
<th>%age of Total Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>D.C.L.</td>
<td>4</td>
<td>66.0</td>
</tr>
<tr>
<td>Menzies &amp; Co.</td>
<td>2</td>
<td>14.2</td>
</tr>
<tr>
<td>A. Walker &amp; Co.</td>
<td>2</td>
<td>4.9</td>
</tr>
<tr>
<td>R.W. Preston &amp; Co.</td>
<td>1</td>
<td>2.9</td>
</tr>
<tr>
<td>Bo'ness Distillery Co.</td>
<td>1</td>
<td>12.0</td>
</tr>
<tr>
<td>Irish Houses</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: U.K.D.A. M.B. No. 1 at 20th November 1878.

17. U.K.D.A. M.B. No. 1 at 7th January 1880.
The figures are based on the October column in Table 67. By October, Harvey, confused by the constitution and upset about his low deliveries quota, had withdrawn to seek—temporarily as it proved—his own salvation. Unlike the old Association this neither provoked a crisis or a scramble for larger sales quotas. Calder, Walker and the Irish Houses were given slightly increased shares but overall, output was lowered. By past standards this was a marked change in behaviour and suggests that restriction was now taken much more seriously.

The question which the voting system raises is, was it the price the B.C.I. had to pay to secure the Association? As the B.C.I. and Kepzies & Co. with 66% of output had only 50% of the votes, it certainly looks like that. Probably, however, it reflected an attempt to solve a much more fundamental difficulty that had destroyed the old Association. True equality under a uniform pricing system implied that each member would have the same costs of production and therefore the same amount of profit. Cooperation is usually easiest amongst equals but, as a glance at Table 67 soon shows, there were wide differences in the scale of production between members, and, given the nature of the patent still, costs of production probably varied widely too. If the larger distillers were operating at higher profit levels and power within the Association had been based solely on output, then a large distiller might have forced through a price change at a time when this would not have suited smaller firms. A voting system which was neither "one distiller, one vote" nor "one gallon of output, one vote", avoided this difficulty. At the same time because it limited each distiller's sovereignty it was a compromise solution, essential to the formation of the Association. Lest the voting system still leave any member dissatisfied, the final provision of the constitution permitted disputes to go to arbitration to give "equal and substantial justice to all."
Thus equipped with its detailed constitution, the Association set about attempting to establish a remunerative price. Did the constitution work in practice and did the Association achieve its aim?

III. THE ASSOCIATION IN PRACTICE

In Chapter Eight, four main criteria were used to assess the work of the old Scotch Distillers' Association: Was it able to control production? Did it stabilise prices? Was it able to prevent new entrants, and did it maintain its internal unity? If the first two criteria are changed to: Was it able to control sales and to secure a remunerative price?; then these criteria can be applied to the new Association. In testing the Association in this way it will be helpful to divide its history into two phases. The first lasted from 1878 until 1882. In September 1882, exactly a year before the U.K.D.A. agreement was due to expire, a price and sales agreement was negotiated with the London Distillers Association. The second phase began with the renewal of the U.K.D.A. and lasted until 1888.

(1) 1878-1882.

The Association initially confined its activities to regulating price and sales in the home market. (i.e. Scotland, Ireland and provincial England). Table 69 shows the spirit deliveries made by the Association between 1879 and 1887.
TABLE 69. Deliveries by the U.K.D.A.
(million proof gallons)

<table>
<thead>
<tr>
<th>Period</th>
<th>Home Market</th>
<th>London</th>
<th>Total</th>
<th>Year</th>
<th>4</th>
<th>5 as % 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ex. London</td>
<td></td>
<td></td>
<td></td>
<td>Home Consum-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>p- tion (Home</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>produced</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>spirits)</td>
<td></td>
</tr>
<tr>
<td>1879/80</td>
<td>10.045</td>
<td>1.309</td>
<td>11.354</td>
<td>1879</td>
<td>27.937</td>
<td>40.6</td>
</tr>
<tr>
<td>1880/81</td>
<td>8.106</td>
<td>1.104</td>
<td>9.206</td>
<td>1880</td>
<td>28.457</td>
<td>32.3</td>
</tr>
<tr>
<td>1881/82</td>
<td>10.279</td>
<td>1.135</td>
<td>11.664</td>
<td>1881</td>
<td>26.731</td>
<td>46.0</td>
</tr>
<tr>
<td>1882/83</td>
<td>10.570</td>
<td>1.222</td>
<td>11.792</td>
<td>1882</td>
<td>28.854</td>
<td>41.2</td>
</tr>
<tr>
<td>1883/84</td>
<td>10.861</td>
<td>1.075</td>
<td>11.936</td>
<td>1883</td>
<td>26.714</td>
<td>41.5</td>
</tr>
<tr>
<td>1884/85</td>
<td>9.542</td>
<td>0.985</td>
<td>10.527</td>
<td>1884</td>
<td>27.995</td>
<td>37.0</td>
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<tr>
<td>1885/86</td>
<td>8.591</td>
<td>0.710</td>
<td>9.301</td>
<td>1885</td>
<td>26.609</td>
<td>34.9</td>
</tr>
<tr>
<td>1886/87</td>
<td>8.886</td>
<td>0.446</td>
<td>9.332</td>
<td>1886</td>
<td>25.954</td>
<td>35.9</td>
</tr>
</tbody>
</table>

Sources: U.K.D.A. Minutes books
Consumption figures from G. Wilson, op. cit. App. F. Table 1. p. 331.

Because the London market was subject to the subsidy and, after 1882, to agreement with the London distillers, Column 1 shows the home market excluding London; Column 2 the London deliveries and Column 3, total deliveries. For the first three years the statistics were not made up for regular twelve month periods so that no significance should be attached to the fluctuations, where the figures are significant is in the fact that deliveries were kept under control and, after 1883/84 actually fell. Was this, given the Association's productive capacity of 13,341 m.p.g., indicative of a remarkable degree of restraint, or was it rather a sign that the Association was actually losing its share of the market? One way of checking this latter proposition is to compare the Association's sales with total U.K. consumption of home-produced spirits. Column 4 shows U.K. consumption and Column 5, the Association's sales as a percentage of total consumption. This suggests that after 1883/84 the Association began to lose ground in the home market.

18. The actual periods were:
1879/80: 21st April 1879-8th May 1880.
1880/81: 8th May 1880-5th March 1881.
1881/82: 17th March 1881-1st April 1882 and thereafter 1st April to 31st March in each period.
Why was this? Was it simply the result of the agreement with the London distillers or was it due to the Association's pricing system? Like the Distillers Company in its first year of operation, the Association began its task of establishing a uniform price by attempting to establish common "conditions of sale". This, like the efforts of the D.C.L., ran straight into opposition from the dealers. The Association wanted a common price to all dealers, large and small, wholesale and retail, but, as the wholesale dealers complained:

"the present system of selling to Retailers at the same price as to the Wholesale Dealers...if successfully persisted in, would in the end render the trade of the Wholesale Dealers valueless, so far as Grain Spirits are concerned."  

The wholesale dealers' message ended with the warning that "before allowing their legitimate trade to be taken from them, they mean to look about to other sources for a supply of Grain spirits." 19 In the short run this meant turning to the London distillers, to distillers outside the Association or to imports. Before allowing this to happen the U.K.D.A. responded, on the suggestion of the D.C.L., by introducing a scale of allowances based on the quantity purchased. The result of the introduction of the Dealers' Bonus was interesting. The dealers, Mr. Dudgeon of Menzies & Co. reported, were frustrating the object of the scheme by "combining to take their spirits through one of their number and so secure a higher rate of bonus than they are entitled to on their individual deliveries." 20 The Association issued a warning and it provides a good insight into the distillers' philosophy:

"The Bonus on Patent Grain Spirits... was given with the view of carrying out a principle generally recognised in trade of giving some advantage in price to large buyers for their personal benefit. Complaints, have, however, arisen that, in some instances an improper use has been made of the Bonus and that some spirits, which have been subject to it have been sold or offered to the smaller dealers under the fixed market price. Distillers find themselves undersold and the trade is disorganised.

20. U.K.D.A. M.B. No. 1 at 7th December 1881.
"It must be obvious to all that such underselling is an abuse of the Bonus and if continued it will be necessary either to modify or abolish it. The Distillers dislike making changes, as tending to unsettle the trade and hope it may not be necessary. They appeal to the good faith of those who receive the bonus and hope that they will support them in carrying out the spirit of the concession." 21.

"The Distillers undersold; the trade disorganised": here again is the insistent searching for a more stable, less competitive trade. More than this, it is evident that the distillers' attempts to stifle competition were setting up countervailing forces and, as Mathias has argued more generally, the existence of price agreements and trade associations was "in some cases...symptomatic of the effectiveness of competition." 22 In the 1880s, the smaller firms began to unite around larger dealers like Robertson & Baxter, Andrew Usher, and William Teacher to secure low priced supplies of grain whisky for blending. It is clear that the Association had little answer to these dealers' combinations. In December, 1881, it was minuted that, "if the Dealers' combination continues the bonus scheme will infallibly be abolished." A year later it was agreed that "Dealers combining to defeat the object of the bonus shall forfeit all right to it." 23 The more such resolutions appeared, the tighter were drawn the Association rules. Members were forbidden "to invoice spirits or pay bonus upon them to any other dealer than the one who orders the spirits." 24 Anyone breaking the rule was liable to a fine of £2,000.

Just as the Association was running into trouble with the dealers, difficulties were arising in the London market. At the start of the Association, the London distillers had complained about the low price of Scotch patent still spirits in the North of England and hinted that "it might be necessary to lower the price in London." To this the secretary had replied that, "'inter alia' the low price in the North of England was due to the Trade Competition between the Scotch and Liverpool Distillers which has, however, now

21. U.K.D.A. M.B. No. 1 at
24. ibid. at 31st December 1881.
come to an end and whenever a suitable opportunity occurs the Scotch price will be raised." The D.C.L. added its own telegrammed appeal: "U.K.A. scarcely yet in working order. Do not endanger all that has been gained by premature independent action." The difficulty for the Association was, that having resurrected the principle of a subsidy, price fixing in Scotland became inextricably linked to London prices. If the differential between Scotland and London widened then the subsidy had to be increased. If the subsidy increased, then, because it was assessed on deliveries in other markets, it had to be paid out of the price gained in those other markets. This made the attainment of a "remunerative price" exceedingly unlikely. Also, the wider the differential grew the less happy the spirit dealers were likely to be with home prices. Yet, the underlying reality was that the English market was much more vital for the Association than the Scottish or Irish markets for the London distillers.

### TABLE 70: Spirit Consumption and Patent Still Output (m.t.a.)

<table>
<thead>
<tr>
<th>Period</th>
<th>England</th>
<th>Scotland</th>
<th>Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>1875/79</td>
<td>9.739</td>
<td>10.671</td>
<td>6.314</td>
</tr>
<tr>
<td>1880/84</td>
<td>10.282</td>
<td>10.866</td>
<td>3.804</td>
</tr>
<tr>
<td>1885/89</td>
<td>9.766</td>
<td>10.754</td>
<td>5.130</td>
</tr>
</tbody>
</table>

**Sources:** Consumption figures calculated from G.B. Wilson, op.cit. App. F. Table 4, pp.341-348. Patent Still output calculated from R.C.W., App. T.

Table 70 shows the output of patent still spirit and consumption in England, Scotland and Ireland averaged for the three five year periods between1875 and 1889. All pot still spirit has been excluded; its inclusion would only present an even gloomier picture for the Scottish and Irish distillers. Production and consumption cannot be directly compared because of the existence of stocks.

25. D.C.L., B.N.B. No. 2 at October 1878.
GRAPH 18: Maize and Grain Spirit Prices (1860 -1914)
GRAPH I9 : Grain Distilling - Profit Margins (1876 - 1893)
GRAIN DISTILLING: PROFIT MARGINS (1876 - 1893)
Although these rose in the 1880s they were mainly composed of pot still spirit. The Association records show that at the end of the Association in 1878, the member firms held only 3 m.p. in stock, and if the members followed the behaviour of the D.C.L. which did not deliberately start setting aside spirit for maturation until 1888, then much of this must have been unintended. Over-production, as the Table shows, was a much graver problem for the Scots and Irish distillers.

Dealers’ combinations, the problem of the London market: one thing further is needed before discovering whether the Association achieved a “remunerative price” and that is the behaviour of the grain market. For the grain distillers this meant the price of maize. Graph 18 shows maize and grain spirit prices between 1860 and 1914. The trend for both, after 1867, was downwards. Trends, however, camouflage some of the reality of the grain distillers’ troubles in the 1880s for, between 1879 and 1882 the Association faced a sharp rise in maize prices, the price increasing from 23/10 to 31/- a quarter. Grain spirit prices, by contrast fell from the Association’s opening price of 2/- to 1/9 per gallon in 1882. By using the same method as was adopted in Chapter Eight it is possible to work out a crude measure of profit margins. Graph 19 shows the profit margin on grain spirit between 1876 and 1893. For the first four years of the Association it fell.

Association Meeting – 25th January 1882. Agenda: Proposed reduction in the price of grain spirit. Meeting opens: "Mr. Calder seconded by Mr. Bald moved that Mr. Stewart take the Chair. Mr. Walker seconded by Mr. Menzies moved that Mr. Menzies take the Chair. Mr. Fraser in virtue of a proxy tendered Messrs. Preston & Co.'s vote in favour of Mr. Menzies. The votes being equal no one took the Chair and the meeting was accordingly not constituted. As no business could be transacted a friendly conversation ensued on the subject of the motion for the proposed reduction in price."

26. See above pp. 297–299. This time only one yield (20 gallons) has been used, and the raw material is maize, not barley.
A deadlock like this was one result of conducting business by a constitutional mechanism, and, this sad apology for a business meeting appears to confirm economic historians' direst suspicions about the unhappy compromise which British business effected through trade associations, in the last quarter of the nineteenth century, between full competition and total merger. Out of the "friendly conversation" came a proposal from Calder that a delegation should confer with the London distillers to reach an understanding on price. The delegation was empowered to offer the London distillers a reduction of 100,000 gallons per year in Scottish shipments, in exchange for a rise in the London price. A month later the delegation reported that the London distillers were not prepared to raise their price because of the danger of increasing imports, but they were prepared to consider any proposal for a trade agreement with — yet again — "a view to maintaining a uniformly remunerative price." On the 1st of May 1882 the U.K.D.A. delegation met the London distillers. The London Distillers' Association was composed of five firms:

<table>
<thead>
<tr>
<th>Firm</th>
<th>Distillery</th>
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<tbody>
<tr>
<td>John Currie &amp; Co.</td>
<td>Bromley</td>
</tr>
<tr>
<td>C.H. Smith &amp; Co.</td>
<td>Thames Bank (29)</td>
</tr>
<tr>
<td>John Watney &amp; Co.</td>
<td>Wandsworth</td>
</tr>
<tr>
<td>H. &amp; J. Haig</td>
<td>Hammersmith</td>
</tr>
<tr>
<td>J. &amp; W. Nicholson</td>
<td>Three Mills, Bromley</td>
</tr>
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Source: U.K.D.A. M.B. No. 1 at 1st May 1882.

John Bald opened the negotiations. "The object of the Scotch Association" he said, "has been to maintain a remunerative price which does not now prevail." In Scotland the Association received a net price of 1/9d. per gallon, subject to an average dealers' bonus

28. ibid. at 25th January 1882.

29. The owners of Thames Bank also enter into Scottish economic history by virtue of their purchase of three estates in Morvern (the first, Archaranic, was bought by Octavius Smith in 1845). The eldest son, Valentine Smith, inherited the distillery in 1871 and spent £5,000 to £8,000 a year subsidising the estates "as a machine for sport." The story of the Smith's holdings in Morvern is told in P. Gaskell, Morvern Transformed (Cambridge 1968).
of 1d.; in London they only "netted" 1 1/4 d. A two branch Association
should now be formed composed of 1) The Scotch, Irish and Liverpool
Distillers and 2) The London Distillers. Future sales would be re-
gulated by average deliveries for the past 3, 5 or 7 years; whichever
was agreeable to both parties. The Branch delivering in excess of
its proportion would be liable to a heavy fine "equal to the profit
and working expenses per gallon." Each Branch would be at liberty
to regulate its own internal affairs but a comparative scale of
prices would be fixed by the Association through delegates. A sub-
sidy, similar to the London subsidy, might be made applicable to
the whole of the U.K. where it was found necessary to fix a low
price to meet outside competition.

The London distillers were willing to consider the proposals
but they wanted some assurances on a number of points. The first
concerned the activities of two distilleries, West Ham and Bristol,
neither of whom were members of the U.K.D.A. or the L.D.A. Both
were undercutting the London distillers.\(^3\) Bald agreed to approach
them and see if they would restrict their sales. The second diffi-
culty was Scottish distillers' sales in South coast towns and the
North of England; these Mr. Watney claimed for the London distillers.
Bald thought an agreement on sales, plus a fine would meet this
problem. The third point was less easy to deal with and, for a
while, brought the negotiations to a halt. The London distillers
wanted patent still spirits for methylation to be included in the
agreement on sales.

When the U.K.D.A. had been formed the idea of setting a
price for spirit for methylation had been discussed and dropped.
Basically the problem was that three different groups of traders
dealt in methylated spirit. There were distillers who made plain
spirit and methylated it; methylators who bought who bought plain
spirit from distillers and denatured it; and rectifiers who usually

\(^3\) Like McKenzie & Co. the Bristol Distillery purchased a gin dis-
tilling firm in London to get rid of its surplus spirit. The
firm they bought in the early 1880s, was Joseph & John Vickers,
rectifiers of Victoria Street. In 1882 it was made into a
limited liability company. The site of Vicker's distillery was
sold to the Army & Navy Co-Operative Society and the distillery
moved to Fulham.
bought poor quality spirit, unsuited for potable purposes, rectified it, and then denatured it. This curious mixture of traders arose largely from the provisions of the methylated Spirits Act of 1855; and the distillers concluded that it would be impossible to achieve a uniform price amongst these disparate groups. In 1881, however, Robert Preston of Vauxhall distillery, managed to form fifteen methylators into the United Kingdom Methylated Spirits Makers' Association. Its aim was to improve profit margins in methylating. To achieve this it was proposed that the U.K.D.A. should sell plain spirits for methylation at a lower price to members of the Methylated Spirits Makers' Association. The makers would then undercut outside makers, either forcing them out of business or into the Association. The price of methylated spirit could then be raised and the makers' Association would agree to pay more for their plain spirit. The scheme was hopelessly ambitious. Not all members of the U.K.D.A. made spirits for methylation, neither were all distiller-methylators in the U.K.D.A., and the fifteen firms in the Makers' Association only accounted for a third of the total number of methylators. Moreover, one of the main markets for German spirit was for conversion into methylated spirit, and a rise in plain spirit prices was almost certain to bring in more imports. Preston's proposal was accordingly rejected and the market for methylated spirit remained free. Here matters stood until the London distillers re-opened the question, in relation to total patent still production of 24 m.p.g. the methylated spirits market at 2 m.p.g. was very small. For the London distillers, however, a willingness on the part of the U.K.D.A. to agree to control deliveries of spirit for methylation was an essential test of their readiness to do the same thing for grain spirit. Grain spirit and spirit for methylation, the London distillers held, were indistinguishable. If a limit was not placed on methylated spirit sales then grain spirit might still enter the London market in a different guise. The U.K.D.A. thought the difficulty might be

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31. The first two were compelled to use spirit on which the duty had not been paid, and the rectifier had to use duty paid spirit only. He received a drawback once the spirit was methylated. A distiller was only allowed to receive spirit for methylation from his own duty-free warehouse, whilst a licensed maker could methylate either British or foreign spirit, and a rectifier could methylate spirit from his duty-paid stock only.
overcome by creating separate points for methylation with a penalty. That meant, however, that the two Scottish distillers outside the Association who sold spirit for methylation in London, would have to be approached. These were J. Stewart & Co. of Saucel and Harvey of Yoker. Saucel, in which Menzies' brother was a partner, had been barred from producing grain spirits for potable purposes under the U.C.L. agreement with Menzies & Co. It had, however, retained its non-potable production. Yoker had left the Association in 1878, but in September 1880, Harvey had agreed to adhere to Association prices. Both were now approached to see if they would join with the distiller-methylators of the U.C.L.A. to form a subsidiary association. Both agreed provided future deliveries were based on an average of sales for the past three years. At this point Menzies & Co. of Saucednam raised a critical objection. A three year term was no use to them because as the market had been free they had held back from methylaating and:

"As there are large buyers of spirits for methylation in London who in former years bought largely from us and are quite willing to resume buying whenever we can offer them spirits for methylation on the same terms as other distillers, we cannot agree, as we have been asked to do, to enter what would practically be a new Association based on points to the individual members, apportioned on the basis of their deliveries of the last three years as that would be tantamount to binding ourselves for a term of years to stand aside and do nothing in spirits for methylation in order that others might carry on that trade with greater advantage to themselves...so it appears hopeless trying to arrive at any arrangement with the London distillers." 33.

To sacrifice the London agreement on the question of the subsidiary issue of methylation seemed like the height of folly and the other members agreed that "Messrs. Menzies & Co. should be allowed to name the number of years (10, 20, 30) which they wish to take as the basis for arriving at the points for their quantity." With this concession, the last difficulty was removed and the way was now open for the completion of the agreement with the U.C.L.A.

32. But not to a sales quota.
33. U.K.D.A. M.B. No. 1 at June, 1882.
On the 20th September 1882, an agreement "to endure indefinitely subject to three months notice on either side" came into effect. Under it future deliveries in the home market were divided between the U.K.D.A. and the L.W.A. The U.K.D.A. sales were to be 11,040 m.p.g. and the L.W.A. 5,150. Spirits for methylation and methylated spirits were split 300,000 gallons to the U.K.D.A. and 150,000 to the L.W.A. Two members from each Association were to fix the penalty and the price. With uniform prices throughout the United Kingdom there was no longer any need to limit the U.K.D.A. shipments to London, and the London distillers might now deliver in any part of the country. That day London prices were raised from 1/4 to 2/- and Scottish, Irish and Provincial English from 1/9 to 1/11 which, after credit and allowances, made grain spirit prices uniform throughout the United Kingdom.

In September 1882, it seemed that stability, that will of the wisp that the distillers had been chasing since the mid-1850s had been achieved. With uniform prices the London subsidy could be dispensed with and the disputes over its assessment fade away. With the distillers united, the fear of the dealers turning South for their spirit was gone. The bonus to dealers could safely be dispensed with. In December the last two outside competitors, Bristol and West Ham, entered into supplementary agreements with the U.K.D.A. Prices had been raised, the corn market was falling and the distillers could afford in a spirit of magnanimity to slightly lower prices in November. Profit margins (See Graph19) were improved. Everything seemed set fair.

(ii) 1883-1888.

"The 'happy family' thus brought together did not, however, remain long happy, and over and over again it required the greatest tact and diplomacy on the part of the more cool-headed members of the group to keep the Association from
"falling to pieces altogether. The curious thing was that everyone seemed to realize that 'unity was strength' and yet many of them were prepared to push their own individual claims to extremes in the belief that the others would yield rather than allow the fabric to fall." 34.

This was how Ross described the events that took place between 1883 and 1888. The unity and harmony that seemed to have prevailed with the U.K.D.A.-L.D.A. agreement barely survived into 1883. In January of the New Year, the first rent in the fabric appeared when Preston & Co. were accused of underselling in Belfast. The firm agreed that it was selling below the Association's price, but, that as it was second quality "molasses with rice" spirit and not pure molasses spirit, the sales were not subject to the Association's rules. Second quality spirit bent, rather than broke the rules, making it more difficult to maintain the price of top quality spirit. In April, the L.D.A. announced that they wished to reduce their prices. Two representatives, as provided in the agreement, met. The U.K.D.A. was opposed to a reduction, the D.C.I. in particular wanting "to try to keep the price stable."

A hurried meeting of the L.D.A. was called, and it resolved: "i. that in the future the regulation of price in the London district should be in the hands of the London distillers; ii. in the opinion of the London distillers it is indispensable that they should be able to regulate the price of their own spirits as they have always done." 35 Not merely did the L.D.A. wish to regain its independence, with the possibility of the re-emergence of a gap between Scottish and London prices, but, by May 1883, they wished to regulate prices in Provincial England as well, an area hitherto regulated by the U.K.D.A. The U.K.D.A. proposed a compromise: the L.D.A. could fix prices within an area 55 miles around Mansion House and the U.K.D.A. would be bound to adhere to them; outside this area the U.K.D.A. would regulate prices and guarantee that the price in Provincial England would never be less than the London price, the L.D.A. would follow this price. The London distillers would not accept this, being "of the opinion

34. W.H. Ross, op.cit. at October 1923, p.131.
35. U.K.D.A. J.B. No. 1 at 25th April, 1883.
that the arrangement of quantities regulated by fines will meet
every difficulty as regards price... 36 Autonomous price fixing
by the L.D.A. was, as the U.K.D.A. pointed out, "an essential
alteration to the agreement," but, in a spirit of conciliation
and to preserve the agreement they would accept the L.D.A.'s
proposal. As this opened up the old problem of a subsidy should
the differential re-appear, it was a substantial concession by
the U.K.D.A. It is probably explained by the fact that negotia-
tions were now proceeding for the renewal of the U.K.D.A., and the
Association was not in a position to become embroiled in a trade
war with the London distillers.

When the Distillers Company's Irish agent had reported
Preston's price cutting to the board, it had replied: "while the
D.C.L. are concerned about underselling and would normally take
strong steps to put a stop to it, the Company are in negotia-
tions for a renewal of the Association...and are averse to doing anything
which may cause ill feeling between the distillers, also seeing
that in other markets the Company have no difficulty in making sales
at the full price and maintaining their proportion of the market
generally, we have decided to do nothing." 37 Reflecting their
satisfactory position, the D.C.L. proposed that the Association be
renewed on the existing points for a further five years. In the
past the ending of one agreement had generally unleashed a jockey-
ing amongst the distillers for improved positions to take account
of changes during the agreement. This again proved to be the case.
Menzies, Murray and Calder wanted a 4 rather than a 5 year average
for sales; Watt wanted his points increased to 150,000 gallons;
Preston wanted to be allowed to sell a second quality spirit and
to have export prices - hitherto free - regulated; the Irish houses
wanted one vote each instead of two shared, and permission to sell
second quality spirits. And, most important of all, the Irish
wanted what they called an "anti-Higgins subsidy". 38

36. Abid. at 27th June, 1883.
38. U.K.D.A. W.B. No. 1 at 26th September 1883.
Up until 1883 the Association had met three of the criteria by which its success might be measured. It had restricted sales, maintained unity despite disputes and, no new entrants had challenged. Now its ability to bar the way to new entrants was called in question. In 1882 William Higgins established a patent still distillery at Avonell near Belfast. Little is known about Higgins himself. He was the only distiller in the United Kingdom to refuse to let Barnard tour his distillery, and Barnard merely recorded that Avonell had an output of 850,000 gallons. This, in 1883, was now coming on to the market and the Irish members of the U.K.D.A. wished to destroy his challenge. If the Association would subsidise them they would renew their membership on the present points. The other members were agreeable. Belfast would be "the field where Higgins would be met." The Irish distillers could sell for three months at 2d. under the Association price. As with the London subsidy, this proved to be enormously expensive for the Association and at the end of the three months Higgins was still in business. It would, the other members decided, "entail much less loss" if a sales quota could be arranged with Higgins and he be brought into the Association. Higgins was offered 175,000 gallons for home consumption on a 5d. penalty and 3½d. bonus. He in return offered 200,000 gallons on the same terms and this was accepted. He was, however, free to sell his quantity "at the best price he can get". Higgins was still in business but at least his sales were tied to the Association for two years at well below his productive capacity.

In September 1883 the U.K.D.A. agreement was renewed for a further five years and in November the Association had another success when the Bristol Distilling Company, which had indicated its intention to adhere to the London agreement, joined the U.K.D.A. as full members. Full membership of the Association now consisted of nine firms controlling seventeen distilleries plus Higgins and Avonell through the subsidiary agreement.

39. A. Barnard, op.cit. at p.430.
40. U.K.D.A. M.B. No. 1 at 20th September 1883.
41. ibid. at 10th October, 1883.
42. ibid. at 7th November, 1883.
Bristol in and Higgins controlled; that left only the unsettling question of how the London distillers would exercise their price autonomy. At first they kept their prices unchanged but did something the U.K.D.A. had not anticipated. The London distillers simply reduced their sales and faced the U.K.D.A. with a heavy bill of £2,500 for bonus on under-deliveries. They followed this up by reducing their price and pushing sales in the Provinces. Together, these moves widened the U.K.D.A.-L.D.A. price differential and hit the Provincial Distillers who now claimed a subsidy "in order to indemnify them against loss in meeting the London distillers". The U.K.D.A. rejected this request and agreed to hold prices firm. With higher prices prevailing in Scotland, the L.D.A. moved shipments North. Once again relations with the London distillers were back in the melting pot.

In February, 1885 Hald tried to persuade the London distillers to raise their price to the Scottish level and discontinue shipments to the North. Both requests were rejected and in April, the Scottish price was cut by 2d. to 1/8. The L.D.A. now proposed that Scottish deliveries should be reduced, initially from 1,339 m.p.g. to 750,000 gallons, and then should cease altogether from April 1886. If the Scots did this the L.D.A. would stop its shipments and raise its price. The U.K.D.A. felt that an end to London sales in Scotland "would probably ultimately result in a rise in price" and agreed to do so. The burden of the reduction of Scottish shipments fell on the D.C.L. and Menzies & Co. and when, in April 1886, the ending of Scottish shipments did not see a rise in the London price but instead a reduction in consequence"of the large increase of German and American spirit imported at prices which vary between 7½d. and 1/4½d. per gallon", the D.C.L. proposed that the London agreement be terminated.

The D.C.L.'s disenchantment with the London distillers was not, however, the most serious threat to the continued viability

43. ibid. at 26th November 1884.
44. ibid. at 26th May 1886.
The London market did, after all, have uncommon difficulties and although a useful outlet for surplus spirit, it was still home developments which counted. Even as the association was discussing the D.C.L.'s proposal, the D.C.L. board was considering the renewal of the U.K.D.A. agreement beyond 1888. In other words, in 1886, it still seemed possible that the U.K.D.A. would be renewed for a second time, yet, by September 1888, it had collapsed. Why was this? What finally destroyed "the happy family"?

IV. THE NEW ENTHANTS: The Irish Distillery, Saucel Distillery and the North British Distillery.

The worst challenge the old Scotch Distillers' Association had faced was from new entrants to the grain distilling trade. The U.K.D.A. had, by 1885, already encountered one new entrant in the shape of William Higgins. He had been brought to the negotiating table by a spell of subsidised undercutting. In 1885, however, two new distilleries, The Irish Distillery at Connswater near Belfast and The North British Distillery in Edinburgh, were established for the production of grain whisky. The former was financed by three Belfast blending firms and signalled the beginning of a process of backward integration by blenders to control their supplies of grain whisky. Barnard described The Irish Distillery as a "Model Distillery" and commented that:

"After our experiences of more than a year, we are bound to admit that this Company have spared no expense to make their new distillery as complete as any we have seen." 47.

45. D.C.L., B.N.D. No. 5 at September 1886.
46. The blenders were Kirker, Greer & Co., Messrs. Mitchell & Co. Ltd., and James Wilson & Son.
47. A. Barnard, op.cit. pp. 428-429.
The reactions of the Irish members of the U.K.D.A. to the arrival of the Irish Distillery are not known, but, the new distillery had a productive capacity in excess of 2 m.p.g. and, as Barnard reported:

"its success is undoubtedly secured, all the owners being largely engaged in the wholesale trade, and easily able to dispose of the entire quantity this place could manufacture."

In a shrinking Irish market, the Irish Distillery introduced a further element of instability.

So far, however, no similar threat had appeared in Scotland. In May 1882, Menzies' brother, the owner of Saucel Distillery in Paisley, died. The Trustees of the estate approached the D.C.L. and suggested that it might buy Saucel for use as a grain distillery. Two D.C.L. directors, Stewart and Bald, opposed the move because:

"it would be unadvisable for the Company at present to buy up more distilleries, as such a course would most probably tend to starting a large and powerful opposition, a result detrimental to all now in the distilling trade." 48.

Instead, the Board recommended that, as Saucel had always had a close connection with Caledonian distillery, "the more natural course would be to form a close alliance between these two houses. The Public... generally know about the connection and accordingly would look on the new one, if it came about, merely as a matter of course." 49

Operating under what it felt to be an important constraint, the D.C.L. Board could offer no amalgamation to the Trustees. For their part, the Trustees found a new partner for Menzies' nephew, Robert Menzies, and Saucel continued for the time being as a malt distillery with the partners drawing their supplies of grain spirit from Caledonian. 50

In May 1884, Menzies & Co. of Caledonian distillery and the London partnership of Menzies, Drysdale & Co. of Tooley Street announced their intention to form themselves into a limited liability company. Before doing so the partners approached

49. ibid. at June 1882.
50. Saucel carried on an export blending trade and used Caledonian grain whisky for this purpose.
the D.C.L. Board to see if an amalgamation would be possible. McNab counselled against amalgamation. Tooley Street had low profits and it was a rectifying works; the D.C.L. knew "little about rectifying and it might be very disastrous if Mr. Drysdale were taken unwell and unable to manage it." To miss the opportunity to bring the second largest grain distillery fully into the amalgamation cast doubt on the ability of the D.C.L. to achieve its original aim of controlling supply. Was McNab not, at any rate, being excessively cautious? Was it really impossible to employ professional managers to run distilleries? Could Tooley Street really only be run by Mr. Drysdale? The amalgamation, it was decided, must go ahead. Under the U.K.D.A. constitution, however, final say on amalgamation rested with the Association. No member, after all, was entitled to start a new distillery, or have an interest in any other distillery during the agreement. How would the other members react? There was, besides, another consideration: what would happen to the Saucel agreement with Caledonian if the D.C.L.-Menzies & Co. merger came off? Robert Menzies of Saucel and Mr. Cattanach, his partner, now announced their intention to become a limited liability company and to restart making grain whisky. Before doing so they too wished to amalgamate with the D.C.L. "to save any more competition in the market." So far as the D.C.L.-Caledonian amalgamation was concerned, only one member of the Association, Robert Preston, objected that it violated the agreement. For the others the long-standing arrangement between the D.C.L. and Caledonian, and the fact that Caledonian was already in the Association, secured their approval. Preston was outvoted and the merger went ahead. The D.C.L.-Saucel amalgamation was rather different. Saucel, was not in the Association and was not at the moment producing grain spirit, therefore, it was argued, Saucel counted as "a new distillery". The D.C.L. "could not consistently with the terms of the Agreement acquire the

51. D.C.L., B.M.B. No. 4 at 7th May 1884.
52. ibid. at 6th October 1884.
53. U.K.D.A. M.B. No. 1 at 26th November 1884.
distillery. 54 Even a D.C.L. concession that, "during the continuance of the Association agreement...no grain spirit will be made in Saucel" 55 failed to secure the consent of all members. The objections to the amalgamation left Saucel "with no other alternative than that already indicated to the D.C.L. viz., to form an opposition in the Patent Grain Trade outside the Association." 56

With Saucel back producing grain spirit, one of the early benefits that the D.C.L. had secured from the amalgamation was lost.

One element significantly absent from both these amalgamations was any discussion of the reaction of the spirit dealers. With the London agreement still apparently secure, and the price of spirit raised, the Association felt confident enough to end the dealers' bonus and the bonus on warning loads. 57 Although the confidence which pervaded the Association in 1884 was one reason for the failure to gauge the dealers' reactions to further amalgamations it was not the only one. In the past most new opposition had come from within the distilling trade itself from distillers who had either converted from pot to patent still distilling or established new patent still distilleries. Up to 1884 there had been no case of a dealer moving into grain whisky production.

Most dealers were considered to be either "too small", or too busy sinking their capital in stocks for maturation, to have sufficient resources to invest in grain distilling. From the dealers' point of view there were good reasons for not investing in grain distilling. The Association's ability to raise spirit prices did not seem very effective, except in the short run. Grain distilling profit margins did not appear to be very promising and the Association's grip on grain supplies did not appear to be very tight. The dealers had combined to undercut the distillers through the bonus. Scottish dealers could always turn to the London distillers for supplies and,

54. ibid. at 24th December 1884.
55. U.K.D.A. W.B. No. 1 at 22nd October 1884.
56. ibid. at 24th December 1884.
57. Warning Loads: it had been customary to give dealers advance notice of a price increase and to allow them to order before it came into effect. This made it difficult, if larger orders were placed, to make the price increase effective. Ending it was another way of turning the terms of the trade against the dealers.
as a last resort, to imported spirits. These were not exact substitutes for grain whisky, but blending with malt whisky could overcome that difficulty. Until the U.K.D.A.-L.D.A. agreement the Scottish dealers had always had an opportunity to exert some influence on home spirit prices. That agreement blocked their access to the London market. It was, as it turned out, only a temporary blockage but the revitalisation of the U.K.D.A. faced the dealers with a monopoly of grain whisky supplies. For the dealers in Edinburgh and Leith the acquisition of the Caledonian distillery by the D.C.L. provided the final impetus for a search for an alternative source of supply. Although the D.C.L. and Menzies & Co. had been linked by the agreement signed in 1877 it is doubtful how many people outside the two firms knew of the link. Even if the agreement was known, there were occasions on which relations between the two firms had been far from harmonious and the risk of a monopoly in the East of Scotland remote. With the amalgamation that prospect became a reality.

How though could the dealers secure an alternative source of supply? If they were relatively small firms, how could they set up in patent still distilling with its requirement of a large capital investment? A group of wholesale dealers, five from Edinburgh and Leith and one from Glasgow, suggested a solution to the dealers' dilemma. Individually, they argued, none of the dealers was sufficiently powerful to found a grain distillery. Collectively, however, a group of dealers might be able to do so. This proposal, put to a meeting of thirty-five dealers in Dowell's Rooms in George Street in September 1885, secured unanimous support and the following month the North British Distillery Company Limited was formed. North British was from the first, an exceptionally curious institution. It was to be run and financed "by the trade for the trade." It was a public limited liability company, but, under the articles of association only whisky merchants could be shareholders.

58. Letters "in strong language" were fairly frequently received by the D.C.L. Board from Menzies & Co. alleging breaches of their agreement. In March 1878 differences between the two firms "were so irreconcilable" that an outside arbitrator had to be called in. See D.C.L., B.W.B. No. 1 at 27th March 1878.
Should any shareholder cease to qualify as a merchant, whether by retirement, death or any other reason, the Directors had powers to exercise a right of pre-emption over the shares. A shareholder did not have to be a customer, nor did a customer have to be a shareholder, so that the firm was not exclusively based around its original backers. The terms of shareownership, with the Company's right of pre-emption did, however, make it exceedingly unlikely that it would be open to a take-over bid. The Company's aim was to provide an alternative, independent supply of grain whisky "at the most reasonable price consistent with sound finance." Customers who were shareholders had therefore a dual interest in the Company’s success in a supply of low priced grain whisky and in the receipt of a dividend. North British came very close to being a "co-operative" distillery.

It is interesting to notice that the leaders in the formation of North British were drawn from the very firms that the small dealers had clustered round to defeat the distillers' bonus scheme. The leaders included men like Andrew Usher, whose firm A. Usher & Co. had held the agency for J & G Smith's Glenlivet

60. The right of pre-emption created a problem of the price at transfer. This was overcome by fixing a price on the basis of ten times the total dividends paid during the previous financial year, dividends of 10% thus representing par.

61. The North British Distillery Company Ltd. at p.7

62. In Edinburgh the Ushers are more famous as brewers than distillers. The first Andrew Usher was born in Melrose in 1782. He set up as a spirit dealer in West Nicholson Street in 1823. He had four sons, James, Thomas, Andrew and John. Andrew and John went into partnership with their father and continued the business after his death. About 1834 James and a Mr. Cunningham took over a brewery at 101 Cowgate and traded as Usher & Cunningham, the partnership was later dissolved and Thomas joined James in brewing. In 1866 they built a new brewery, "The Park Brewery" at St. Leonards Station. J & T Usher acted as agents for Andrew Usher & Co. James left the firm and the brewing interests remained in the family of Thomas Usher. Andrew Usher & Co. acquired the Glenlivet agency in 1844. In 1860 the firm bought a small malt distillery, the Edinburgh Distillery, then known as Glen Scienes distillery (Scienes is on the South-East corner of the Meadows and hardly merited the title of Glen). The second Andrew Usher was connected with the North British Distillery Company. He died in 1899 and left £467,000, part of which financed the construction of the Usher Hall (usually, but incorrectly described as one of "the brewers' halls"). The rest of his legacy went into medical research.
whisky since 1844; William Sanderson, the Leith blender, whose
Vat 69 whisky had appeared on the market in 1882, and John
Crabbie, also a Leith blender, whose family had owned a grain dis-
tillery at the time of the first trade arrangement amongst the
Scottish distillers in 1856. The Company drew the bulk of its
support from the whisky merchants of Edinburgh and Leith. Twenty-
five of the thirty-five firms represented at the promotion meeting
were from Edinburgh and Leith, and as Table 72 shows 57% of the
Company's capital was subscribed from the same area.

<table>
<thead>
<tr>
<th>Location</th>
<th>Percentage of Capital Subscribed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edinburgh and Leith</td>
<td>57%</td>
</tr>
<tr>
<td>Glasgow</td>
<td>20%</td>
</tr>
<tr>
<td>Rest of Scotland</td>
<td>13%</td>
</tr>
<tr>
<td>England</td>
<td>4%</td>
</tr>
<tr>
<td>Location not specified</td>
<td>6%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Source: N.B.D.Co. Share Register, 9th November 1885.

The appeal of North British to the spirit dealers was immediate.
Even before the promoters had supplied full details of the scheme
or found a site for the distillery, the capital was "considerably"
oversubscribed, a sharp contrast to the D.C.L.'s share issue
five years earlier. The share register was full of the names of
merchants who felt they had had rough treatment at the hands of
the D.C.L. It included firms like Arthur Bell of Perth; J & G
Stewart, James Ainslie & Co., D.A. Rhind & Co., Charles Mackinlay
& Co., all of Edinburgh; Greenless Brothers and Mackie & Co. of
Glasgow.

Although the promoters of North British did not put their
proposals to the dealers until September 1885, serious thought had
been given to the idea of building an opposition distillery at the

63. According to R. Wilson, The House of Sanderson (Edinburgh, 1963)
64. The first Board included in addition to these three, Alexander
Murdoch Wine Broker, Glasgow; John Somerville, Wine Merchant,
Leith; George Robertson, Wine Merchant, Edinburgh; and James Mc
Lennan, Wine Merchant, Glasgow. N.B.D. Co. M.B. No. 1 at October 1885.
65. The initial paid up capital was £75,000.
beginning of the year. The D.C.L. Board got wind of the scheme in February and began discussing the best way of quashing the movement. It proposed initially that the U.K.D.A. reduce grain spirit prices by 2d. This was rejected. So too was a later D.C.L. proposal to increase the bonus to large dealers. An alternative idea, suggested by Hugh Haig, and designed to bind the dealers to the D.C.L., was that the dealers should be paid their bonus in D.C.L. shares. The Board dismissed this scheme as "quite unworkable" 66

This left negotiation as the only other course and, in November 1885, after the North British promotion meeting but before construction work on the new distillery had begun, rather late in the day but not too late; E.F. Dudgeon, the secretary of the D.C.L. began talks with the promoters. With the authority of the D.C.L. Board he put six main proposals to them:

1. that D.C.L. shares be issued to the applicants for North British shares.
2. that if these shares were sold within 10 years the difference between the issue price and the price received be repaid to the D.C.L.
3. that D.C.L. customers, not applicants for North British shares, be offered D.C.L. shares in proportion to their purchases of grain spirit.
4. that a premium on the shares would be paid equal to Caledonian's contribution to D.C.L.'s reserve fund.
5. from 1887 (or earlier if the U.K.D.A. is dissolved) until 20 years after, dealers will get from the D.C.L. in addition to the dealers' allowance, a rebate on the quantity of spirits taken for home consumption and proportional to the D.C.L.'s net profit.
6. the North British Distillery Company be dissolved and the dealers bind themselves to have no other interest in any other distillery for 20 years.

The terms were clearly designed to cut the ground from under the promoters as the share offer and the link with the D.C.L.'s profits was very similar to what North British held for the dealers. In reply, the promoters asked three straight questions:

"1. in the case of an agreement being come to would a seat at the D.C.L. Board be given to a representative of the North British Distillery Company?

2. would the price of whisky be regulated by the London market?

3. would the D.C.L. sell to the North British Distillery Company; the Caledonian distillery?"

66. D.C.L., B.M.B. No. 4 at October 1884.
67. All the details of the negotiations are taken from the Board Minute books of the North British Distillery Company.
In each case the D.C.L.'s answer was negative and with that, there was, the North British promoters announced "no basis for negotiations." A subsequent modified and more generous offer from the D.C.L. which would have allowed dealers "in the event of the D.C.L. refusing to supply them with spirits at the same price and terms as they can supply themselves elsewhere" to turn to any other alternative source, was "rejected unanimously". That was in December 1885, and with the ending of negotiations the North British promoters put into effect their plan to build a distillery "with a capacity sufficient to produce 25,000 gallons of spirit per week" (1.3 m.p.g. per annum) and designed "so that it might be readily enlarged to produce a much larger quantity."

The D.C.L. in their proposals, especially the share offer, had gone some way to meet the dealers' desire to benefit from the custom they brought to the grain distillers. On the North British side it would be wrong to see the promoters as a group of men determined to establish another grain distillery simply to break the D.C.L. monopoly in the East of Scotland. The dealers were not blind to the dangers of over-production. In February 1886, after construction work had begun, the North British Directors tried to secure a "friendly settlement". If the D.C.L. would undertake "not to charge a higher price for their patent grain spirits in Scotland than was charged for patent grain spirits in London, and pay all the preliminary expenses connected with the formation of the North British Distillery Company then an arrangement might be come to." Andrew Drysdale urged the D.C.L. Board to accept this proposal and, in addition, to agree to divide with Scottish customers all surplus profits beyond what was required to pay a 10% dividend. The other Directors could not accept that the dealers should participate in the D.C.L.'s profits when they had not put up any risk capital and profit sharing was rejected. They were, however, prepared not to charge more in Scotland than in London, but this in itself was not sufficiently attractive to the North British Board.

68. W.H. Ross, op.cit. at January 1924.
With the collapse of these talks the prospect of North British being dissolved disappeared. In September 1887, the first make of grain whisky ran from its stills.

Reviewing these negotiations, Ross wrote:

"the difference between the parties was very slight (looked at from the present distance [i.e. 1924] ridiculously slight). It is perhaps unwise to criticise the action of the Board at that time too severely, as no doubt there was a want of give - and - take on both sides, but it is permissible to think that had the distillers shown a little more consideration for the blenders' point of view, or, in other words, had they made themselves better acquainted with the feelings and grievances of their customers than they did, the result would have been very different." 70.

It would be possible to agree with this mild criticism were it not for the fact that within two years the Company had introduced a rebate scheme which was persisted in despite complaints from the blenders and which, in Ross's own words, "paved the way" for the formation of Ardgowan distillery, another competitor grain whisky distillery. The truth was that the D.C.L. by being formed solely round the grain distillers cut itself off from its customers. There were no blenders on the Board until 1896, and then the seats were offered only as a belated response to the formation of the Ardgowan Distillery Company. Up until then the D.C.L. failed to realise that its persistent attempts to bind the grain distillers together faced the dealers with a threat to their grain whisky supplies. The dealers could not simply be left out of the distillers' price and sales negotiations in the belief that they would slavishly accept whatever price the distillers cared to dictate.

70. W.H. Ross, op.cit. at January 1924, pp. 5-6.
V. COLLAPSE

Avoneil, The Irish Distillery, Saucel and North British, in just four years, four new grain distilleries were added to the market with a combined productive capacity - on paper at least - of about 4.5 m.p.g.,\textsuperscript{71} equivalent to a third of the U.K.D.A. productive capacity in 1878. With the London agreement in disarray and the output of the new distilleries coming on to the market, the U.K.D.A. met, in March 1887, to consider the future of the agreement. For a while it seemed that something might be salvaged: Higgins was prepared to become a full member; The Irish Distillery would agree to restrict its home market deliveries to 750,000 gallons; Harvey of Yoker would not restrict his deliveries but would adhere to the Association price "as before"; and, North British was prepared "to act in the common good."\textsuperscript{72} A new and detailed constitution was even drafted.\textsuperscript{73} The reality of these promises was, however, very different. The London distillers because of imports were not even willing to discuss sales, let alone price, and, as the output of the new distilleries appeared widespread cutting was evident. The Cork Distilleries Company withdrew to meet the competition in the Irish market and, in August 1888, the D.C.L. announced that in view of "the breaches, and utter disregard for, the Association rules" the Association agreement, as far as the D.C.L. was concerned was finished. Final settlement of the Association's affairs took place the following month. The meeting ended with the resolution that all distillers should hold to a price of 1/6 per gallon. At its peak in 1881, the Association price had been 1/11. Even 1/6 proved impossible to hold and the D.C.L. Board announced its regret:

"that their endeavours to raise the price of spirits to 1/6 nett has not been supported by some other distillers... the Company must therefore hold themselves free to take under this price if forced to do so." \textsuperscript{74}

\textsuperscript{71} Avoneil 0.850 m.p.g.; The Irish Distillery 2.0; Saucel 0.321 and North British 1.3.
\textsuperscript{72} D.C.L., B.M.B. No. 5 at September 1887.
\textsuperscript{73} U.K.D.A. B.M.B. No. 2 at 25th January 1888.
\textsuperscript{74} D.C.L., B.M.B. No. 6, 10th October 1888.
For over a decade after the collapse of the U.K.D.A., the distillers left sales restriction alone. Attempts to fix prices continued until 1895 when grain whisky reached its low for the century at 1/3 per gallon. Some of these attempts were not without irony. At the end of 1890 for example, maize prices rose very sharply from 20/- to 28/- a quarter. An emergency meeting of the grain distillers was called and it was agreed that the price of grain whisky should go up by 1d. per gallon to 1/7. This meeting secured the widest measure of support ever; greater than the U.K.D.A. had achieved in its ten year history. Although price fixing on a broad scale was abandoned after 1895, the D.C.L. and the North British agreed to advise each other before making any changes and less formal discussion of prices than under the U.K.D.A. probably continued. In the 1890s, however, prices could largely be left to look after themselves. So too could sales and output, for demand was rising rapidly and in 1900 U.K. consumption reached its all time peak at 45,889 m.p.g. The home distillers' share of this market amounted to 27.1 m.p.g. which was also a record. In the collapse that followed, the D.C.L. began to apply the lesson it had learnt from the frustrations of the U.K.D.A.: that the only way to control the grain distilling industry was by full amalgamation.

VI. CONCLUSION

In this Chapter the constitution of the United Kingdom Distillers' Association and its application have been examined. The final task is to conclude the Chapter by relating the U.K.D.A. to the general discussion about trade associations in the British economy at this time.75

75. This conclusion takes the content of the "Conditions of Competition" section in Chapter 15 of Professor Mathias's book, The First Industrial Nation as the benchmark against which to compare the U.K.D.A.
The U.K.D.A. was not the first trade association to be formed amongst the grain distillers. It had two predecessors, the first of which dated from the mid 1850s. By the criteria used here it had, however, a much more successful existence. But therein lay the paradox: for when it enjoyed its greatest success just after the agreement with the London distillers, it created conditions that opened the way for new entrants. Its early history confirms Professor Mathias's comment that "from the late 1870s employers' organisations took on a new power of growth." Equally, events after 1882 show that countervailing forces could arise when competition was too successfully stifled. In Haig's phrase, the grain distillers "turned the screw too tight" and success, to modify Professor Landes' remark, became more dangerous than failure.

The conventional boundary dates for "the Great Depression" are 1873-1896. In relation to the main statistical indicators for the distilling industry: spirit consumption and production, raw material and spirit prices, these date are not significant in any cyclical relationship. Yet, there is little doubt that the grain distillers were reacting to circumstances associated with "the Great Depression": falling grain and spirit prices, shrinking profit margins and severe competition (including competition from imports), excess capacity and - from 1878 to 1888 - declining demand. Like many other British businessmen, the grain distillers' chosen instrument for meeting these problems was a trade association. It was not, however, "an informal pact". The association possessed financial sanctions and used them. With these it was far from being a cosy gentleman's agreement. The path to 1878 was strewn with too many broken agreements for the grain distillers to believe in the rule of gentlemen - at least where price and sales were concerned. The agreement did though, stop short of amalgamation or even cartelisation where this pre-supposes financial links between independent firms. The London subsidy was the closest the U.K.D.A came to

financial connections between the members. No shares were exchanged through the auspices of the U.K.D.A.

There remains some doubt over whether the agreement had the force of law. Towards the end, disputes did look like spilling over into the Courts. Calder, for example, threatened to sue the D.C.L. for breach of the agreement when it announced its intention to withdraw. 79 Promise of a counter-suit dissuaded Calder from pressing his case. On the whole, the Association seems to have been shy of the publicity such actions would have brought. On one occasion, in a dispute over the assessment of the London subsidy, the provision for outside mediation was nearly invoked, but "it was thought very undesirable to refer this question to any outside party." 80 The Distillers Company too regarded the likely unfavourable public reaction to the proposed Saucel amalgamation as an important factor weighing against it. That does not mean, however, that the distillers were worried by their daily contraventions of the prevailing economic ideology or embarrassed at belonging to an agreement that deviated from "a competitive norm." 81 It was rather that privacy was important because it limited the foundations for criticism and countervailing action by the London distillers and the dealers. It was explicable in terms of the industrial situation.

What, at any rate, was the "competitive norm" that the distillers faced? Both the Distillers Company and the Association arose from a deep seated feeling of insecurity. Inside the Association the distillers at least knew what their fellow British competitors were doing, but the distillers' uncertainty and insecurity cannot be divorced from the growing internationalisation of economic activity. The imports of German and American spirit which so upset the London market and made price fixing throughout the whole of the United Kingdom well nigh impossible except for a very brief period, came from national alcohol surpluses in the home

79. D.C.L., H.M.S. No. 5 at 29th June 1887.
80. U.K.D.A., H.M.S. No. 1 at 14th April, 1880.
country. In world terms, the United Kingdom was not a large producer of alcohol but, it was, however, a free trade nation which offered an open market for the surplus output of other nations. The competition that British grain distillers faced from these two countries was far from normal as a brief survey of conditions in America and Germany will illustrate.  

For the British distiller American spirit imports were doubly ironic. British grain distillers imported American maize and converted it into grain spirit. American distillers also made maize into spirit. British grain distillers formed themselves into a trade association to limit home sales and stock, export or methylate the surplus. Across the Atlantic, the American whiskey pool did much the same thing and from 1881 to 1887 paid distillers to export to Europe at a loss. In Germany, the State fostered alcohol production from potatoes in the interests of home agriculture and paid a bounty on exports. Significantly, it was changes in the supply conditions in the countries of origin which led to a reduction in the level of imports rather than the actions of British distillers - or the British Government. In 1887 the members of the American pool formed "The Distillers and Cattle Feeders Trust." Based on the model of the Standard Oil Trust it was operated by nine trustees to whom the shares of the original members of the pool were assigned. Instead of exporting at a loss, the Trust began to limit production by concentrating output on a smaller number of distilleries. Eighty distilleries from the former pool became members and within two years only twelve were producing. Cost savings from this rationalisation were used to lower prices and crush outside competitors. In Germany, also in 1887, the State lowered the export bounty and began to encourage the use of alcohol for non-potable purposes in the pro—

82. The following discussion is based on two main sources. For America the source is J.W. Jenks, The Development of the Whiskey Trust, Political Science Quarterly, Vol. IV, 1889. For Germany it is C. Simmonds, Alcohol: Its Production, Properties and Applications (London 1919) pp. 107-110. Much of Simmonds' discussion was drawn from E. Kremer, Agricultural Alcohol: Studies of Its Manufacture in Germany, Abstract of U.S.A. Department of Agriculture, Bulletin No. 182 (Washington 1915). I am indebted to Mr. John Cowper, Technical Director of the North British Distillery Company for allowing me to borrow Simmonds' book.
duction of heat, light and power. This change in policy resulted in a gradual decrease in the level of German imports into the United Kingdom. In Germany, distilling was seen very much as a servant to agriculture as a means of maintaining profitable cultivation in the Eastern provinces. The nature of the distilling industry, largely composed of small "farm" distilleries, and the prevailing attitude to State intervention in economic activity were so very different from Britain that comparison is hardly meaningful. The "competitive norm" was not comprehensible in British terms.

On the other hand, the American solution of rationalisation, by no means unique to its distilling industry, has been used to provide a contrast with the response of British entrepreneurs. What would rationalisation have implied for the structure of the British grain distilling industry?

The first point to make is that at no time between 1878 and 1888 was rationalisation ever discussed in the Association. Not only was it never discussed but the rule forbidding new acquisitions suggests that an unchanging, stable industrial structure

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83. There were more than 70,000 distilleries in Germany. Five-sixths of the total were very small farm distilleries producing alcohol from fruit, and with an average output of only 10 to 20 gallons yearly. For fiscal purposes German distilleries were divided into three classes: "industrial distilleries" carried on by individuals or companies solely for manufacturing purposes; "agricultural distilleries", using potatoes or grain grown on the owners' farms or on a number of farms if the distillery was a co-operative; and "material distilleries" using fruits, berries, etc. The second class produced the greatest proportion of spirit.

84. It would have required a major change in Government policy to move to a German type of distilling industry, comparable to the sort of thinking that had existed in the 1820s when distilling was used for agricultural improvement. It would have made little sense in terms of the structure of distilling or agriculture, and for non-potable purposes "cheaper petrolæum and gas" were available in the U.K.

85. See P. Payne, op.cit. p.523
was seen as a desirable aim, or at the very least a valuable by-product, of the Association's activities. Indeed, what is striking about the U.K.D.A. was its very single mindedness; price and sales absorbed all its energies. Unlike the North of Scotland Malt Distillers' Association, for example, the U.K.D.A. did not bother with matters of general trade concern such as new excise regulations, river pollution legislation, or even changes in spirit duty. Although rationalisation was not discussed during the life of the Association, less than a year after its collapse; Robert Preston sent the D.C.L. a memorandum proposing the formation of a syndicate to take over all the grain distilleries in the United Kingdom. The memorandum has not survived, but the D.C.L. rejected the scheme as "impracticable". If Preston's scheme had involved a concentration of production, how many distilleries would have disappeared? In 1889 U.K. patent still production was 26.8 m.p.g., an output made by 26 distilleries owned by 29 firms. The newest and probably the most efficient distillery in terms of layout, material handling and design, was the North British distillery. In 1889 its output was just over 2 m.p.g. Thirteen such distilleries could have produced the whole of the U.K.'s grain spirit requirements. In other words, 50% of the existing distilleries could have been dispensed with. At a time when ownership was still in the hands of individual proprietors, partnerships or private limited liability companies it would have been a truly enormous undertaking to produce this kind of readjustment. Of course, that calculation is both hypothetical and extreme. It ignores the problems that would have been involved in moving to such an ideal situation and maximises the degree of readjustment. Other less extreme solutions involving further amalgamations were ruled out of order by the Association. In the circumstances of the grain distilling industry the firm which might have been expected to provide the drive and leadership to impose further concen-

86. All these were discussed by the North of Scotland Malt Distillers' Association. On one occasion, in 1880, the U.K.D.A. gave evidence to the Select Committee on the Wine Duties and paid for a chemist to visit the Continent to study the production of wine.

87. D.C.L., H.M.B. No. 6, July 1889.

88. See the appendix to this Chapter for a list of all the firms in the grain distilling industry.
tration on the industry was the Distillers Company. It, however, was the very firm that organised the Association as the answer to the industry's problems and designed it so that capacity, which past experience indicated was difficult to control, was left unchecked. It has already been seen how the D.C.L. suffered from internal division and had difficulty raising capital from the public for its own purposes. During the existence of the Association, as the next Chapter will show, the D.C.L.'s response to its own excess capacity fell far short of rationalisation. For this Chapter the important point is that the D.C.L. was scarcely in a position to offer an American type solution. It was, however, strong enough to lead the distillers into seeking shelter from the problems of the 1880s through mutual cooperation in the Association. There the grain distillers could hope for better times to come - as they did in the following decade. For the grain distillers the importance of the Association - to bend Professor Mathias's more general conclusion - was not that it "allowed the least efficient firm to make profits and go its old way" but that it allowed all to do so.

### APPENDIX TO CHAPTER TEN

**GRAIN DISTILLING FIRMS (1889)**

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<thead>
<tr>
<th>FIRM</th>
<th>TYPE</th>
<th>DISTILLERIES</th>
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<tbody>
<tr>
<td><strong>Scotland</strong></td>
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<tr>
<td>The Distillers Co. Ltd.</td>
<td>Public Company</td>
<td>Cameron Bridge</td>
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<tr>
<td></td>
<td></td>
<td>Caledonian</td>
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<td>Saucel</td>
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<td>Partnership</td>
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<td>Partnership</td>
<td>Avoniel (Belfast)</td>
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<tr>
<td>J &amp; W Harvey &amp; Co.</td>
<td>Partnership</td>
<td>The Irish Distillery (Belfast)</td>
</tr>
<tr>
<td>J. Stewart &amp; Co. (Menzies &amp; Cattanach)</td>
<td>Partnership</td>
<td>Dundalk</td>
</tr>
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<td>Public Company</td>
<td>Abbey St. (London-derry)</td>
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<td>Private Ltd. Co.</td>
<td>Bankhall (Liverpool)</td>
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<tr>
<td>Malcolm Brown &amp; Co.</td>
<td>Partnership</td>
<td></td>
</tr>
<tr>
<td>Andrew A. Watt</td>
<td>Private Ltd. Co.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>England</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Provinces:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R. W. Preston &amp; Co. Ltd.</td>
<td>Private Ltd. Co.</td>
<td>Bankhall (Liverpool)</td>
</tr>
<tr>
<td>Archibald Walker &amp; Co.</td>
<td>Partnership</td>
<td>Vauxhall (Bristol)</td>
</tr>
<tr>
<td>The Bristol Distilling Co. Ltd.</td>
<td>Private Ltd. Co.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>London</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lea Valley Distillery Co. Ltd.</td>
<td>Private Ltd. Co.</td>
<td>Stratford (1)</td>
</tr>
<tr>
<td>John Currie &amp; Co.</td>
<td>Partnership</td>
<td>Bromley</td>
</tr>
<tr>
<td>C. H. Smith &amp; Co.</td>
<td>Partnership</td>
<td>Thames Bank</td>
</tr>
<tr>
<td>John Watney &amp; Co.</td>
<td>Partnership</td>
<td>Wandsworth</td>
</tr>
<tr>
<td>H &amp; J Haig</td>
<td>Partnership ?</td>
<td>Hammersmith</td>
</tr>
<tr>
<td>J &amp; W Nicholson</td>
<td>Partnership</td>
<td>Three Mills, Bromley</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Number of Grain Distilleries: 26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Number of Firms: 19</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources: The Appendix has been compiled for a number of sources: A. Barnard, *passim*; The Minute Books of the U.K.D.A.; The Wine Trade Review.

Notes: (1) The Lea Valley Distillery was both a malt and grain distillery and took part in the grain distillers' deliberations in the 1890s. It was the only malt distillery in England and as Barnard said, "it was certainly a bold experiment to make a trial in the very heart of the Kingdom, so far away from the hills and mountain streams."
CHAPTER ELEVEN

THE AMALGAMATION AND THE ASSOCIATION — The Development of The Distillers Company during the Association (1878–1888)

Contents:

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2. Prices, Sales and Capacity 388–397
3. Profits 397–400
CHAPTER ELEVEN

THE AMALGAMATION AND THE ASSOCIATION - The Development
of The Distillers Company during the Association (1878-1888)

I. INTRODUCTION

The study of the United Kingdom Distillers' Association
was prefaced with a brief account of the experiences of the Distillers Company during its first four years. That introduction
sought to show how difficult it was for the six pre-amalgamation
firms to weld themselves into an effective business organisation.
It provided a measure of the task which faced the Association
even within its narrower objectives. The history of the Association itself was examined from a general standpoint rather than from
the particular perspective of the Distillers Company for the Association tried to encapsulate all the firms in the grain distilling industry. An industrial rather than a company analysis
seemed more appropriate. This chapter returns to the fortunes of
the Distillers Company during the existence of the Association.
The disintegration of the Association in 1888 marked the end of
the strategy which the D.C.W. had pursued since taking the initiative
in its formation. In 1878 Association control had been substituted
for Board control over pricing, home sales, conditions of sale and
the acquisition of distilleries. These now came back into the hands
of the Directors but how had the Company developed in the interval?
How far had it advanced to achieving the aims of the amalgamation?
How had it responded to its own excess capacity? What effect had
membership of the U.K.D.A. had on the Distillers Company?

II. PRICES, SALES AND CAPACITY

An answer to the last question must begin with the problems
which had confronted the Company when, in its first year of
operation, it had attempted to strike an independent pricing policy.
This had shown that where prices were concerned the D.C.L. could not act alone, at least where the aim was to maintain or raise prices. In effect, the Board had precious little sovereignty to surrender to the Association and the Company’s initiative in calling the grain distillers together was an explicit recognition of the interdependence between them. Yet, if little real sovereignty was exchanged initially, the overwhelming importance of the D.C.L.’s home market sales which, if the London market is included, were never less than 49% of total Association sales meant that despite the voting system the D.C.L. tended to have the largest say when the U.K.D.A. fixed prices. Between 1878 and 1888 the Association made twelve pricing decisions. On only three occasions were the D.C.L.’s wishes overridden. In practice, beneath the veil of the constitutional voting system, it could be argued that a form of price leadership existed in the grain distilling industry. It was, however, price leadership under constraint. The London distillers and the level of imports were always, so to speak, “ex officio” members of the Association. In this respect the Distillers Company despite the size of its sales was no different from any other member of the Association.

But what happened to the D.C.L.’s sales during the Association? Table 73 shows the total deliveries of spirit by the D.C.L. in all markets, that is, home (including London), export and methylation for the two years 1879 and 1880. Menzies & Co’s figures are set alongside for comparison.

**Table 73: Spirit Deliveries by the D.C.L. and Menzies & Co. 1879-80.** (proof gallons)

<table>
<thead>
<tr>
<th></th>
<th>1879 (% of Total)</th>
<th>1880 (% of Total)</th>
<th>1879 (% of total)</th>
<th>1880 (% of total)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>D.C.L.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Export</td>
<td>295,891</td>
<td>5.5</td>
<td>478,588</td>
<td>8.2</td>
</tr>
<tr>
<td>Methylation</td>
<td>98,293</td>
<td>1.8</td>
<td>231,804</td>
<td>4.0</td>
</tr>
<tr>
<td>Home market</td>
<td>5,034,894</td>
<td>92.7</td>
<td>5,125,921</td>
<td>87.8</td>
</tr>
<tr>
<td>Total</td>
<td>5,429,078</td>
<td>100.0</td>
<td>5,363,313</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**D.C.L.: Division of Home Market**

<table>
<thead>
<tr>
<th>Market</th>
<th>1880</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>of which</td>
<td></td>
<td>100.0%</td>
</tr>
<tr>
<td>London</td>
<td>820,532</td>
<td>16.0</td>
</tr>
<tr>
<td>Liverpool &amp; Manchester</td>
<td>856,061</td>
<td>16.7</td>
</tr>
<tr>
<td>Newcastle</td>
<td>105,546</td>
<td>2.1</td>
</tr>
<tr>
<td>Midlands &amp; 3rd of England</td>
<td>46,640</td>
<td>0.9</td>
</tr>
<tr>
<td>Scotland &amp; Ireland</td>
<td>3,297,142</td>
<td>64.3</td>
</tr>
</tbody>
</table>

**Sources:** U.K.D.A., M.B. No. 1 – D.C.L., B.M.B. No. 1
In these two years, the only years for which these broad classifications of sales are available, the home market (excluding methylation) accounted for between 87% and 92% of the D.C.L.'s sales and 95% and 97% of Menzies & Co. The overwhelming importance of home sales underlines the importance attached to the formation of an Association which attempted to control home prices and sales whilst leaving export and methylated spirits markets free. Table 74 shows the total Association home market sales (including London) and those of the D.C.L. and Menzies & Co. from 1879 to 1887. 1

**Table 74: Home Market Sales by the U.K.d.a., the D.C.L. and Menzies & Co.**

<table>
<thead>
<tr>
<th>Period</th>
<th>1</th>
<th>2</th>
<th>3 = (1+2)</th>
<th>U.K.d.a.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1879/80</td>
<td>5.619</td>
<td>2.008</td>
<td>7.627</td>
<td>11.354</td>
</tr>
<tr>
<td>1880/81</td>
<td>4.325</td>
<td>1.610</td>
<td>5.935</td>
<td>9.210</td>
</tr>
<tr>
<td>1881/82</td>
<td>6.331</td>
<td>2.020</td>
<td>8.351</td>
<td>12.684</td>
</tr>
<tr>
<td>1882/83</td>
<td>6.084</td>
<td>1.840</td>
<td>7.924</td>
<td>11.792</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>5.590</strong></td>
<td><strong>1.870</strong></td>
<td><strong>7.460</strong></td>
<td><strong>11.260</strong></td>
</tr>
<tr>
<td>1883/84</td>
<td>6.294</td>
<td>1.942</td>
<td>8.236</td>
<td>11.936</td>
</tr>
<tr>
<td>1884/85</td>
<td>5.226</td>
<td>1.691</td>
<td>6.919</td>
<td>10.527</td>
</tr>
<tr>
<td>1885/86</td>
<td>4.301</td>
<td>1.717</td>
<td>6.018</td>
<td>9.301</td>
</tr>
<tr>
<td>1886/87</td>
<td>4.775</td>
<td>1.489</td>
<td>6.264</td>
<td>9.332</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>5.150</strong></td>
<td><strong>1.710</strong></td>
<td><strong>6.860</strong></td>
<td><strong>10.274</strong></td>
</tr>
</tbody>
</table>

1878 - Total Productive Capacity:

i. The D.C.L. and Menzies & Co. - 8.8 m.p.g.
ii. The U.K.d.a., 13.341 m.p.g.

**Source:** U.K.d.a., H.B. No. 1 and 2.

In 1878 the combined productive capacity of the D.C.L. and Menzies & Co. was 8.8 mpg. For the whole Association it was 13.341 m.p.g. As Table 74 shows the gap between productive capacity and home market sales became increasingly large. But was the gap filled by either exports, methylated spirits or stocks? This is an important question for if these markets generated sufficient sales to

1. The figures are not exactly comparable with those for 1879 and 1880 in Table 73, because they cover different time periods. At the end of 1884, the D.C.L. and Menzies & Co. amalgamated. The Association returns continued to show separate sales figures for the two firms. In Column 3 they have been combined because the D.C.L. and Menzies & Co. shared a single sales quota and also no separate figures for each firm's productive capacity exist.
make total sales match total productive capacity, then the Association appears as a rather more successful institution. On the other hand, if they did not, the question arises why firms should have been content with an Association which, whilst it kept them in business, meant that they were continually producing below peak capacity. There are no comparable sales figures for these markets during the duration of the Association. All that exist are the export and methylation figures for 1879 and 1880 in Table 73. Including exports and methylated spirits the combined sales of Menzies & Co. and the D.C.L. in 1879 and 1880 were 7,326 and 7,911 m.p.a. Both were below peak capacity. How, though, did these markets develop after 1880? Did they grow sufficiently to meet productive capacity? Without sales figures it is necessary to fall back on the decisions taken by the D.C.L. Board to provide evidence of the market situation. Where exports were concerned this suggests that until 1885 they were regarded very much as a residual activity. Exports were only given added emphasis with the appearance of the North British Distillery. At the same Board meeting as the rejection by the North British of the D.C.L.'s scheme for stopping the construction of the new distillery was announced, plans were made for the Distillers Company to begin exporting "to find an outlet for the Trade which will inevitably be lost should the new Distillery go on."2 The response to increased competition at home was the Company's entry into the export trade.3 It was followed shortly after by the beginning of a deliberate policy of building up stocks of mature spirit for the export trade. Exports and stocks came together and it seems unlikely that these outlets offered the D.C.L. an opportunity to expand sales to productive capacity. The impression is then, that at least until 1885, the Distillers Company accepted a solution which left the firm producing below its productive capacity and, given the small sales quotas offered to firms who later entered the Association, this was probably true of the whole grain distilling industry.

2. D.C.L., B.M.B. No. 4 at 11th November 1885.
3. This was a trade in blended whisky.
Was this rational behaviour from the point of view of the Distillers Company? The question may be answered by investigating the implications of an attempt to eliminate surplus capacity. In the Distillers Company any attempt would have faced the Board with exactly the sort of conflict which arose over the issue of the Board's control over the vendor/managers with regard to pricing. Until 1885 adjustments to capacity were of the sort outlined by W.H. Haig to Alexander McNab in July 1877:

"At present we could supply the market from five distilleries or even four; what then is the use of keeping six going, and one of them at a loss. We ought to close Port Dundas and endeavour to get it put in proper order for the winter's work. We should take the stills down, as the low percentage shows there must be something wrong with them." 4.

This sort of flexibility which allowed distilleries to be shut down temporarily was one of the benefits from the amalgamation. It hardly amounted, however, to the more thorough-going sort of reorganisation that had been discussed during the amalgamation negotiations. Short term closure, a matter of months rather than years, was the utmost that the managers would accept; none of the distilleries were kept permanently unemployed. 5

Instead the Board sought cost economies in three directions. The first was in a rationalisation of agencies. This had been part of the plan drawn up by Haig and McNab for the conduct of the Company's business. By April 1880, four-fifths of the original agency agreements had been terminated and for sales purposes the U.K. had been divided into eighteen districts with one major agent in each. Drastic pruning on this scale was not a painless or costless process. Each of the original proprietors had particular agents that he wished to see continue in the new Company's employment and it took a great deal of diplomacy and tact on the part of Haig and McNab to secure the implementation of their plan. 6 Nor did existing agents calmly accept the loss of part of their former sales districts. J.J. Menzies, one of the agents in England,

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5. Not until 1890 was a distillery kept unemployed for a year for re-equipping.
"complained bitterly that he had been unjustly treated by the directors" and announced that he intended to sell competitors' spirits in districts where he was no longer allowed to represent the Company. The Directors decided that Menzies's "general bearing towards the Company shew him to be decidedly unfriendly if not hostile to the Company ...(the Directors) prefer an open foe to a doubtful friend; and accordingly they are anxious that the connection between the Company and Mr. Menzies should come to an end." Menzies, as well as some eighty other agents, were fired during the pruning process. Redundancy as a result of amalgamation now became a feature of the distilling industry. Like the attempt to shift sales margins against the dealers, the rationalisation of agencies contributed to the Company's bad image.

The Haig-McNab plan did not put an end to the competition between the Company's different distilleries for orders. Each distillery, as a result of the proprietors' special pleading for particular salesmen, was allowed to continue employing travellers to sell direct to customers. This, as the D.C.L.'s Glasgow agent reported, frequently meant that the Company as a whole lost sales:

"Every traveller should sell for any one of the Company's distilleries. This would give each more chance of obtaining an order than if he sold for one special distillery and would modify his inclination to praise one make over another.

At present the travellers are associated in the minds of customers with the distilleries they severally represent, so that a buyer not prepared to order from one certain distillery does not think of tendering an order for another; the chances thus are that an outside seller may next call and secure what the Company might have obtained had the Company's salesman offered the buyer his choice of spirits.

To prevent Distilleries clashing with Agents or Travellers no offer should be made to buyers direct by any distillery except in cases where delay would be prejudicial and, in this case, the agent is to be simultaneously advised." 8

7. D.C.L., B.W.B. No. 1 at 11th July 1877.
8. D.C.L., B.W.B. No. 2 at 22nd June 1881.
This scheme was, however, turned down by the Board. Too many of the Directors wanted their distilleries to have direct access to their customers. Two other proposals, one for an Inspector of Agencies and the other for a Chief Salesman, were also rejected. The result was that squabbles between the distilleries over the allocation of sales and allegations of underselling continued through most of the 1880s. In 1888 an investigation of the accounts of Glenochil distillery, now being managed by Alexander McNab's nephew, revealed that widespread underselling had been taking place. The distillery maintained two sets of accounts, one set for the benefit of the D.C.L. Board and the other for the manager. The first set showed sales to wholesalers, but the second showed that:

"the transactions are as a matter of fact not with these firms at all, but are in reality with a lot of small Dealers and Publicans - 62 in number, some of them of the smallest class, the system being merely a colourable pretext for giving the Wholesale firms and the 62 small men the highest allowance for bonus."

This system of concealment, the Board ordered, "must at once be stopped. Small people can combine if they like, but they are not to be led by Glenochil and the distillery is to keep away from the retailers." All in all "this highly improper mode of dealing" was "damaging to the good name of the Company, misleading to the Directors, and destroys their power to regulate the price of all the other distilleries of the Company." It was also, however, a direct result of the continuing autonomy of the distillery managers and the absence of any central control over sales. This revelation, combined with the pressure on profits following the collapse of the U.K.D.A., resulted in the creation of a separate Sales Department at Head Office in 1890. The Sales Department gave the Board much more effective control over sales and put an end "to the clashing of the different distilleries of the Company" over the terms of sale. The Department insisted on customers ordering from the distillery nearest to them to reduce delivery costs, regulated prices and allowances, and reduced the terms to all

customers to a uniform basis; something which the Board had been attempting to secure since the inception of the Company.

A reduction in selling costs had been anticipated as one of the benefits from the amalgamation. Although the Haig-McNab plan reduced the number of agencies, effective Board control over sales took thirteen years to establish and occurred at the same time as the vendor/managers' influence in the Board began to decline.

The second area where cost savings were sought, also forecast in the amalgamation proposals, was in the use of the Company's bargaining power to secure more favourable terms from its suppliers. Grain purchasing provides one instance of this. Buying was centralised in the Board from the beginning, the Company declined to employ British corn merchants and bought grain directly from exporters. The Company also sought discounts from the railways though here the D.C.L. did not necessarily have the stronger bargaining position:

E.H. Haig to J.B. Harvey: "Enclosed I send you a private note from Walker of the N.B. Railway. I wrote to you some time ago, asking you to send your traffic by the N.B. instead of by the Caledonian Railway; for I am promised some substantial reductions in the rates from other distilleries if you agree to this. We are all so much dependent on the N.B. that it is better I find to flatter than to fight them. I hope to have our rate from Cameron Bridge to Dundee reduced 3 or 4 shilling per ton, but he makes this dependent on whether they get Carsebridge traffic or not..."

The third way cost economies were sought was by comparing the costs of production in the distilleries and from 1881 a permanent committee on Distillery Working Expenses supplied the Board with annual returns which indicated where major savings might be made. One area where attempts to rationalise existing plant might have been expected was when suggestions for replacement expenditure or new investment were made. Here, the Board exercised very firm control over the managers. From October 1881, works expenditure

10. i.e. The North British Railway.
11. D.C.L., L.B. No. 1 at 7th July 1877.
of more than £100 "were not to be undertaken without the Board's consent". This ruling produced a counter resolution from J.B. Harvey, vendor/manager of Carsenbridge distillery. He proposed:

"That the Directors having so little confidence in the judgement and discretion of the present Managers that they cannot entrust them with the replacement of an old wash back without first obtaining sanction of the Board and exhibiting same to the Auditors, hereby resolve to dispense with the services of the present Managers and to look out for other Managers in whom they may have confidence." 12.

What this facetious resolution in fact revealed was the Company's piecemeal and parsimonious approach to investment both of which stemmed from the absence of any overall investment strategy. As with the Company's move into exporting, the arrival of new competitors was an important factor in the creation of a new investment policy. The state of the D.C.L.'s distilleries compared very unfavourably with the modern designs of the new competitors. In August 1885, H.V. Haig drew the Board's attention "to the antiquated shape of most of the works of the Company" and proposed, "with a view to their future economical working", that:

"...a committee visit the works and lay down a plan of what they consider the proper size and form each Distillery should take when any particular repair or renewal comes to be made." 13.

A permanent Works Committee as a committee of the D.C.L. Board was not finally established until 1902, but beginning in 1885, the Company started to establish an overall framework within which investment decisions might be taken.

The recognition that the firm's distilleries lagged behind the up-to-date works of the new entrants suggests one other reason why excess capacity did not alarm the Board during the existence of the Association. For old-established firms such as the pre-amalgamation companies with antiquated works, under-utilisation of capacity may not have been particularly important if initial

12. D.C.L., B.M.B. No. 3 at 26th October 1881.
investment costs were long written off. It is noticeable that the firms who struggled hardest for increased sales quotas within the Association were usually the youngest firms needing to meet their initial outlay. Calder and Preston in particular were the distillers least satisfied with their quotas. In the Distillers Company the search for more economical working at the distilleries assumed an increased importance when profits fell as the impact of the new competitors began to be felt. The question of profits raises the final point in relation to the solution that the D.C.L. found through the Association: what effect did it have on profits?

III. PROFITS

Ideally, to answer the question fully, profits before, during and after the existence of the Association would have to be known. So too would the contribution to profits from the two other sources of revenue that the D.C.L. possessed in yeast and draff sales. Table 75 presents the figures that are available:

<table>
<thead>
<tr>
<th>Year (ending May)</th>
<th>Net Profit</th>
<th>Dividend</th>
<th>Year</th>
<th>Net Profit</th>
<th>Dividend</th>
</tr>
</thead>
<tbody>
<tr>
<td>1877/78</td>
<td>84,500</td>
<td>13%</td>
<td>1884/85</td>
<td>118,250</td>
<td>14%</td>
</tr>
<tr>
<td>1878/79</td>
<td>est.</td>
<td>13%</td>
<td>1885/86</td>
<td>96,833</td>
<td>12%</td>
</tr>
<tr>
<td>1879/80</td>
<td>75,728</td>
<td>8%</td>
<td>1886/87</td>
<td>115,333</td>
<td>11%</td>
</tr>
<tr>
<td>1880/81</td>
<td>n. k.</td>
<td>n. k.</td>
<td>1887/88</td>
<td>100,440</td>
<td>10%</td>
</tr>
<tr>
<td>1881/82</td>
<td>n. k.</td>
<td>n. k.</td>
<td>1888/89</td>
<td>94,424</td>
<td>10%</td>
</tr>
<tr>
<td>1882/83</td>
<td>123%</td>
<td>1889/90</td>
<td>92,568</td>
<td>8%</td>
<td></td>
</tr>
<tr>
<td>1883/84</td>
<td>112,417</td>
<td>10%</td>
<td>1890/91</td>
<td>118,694</td>
<td>10%</td>
</tr>
</tbody>
</table>

Source: D.C.L. Board Minute Books.
n.k.: not known.

There are no figures for the pre-amalgamation firms. For the years 1877/78 to 1879/80, profits have been estimated from the statement in the share prospectus of 1880 that profits since incorporation would have provided an annual dividend of 13% on the issued
share capital (£650,000). For 1880/81 and 1883/84 to 1890/91 the profit figures are those noted in the Board Minute Books. This leaves two years, 1881/82 and 1882/83 for which no profit figures are available. For the latter year the dividend is known and this has been included to give an indication of the Company's financial position.

It is worth comparing these figures with the profit margins that were calculated from maize and grain spirit prices in Chapter 10. The D.C.L. figures suggest that the profit margin calculations did at least give a true picture of the direction of change. For the D.C.L. the first period of the Association, from 1878/89 to the signing of the London agreement in 1882, does seem to have been one of falling profits. In the following two years, before the arrival of fresh competition, profits rose to much higher levels and then in 1885/86 they fell. Although the last two years of the Association saw a recovery in profits it is unlikely that these figures give a true reflection of profits on grain whisky because from 1883 onwards the Company began to develop a new yeast process. Profits from this new activity are available for some years:

<table>
<thead>
<tr>
<th>Year</th>
<th>Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1885/86</td>
<td>£ 2,000</td>
</tr>
<tr>
<td>1886/87</td>
<td>£ n.k.</td>
</tr>
<tr>
<td>1887/88</td>
<td>£ 8,000</td>
</tr>
<tr>
<td>1888/89</td>
<td>£23,624</td>
</tr>
<tr>
<td>1889/90</td>
<td>£14,000</td>
</tr>
</tbody>
</table>

Source: D.C.L. Board Minute Books.

When compared with the net profit figures which cover all trading activities these indicate that after the disintegration of the Association the Company was faced with a severe decline in grain whisky profits.
What can be made of these admittedly imperfect figures both in relation to the solution which the Distillers Company sought through the Association and the contemporary complaints about excessive competition? The first point is that for all the distillers' disquiet about the position of the grain distilling industry in the 1880s, the absolute level of profits appears remarkably high. So too does the level of dividend, which in only two years between 1877 and 1891 fell below 10%. Were the grain distillers, like other businessmen, just weeping crocodile tears to cover their embarrassment as they laughed their way to the Bank? The spirit dealers involved in the formation of the North British Distillery certainly thought so and stressed the profits from grain distilling in their prospectus:

"As showing the profits of grain distilling it may be mentioned that the D.C.L. with their capital of £650,000 have been able over a series of years to pay dividends from 10 to 15% besides accumulating a reserve fund of £85,000 and writing off each year large amounts for depreciation." 15.

Perhaps, however, the distillers' tears were genuine. Profits before 1877 may have been higher but in the absence of any pre-amalgamation figures the only valid comment is that the early 1880s saw a worsening of the factors which had weighed heavily with the distillers when they discussed the prospect of amalgamation. The cloud-burst which John Bald had feared did not materialise and to some extent the existence of the Association kept it at bay.

The second point is that to consider the D.C.L.'s membership of the Association solely in terms of its effect on Company profits, is to take too narrow a perspective. Amongst the promoters of the D.C.L., only John Bald had explicitly viewed the amalgamation as a way to increase profits. Other motives such as "the simplification of personal and family arrangements" and "the management of improvements" were emphasised. So too were "the avoidance of undue competition" and "the better regulation of

15. N.B.D.Co., Share Prospectus 1885.
supply for the demand". Both these latter objectives could only be achieved through cooperation in the Association. Moreover, as was argued in the last Chapter, the amalgamation and the Association, were both responses to a growing feeling of insecurity. In this situation, stability was more highly prized than the maximisation of profits. Lest this departure from the accepted entrepreneurial goal seem dubious it is worth remembering that there were occasions when the price that the D.C.L. was prepared to pay to secure stability became quite explicit. One was when the formation of the North British was mooted. In the hope that the North British would be abandoned the Directors of the D.C.L. offered to distribute amongst the dealers all surplus profits beyond those required to pay a 10% dividend. Yet, although stability was desired, there came a point when its cost became too high. For the Distillers Company that point came near when, after agreeing to sacrifice its entire London sales, the London Distillers' Association, showed no intention of adhering to the agreement. It finally arrived with the undercutting that followed the appearance of the new entrants. This was what ultimately destroyed the Company's faith in the Association.
CHAPTER TWELVE

THE BLENDERS: INTRODUCTION AND METHOD

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CHAPTER TWELVE

THE BLENDERS: INTRODUCTION AND METHOD

"The prevalent notion amongst whisky drinkers, especially in Scotland, is that several varieties of whisky blended is superior to that of any one kind." (Charles Tovey, 1864). 1. "The Blenders are responsible for the great increase in consumption." (William H. Ross, 1908). 2.

I - INTRODUCTION

Since Chapter Six attention has been focussed on the grain distillers. The fundamental technological impact of the Coffey still and the reactions of the grain distillers to the productive capacity placed at their disposal, amply justified this concentration and the consequent relative neglect of other sections of the spirit trade. Still, the fact remains that the grain distillers, despite the scale of their manufacturing operations and the predominance of their product in the total output of spirits, constituted but one section of the whisky trade as a whole. Within spirit manufacturing itself, the pot still distillers remained, except in England, an active and much more numerous group than the grain spirit producers. In Scotland by the end of the 1880s there were 12 patent still distilleries and 119 pot still distilleries. Malt whisky distillers outnumbered grain distillers by a factor of almost ten to one. They accounted, however, for only 38% of total Scottish spirit production. Whilst different technologies, scale of operations and size of firm sharply delineated the pot and patent still producers, their individual products - malt and grain whisky - were increasingly being marketed in the form of blended whisky, a mixture containing both types of spirit. Mixing was not a new activity but from 1860 onwards it became the most noticeable feature of the whisky trade. It also became the means by which a distinct market was created for "Scotch whisky" amongst consumers.

1. C. Tovey, op.cit. p.150
2. R.C.W. at Qn.5082, p.164.
For distributing their products to the public both types of distiller relied on the services of the wholesalers and retailers. The quite remarkable conquests of Scotch whisky in the spirit market after 1860 owed much to one type of wholesaler, the blender. The blender brought direct from the distiller and created out of the heterogeneous range of malt whiskies a more uniform product. Malt whisky, because of the less perfect fractionation in the pot still, varied in flavour from one distillery to another, and, over different seasons, within one distillery. It also, because of the high proportion of secondary constituents, required time to mature before it became fit for consumption. Although raw spirit continued to be sold until 1915, the improvement after storage was recognised by the 1860s. Tovey, in particular, was highly critical of the sale of raw spirit:

"In England, especially in the south, whisky has not had fair play; it is generally offered for sale and brought into consumption quite new from the still, and in this state is not fit for drinking; it is heating and intoxicating, and soon disorders the system. The effects of a debauch after drinking new whisky is a punishment long to be remembered. Spirit merchants and dealers should allow to whisky the same privilege awarded to Brandy and Rum, that of age in Bond."

Time and storage space required capital and added to the cost of producing malt whisky, much more so than was the case with grain whisky which, although undergoing change during maturation, could be sold at a much earlier age. The blender provided working capital to finance stocks and became a major holder of mature whisky. So too did a purely financial intermediary, the spirit broker. In theory the broker's role was to equilibrate the supply of particular types and ages of whisky with demand, but the growing volume of stocks effectively divorced production from consumption and became an important source of instability in the trade. In Scotland alone spirit stocks in bond rose from 6.4 m.p.g. in 1870 to 18.8 in 1880 and to 50.6 by 1890. In the United Kingdom as a whole they increased

3. C. Tovey, op. cit., p.151.
from 16.9 mpg in 1870 to 86.3 m.p.g. in 1890 and by the latter year were equivalent to about three times the annual consumption of spirit.

With the addition of grain spirit the blender also produced a cheaper whisky and it was he who moulded Scotch whisky to suit all tastes and all pockets. He also assumed responsibility for bottling, an additional process which became much more extensive in the 1890s. The growth of bottled as opposed to bulk sales of whisky owed much to the blender's desire to safeguard the distinctive trade name he had created. Expensive advertising which sent consumers looking for "Black and White", "Vat 69", "Johnnie Walker", or "Dewars White Label" could only be safeguarded by bottling. Bottling protected the blended contents from unscrupulous publicans and grocers who diluted casked blends with water or substituted cheaper whiskies. Bottling was also a response to the upward movement in spirit duty after 1890 which made casked sales too expensive for retailer and consumer alike. For thirty years, between 1860 and 1890, duty remained, with one temporary increase in 1885, unchanged at 10/- per proof gallon. Goschen, that "Professor of Cheap Morality", responded to "the Temperance Gallery" and added 6d. to duty in 1890 thus bringing to an end a unique episode in the history of excise duty.

The blender created modern "Scotch whisky". He advertised, publicised and pushed Scotch whisky beyond the boundaries of Scotland so that by 1900 it had ousted gin and brandy from the English market and had begun to establish an international reputation. The rise of the blender was to have important repercussions on the primary producers, the malt and grain distillers, but if the spread of Scotch whisky is to be explained and a balanced picture of the trade established, it is essential to examine this important section of the industry.

II - A PROBLEM OF METHOD

To do so, however, presents a number of problems. The grain distillers have been relatively easy to study. They were limited in number, one firm came to control a significant proportion of output, and their mutual activity through trade associations made generalisation relatively safe. By contrast spirit dealers were much more numerous and their trading activities often much more diverse. A dealer's licence allowed an individual to trade in any quantity of spirits not less than two gallons and the number of licences gives some indication of the size of the trade. In Scotland alone the number was never less than 350 between 1860 and 1925. In the boom years of the 1890s licences increased to a peak of 675 in 1899. Moreover the English dealers cannot be ignored. Many English dealers blended Scotch whisky and much of the capital that flowed into malt distilling in the 1890s came from the South. Between 1860 and 1900 wholesale licences issued in England rose from 2,912 to 11,756. For analytical purposes these figures indicate little more than the willingness to enter the trade. A licence was issued at the point of distribution and, as one feature of blending was the growth of national firms with centralised blending plants and a countrywide network of branches, the licensing figures give no indication of this process. Also, although the growth of firms operating at a national level tended to result in specialisation within the firm on whisky, for many firms whisky selling was only one activity. Butter, cheese, tea, wines, beer and other consumer goods were carried by these wholesalers. John Walker & Co. for example, maintained an active trade with Australia in pots, pans, cement, bricks, ropes, sails and many other commodities before specialising in whisky during the 1880s. Nor can the dealers be studied through trade associations. No wholesalers' association occupied a central position in the trade until the formation of The Whisky Association in 1912. Other associations such as the Edinburgh and Leith Wholesale Wine and
Spirit Dealers' Association appear to have been organised mainly for the purpose of trade defence against the temperance movement. Their predominant activity was financing opposition to the temperance candidates in municipal elections. Relations with their suppliers, the distillers, were normally left to ad hoc meetings and not to a permanent organisation. Besides, one of the most interesting developments in the trade, the integration of spirit dealing and distilling firms, was to blur the historically sharp distinction between dealer and distiller.

The problem of generalising about the wholesale dealers has been met by other historians in two ways. One is to concentrate on the experience of "The Big Five" blenders. The other is to describe the public controversy which attended the growth of blending, in particular the question of whether it constituted adulteration and misdescription.

In the former approach the experience of "The Big Five" blending houses: Buchanans, Dewars, Haigs, Mackies and Walkers are used to describe the distributive trade. In this approach the essential factor is seen to be the vitality, dynamism and publicity consciousness of each firm's proprietors. Success is highly personalised. Whilst not denying that the proprietors of these firms do appear to have been extraordinarily gifted salesmen and publicists, able in a relatively short space of time to implant their products so firmly in the public mind that their proprietory brands became household names, it is for a number of reasons an approach which suffers limitations.

All of the historians have worked from a common source. This is the series of "House Histories" that appeared in the D.C.L. "Gazette" during the 1930s. These were written by one of the

leading officials in each firm (usually the secretary) with the purpose of keeping employees of the D.C.L. in touch with developments in what were, after 1925-1927, subsidiary companies. Much historically valuable material appears in them. Equally, much was omitted and as they were all written at a time when the proprietors were still active in business they were deferential, stressing the virtues of the founders. The Victorian legacy of dynastic paternalism was still evident and this too constrained the scope for free comment and judgement. Their concentration on the diligence, energy and salesmanship of the proprietors biased more careful consideration of other vital entrepreneurial qualities. Finance and administration, to name but two skills necessary for the survival of national enterprises, got little coverage. Yet Dewars, for example, had over 400 employees, a capital of £2 million pounds and branches or agents in nearly every country of the world by the early 1920s; by then more than salesmanship was needed to sustain the firm.

There are other weaknesses. Each history was written separately and there is a lack of perspective which has carried over into later studies. The absence of any attempt to see how each of "The Big Five" firms stood in relation to each other, or to other spirit dealers outside the group, is their greatest weakness. Within "The Big Five", leadership, defined in terms of profits, changed frequently between the 1880s and 1925 when three of the five, Buchanans, Dewars and Walkers fused with the D.C.L. In 1888, the first year for which there are comparable figures, the profits of Haig's and Dewars were £2,510 and £1,322 respectively. Both were a long way behind Walkers at £15,000 but both were similar to Arthur Bell & Sons, a firm not included in "The Big Five", where profits were £1,888. After 1890 Dewars pulled away from Haig's and Bell's and passed the Walkers in the 1900s. A wartime amalgamation between Buchanans and Dewars left the consolidated firm stronger than the rest of "The Big Five" and for that matter, the Distillers Company itself. It is precisely these sorts of differences existing within

7. John Haig & Co. Ltd. was purchased by the D.C.L. in 1919; James Buchanan & Co. Ltd., John Dewar & Sons Ltd., and John Walker & Sons Ltd. in 1925; and White Horse Distillers Ltd. in 1927.

8. Sales statistics are almost wholly lacking for all "The Big Five".
the group and between the group and other dealers that surely merits attention.

Legitimacy to the title "The Big Five" has never been questioned. Significantly, this title was not used by the blending firms themselves. The title that was adopted was "The Big Three" and this was first used by Buchanans, Dewars and Walkers when they discussed the possibility of amalgamation in 1910. Other firms, "smaller concerns" as "The Big Three" called them, were very much a secondary consideration. All these three firms grew very rapidly in the 1890s and before then they would hardly have merited the title. In the 1880s the large dealers were to be found amongst the firms who organised the North British Distillery in opposition to the Distillers Company, for example Andrew Usher & Co. of Edinburgh, Robertson, Sanderson & Co. of Leith and Wright & Greig of Glasgow. Even ignoring the legitimacy to the title, the very name suggests that these three firms were hardly representative of the dealers as a whole when there were over 600 licensed dealers. Why then when so little about the sales, profits and relative strengths of these firms is known, has this approach been adopted? One reason lies in the fact that at the time when these historians were writing (all after 1951) "The Big Five" really were "The Big Five". Grouped within the Distillers Company these firms dominated the industry. In the home market the only other significant brands were Bells and Teachers. This pattern emerged, however, only after a curious episode at the end of the First World War and to see why it is essential to look beyond "The Big Five" when discussing blending, this episode must be examined.

The blender mixed different types of malt whisky as well as malt and grain. The quality of his product came to be measured by two things. One was the proportion of malt whisky and the other the age of the spirit in the blend. The higher the proportion of malt

and the more mature the spirit the better was the quality. Both made the blend more expensive; malt whisky because it cost more to produce, and age because of the additional cost of storage, capital and wastage. During the war malt whisky distilling was first curtailed (from 1916) and then prohibited from June 1917 to January 1919. Grain distilleries continued to work but their production was switched towards strong alcohol for the munitions industry and new whisky of both types was in increasingly short supply. In 1915 the Immature Spirit Act was passed. This prohibited spirit under three years of age being sold for consumption. The industry, which had been working on a much tighter stock position in the years before the war than had been the case up to 1900, found that a large proportion of its stocks could no longer be used. With a shortfall in the supply of new whisky and a curtailed use of existing stocks blenders were forced to ration deliveries, generally by about 50%. In the search for stocks mature whisky prices rocketted and brokers enjoyed profits not seen since the boom days of the 1890s. For small dealers running a duty paid trade with little or no stocks liquidation was inevitable. Equally, the large stockholders were an exceptionally attractive proposition for purchase by the blending companies and many took the opportunity of a quick capital gain and sold out. In what must be one of the largest voluntary liquidations in the history of British industry over 50 firms on the blending and distributing side of the business cleared out of the trade. Some of these firms were amongst the largest in the industry. James Watson & Co. of Dundee for example, had 5½ m.p.g. in stock and profits of over £1 million pounds when they liquidated in 1923. Peter Dawson Ltd. owned many famous brands and 2.9 m.p.g. of stock when they sold out in 1924. Both firms would have been well qualified for inclusion in "The Big Five". By the mid twenties they were gone from the trade along with many much smaller, less powerful firms.

11. Because of evaporation during storage.
The post war boom in stocks was over by the end of 1924. It tailed off as a result of "The Big Three" blending houses and the Distillers Company agreeing not to compete against each other at stock auctions and was finally ended by the exposure of the underlying weaknesses of the market. With consumption falling stock prices slipped and after 1924 the brokers joined the exodus. How many brokers left the trade is not known but one Glasgow broker described the situation there in 1931 as follows: "There were 25 brokers in Glasgow alone in 1924. Today there are only four. Holders of stocks that no one wants to buy."13 In the 1920s then, "The Big Five", operating in the D.C.L. group, really did come into their own albeit in a much diminished market, but, for a representative picture of the development of blending some recognition must be made of other firms. Until the trauma of the 1920s the advance of Scotch whisky in the spirit market is best seen as a flow composed of many small burns rather than a few gigantic rivers.

Insufficient attention to significant historical changes has been one reason for historians concentrating on "The Big Five". The other reason follows directly from the events just described. Historians turn to surviving firms for information. "The Big Five" survived and they had house histories already available; why dig any further? Worse still, from the historian's viewpoint if not from the owners', the post war liquidation was remarkably painless. Most firms were voluntarily wound-up and unlike past crises no rich harvest of sequestration papers is to be found.14

The second approach, the study of the public controversy over blending, is undoubtedly interesting. Much valuable source material is to be found in the reports and minutes of evidence of The Select Committee on British and Foreign Spirits of 1890/91 and The Royal Commission on Whiskey of 1908/09 as well as in press and

14. Stocks and trademarks of many of these firms were purchased by the Distillers Company and "The Big Three" but almost no records survived.
parliamentary debates. These sources need, however, as has not been done before, to be supplemented by business records, especially those of the main protagonists, the malt distillers and the D.C.L., as the public face presented at official enquiries did not always correspond to the private.

As for the blending firms themselves the surviving business records of three firms inside "The Big Five": Walkers, Dewars and Haigs and one firm outside the group: Arthur Bell & Sons Ltd. have been used. The records giving the longest, most extensive coverage are those of Arthur Bell & Sons, and the study of the blending industry begins with this firm. Bell's records run from 1830 to 1900 and make it possible to construct the evolution of the enterprise. The firm differs in many respects from Walkers, Dewars and Haigs and cross referencing is made with their activities. After 1900 Bell's records are much less substantial but by then Dewars and Walkers were growing rapidly and attention is switched to them.


CHAPTER THIRTEEN

THE BLESIDERS - ARTHUR BELL AND SONS LTD.

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Important as the big names were to be to the progress of "Scotch", the history of Arthur Bell and Sons Ltd. is worth investigating as an example of the myriad numbers of smaller wine and spirit merchants who made up the bulk of the trade in the years before it became increasingly concentrated. The survival of assorted records belonging to the present day company makes it possible to reconstruct the development of an enterprise typical in some, but certainly not all respects, of the solidly middle class trader in wines and spirits in the 19th century.

The origins of the company trace back to a small Perth firm established by Thomas Sandeman in the early years of the 19th century. The surviving records do not give the exact date of foundation but this is generally taken as 1825. Sandeman started trading as an agent for Sandeman & Co. of Oporto, the wine importers, and latterly dealt on his own account in a wide range of drinks. Most of the wine he sold came by sea from London to Dundee and then by lighterage to Perth. Connections made in this trade provided a base for his other activities which included the organisation of his fellow Perth merchants for the establishment of a warehouse.

The conversion of an old granary in Speyside "was not for our private use only, but for the accommodation at the lowest possible rent, of all who might choose to lodge wine and spirits therein... we are willing to allow such wine and spirit merchants as may be so disposed, to participate in any profit which may from time to time result from the speculation, upon condition of their agreeing to pay a share of any loss." 2

1. This was a family relationship, the London business of Sandeman & Co. had been founded by a Perth man, George Sandeman, in 1790.
2. Letter Book (hereafter L.B.) 26th June 1837.
As to the nature of his customers little evidence remains, only two indicators ranging to opposite ends of the social scale. One, a letter trying to interest Lord Kinnoul in a purchase of Port wine, runs: "Should Lord Kinnoul, at any future time, think of making a trial of my port wine I feel very great confidence in recommending to his Lordship the wine I receive from my friend Messrs. Sandeman & Co. of Oporto, who has for some time past held the most extensive stock of any House in the country."3 The other is a delivery order covering a cartload of spirits to John Alexander, an Innkeeper in Neible some twenty miles north-east of Perth: "I shall not charge you more than 8/- although that price does not pay me and I beg you not to mention it to others whom I must charge higher."4 At least in emphasising the wonderful bargain the customer was getting, T.R. Sandeman was behaving exactly as his successors were to do.

Whatever sort of clients he traded with, he had, by the time of his death in 1837, built up a prosperous and thriving business returning profits of over £900 on a turnover of five and a half thousand pounds. Besides his promotion of the Speygate Bond he had extended his agencies into spinning, iron and insurance. Unlike some single proprietor firms the business did not fold with the owner's death, the clerk James Roy taking over. What the financial arrangements were for this succession is not known, but the firm's activities in wines and spirits were distributed as follows: (see page 413)

3. L.D. 7th August 1837.
4. L.D., 1837.
The main lines of trade though not the most profitable\(^5\) were clearly wines and spirits, providing over 90\% of turnover. Amongst the minor items, the inclusion of tea alongside alcoholic beverages is not as odd as it appears. For tea, like wines and spirits, was liable to excise duty and traded naturally with other bonded goods. Moreover, until the rise of specialised tea merchants and retailers after the cutting of the excise duties the major wine importers in London dealt in tea.\(^6\) It was only in 1871 that tea disappeared from (by then) Arthur Bell's trade. This was not as long as Malt Liquors, that is, Scots Ale, continued in the trading lists. Ale survived as late as 1913 when falling consumption and decreased profit margins squeezed it out in favour of concentration on spirits. Spirits it should be noted included brandy, rum, and gin as well as whisky and it is disappointing that the figures do not give any indication of the relative proportions of each. This is the case for the whole period of the firm's history which is

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5. The figures are taken from a surviving ledger summarising the trading position. It remains curious and not perhaps entirely accidental that the only accounts deal with periods when a change of management occurred.

under examination and it can only be inferred from the volume of correspondence mentioning only whisky that rum and gin dropped in importance.

From 1838, surviving accounts cover the period until the end of 1841 and show little change in the structure of trade except for a sharp fall in sales of spirits of almost £900. As the sales of wine and ale were unaffected, indeed the latter was on the increase, the fall may be connected with Father Matthew's temperance campaign which, with its emphasis on the dangers of "ardent spirits" hit spirit consumption harder.

The ten years after 1841 remain a blank in this attempt to reconstruct the history of the firm. No records at all survive, the next ledger only beginning when Arthur Bell was taken into partnership by James Roy. Up to that time Bell was employed as a traveller in the firm. 7

Whatever the nature of the missing years - and the effects of the temperance campaign together with the economic crises of the early 1840s would suggest they were less than happy years for the wine and spirit trade - the partnership which Bell was about to enter was returning lower profits than in Sandeman's time:

| TABLE 78 - J. Roy and A. Bell, Wines and Spirits Sales and Profits (January 1851 to December 1851) |
|----------------------------------|----------------|----------------|----------------|----------------|
| WINE % OF TOTAL | SPIRITS % OF TOTAL | LIQUORS % OF TOTAL | MALT % OF TOTAL |
| Profit from £: | £172 | 22.13 | £538 | 69.24 | £28 | 3.60 |
| Sales of £: | £1028 | 25.15 | £2687 | 65.75 | £101 | 2.47 |
| Profit/Sales%: | 16.73 | 20.02 | | | 27.72 | |

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Apart from the sales and profit figures what else can be said about the size of the firm, its trading connexions and the market it operated in? In 1851 the partnership was still being worked from the original small shop in Kirkside. The shop plus a cellar were rented for £33 a year. Employees were few besides Roy and Bell, only a clerk, a cellarman and a boy. The cellarman's responsibilities covered storage and bottling, whilst the boy doubled as shop salesman and delivery lad. Much of the trade was purely local, orders over the counter being distributed by handcart throughout the town. Trade beyond Perth was a curious mixture of travelling salesman and "mail order". Each Spring, Bell as the younger partner, set out on a tour of Perthshire and surrounding counties. The firm depended heavily on this trip, for it was not merely a selling operation but also a debt-collector's journey for the settlement of outstanding accounts. A letter of October 1855, reveals the terms and conditions on which whisky was sold:

"Messrs. Roy and Bell will be happy to supply Mr. John Ferguson with whisky same as last time at 13/3 per gallon carriage paid to Dunblane Station less sixpence a gallon if paid prompt cash or three pence per gallon discounted if paid when Mr. Bell is at Callender in the Spring."

After becoming a partner Bell began to curtail his sales trips and towards the end of 1855 announced that he was "intending in future to travel no further North than Kirriemuir in Forfarshire." His duties were taken over by the man who was to become Bell's partner after James Roy left the business in 1862. This was T.R. Sandeman, a nephew of Bell's and presumably a son of the original founder of the business. Apart from a no doubt welcome withdrawal from an arduous task – a sales trip lasting some three months by train, carriage and horseback – it also allowed him to concentrate his activities on the market which really interested him: the whisky trade south of the border. The timing, in the partners' opinion, was ripe for this move as "Next month the English and Scottish

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7. R. Wilson in "Bell's O'Perth" in the W.S.T.R. for 17th February 1958 mentions another partner of James Roy by the name of Miller. I have found no trace of him.
duties on whisky will be assimilated and it will then be in our power to send Spirits in any quantity to England at a reduction of 6d. per gallon." Yet despite the establishment of a common market, the bread and butter part of the firm's business remained firmly rooted in Perth and its environs, and this is true for most of the period covered.

What sort of trade was this in Perth? Bell held both a wholesale and a retail licence. Although describing his business as a wholesale one in which he sold wines and spirits to publicans and hoteliers, many of his sales were made over the counter retail to the public. From the correspondence a large passing trade typical of a market town like Perth was done. This was seldom in single bottles of whisky, but rather in parcels of assorted wines and spirits made up for larger households with tea frequently included. This type of trade was very like that of the family grocer. It was not perhaps the most dynamic form of business, but it was largely free from the bad risks of supplying publicans. Also it was a trade where connections, once established, were likely to be easily maintained, usually with a little prompting from Bell's business pen. A typical letter was: "we expected before this to have had the pleasure of hearing from you. We now beg to inform you that whisky has now reached its lowest and that this is the most favourable time for purchasing." The style of writing was varied to suit different types of customer. Thus Mrs. Keir of Pitlochry received a note comprising a fine balance of dismay,

8. This was in 1856 when Scottish duty was increased to 2/0 to bring it up to the English level of 8/0 per proof gallon. The reduction of 6d. mentioned in the letter was a cut in the price of whisky ex duty. Prior to the unification of Scottish and English duty Scottish traders selling in England had to bear the sea risk of the full English spirit duty. English duty was charged on the quantity put on board and not on the quantity landed in England which, because of evaporation, leakages, pilferage etc. was usually less. Elimination of the possibility of loss from this source enabled Bell to lower the price of his whisky. This feature of the Anglo-Scottish spirit trade was a major grievance amongst Scottish traders. See Customs and Excise Records, M.B. No. 56, Deputation of Scottish and Irish Distillers and observations of the English relative to the system of warehousing home made spirits c. 1839.


10. L.B. 4th March 1856.
moral outrage and firmness:

"Mr. Bell was much surprised and disappointed that Mrs. Keir did not settle this old balance with Mr. Sandeman and he hopes she will remit it without delay as such long credit eats up all the profits in the business, the usual credit on whisky is three months (not a year)." 11.

Whilst a large measure of irony and bluntness was aimed at making Mrs. Rodger of Auchterarder pay up:

"Madam:

On 14th February last you called at my office and got one bottle whisky and two bottles brandy value 8/3 promising to call and pay it on a fortnight after. I was under the presumption that you were a lady and would keep your promise, although a stranger to me.

If I do not hear from you before Friday first I will have a different opinion of your character and will take steps accordingly." 12.

Despite such disappointing customers there is no doubt that counter sales with immediate payment or, at most, short term credit, was far less likely to involve the firm in bad debts, and it was bad debts which pulled most small merchants under.

As a garrison town Perth had another remunerative market in the regimental messes of troops stationed there. On the whole these were good risks as individual officers and N.C.O.'s could be chased for payment by the simple expedient of threatening to inform their commanding officers about debts. This did not prevent some regiments settling up less promptly than others; the 79th Foot paid regularly whereas Her Majesty's 14th Light Dragoons were told "we have supplied many messes but yours is the first that has not paid us." 13

Another important market for the firm - though again there are no figures to say just how important - and the one to which the biggest risk was attached was the wholesale business supplying wines,

11. L.B. 13th December 1862.
12. L.B. 5th April 1873.
spirits and beer to licensed grocers and publicans. A trade carried on largely outside Perth it involved distribution throughout Perthshire and Forfarshire, a relatively large area of Highland Scotland. This was the market which was to grow increasingly important for the firm as communications improved to the north and east of Perth. What Perth lacked as a market in terms of numbers, it made up for by its location in the fast developing railway network. By 1850 Edinburgh, Dundee, Glasgow, Perth and Aberdeen were all linked by rail and whilst there was still not a single yard of railway north of Aberdeen the next ten years saw the foundation of the Highland railway system, Perth itself being directly connected to Forres on the Moray Firth by the line through Dunkeld, Pitlochry, and Aviemore in 1863.

It was on behalf of this business that the spring sales tour was undertaken. From the list of orders the partners' demands for the ensuing year were transmitted to the distilleries in time for the start of the distilling season in September. From which distilleries were they purchasing whisky? Most of their whisky came from the large Lowland distilleries: from the Grange distillery at Burntisland belonging to William Young & Co., from the Haigs' distilleries at Seggie and Cameronbridge, from the McNab brothers' distillery at Glenochil and from the Carsebridge distillery of John Bald. Grange distillery was a pot still distillery and supplied malt whisky. The others were all grain distilleries. The only Highland malt distillery mentioned in the Purchases Books was Edradour in Pitlochry, one of the smallest pot still distilleries in Scotland. The whisky prices of these distilleries confirm the cost reducing effects of the patent still, the ability of the large Lowland pot still distilleries to achieve economies of scale within the traditional process, and the relatively high price of Highland malt whisky. The prices were as follows: (see page 419)

---

16. For a description of this tiny distillery which in 1885 had an annual output of only 6,600 gallons, see A. Barnard, op.cit., p.274.
TABLE 79 - Duty Free Spirit Prices (1857)

<table>
<thead>
<tr>
<th>Spirit</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edradour (Highland malt)</td>
<td>4/6 p.p.g.</td>
</tr>
<tr>
<td>Grange (Lowland malt)</td>
<td>3/9 &quot;</td>
</tr>
<tr>
<td>veggies &amp; Cameronbridge (Grain)</td>
<td>2/6 &quot;</td>
</tr>
<tr>
<td>Glenochil (Grain)</td>
<td>2/6 &quot;</td>
</tr>
</tbody>
</table>


From the spirit dealers' viewpoint Lowland whisky had an additional attraction. At this time all the Lowland distilleries delivered carriage free whilst the freight on Edradour whisky over the short distance from Pitlochry to Perth was 4/2 on the hogshead (55 to 65 gallons), an addition of almost 1d. a proof gallon.

Why, when Highland malt whisky was so much more expensive, did the partners purchase it? In their judgement malt whisky was superior in quality to Lowland grain whisky. The price of malt whisky made it much less competitive for sale on its own but by adding grain spirit, a much less distinctively flavoured product, a mixture could be produced which retained some of the flavour of malt whisky yet was cheaper than a single malt. Cheapness though was not always the firm's main consideration. Quality was to be emphasised also but the twin elements of difference in flavour and cost provided the basis for the firm's approach to the market. In 1862 two differently priced blends were being offered in the first attempt to enter the London market: one blend at 6/- the other at 5/2. Five years later Bell wrote to a customer in Perth as follows:

"I do not usually give the mixture of my whiskies, but may mention that the best is made in Banffshire's Glenlivet district, and the other is Pitlochry and Stirlingshine whiskies." 17.

By then purchases had widened to include Glenlivet whiskies, reflecting the growing popularity of Glenlivets and the improved communications north of Perth which made the output of the Highlands.

17. L.B., 14th May 1867.
malt distilleries more accessible to the southern blender.

The partners saw the equalisation of Scottish and English duties as a propitious moment to push their sales south of the border. Yet was it? In one respect it was. When Bell became a partner in 1851 Scottish excise duty was 4/8 per proof gallon. This level had been reached with a series of steady increases from the 2/3d duty of 1823. In 1855, the 4/8 became 6/- and the following year the equalising duty with England of 8/- was reached. Ireland followed suit in 1858. This was not the end of the increases for in 1860 duty rose to 10/-. Now whilst even the buoyant English market shuddered and slipped back for three years after 1860 under the additional impost, there at least the level of duty had been historically higher and the extra sum was much smaller in proportion to the existing level (7/10 in 1840). In Scotland consumption was hit hard and fell by over 40% between 1852 and 1861, so that the partners were responding to a hearty fiscal shove in seeking sales down south.

Fiscal harmonisation, distinctly unfavourable in one sense, created the challenge to escape from the shrinking Scottish spirit market. The higher duty also brought some decidedly favourable excise reforms. In 1853 a scale of allowances for losses in the strength and quantity of spirit stored in warehouses was introduced. By 1864, disputes between the Excise and traders over the level of the allowance, resulted in the introduction of a simple provision that duty would only be charged on the actual quantity delivered for consumption. The year before, spirit dealers were allowed to sell retail to the public in reputed quart or pint bottles so long as the total quantity sold was not less than two gallons. Spirits were also allowed to be reduced in strength in specially approved warehouses. In 1867 permission was granted to bottle spirits free of duty for sale in the home market. Perhaps the biggest gain from these reforms came in the Spirits Act of 1860 which allowed spirits

18. Because of the heavy costs involved in using duty paid spirit at the higher levels of duty.
to be blended in bond. Blending could now take place from duty-free stock, effectively lowering the costs of establishing a dealer's business.\footnote{For these and other changes see R. Wilson, \textit{The House of Sanderson} (1963) and Sir Nathaniel J. Highmore, \textit{The Excise Laws} (London 1923) pp.520-1.}

For Roy and Dell the 10/- rate was a change "for which we were quite unprepared...and had not enough duty paid stock to meet all the orders we have on hand."\footnote{L.H., 17th July 1860.} Being caught out they had to raise their prices straight away and in this particular case, by the full amount of the increase in duty. It would be interesting to know whether this shortage of duty paid stock was merely an unhappy accident due to lack of foresight, or whether a shortage of capital forced the partners to keep duty paid stocks as low as possible. In the absence of accounts for this period there is no way of deciding the question. However, some balance sheets from 1864 have survived and these suggest a marked change in the way the firm was financed. This was intimately connected with the changing ownership of the firm.
CHAPTER FOURTEEN

THE BLENDERS - ARTHUR HELL AND SONS LTD.

"WHEN SORROWS COME THEY COME NOT SINGLE SPIRES ..."
(1860-1870)

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CHAPTER FOURTEEN

THE BLENDERS — ARTHUR BELL AND SONS LTD.

"WHEN SORROWS COME THEY COME NOT SINGLE SPYTES."

(1860-1870)

I. INTRODUCTION

Between 1825 and 1837 the firm was run solely by T.R. Sandeman. When he died the clerk James Hoy took over, bringing Arthur Bell in as a partner in 1851. This partnership lasted eleven years and was dissolved in 1862, probably on account of Roy's retirial. On the 1st March 1862 Arthur Bell brought his nephew, T.R. Sandeman, into the business and they ran it jointly until an acrimonious quarrel which left Bell in sole command from the 2nd June 1865.

Aside from any question of personal conflict the greatest problem of a partnership is replacing a partner's capital share in the firm on death or retirial. Bell had to deal with this problem twice in the short space of three years. Whatever difficulties this created for Bell it has left a legacy for the historian because of the more exacting accounting needed to measure the changing personal shares in the firm. By reconstructing the balance sheets in Arthur Bell's Personal Journals the sources of capital from 1864 can be found:

<table>
<thead>
<tr>
<th>Source</th>
<th>1864</th>
<th>1866</th>
<th>1870</th>
<th>1880</th>
<th>1890</th>
</tr>
</thead>
<tbody>
<tr>
<td>James Hoy</td>
<td>667</td>
<td>727</td>
<td>352</td>
<td>nil</td>
<td>nil</td>
</tr>
<tr>
<td>Roy and Bell</td>
<td>30</td>
<td>nil</td>
<td>nil</td>
<td>nil</td>
<td>nil</td>
</tr>
<tr>
<td>Arthur Bell</td>
<td>1949</td>
<td>4347</td>
<td>4033</td>
<td>11,870</td>
<td>22,076</td>
</tr>
<tr>
<td>T.R. Sandeman</td>
<td>2597</td>
<td>nil</td>
<td>nil</td>
<td>nil</td>
<td>nil</td>
</tr>
<tr>
<td>Central Bank</td>
<td>10</td>
<td>2097</td>
<td>nil</td>
<td>nil</td>
<td>nil</td>
</tr>
<tr>
<td>The Misses Duffs</td>
<td>nil</td>
<td>1305</td>
<td>1300</td>
<td>362</td>
<td>nil</td>
</tr>
<tr>
<td>Anna etc.</td>
<td>nil</td>
<td>313</td>
<td>501</td>
<td>982</td>
<td>nil</td>
</tr>
<tr>
<td>Imrie Bell</td>
<td>nil</td>
<td>20</td>
<td>nil</td>
<td>nil</td>
<td>65</td>
</tr>
<tr>
<td>James Brodie</td>
<td>nil</td>
<td>64</td>
<td>nil</td>
<td>nil</td>
<td>nil</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>5253</td>
<td>8809</td>
<td>6250</td>
<td>13,144</td>
<td>22,141</td>
</tr>
</tbody>
</table>

**NOTE:** Anna etc. represents money invested in the firm by Bell for his sisters Anna, Marion and Isabella.

**Source:** A.B. & S., Personal Journals.
A word of explanation on the Journals is necessary at this point. The use of the word "Personal" being highly pertinent to the value that can be placed on them as a source. The Journals were kept as a private record of the position of the firm by Bell and are all in his own handwriting. The care he took over them is not in doubt. It is perhaps a measure of the attention he paid to them that amongst his calculations for 1897 there is a note — "Assets: Cash £16.14.1 plus 9d. — undiscovered error for the first time since 1851". Yet despite this meticulous approach the separation of family finance from the firm's is not always entirely clear. By 1896 Bell was investing funds amounting to over £10,000 for eleven members of the Bell family (excluding himself), together with a trust fund for his younger son Robert, and investment for an outsider. Of the eleven members of the family mentioned in the records, eight were female and his responsibility for their financial wellbeing was a constant source of bother. In the 1860s the strain of his family responsibilities was scarcely to be measured by a capital sum for Bell's affairs were living proof that, "when sorrows come, they come not single spies. But in battalions"; the partnership with young Sandeman ended in a bitter quarrel; Bell's brother John lost over £2,000 which Bell had lent him; and attempts to get into the London market failed.

II. THE PARTNERSHIP DISSOLUTION

It is the dissolution of the Bell/Sandeman partnership that reveals the sources of finance. Before looking at this, why did the partnership break? The cause of the split seems to have lain in the fact that Sandeman was working not only with Bell but also on his own account. This was not unusual. Many junior partners in the wine and spirit trade, especially if they were tra-

1. Shakespeare, Hamlet IV, v. (78)
vellers, picked up agencies for firms who could not afford to maintain a full-time agent. Indeed Bell and Sandeman themselves used a traveller working for the Canon Brewery as their first London agent. The question which had to be answered by those who took such agencies was "To which job do I devote most time and energy"? In Sandeman's case the agency won the day. Worse still, and in a combination of unfortunate circumstances this seems to have brought matters to a head, Sandeman had been buying goods for himself and charging them to the partnership. The actual goods were a box of cigars and a portrait for his mother to the value of £8. On top of the cigars and portrait there was also a bill of £12 for a horse and gig which Sandeman had managed to "write-off" whilst travelling on his own business and for which he refused to pay. The ensuing correspondence reveals Bell as the aggrieved party:

"...you remember you and I agreed that we should each be liable for our own accidents happening either to horse or gig but those have occurred when travelling about your own private affairs unconnected with the business, but as I gave Ritchie no instructions to keep your account separate from the firms, of course he now looks to me for payment, and as I have no intention of going to law with him in regard to a debt due by you, if, I cannot recover it from you I must pay it myself and be made the loser however unjustly, and can only say I expected more honourable treatment at your hands.

Be so good as to let me know what answer I shall give ... I may remark that I am sorry to see you write in such an unfriendly strain, as I am ignorant of having given any cause for it. I believe I have always acted most justly towards you, and am only asking for the same in return."

This letter procured no settlement of Sandeman's debt and Bell wrote again demanding payment and threatening to take the matter to law:

"Since writing you...I have felt so much hurt at your evident intention of saddling me with £20,11.6 of your debt, with which I have nothing earthly to do, that I intend resisting payment of Ritchie's claim against you, which will bring an action before the Sheriff, in which your behaviour will be fully exposed, and as Ritchie tells me has plenty of evidence to show how unfit you

---

2. L.B. 17th January 1866.
"were to be entrusted with horses and gigs, I don't see how the Sheriff can give any other decision but against you, but before doing anything further in this matter I intend laying the correspondence before Messrs. Roy and Spears if I do not receive an immediate remittance for the above amount." 3.

Threat of resort to the law produced - though not immediately - the desired remittance leaving "...only (the) regret that you did not clear up these matters before you left as it has been very painful for me to receive such communications as you have lately thought proper to send to me." 4

The other unfortunate circumstances which helped to rupture the partnership involved the level of profits and the London market. The partnership was hardly returning sufficient profit to keep the two partners and Arthur Bell's relations. In 1865, total profit was £1,925 and if the firm was to have any prospect of expansion some of this figure would need to be ploughed back. Besides the demands of the family there was also the abortive attempt to get into the London market which ended in bad debts and ill feeling in direct proportions.

III. FAMILY FINANCE

The immediate problem for Arthur Bell was to replace the capital which Sandeman withdrew from the partnership - a sum of £2,597 in 1864 - and for the only time in his career Bell turned to bank borrowing. There are no documentary sources to tell why Bell was so loathe to borrow from the banks. Most probably it was due to his desire to be free and independent of sources over which he could not exert personal influence. His unwillingness

4. L.B. 14th February 1866.
to use bank credit makes his firm untypical of the spirit dealing trade as a whole. Whisky bills advanced by the banks against the security of bonded stocks were to be an important source of finance but Bell, by 1870, had cleared his account with the Central Bank and it was not till his sons sought capital for a vigorous policy of expansion after their father's death that the firm again turned to the banks. In addition to bank finance, capital resources were augmented by tapping two other sources: "the Misses Duffs", who were friends of the family, and ploughed back profits of the firm. As can be seen from the table of Owner's Drawings, Bell waived his share of profit in 1865 and with the exception of 1866 returned over half the profits to the business:

**TABLE 81 - Owner's Drawings from the Profits of the Firm**

<table>
<thead>
<tr>
<th></th>
<th>1865</th>
<th>1866</th>
<th>1867</th>
<th>1868</th>
<th>1869</th>
<th>1870</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Total Profit</td>
<td>£1925</td>
<td>1922</td>
<td>1718</td>
<td>1809</td>
<td>1935</td>
<td>1907</td>
</tr>
<tr>
<td>B. To Arthur Bell</td>
<td>£0</td>
<td>1023</td>
<td>618</td>
<td>789</td>
<td>923</td>
<td>939</td>
</tr>
<tr>
<td>C. Balance of A</td>
<td>nil</td>
<td>53%</td>
<td>36%</td>
<td>44%</td>
<td>48%</td>
<td>49%</td>
</tr>
</tbody>
</table>

Sources: A.B. & S. Personal Journals.

This financial strain was not helped by the second of Bell's misfortunes: the loss of the £2,000 loan he made to John Bell. This loan was but one of many which Arthur Bell made to his relations. It was however one of the largest and for a more risky purpose than usual. Most of the loans given to the family were for personal purposes, especially education. For example, James Bell, a dental surgeon in Glasgow borrowed to finance his training and to set up in practice. This was a debt which Bell noted in his journal as "never to be claimed until he is quite able to pay." Likewise Robert Bell received aid for his civil engineering course. Other loans paid passages for Bell's settling in the Empire: Elliot in Canada and Imrie in New Zealand. John's was different. It was to
establish him as an importer of guano fertiliser in Leith. This was an exceptionally risky business to enter, marked as it was by fluctuations in supply and an almost total monopoly of Peruvian guano imports by the London agent. In addition, guano was being replaced by artificial fertilisers. In 1867 John's firm failed and shortly afterwards John died. Arthur Bell was left to wind up the company and assume the responsibility for John's wife and family.

IV. THE LONDON MARKET

Amidst these setbacks, which in all conscience were sufficient to confound the most determined stoic, Bell was struggling to open a fresh outlet in London. The failure of Bell's first attempt to enter the London market merits attention. In 1855 the firm had offered whisky to a retailer in England and in 1862 Bell appointed an agent in London. The first move showed initiative and the second preceded any such action by the majority of Scotch whisky dealers. Bell was not the first dealer to probe the London market. Ushers of Edinburgh had established a London office as early as 1844 but Bell was well ahead of other firms. Dewars, another Perth firm, did not appoint an agent in London until 1879 and Walkers, a Kilmarnock firm, until a year later.

Bell enlisted the support of Sandeman & Co. of Oporto in finding a reputable agent. In this there was nothing novel nor in the terms of the agency which were outlined in a letter to one of the partners of Sandeman & Co:

6. There is some mystery about his death. Letter book correspondence hints at suicide.
7. L.B. September, 1862.
"I referred to our conversation regarding an agency in London for the sale of whisky in casks. Samples which we can deliver free of carriage in London at

No. 1: 60 p. 17/- p. gal
No. 2: 110 p. 17/6 p. gal (less 3d. p. gal discount if paid within 3 months.)

We agree to allow your friend 1/- per gallon commission on all sales paid in full and we would require to charge him with 1/- per gallon on any sales which may turn out to be bad debts, but we trust if he is inclined to take orders for us, that they will be only from parties of undoubted character and means and that the credit will never exceed 4 months, as 3 months is the usual credit we allow. Casks to be charged in invoices and allowed for when returned."

It is noticeable that these are almost exactly similar terms to those in the Scottish trade. With the exception of a months extra credit there are no special credit facilities. The business was to be started in casked whisky as opposed to bottled which would limit sales almost certainly to public houses and hotels. This approach, which would involve the ever present danger of bad debts, was dictated by the absence of facilities for bottling in bond.

None of the sophisticated sales methods which were to be developed later are present: there are no discounts for large orders, no allowances for advertising, and no attempt to change the product to suit the tastes of the London market. Here is Scotch for the Scots with the difference that it is being sold to Englishmen. The absence of any attempt to find out with samples if the product would be acceptable to London tastes can be seen, with the benefit of hindsight, as the greatest weakness in this first attempt. It was the first fault which the agent, Mr. Young, reported. The London customers did not take to the heavier taste of the whisky offered.

The element of indignant surprise at this consumer reaction comes out in Bell's reply:

"Your friends do not seem to be aware that the finer whiskies in Scotland are only made at 11 to 11.6 o.p. and that when kept a couple of years they fall in strength at least 3%. We do not usually send out our whisky to customers who are particular as to quality until it is of that age, but if your friends value the strength more than quality we must just send them new whisky..." 9.

8. The prices quoted included duty at 10/- per proof gallon.
This new whisky, whether it was malt or grain, would have been sharper in flavour and lighter to the taste.

Initially the agency was to run for a year. Half way through the period satisfaction was expressed "with your mode of conducting our agency. (We) trust you will continue in the same safe and prudent course which we much prefer to a large and hazardous connection." However, safety and prudence are not always the sisters to seduce customers and by the year's end Bell expressed disappointment to his contact in Sandemans:

"I have been expecting to see, or hear from Mr. Young as he promised but have been disappointed, and as the few customers he got for us may now be going elsewhere for their whisky and we are unwilling to make a new arrangement with Mr. Young in the way he proposed to Mr. Sandeman, we would feel much obliged by your proposing to any party whom you think suitable in every respect to carry on the agency in the same way as Mr. Young did. I may mention that there is still owing to us by Mr. Young £29.0.10 overdue..." 11.

The £29.0.10 overdue probably rankled Bell more than the absence of customers. Perhaps this is unfair. The agency system demanded a large amount of mutual confidence. Misplaced trust which gave rise to bad debts was both a free distribution of whisky and a drain on the credit reserves of the firm. It was better to cancel the agency and attempt to collect unpaid bills than allow affairs to drift whilst maintaining a Micawberish pose of "waiting for something to turn up." In the event the agency was cancelled and Sandemans appointed a Mr. Schofield as the new agent. This was in November 1863 and four months later Bell was complaining that "..Mr. Schofield is sleeping..." 12 Apparently he slept for some time because by October 1864 little progress had been made in the collection of accounts and indeed the amount outstanding had risen to £113, on top of which no new orders had been received for over three months. After enquiries by Sandemans it emerged that the customers had paid the money to Schofield, and Bell promptly threatened to place the

10. L.B. 22nd April 1863.
11. L.B. 2nd November 1863.
12. L.B. 8th March 1864.
matter in the hands of a London solicitor. The threat of legal action produced a small remittance and the hope on Bell's part that Schofield would "have a little more regard to our interests in the future." It was a forlorn hope, and this unhappy state of affairs in London was being matched by the quarrel between the partners in Perth. The result was that Bell informed Schofield on the 1st of June 1865 "...that my partnership with Mr. Sandeman is dissolved and as I intend to withdraw my London agency, I will feel particularly obliged by your collecting the accounts and remitting them to me without delay." As might have been expected Schofield was no quicker in doing this than he had been over finding customers, and once again Bell had to prevail upon the good offices of his friend in Sandeman & Co.

"I am beginning to despair of prevailing on Schofield to collect my outstanding accounts after frequent applications ... I am ashamed again to trouble you about my affairs but I think you once mentioned that you thought one of your collectors would take the agency, and if not he would perhaps collect the annexed accounts for which I would give him 2½%. I don't think it would be advisable to have another agent unless he was constantly calling on the trade such another as Mr. Young." Despite his reservations about another agent, a Mr. Bennett was taken on largely as a debt collector, but in fact proved no more successful than the others as salesman or debt collector.

"Mr. Bennett is not nearly such a good salesman as Mr. Young. He only gets orders for small quantities of whisky in jars. I have not yet received a penny from him...he says Old and Conduit (the only two customers that have taken a caak each) are not able to pay yet." Three agents had been hired, all proved unsuccessful, and all were fired, the first two involving the firm in losses. Was this just bad luck in choice of agents or were there good reasons why the agency system failed Bell so badly? In part the problem

13. L.B. April 1865.
15. L.B. July 1865.
was one of communication and trust. Overseeing an agency in London from 400 miles north was no simple matter, the utter frustration of failing control and lack of reliable information is clear from the correspondence. It is noticeable that those firms which were later to work the agency system most successfully, very quickly placed a partner or sales manager on the spot to supervise, and followed this up by opening a branch office where accounts could be collected and sales books audited. Thus Dewars although much slower than Arthur Bell in appointing a London agent were quicker to establish a branch office. T.K. Dewar, the youngest partner in the firm, was sent to London in 1885 (aged twenty-one) with orders to supervise the agent and expand the firm's sales. In 1887 he opened the firm's first branch office. Alexander Walker did likewise and by 1888 London had not only its own administrative centre, but also bottling and storage facilities. Both firm's offices ultimately became the spearhead of the whole sales operation. It was not just a simple choice between honesty and trust, the probability of ever finding the perfect combination of good salesman and good account collector was exceptionally low. Indeed, by continually pressing for payment, a salesman was hardly likely to endear himself to his client however popular he might be with his employer. Aggravating this dilemma was the standard of commercial morality in the wine and spirit trade which seems to have been very low even by the standards of the 1860s. Embezzlement and fraud formed, along with bankruptcies, a large part of the staple fare of the trade press. The route to Carey Street was paved with dishonest partners and absconding agents. If it was any consolation to Arthur Bell, struggling to open the door to the London market, other firms suffered just as much. 17

It was a trade which was easy to enter and easier still to leave which no doubt accounts for Bell's continual admonitions to cautious advance. For most firms bad debts were the greatest risk

17. See Chapter 17.
factor in rapid expansion and to Bell these were the biggest irritant and source of worry. Moreover, bad debts were worst in the type of business Bell sought. This, as Bell’s letter appointing his fourth agent in seven years shows, was in the public house trade. It is a curious inconsistency in his policy that he attempted expansion along the line which his experience in Scotland must have told him was the riskiest.

The fourth offer to act as London agent for Bell came from the traveller for the Canon Brewery, a James Ruston. Bell had already tapped this source of recruitment. Bennett and Young had both held the same position in the Brewery and each traveller probably mentioned this source of extra income to his successor. In September 1869, Ruston wrote to Bell asking for a list of his customers in London. Bell pointed out that it would need some revision, "it being some years ago since some of them purchased." The list must have contained the possibility of securing sales, for Ruston agreed to accept the agency and Bell was well pleased with this:

"It is with much pleasure I have received your note offering to act as agent for the sale of my whisky, and if possible to increase my trade throughout your connection. I accept your offer in the hopes that sales may be largely increased, but would impress upon you the necessity of taking orders only from those in whom you have implicit confidence. I trust to your doing so and in return will ask you for no guarantee... I shall allow you from these prices 1/6 per gallon for commission (prices 3 months credit; 18/- casks, 19/- jars 90 p.) and discount if any." 19

Of the Twenty five customers on the list, all but one was the licensee of a Hotel or Tavern, and the names of the public houses suggest that Bell was not aiming for the highest quality market: "The Goat and Star" at Piccadilly, "The Clothworkers Arms" at Islington and "The Red Cow" at Smithfield being included.

How did Ruston fare? Apparently not at all well for not a single order came Bell's way. After five months Bell wrote to him:

"I presume your other duties have hitherto prevented you from procuring any orders for my whisky, but as soon as it is in your power I shall be very glad if you would send me a few, as I should be unwilling to drop the connection already formed, and was in hopes that it might even have been extended." 20.

Clearly Bell was not having any more joy with his fourth agent than with his first three. This situation dragged on for another year, as exasperating as it was unrewarding:

"Being very desirous of renewing my connection with the Spirit Trade in London, I am induced again to write to you on the subject, and to ask if you would not now be inclined to act for me, as I should imagine from your daily communication with those who are buyers of whisky, you might with very little trouble send me an order at least once a week for a single quarter cask, which at 1/6 a gallon commission would add a hundred guineas a year to your income. My prices are same as before. Hoping to hear from you." 21.

It is noticeable that the commission Bell was offering had increased from 1/- to 1/6 since his first bid to sell whisky in London. Also the letter gives a measure of the volume of trade for which Bell was hoping, a quarter cask a week being over 1,400 gallons a year. 22 In the absence of sales records for the firm it is impossible to say exactly what the relative importance of the London market would be. What is certain is that gaining entrance to the first city of the Empire held the possibility of potential sales expansion as well as prestige for the firm. 23

Yet prestige has its price. Bell's approach had been essentially a cautious one and in the clash between caution and advance the former won. No more was heard of Ruston, and Bell thereafter tried to secure sales in London by approaching the few customers his several agents had introduced. This method resulted

20. L.B. 16th February 1870.
22. A quarter cask in bulk gallons i.e. gallons of unspecified strength, is 28-35 gallons.
23. See Chapter 17.
in only two substantial enquiries in the next fifteen years and it was not to be until 1886 that Bell again tested the English market.

Bell's abortive attempts to open an outlet in London for his whisky, the breakup of the partnership and his brother's financial failure all seem to have reinforced his prevailing cautious attitude and after 1871 he concentrated on the business he knew best, the whisky trade in Scotland.

V. BEER AND WINE

The depression in the Scottish spirit market also sent the partners looking for new outlets for beer and wine. For a short while during the Bell and Sandeman partnership there had been hopes that the beer side of the business might be expanded. In 1862 the partners sought and obtained agencies for the sale of Burton Ale and London Porter. Burton Ale did not prove successful. It did not travel well and the few customers who placed orders complained that the Ale was flat and cloudy. After a brief correspondence in which Bell and Sandeman cast doubt on Messrs. Bass's brewing capability, and Messrs. Bass slighted the partner's skill as cellarmen, the agency was ended. Bass's criticism was probably well founded for better fortune attended the London Porter agency, and part of the explanation lay in the close care which the partners took in handling the Porter. The agency had been granted by Messrs. Field & Co., the proprietors of the Canon Brewery. When they enquired after the way in which the Perth firm was handling the product they seemed well satisfied by Bell's answer that:
"...we allow it to flatten in wood, we let it lie on the gantries from one to four months after having placed a spike in the bung, slackening or tightening it as the Porter is brisk or flat, and it ripens in bottle in about the same time as it has been in cask and of course the warmer the weather the sooner it is ready for use. We pack the bottle on their sides in a bin as we do wine..." 24.

The other reason for the success lay in the discount which Bell and Sandeman were able to extract from Fields in order to compete with Scottish porter from the Edinburgh breweries. Fields were willing to give a discount as their ambition was to open up a market in Scotland similar to that enjoyed by Barclays, another London brewing company. Moreover London Porter fitted in well with the Perth firm's activities, for "...the finest Imperial XXX London Porter...we keep for our family trade..." 25 Like tea it slotted in to complete the parcels of wines and spirits made up for the family trade. What started as a purely business deal became a pleasure for Bell when George Sandeman, his old contact in London, was made a partner in the Canon Brewery, a position "...I am certain you have wrought well for. It will give me now much more pleasure to drink and sell the stout brewed by Messrs. Field & Co..."26. The pleasant aspect of the connection must have increased, for although sales were not large, after three years Bell was able to raise his orders as "...your Imperial stout is so good, the few customers I have for it are rapidly consuming it."27

The technical problems in handling London Porter were easily overcome. This was not so with Guinness the well established branded porter. In this case the source of the trouble was Guinness's agents in Scotland, A. Arrol & Sons of Glasgow. Complaints about the muddy state and acidity of the Guinness Bell was buying for bottling from Arrols, led him to approach the Dublin brewers to serve him directly rather than through their Scottish agents. This however Guinness were unable or unwilling to do. As with the

24. L.B. 8th March 1864.
25. L.B. June 1864.
27. L.B. 13th October 1867.
Burton Ales it was suggested that the fault lay in Bell's cellar keeping and specifically with his low turnover which meant that the stout lay for a long time on the gantries instead of being rapidly bottled and put into consumption.

Apart from any question of the relative profitability on beer and spirits these difficulties, the waste involved and the loss of consumer goodwill led Bell to concentrate his attention on spirits. Similar difficulties affected his wine trade, though again the fault did not always lie with Bell:

"...we are sorry to hear that the Champagne last sent now six years ago has turned acid. It was the finest quality shipped by Usseors, Chanoine & Dagonet, a house of the highest standing and of whose wine we never before had a complaint. Acidity may be caused either by the wine being in a cellar of variable temperature or by air penetrating the casks if the bottles happen to remain any time on end; as Champagne requires to be kept in a cool cellar or a uniform temperature, and should always be undisturbed on its side. We trust this will give satisfaction." 28.

What contribution were these subsidiary items making to the firm's profits?

**TABLE 82 - Contribution to Total Profit by Wines, Spirits, Malt Liquors and Tea**

<table>
<thead>
<tr>
<th></th>
<th>1841</th>
<th>1851</th>
<th>1865</th>
<th>1875</th>
<th>1885</th>
<th>1895</th>
<th>1905</th>
<th>1915</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit from Wines £ ...</td>
<td>253</td>
<td>172</td>
<td>467</td>
<td>.475</td>
<td>277</td>
<td>235</td>
<td>395</td>
<td>367</td>
</tr>
<tr>
<td>% age contribution ....</td>
<td>29</td>
<td>22</td>
<td>24</td>
<td>.25</td>
<td>14</td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Profit from Spirits £ ...</td>
<td>537</td>
<td>538</td>
<td>1365</td>
<td>1378</td>
<td>1631</td>
<td>4998</td>
<td>13,029</td>
<td>23,837</td>
</tr>
<tr>
<td>% age contribution ......</td>
<td>61</td>
<td>69</td>
<td>71</td>
<td>72</td>
<td>85</td>
<td>95</td>
<td>95</td>
<td>97</td>
</tr>
<tr>
<td>Profit from Malt Liquors £</td>
<td>48</td>
<td>28</td>
<td>62</td>
<td>53</td>
<td>24</td>
<td>42</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>% age contribution ......</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Profit from Tea £ .......</td>
<td>33</td>
<td>39'</td>
<td>19'</td>
<td>6'</td>
<td>2'</td>
<td>-</td>
<td>277&quot;</td>
<td>-</td>
</tr>
<tr>
<td>% age contribution ......</td>
<td>4</td>
<td>5</td>
<td>2</td>
<td>-1</td>
<td>-1</td>
<td>-</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Profit from Others £ ....</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>31</td>
<td>359</td>
</tr>
<tr>
<td>% age contribution ......</td>
<td>-1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Total Profits £ ..........</td>
<td>871</td>
<td>777</td>
<td>1924</td>
<td>1914</td>
<td>1984</td>
<td>5275</td>
<td>13,732</td>
<td>24563</td>
</tr>
</tbody>
</table>

**Note:**

1. All percentages have been rounded, where an item contributed less than 1% this is signified by a minus (-) in front of the one.
2. Tea had gone from the sales list by 1871 but the accounts from 1851 do not distinguish between tea and black beer. This is indicated by a prime (').
3. From 1900 the firm was able to charge for rent. This is included in the 1905 profit figure and is marked with a double prime ("'). Reates and profits from the joiners shop are in the original accounts from 1903 and 1910 respectively. They are excluded here as is warehouse rent after 1905.
When Arthur Bell came into the firm in 1851 profits from wine were only £172 or 22% of total profits. By 1865 wine sales netted £467 and whilst the rising spirit sales meant that the contribution of wine profits to total profits had only risen to 24%, the 1860s and 1870s were generally good years for the wine side of the business. No doubt this was merely a reflection of the national picture. The Cobden Treaty of 1860 with France opened the U.K. to the import of light wines at a duty sufficiently low to bring the price within the reach of a new middle class market. The attraction of these low priced wines and the lack of knowledge of their relative merits led to a heavy reliance on brand names. 29

In some respects, especially the emphasis on brands, the large increase in the number of wine sellers, and the selling of brands by agents, the expansion in the wine trade resembles the features of the upsurge in popularity of Scotch whisky in the 1890s. By 1876, wine consumption in the U.K. had reached its peak - at 18.5 million gallons and 0.56 gallons per head - and thereafter decline set in. Bell's wine profits almost exactly duplicated this, peaking in 1871 at £536 and dropping after that date. In view of Bell's later admonitions against advertising it is almost certain that he did not join in the rush to secure agencies and exclusive rights to brand names. Instead he continued to rely on the old established connection with Sandemans of London for wines with which to supply the family trade. Nor were these all middle class families. In 1866 he sought to supply one of Perthshire's aristocracy:

"I am informed that the Duke of Atholl intends residing at the Castle. I should be glad if permitted to submit samples of my wine for his Grace's inspection, and if you have an opportunity of recommending a trial I shall

29. See G.B. Wilson, op.cit. pp.40-44.
"do my utmost to give satisfaction, having at present a well assorted stock both in wood and bottle.

You will kindly excuse the liberty I take in requesting this favour."

Whether the Duke's secretary excused the liberty or not remains unknown. However important securing sales with the aristocracy was, and in an age of increasing middle class emulation of upper class tastes it should not be underestimated, it was far less consequential than the growing affluence of the mid-Victorians and their extraordinary thirst for not just the usual brandy, gin and whisky but also an exotic range of British wines like:

"Elder Flower and Elder Berry at 18/- per dozen. Strawberry, Gooseberry, Cowslip, Raspberry, Black and Red Currant and good Rhubarb at 16/- The qualities, all of which we can warrant, being from a first rate manufacture."

The mid-Victorians thirst was also reviving the spirit market. In 1861, Scottish spirit consumption was 4.25 m.p.g. In 1852, the year before the duty increases began, it had been 7.17 m.p.g. Consumption recovered after 1861 and by 1878 it had risen to 7.142 m.p.g. an increase of 63% which brought it very close to the previous peak in 1852. Although for most spirit merchants this increase was probably more a question of recovering lost ground than of making fresh advances, it does help to explain why Bell did not persevere with the English market after 1871. Depression at home had inspired the search for sales in England. The lifting of the depression made it less essential to maintain the search. So too did the collapse of the partnership with Sandeman which left Bell as the sole recipient of the firm's profits. Between 1865 and 1869 these average £1,862 a year and in the following five years they increased to £2,036. This was not as much as Scottish consumption increased but the profits were, for the moment, adequate for Bell's family responsibilities. He had cleared off John Bell's debts and established a trust fund for his three sisters. The firm's profits were also sufficient for him to begin investing a

30. L.D. 9th May 1861.
portion of his capital overseas and in 1874, with the purchase of £374 worth of stock in the Chicago and Alton Railroad, he began the construction of a portfolio which by 1892 was worth £15,537. 31

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CHAPTER FIFTEEN

THE BLENDErs - ARTHUR BELL AND SONS LTD.

"THE QUALITIES OF MY GOODS.. SPEAK FOR THEMSELVES"
(1870-1895)

Contents: 

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CHAPTER FIFTEEN

THE BLENDERS - ARTHUR BELL AND SONS LTD.

"THE QUALITIES OF MY GOODS...SPEAK FOR THEMSELVES"
(1870-1895)

I. INTRODUCTION

The twenty-five years after 1870 stand out as a distinctive phase in the firm's history. The period began with the firm's extreme dependence on the Scottish spirit market and ended with attempts to escape from this straitjacket into the export trade. Also, the disappointment of the firm's early efforts in England gave way to a rekindled hope that the agency system might be favourably operated to establish Bell's whisky there. In 1886, Bell began appointing agents in England and in 1890, his first overseas agent in Australia. Exporting and the renewed enthusiasm for the English market were responses to the intense competition in the Scottish spirit trade during the 1880s, partly brought about by a 19% fall in consumption between 1878 and 1889.¹ The hunt for new customers was also, however, designed to widen the firm's markets to provide a bountiful inheritance for Bell's two sons.

By the end of the 1880s Bell had been almost forty years in the whisky trade and his desire to hand on a good going concern to his sons was a powerful motivating force. In the Autumn of 1889 his eldest son, Arthur Kinmond Bell, or "A.K." as he was known in the trade, joined the firm. Six years later he was given a partnership with a half share in profits.² In 1896, the second son, Robert Duff Bell, became a partner and profits were shared equally between all three. Having carefully arranged for his sons' succession Arthur Bell gradually withdrew from the day to day running of the business. He died in 1900.

¹ From 7.142 m.p.g. in 1878 to 5.769 m.p.g. in 1889.
² The profits were divided after allowing for re-investment.
The development of the firm during those years when Arthur Bell was in sole command was strongly influenced by his own individual sales philosophy of which a rigorous insistence on quality, a total refusal to advertise, and a continuing faith in the virtue of cautious advance were the main hallmarks. "Slow and Sure" was Bell's business creed but the upsurge in consumption after 1889 called this into question. So too did the contrasting beliefs of his sons, and Arthur Bell's policies were not to leave an indelible mark on the firm. The abandonment of many of Bell's policies by his successors and the relatively more dramatic advance of other blending firms in the hectic decade of the 1890s, makes 1895, the year of A.K. Bell's succession to partnership, a useful cut-off point in the firm's history.

Important as Bell's beliefs were, the firm was also influenced by general changes in the spirit market. These included the increasing concentration amongst the producers of grain whisky, marked by the formation of the Distillers Company in 1877, and the behaviour of spirit consumers in a situation such as existed between 1860 and 1890 where spirit duty remained unchanged. The main argument of this chapter is that it is difficult to understand the factors influencing spirit consumption without a knowledge of the way the trade responded to changes in the market. The chapter examines the practice of blending and the changing supply and demand conditions spirit dealers like Arthur Bell faced. In the light of the trade's response it takes a critical look at previous interpretations of consumer demand for spirits. In the Chapter Sixteen the focus returns to Bell's customers and to the development of the English and export markets down to 1895.

3. L.B. 26th July 1890.
II. THE PRACTICE OF BLENDING

By 1870 Bell was selling a variety of differently priced blends and purchasing a wide range of whiskies including the popular Glenlivets. Whilst he mentions the importance of age or maturation there is as yet nothing in his sales correspondence which specifically emphasises that he is selling Bell's whisky, nor does he have any trademarks or devices registered. It is not just that the more sophisticated advertising, common in the trade by the 1890s; the frosted bar mirrors, the stamped ash trays and drinking glasses, the pipers and the tartans is missing, even the humble showcard is allowed no place in Bell's sales philosophy. His philosophy, as he tells a Glasgow customer in December 1879, is based on "... more than thirty years in the trade..." and carries the lesson:

"...that several fine whiskies blended together please the palates of a greater number of people, than one whisky unmixed, consequently I have long adopted that practice, and never found it necessary to send out showcards but just allowed the qualities of my goods to speak for themselves.

The best whisky I sent you is a combination from seven different distilleries and the cheaper is a blend of Highland, and South Country Whiskies, and I am glad to hear they give satisfaction." 4.

Here was a pride in quality and a belief in the virtue of his own experience which was to last Bell for the rest of his business career, not just in the home market, but even in the development of his export sales. It did not survive unchanged with the second generation. In part its origins lay in the old style of family trading where price was less important than quality and where long established connections could be cossetted and nursed. As much as the nature of the customer the success of the policy depended on the skill of the blender and the behaviour of the excise duty on spirits.

4. L.B. 9th December 1879.
The blender takes his profit on the difference between the price at which he buys whisky from the distiller and the price at which he can sell to the customer. From this margin he must meet the cost of casks, insurance, freight, advertising, administration, credit and storage. After all these are deducted he has his net profit. By themselves these items make any attempt to gauge profit margins - especially historically, fraught with difficulty. An even more formidable obstacle is deciding what is meant by 'whisky', in other words what are the constituent items in the blend? Just as today this remains the essential secret at the heart of the blender's art - and less romantically - a crucial pricing decision, so historically it is the area where least information can be found and analysis assumes a highly conjectural form. Bearing this basic limitation in mind what sort of picture of Bell's blending practice can be outlined?

It is best to start with an examination of the possible extremes of profit. If the letter to James Ruston, quoted on page 432, is used as an example of the prices and conditions under which Bell was working the following picture emerges. The letter gives a selling price of 18/- for a gallon of 9 over proof whisky in casks. Commission for the agent absorbed 1/6 (no strength specified) of this price leaving 16/6 to meet (1) duty at 10/- per proof gallon in 1869, (11) the cost of a gallon of 9 o.p. whisky, and (111) a proportion of the cask, insurance, freight etc. Adjusting the cost of 16/6 at 9 o.p. to proof strength gives a selling price of 14/11. Deducting duty at 10/- per proof gallon leaves 4/11 p.p.g. as the price of the whisky, proportion of cask, insurance, freight, etc. plus profit. Now the crucial item is the type of whisky Bell was giving to his customers for this is the main element influencing profit levels. In 1869 Bell was purchasing whisky from the distillers which ranged in price from Carsebridge grain whisky at 2/1 p.p.g. to Glenlivet malt at 4/- p.p.g. Thus if the whisky was unblended, new and (a) all grain, Bell had a margin of 4/11 less 2/1 to cover
cask, freight, insurance etc., or (b) all Glenlivet at 4/-, a margin of lld. On these assumptions and conditions the range of possible points from which to choose a profit margin was from lld. to 2/10. However it is known that Bell was mixing his whisky and this would give him an almost infinite range of choice within these limits from his purchases of Carsebridge (grain), Auchertool (Lowland Malt), Glenlivet and another unidentified Highland Malt. This is demonstrated in Table 83 which shows the blending profit possibilities under seven crude assumptions of the types of whisky he was selling.

Table 83 - Blending Profit Possibilities (1869)

<table>
<thead>
<tr>
<th>Range of Whiskies</th>
<th>Price per Proof Gallons</th>
<th>A</th>
<th>100%</th>
<th>B</th>
<th>25%</th>
<th>C</th>
<th>50%</th>
<th>D</th>
<th>50%</th>
<th>50%</th>
<th>50%</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Carsebridge (Grain)</td>
<td>2/1</td>
<td>2/1</td>
<td>4/-</td>
<td>/6½</td>
<td>1/0½</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>B. Auchertool (Lowland Malt)</td>
<td>2/4</td>
<td>-</td>
<td>1/2</td>
<td>1/7</td>
<td>-</td>
<td>1/2</td>
<td>-</td>
<td>2/-</td>
<td>-</td>
<td>-</td>
<td>1/2</td>
</tr>
<tr>
<td>C. Glenlivet (Highland Malt)</td>
<td>4/-</td>
<td>-</td>
<td>1/-</td>
<td>-</td>
<td>1/0½</td>
<td>-</td>
<td>1/9½</td>
<td>-</td>
<td>1/9½</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>D. Highland Malt</td>
<td>3/7</td>
<td>-</td>
<td>-</td>
<td>/10½</td>
<td>-</td>
<td>1/9½</td>
<td>-</td>
<td>1/9½</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

| Cost of Blend             | 2/1                     | 4/- | 3/-  | 2/2½| 3/9½| 3/0½| 2/1½|
| Margin at Selling price of 4/- | 2/10               | 1/11| 2/8½| 1/10½| 3/11½| 2/1½|
| % Gross profit            | 58½                    | 19½ | 39½  | 55% | 23% | 38% | 40% |

Note: The two quotations of 100% Carsebridge and 100% Glenlivet are obviously not blends. They are included to show the two extremes.

Now while this table, simplified as it is both by exclusion of age and choice of proportions of constituents, gives an idea of the possible theoretical points at which Bell could have taken his profit it is by no means the whole story for there are still two other variables to be included in discussing the gross profit margin: the price of spirit from the distillers and the price which the consumer will pay.

5. The element of simplification here is very large indeed. One of the great complaints against the blenders was the practice of less scrupulous blenders of misdescribing the age of their whisky. The introduction of maturation had the effect of raising the cost of whisky to the blender because of the additional charge for storage, capital, insurance and casks. The ultimate effect on profit depends on whether these additional costs were covered by the increase in price of mature whisky to the consumer.
III. THE SUPPLY OF WHISKY

Taking the former, the distiller’s price, how much influence did Bell have on this? The answer really resolves into a discussion of the relative market strengths of, on the one hand, the grain distillers and on the other, the malt distillers. For both groups the 1870s were years of important developments. The Lowland grain distillers were struggling to find a stable trading agreement to regulate output, prices and terms of sale. In 1874 they succeeded in introducing rent for spirit stored in their warehouses. That year also saw the formation of the North of Scotland Malt Distillers’ Association one of whose aims was to alter conditions of sale in favour of the distiller. It mirrored an association formed earlier amongst the Campbeltown distillers. It is clear from Bell’s records that neither the Elgin or Campbeltown groups had much influence on price. The flagging Scottish market, which made such attempts at combination inevitable, also made the prerequisite trust and cohesion amongst independent distillers impossible. Also the distillers’ customers, the blenders, were exceedingly flexible in switching their sources of supply. Until the growth in demand for mature whisky placed a premium on long-term stock purchasing by the blender, he was able to switch his purchases to the distiller who offered the lowest price. This situation was changing rapidly, for in the 1870s alone, the volume of Scotch whisky stocks trebled.

Bell himself put pressure on malt distillers to lower prices. In 1871, having sent casks to the Campbeltown distillery of Messrs. Beith Ross & Co., to be filled “...with your best and most silent whisky at your lowest cash price...” he was told the price had been raised. His retort that another Campbeltown distiller had offered whisky at a lower price resulted in an immediate reduction. Whether this was true or not hardly mattered. This sort of pressure was

6. See Chapters 7 and 8.
7. Silent whisky was whisky without any pronounced flavour. It was an interesting request in view of the critical comments of malt whisky distillers about the silent quality of grain spirit.
easy in view of his blending technique, which was, by later standards, remarkably crude. For, as he pointed out to one of his few remaining London customers in 1878:

"...I cannot tell the exact age of my best old whisky as I never empty the large tun in which it is blended, but that which you had in October last at 13/6 was then two years old, not being a favourite in this market. I am sometimes enabled to buy it 2/6 per gn. cheaper than the finest whiskies I usually blend." 8.

Thirteen years later the extremely rapid build up in stocks of mature whisky and the increasing sophistication of taste amongst Bell's consumers made this sort of blending obsolete. Juggling with well established blends was a risky proposition and even an offer of whisky on exceedingly favourable terms from John Hopkins & Co. of Tobermory distillery could not be accepted:

"I thank you for your last offer of Tobermory whisky and 6% after three years, on the chance of my taking some of it into stock here.

As I have already suffered by making a slight alteration in my blend I intend in future to abide by the blend I have adopted for so many years, therefore I could hold out no hope of trying the Tobermory however good it might be..." 9

Despite this inflexibility in the choice of blend components the Highland Malt distiller was not able to increase his market power. Indeed Bell made it clear that if the distiller was prepared to carry the risk of a switch in blends then a deal might be arranged:

"...My son merely mentioned that another house sold me whisky offering to take it back at the end of a year if unsold, guaranteeing me 7½% in case it might be any object to you to make similar offers." 9

Such was the economic power of the blender in the overexpanded Highland malt whisky market of the 1890s. With the large Lowland grain distillers Bell's position was rather different. His correspondence with firms belonging to the Scotch Distillers'
Association of 1867/1877 makes it clear that members resorted to a variety of discounts such as longer credit and free carriage in order to secure sales. Even without these Bell was able to resort to the old tactic of playing one distiller off against another by placing an order, complaining about the price quoted, and gently mentioning that another rival distiller had offered superior terms. This game was older than capitalism and Bell played it superbly well against the two giants of Alloa and Clackmannans: Carsebridge and Cambus distilleries. Indeed in December 1873 Bell had the gall to suggest to John Bald of Carsebridge that if Bald gave Bell the commission the distiller's agent received:

"...I would have no objection to confine my orders for grain whisky exclusively to your house, as long as I found you supplied a quality to suit my purposes, and on the understanding you always charge me at the lowest cash price current at the date of your Invoices, and of course never exceeding the market price at the date when the orders are given." 10.

There were signs however that the game was nearly over, or at least that the rules were about to be changed, for Bald declined the proposition and when Bell put the same offer to Robert Moubray of Cambus he was again rebuffed. Further evidence that the grain distillers were gaining power came when Moubray, following the agreement on warehouse rent charged Bell rent for whisky in bond. Bell tried his old tactic:

"I observe you charge me rent on the few small casks you retained in bond for me, after the expiry of a year. As you are the only one of all the numerous distillers in whose bonds I have old whisky who has made such a charge I hope you will not be the first to exact it." 11.

Again it failed to work. This was in March 1876. Just over a year later, in April 1877, six of the leading grain distillers including Bald and Moubray formed the Distillers Company Limited.

10. L.B. 25th December 1873. (The point about the invoice and order prices is that following a rise in the grain markets the distillers revised their prices upwards and attempted to secure a price higher than that at which the order had been taken and higher than that of the grain from which the whisky had already been distilled giving them a form of windfall gain at the dealer's expense.)
11. L.B. 4th March 1876.
The first task undertaken by the directors of the new company was to rationalise the price structure of the six distilleries and to establish common terms of sale. This included a system of discounts based on the quantity purchased by dealers. The lowest discount level was an annual purchase of 13,000 proof gallons or 100 puncheons and much to Bell’s chagrin his purchases fell just below the required quantity. His annoyance was clear:

"I see you exclude me from participating in the smallest rate of allowance because the eight puncheons of Cambus which I ordered on the 28th March 1879 were invoiced to me on the 28th April or three days before your scheme came into operation, but of which scheme the Distillers must at that time have been aware and after keeping back my invoice 25 days, might have been sufficiently liberal to have detained it another three days.

I may remark that I never received one of your circulars intimating the scheme of allowances, and I am ignorant whether Malt whisky bought from other distilleries should be included." 12.

Nor was it helped by his finding out whilst in Edinburgh that:

"..Grain whisky had been bought at 1/9 on the same day as you have invoiced my six puncheons at 1/11. Such being the case I trust you will send me a corrected invoice. I must say that considering the many years I have been your customer I should be entitled to receive the allowances of 3d. per proof gallon on my yearly purchases, although they don’t amount to the specified quantity as such an offer was made to me by Distillers last autumn not of your company provided I dealt exclusively with them." 13.

Bell was not alone in his annoyance and disappointment. Many old customers of the grain distillers, both larger and smaller than Bell, were discontent with the discount system. Nor was the threat implied in the last sentence of the letter an idle one and Bell’s reaction was not unique. Two days later he wrote to Robertson and Baxter, the Glasgow dealers:

"..You might say on what terms you could supply me with Cambus whisky throughout the year, my purchases of Grain being under the quantity entitling me to bonus from the Distillers."

12. L.B. 24th April 1880. The mention of malt whisky from what were grain distilleries refers to the production at some of the W.C.L. distilleries of a malt whisky from an all malted barley mash in the patent still and in the Stein still. It fetched a premium over grain.

13. L.B. 19th December 1881.
Many did likewise. Through Robertson and Baxter and other large dealers increasing their purchases from the D.C.L. they were able to exert pressure for a larger discount which was then passed back to their customers. In Bell's actions the grain distillers' concern over the "abuse" of the bonus system can clearly be seen. There is no direct evidence on Bell's attitude to the United Kingdom Distillers' Association of 1878/1888 but he was one of the dealers who took shares in the North British Distillery Company and in Ardgowan Distillery, the second grain distillery founded by dealers in 1896. Probably he regarded the collapse of the U.K.D.A., or as Alexander Walker bluntly called it, "the whisky ring", with not a little satisfaction. Certainly, for the rest of his time in the trade he refused to buy grain whisky direct from the Distillers Company.

The overall effect of these developments in the grain spirit market on Bell are hard to judge. From 1870 to the formation of the D.C.L. his grain spirit probably cost him more as the distillers' influence grew. Thereafter the fall in grain spirit prices and the alternative arrangements he was able to make placed him at no great disadvantage, though in 1892 he was complaining to the North British Distillery about not receiving their most favourable terms. If anything the increasing concentration amongst the grain distillers reinforced his independence and fired a prejudice against the D.C.L. which did have damaging consequences. The dealers who came to terms with the new company secured extensive loan facilities which freed capital for investment in maturing whisky stocks. In January 1889 Walkers were given a discount on D.C.L. grain whisky and Dewars, in 1890, received credit of £12,000 on purchases from the D.C.L. in exchange for agreeing to tie their grain spirit requirements to the firm. Dewars' credit was rapidly increased and by November 1898, it amounted to £20,000. This help Bell never received and as he would not turn to the banks for loans the main burden of finance fell on the firm's profit earning capacity. Until the second half

15. D.C.L., B.M.B. No. 6 at January 1889 and June, 1890.
of the 1890s this was not great (See Table 84) and although on average, Bell reinvested about half the profits each year, his inability and unwillingness to turn to other sources of capital remained a drawback on the firm's progress not broken until his sons sought help from the banks.

<table>
<thead>
<tr>
<th>Period</th>
<th>Profit</th>
<th>Owner's Drawings</th>
<th>Re-Investment</th>
<th>( \theta \text{ as } % )</th>
</tr>
</thead>
<tbody>
<tr>
<td>1870/74</td>
<td>£2,036</td>
<td>£ 998</td>
<td>£1,038</td>
<td>51%</td>
</tr>
<tr>
<td>1875/79</td>
<td>1,955</td>
<td>1,003</td>
<td>953</td>
<td>49%</td>
</tr>
<tr>
<td>1880/84</td>
<td>1,966</td>
<td>1,050</td>
<td>916</td>
<td>47%</td>
</tr>
<tr>
<td>1885/89</td>
<td>1,897</td>
<td>965</td>
<td>932</td>
<td>49%</td>
</tr>
<tr>
<td>1890/94</td>
<td>2,391</td>
<td>925</td>
<td>1,466</td>
<td>61%</td>
</tr>
<tr>
<td>1895/99</td>
<td>7,283</td>
<td>3,555</td>
<td>3,728</td>
<td>51%</td>
</tr>
</tbody>
</table>


IV. THE DEMAND FOR WHISKY

The cost of whisky, his main raw material, set the lower limit to Bell's profit margin. At the upper end the limit was determined by the price consumers were prepared to pay. In the British market the main influence on this was excise duty. From 1860 to 1890 duty remained, with the single exception of a temporary aberration in 1885, stable at 10/- per proof gallon. In the history of the whisky trade this long period of stability has been given a particularly rosy interpretation. Superficially there is some justification for this, for it was preceded by the sharp increases of the 1850s, and succeeded by the apparently unending upwards spiral that lifted excise duty to 72/6 per proof gallon in 1920. Closer examination indicates the need for a rather different interpretation
and one which has important implications for blending.

In 1869 Bell was selling a blended whisky at 14/11 per proof gallon. Duty was 10/- and accounted for 67% of the wholesale price. Whilst this made duty a preponderant influence in the price of whisky it does not follow that a constant duty was necessarily beneficial. To assess the effects of duty on consumption it is necessary to examine more than the absolute level of duty and the way the level was reached. In deciding how to spend a given income the consumer has to choose between a range of commodities and a range of prices. If it is assumed that the consumer's income is fixed then the critical variable is the position of the commodity within the relative price structure. Even if duty remains constant the relative price of spirits may alter as a result of changes in the price of other commodities. Assuming that excise duty is actually borne by the consumer, its real burden, and hence its effect on demand, may decrease if other commodities rise in price and increase if they fall. In the same way, by assuming prices to be constant and income to be changing, it can be shown that an increase in income may offset a constant duty and a fall increase its real burden. To recognise that a constant factor in the price of a commodity may be altered by movements in relative prices and consumers' incomes is to do no more than acknowledge two well established propositions in demand theory. But what conclusions can be deduced from them when they are applied to the demand for spirits and in particular, the demand for whisky?

In Chapter Four, where the major trends in nineteenth century spirit consumption were established, it was argued that the most significant shift in consumer preference after 1860 took place amongst home produced spirits. From the 1870s, the dominant feature of the spirit market was the increased consumption of whisky which displaced, most of all, gin and to a lesser extent, brandy. Research into expenditure on drink in the nineteenth and early twentieth centuries has not been concerned with isolating the factors governing the
GRAPH 20: United Kingdom Per Capita Consumption of Beer, Wine and Spirits (1920 - 1930)
demand for whisky, but rather with the demand for all types of spirit and drink in general, that is, beer, wine and spirits. The field has attracted a wide range of investigators. Up until the First World War the keenest students were temperance advocates who anxiously scanned the consumption statistics for signs that the demand for drink was declining. After the Second World War pioneer econometricians attempting to apply regression techniques to consumer demand, used the data on drink consumption to test their models. Most recently, drink expenditure has been examined for its effects on the standards of living of the working class between 1870 and 1914. Although these studies have not been solely concerned with whisky they do display certain common assumptions which amount to a widely accepted interpretation of the drink market. By examining their arguments and isolating the common assumptions it will be possible to explain the spread of whisky drinking.

In the twentieth century all investigators have used the statistics on per capita drink consumption for the United Kingdom collated by G.B. Wilson in his compendium on alcohol. These are reproduced in Graph 20. They show per capita consumption rising rapidly during the 1860s to a peak in 1875/76 at 1.30 proof gallons


GRAPH 2I: Per Capita Consumption of Home Produced Spirits in England, Scotland and Ireland (1860 - 1910)
PER CAPITA CONSUMPTION OF HOME PRODUCED SPIRITS (1860-1910)

PROOF GALLONS PER HEAD

SCOTLAND

IRELAND

ENGLAND
for spirits, 34.4 gallons for beer, and 0.56 gallons for wine. After 1875/76 per capita consumption levels fell and it was not until the late 1880s that there was any sign of revival. The peak in 1899/1900 was, however, at a lower level than that of 1875/76 at 1.12 proof gallons for spirits, 32.5 gallons for beer and 0.41 gallons for wine. After 1900 per capita consumption clearly declined except for a brief revival during the abnormal conditions of the First World War.

So far as spirits alone are concerned, most investigators have regretted the absence of consumption statistics for each component part of the United Kingdom and for each type of spirit. For home produced spirits, that is, whisky and gin, separate consumption statistics for England, Scotland and Ireland are in fact available. These are shown in Graph 21. These statistics have been avoided by other investigators for two reasons. The first is that they were interested in the total consumption of spirits and this includes both home and imported spirit. No separate statistics for national consumption of imported statistics exist until 1890 and so the national statistics for the consumption of home produced spirits have been ignored. The second reason lay in the belief that the national figures for home produced spirits did not take into account the transfers of spirits across national boundaries. In fact, after 1860, the Excise returned statistics showing the inter-country transfers. The statistics were collected at the point where duty was paid and it was felt that transfers of spirit which had paid duty in, say, Scotland into England for consumption would make them inaccurate. Contemporary trade practice suggests that this is not the case for, with the high level of duty and the existence of duty-free warehouses, there was a strong incentive to delay duty payments until the last possible moment thereby economising on working capital. It seems unlikely that duty paid spirit movements introduce any significant element of distortion.

20. ibid, pp.341-348.
As Graph 21 shows, the separate national figures for the consumption of home produced spirits present a rather different picture than the U.K. ones. Scotland and Ireland display the trend evident in the U.K. figures, a result which is to be expected given the weight of their absolutely higher levels of per capita spirit consumption in the U.K. statistics. In England, however, peak per capita consumption is not reached until 1900 instead of 1875/76 as the U.K. figures suggest. Neither are the fluctuations in per capita consumption as severe as those in Scotland and Ireland. Whilst an explanation has to be found for these features, they do suggest the need for caution in using the U.K. figures, as Dingle has done, for generalisations about working class living standards.

It is on the basis of the U.K. per capita consumption statistics that other investigators have erected explanations for the decline in consumption. Hypotheses have not been in short supply. To quote Dingle:

"Contemporaries explained changes in the level of drink consumption per head in terms of a wide range of determinants; climatic variations, types and hours of work, the number of retail outlets in relation to population, the availability of alternative recreational facilities, and the growth in temperance sentiment all had their advocates." 21. The most widely accepted explanations for variations in consumption over time was, however, "the level of wages and commercial prosperity. It was in these terms that the peak level of consumption 1875-76 was explained. More sophisticated statistical analysis has confirmed the positive correlation between wages and drink consumption, the closest correlation being observed after a one year lag, and for spirits to a greater extent than beer."22 For Dingle's purpose this explanation is inadequate because it only explains short term fluctuations and therefore does not "adequately account for either the magnitude of consumption levels reached in the mid 1870s or the subsequent long term trend of virtual stagnation, and after 1900, decline, despite

22. ibid, p. 615.
continued rises in both real and money wages." Dingle then proceeds to construct a sophisticated explanation which distinguishes between the ways an increase in income comes about. One way, occurring from the 1850s until the end of the 1870s and benefitting the main drink consumer in the family, is by money income moving ahead of prices. The other happens in the 1880s and 1890s and benefits the housewife, when real income rises through falling prices. Welded on to this distinction is an argument that it was not until the 1880s that changes in the supply of other commodities ("the retailing revolution") made them available to working class consumers. The peak of drink consumption in the 1870s was therefore "a response to a situation in which purchasing power had temporarily outstripped the supply of consumer goods available, once basic needs had been satisfied." Drink and leisure were preferred to a restricted and boring diet. In the 1880s this situation changed: "Firstly...the range of commodities within reach of the working class was widening considerably, both in variety and price. Drink, on the other hand, remained unchanged in price, so it was becoming proportionally more expensive relative to an increasingly wide range of alternative consumer goods. Secondly, drink consumption per head rose when an increase in real wages came in response to rising money wages, as occurred in the mid 1870s, 1900, and to a minor extent around 1890 and 1910. But when real wages rose as a result of falling prices between 1880 and 1895, the level of drink consumption stagnated." By exploiting the relative price and income relationship between drink and other commodities, Dingle's explanation is particularly appealing in the light of the large, apparently unalterable, duty element in spirit prices. It does, however, depend critically on the assumption that drink remained unchanged in price.

For his evidence on drink prices Dingle relies on Prest and Stone. Prest assembled the consumer expenditure figures for 1870 to 1919 and Stone for 1920 to 1938. Stone, for the latter period,

23. ibid, p.615.
24. ibid, p.618.
25. ibid, p.618, emphasis added.
found evidence of a moderate income elasticity of demand and a larger price elasticity. However, both also found a downward trend in spirit consumption not explained by price and income changes. For Stone it was "hard to see how this can be attributed to anything but a change in the tastes and habits on the part of the general public."

Dingle does not ignore these influences but prefers to leave them out because they are not quantifiable and because they complement rather than compete with his explanation. Dingle relied on Prest and Stone for his evidence on prices and they too make the critical assumption that prices remained unchanged:

"Information on price movements in this field is far from perfect, but it seems clear that in the case of the more important beverages at any rate, prices were practically stationary except in so far as changes in rates of duty brought about changes in prices. This tendency for prices to be kept constant in money terms meant that these commodities were becoming relatively more expensive as the general level of prices of consumer goods and services fell. Thus a fall in the amount demanded over the period was to be expected except in so far as other factors, such as rising real income or changes in tastes and habits came to the rescue. In fact such offsets to the growing relative expensiveness of alcoholic drinks do not appear to have given much support, and in the case of spirits there was a large downward residual trend in consumption after the influence of income and relative prices is accounted for." 28.

Prest relied on the estimates of Dr. Dawson Burns and G.B. Wilson for his price series. Burns's series covered the years 1900 to 1909, when he compiled annual estimates of the Nation's drink bill. Wilson's estimates were for 1910 to 1919 and both made the arbitrary assumption that two-thirds of spirits were consumed over the counter and one-third in bottles. Prest assumed this ratio to be constant for the period 1870 to 1919. For the period 1920 to 1938 Stone used a

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26. The income elasticity of demand was 0.54, i.e. an increase of 1% in average consumers' income would lead to an increase of 0.54 of 1% in spirits consumption. The price elasticity was -0.72, i.e. an increase of 1% in the price of spirits would lead to a fall of 0.72 of 1% in consumption. See R. Stone, The Analysis of Market Demand J.R.S.S., Vol. 108 (1945), p.317.

27. ibid, p.317.

price series supplied by H.M. Customs and Excise and this was adjusted to allow for the differential in price when spirits were bought by the glass rather than the bottle. This ratio was 35:65 for glass and bottle respectively; almost an exact reversal of Prest's ratio. 29 For the whole period 1870/1938 the price series was as follows:

<table>
<thead>
<tr>
<th>Period</th>
<th>Per Pint</th>
<th>Per Gallon</th>
</tr>
</thead>
<tbody>
<tr>
<td>1870-1909</td>
<td>3.31/-</td>
<td>26.48/-</td>
</tr>
<tr>
<td>1910-1915</td>
<td>3.94/-</td>
<td>31.62/-</td>
</tr>
<tr>
<td>1916</td>
<td>5.25/-</td>
<td>42.00/-</td>
</tr>
<tr>
<td>1917</td>
<td>10.50/-</td>
<td>84.00/-</td>
</tr>
<tr>
<td>1918-1919</td>
<td>13.75/-</td>
<td>110.00/-</td>
</tr>
<tr>
<td>1920</td>
<td>15.30/-</td>
<td>122.40/-</td>
</tr>
<tr>
<td>1921-1938</td>
<td>16.20/-</td>
<td>129.60/-</td>
</tr>
</tbody>
</table>

Source: A.R. Prest, op.cit., Table 49, p.79 and Table 55, p.86. R. Stone, op.cit., Table 71, p.189.

It is Prest's series that is of immediate interest. What does it imply about the spirit market and how realistic is it?

The series assumes a common price for all types of spirits but, as was shown in Chapter Four, the spirit market displayed a complex price structure both between whisky and other spirits and even between different whiskies. Whisky prices varied between malt and grain, between different malt distilleries, and by age. Prest took a price of almost 26/6 per proof gallon for spirits. For the period 1870 to 1890 when duty was 10/- per gallon, this gives a duty free price of 16/6. Bell's duty free blend in 1869 cost 4/11 wholesale, 11/7 less than Prest's price. Greenlee Brothers, one of the Scottish firms active in the English market, advertised prices "ranging from 2/- to 12/6 per gallon" in 1885. 30 These prices

30. See advertisement in A. Barnard, op.cit., end pages.
were hardly uniform and even the most expensive whisky at 22/6 duty paid, was 4/- less than the price series. And 22/6 per gallon implied a thoroughly matured liquor Scotch whisky: hardly the drink of the working class.

Nor is the assumption of an unchanged price over a thirty-nine year period realistic in terms of industrial behaviour for it assumes an incredibly strong level of agreement never to change prices. As the history of the U.K.D.A. showed, the desire for price stability existed amongst the grain distillers but was never fulfilled. Grain spirit prices fell and one reason they did so was because grain distilling was itself influenced by changed supply conditions in the international grain market. Grain spirit made from American maize was just as much a new consumer good as other products flowing from the bountiful American heartland. Still, evidence from producers' prices does not fully answer the point that retail prices remained unchanged. Agreement amongst wholesalers and retailers might have prevented a fall in spirit prices being passed on to the consumer. In 1890, 1894 and 1900, there were attempts by dealers and retailers to regulate prices. These were all years when duty was increased. The increases were small and the trade agreed to keep prices constant by lowering the strength of spirit and absorbing the duty increases this way. These were, however, specific responses by the trade to fear that consumers would resist higher prices. They were, in other words, explicitly recognising the danger of being priced out of the market. A reduction in strength was not an infinitely repeatable tactic. It was only possible because until Lloyd George's Budget of 1909, duty increases were relatively small. After 1909 there is less room for doubting that duty increases detrimentally affected the position of all types of spirit, including whisky, in the relative price structure. From that time onwards the owners of the leading brands of whisky did start to regulate prices through the Whisky Association. By the 1920s it becomes possible to agree with Stone's description of

31. The movement of duty was as follows: 1890, increase of 6d. to 10/6; 1894, increase to 11/-; 1895, decrease to 10/6; 1900, increase to 11/-; 1909, increase to 14/9.

"administered" spirit prices. 33 The earlier situation was vastly different and price competition certainly prevailed.

The final point about the existing interpretation of the spirit market relates to the assumption of constant ratio between counter and bottle sales. It is difficult to see the ratio as constant over such a long period. The switch away from bulk sales of whisky to bottle sales occurred in the 1890s. Initially it was designed to give greater scope for brand advertising and like other aspects of "the retailing revolution" it diminished the retailer's responsibility for the display and presentation of goods. Bottling raised the blenders' costs of production and also the price to the consumer per gallon purchased. With the duty increases after 1900, however, its real significance was that it enabled consumers to purchase spirits, albeit in smaller quantities, and it became another way of minimising the impact of duty. By the 1920s bulk sales were much diminished and bottling had been extended to include "half-bottles, quarter-bottles, glasses and even miniatures." 34.

This evidence from trade practices suggests the need for caution in interpreting the estimates of consumer expenditure on spirits. Prest's estimates, because of the high price of spirits and the assumption of a constant glass/bottle ratio, almost certainly exaggerate the size of consumer expenditure on spirits between 1870 and 1909. By implication there are dangers in using the figures to assess the impact of drink expenditure on working class living standards. 35 The wide range of blends of varying quality and price make

35. Dingle uses the calorific values of beer and spirits to argue that these drinks may have been more beneficial than low calorie temperance beverages such as tea and coffee. This ignores the point that dilution of spirits was a widespread practice amongst publicans and the working class may simply have been consuming expensive "duty paid water". The Sale of Food and Drugs Amendment Act (1879) introduced a minimum legal strength for potable spirit but the law could be easily evaded by publicans displaying a notice that spirits were sold below the minimum legal strength. See H. Dyer and C.A. Mitchell, The Society of Public Analysts and other Analytical Chemists: Some Reminiscences of its First Fifty Years (1932), p.22 and pp. 79-80.
it impossible to give any quantitative expression to the factors governing spirit consumption except, as was done in Chapter Four, by showing the growing share of the spirit market that was going to whisky. The reaction of the Scotch whisky dealers to a situation where the large duty element threatened to put their product in a disadvantageous position, given contemporary price and income movements, suggests that this section of the spirit trade was fully alive to the dangers their product faced. Not until after 1900 did this danger become critical because falling per capita spirit consumption in the U.K. was offset by population growth and the total spirit market had not begun a permanent decline.

The separate per capita spirit consumption statistics for each component part of the U.K. suggest the need for a less general explanation of the factors influencing spirit consumption. The decline in per capita consumption in Ireland and Scotland after 1875/76 is probably best seen in local terms. The most recent historian of the Irish distilling industry has argued that the fall was due to a switch to beer drinking in place of spirits. Agrarian depression after 1870 may also have contributed an income effect that helped to dislodge spirits. The substitution of beer for spirits is not an explanation which fits declining per capita spirit consumption in Scotland. Nor is there sufficient information on Scottish incomes to turn to this for an explanation; the advocates of temperance may still have their say. The much later peak in English spirit consumption in 1900 can be explained by the success of the Scottish and to a lesser extent, Irish, dealers in opening up new markets for their products. Between 1890 and 1900 English spirit consumption rose from 16.8 m.p.g. to 25.6 m.p.g., an increase of 8.8 m.p.g. Scottish and Irish dealers accounted for 6.1 m.p.g. or 69% of this increase, and the sales were split between Irish and Scottish whisky in the ratio 31:69.

36. E.B. McGuire, op. cit., pp. 299-300. This is a difficult task as beer consumption has to be estimated from production statistics giving rise to transfer problems.
37. See the table on Scottish beer production in G.B. Milson, op. cit., pp. 369-370.
To recognise that spirits, especially blended whiskies, were sold at different prices is to acknowledge qualitative divisions within the spirit market and the presence of consumers who were less sensitive to price than the working class. The Royal Commission on Whiskey divided blends into two classes: "(i) mildly flavoured Scotch whiskies of particular characters and good quality, (ii) cheap palatable Scotch whiskies." By 1908, a good quality blend was one that contained a high proportion of malt whisky, and whiskies of a high average age. Both these features made the blend more expensive, so that not all of the success of blended whisky can be explained by price competitiveness. Within a wide range of prices blenders mixed whiskies to suit the price a customer quoted. A firm like Greenlees, advertising prices from 2/- to 12/-, produced blends of widely differing qualities. Other firms specialised on particular segments of the market. William Teacher, for example, saw his main aim as producing "a cheap whiskey for the working man." His business was in Glasgow and there, "the more malty the whiskey you give the less age you give, at least, the age has to be kept down so as to meet the price." Arthur Bell, by contrast, had nailed his colours firmly to the mast of quality, and unchanging quality was to be his constant theme. Good quality whisky implied a relatively high price and his policy provided a test of his ability to sell on grounds other than price.

Although blending allowed the production of a wide range of differing qualities of whisky, each individual blend was of uniform quality. The creation of a more uniform product was an important step in overcoming one of the barriers that had hindered the development of a national market for Scotch whisky. In the 1860s, the diversity of Highland malt whiskies and the small quantities each distillery produced, limited sales. James Mackinlay, the senior partner in Charles Mackinlay & Co., the Leith blending firm, explained the marketing problem the firm faced in England:

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39. R.C.W., Qn. 7522, p.236.
40. R.C.W., Qn. 7546, p.236.
"...I think when the duties were equalised the Irish whiskey predominated. They made in larger stills, the whiskey was more uniform in style, and you could have a larger quantity of it. If anyone saw Irish once they would know it again. From what I have seen of it it had a peculiar flavour, which is peculiar to all Irish whiskies, and they were in that way able to do a fairly large trade in a uniform quality. With Scotch whiskey it was different. One man would bring to England north country whiskey, another Islay, a third, perhaps, plain malt or grain, all different in style. It was then that the Scotch blenders saw that blending was a necessity; they began to blend these various malts and the addition of grain was also necessary, because blenders could not get the quantity for one thing and they could not get the smoothness and uniform quality without using grain."

The malt distillers, faced with the growing economic power of the blenders, offered a different explanation for blending. To the malt distillers, blending was substitution in which an inferior product, grain whisky, replaced more expensive malt whisky. In their eyes the main reasons for the popularity of blended whisky were duty increases, which encouraged dealers to shift the fiscal burden by using cheaper grain whisky, and misdescription that allowed the blenders to pass off mixtures as "genuine Highland malt". In the 1880s, they began a campaign against the "adulteration" of malt whisky with grain spirit which was to involve the whisky trade in intermittent public controversy for almost thirty years.

41. R.C.W., Qn. 7599, p. 237.
42. N.S.I.D.A., M.B. No. 1 at 14th July 1887.
CHAPTER SIXTEEN

THE BLENDERS — ARTHUR BELL & SONS LTD.

"SLOW AND SURE"?
(1870 — 1895)

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CHAPTER SIXTEEN
THE BLENDERS - ARTHUR BELL & SONS LTD.
"SLOW AND SURE"?
(1870-1895)

I. INTRODUCTION

In 1886, the Wine Trade Review announced that "the future of the wine trade is whisky", and advised wine merchants to begin devoting rather more attention to whisky. For spirit dealers already in the trade prospects looked rather less rosy. In Scotland, spirit consumption shrank throughout the 1880s, and 1887, just a year after the Review's optimistic prediction, was particularly disastrous for some blenders. In August, Kidd, Eunson & Co., a well known blending firm failed and the Scottish banks, who had advanced credit for whisky stocks against warrants, curtailed their lending. To cover their bank advances stockholders released whisky for auction. Between November 1887 and February 1888 nearly half a million gallons of whisky, three-quarters of it malt, were auctioned in Glasgow and Edinburgh. Prices for the malts of the best known distilleries did not fall too much but holders of second class whiskies lost heavily. Some thirty dealers followed Kidd, Eunson & Co. into bankruptcy. It was a year which, the Review thought, "the distillers and wholesale merchants in Scotland will try to forget...yet it will be difficult, for it witnessed one of the greatest crises, if not the greatest which has ever happened in the trade." In fact Scottish consumption did not reach its lowest point until 1889, but these years marked the pivot between the depression of the 1880s and the boom of the 1890s.

For Arthur Bell, the second half of the 1880s was a period of falling profits and by 1890, his profits were at their lowest since

2. Warrants or bills granting credit against stocks in bond.
GRAPH 22: Arthur Bell & Sons - Profits (1865-1899)
ARThUR BELI & SOlNS
PROFITS 1865 - 1899
1867. (See Graph 22). Bell laid the blame for the fall in profits on the home market being "much cut up with keen competition", and, in the knowledge that his sons would be joining the firm, began to seek sales in England and in the export market. These two areas justified The Review's optimism. Sales of Scotch whisky in England rose from 1.8 m.p.g. in 1880 to 2.9 m.p.g. in 1890. Exports of British spirits were also doing well. In volume they rose from 2.06 m.p.g. to 3.66 m.p.g. over the same period. Average prices for spirit exports were also well maintained and were higher than home prices. Exports were promising, but little more than that. They paled in comparison alongside U.K. consumption of home produced spirits of 28.4 m.p.g. in 1880, and 29.4 m.p.g. in 1890. Nor were these markets as large as the share of imported spirits in the British market. In 1880, 8.5 m.p.g. of imported spirits were consumed, and in 1890, 8.96 m.p.g. Not until 1905 did the U.K. become a net exporter of spirits.

In Graph 22, Bell's profits in the 1880s look depressing. Yet, when compared with Dewars, his closest competitor in Perth, the absolute difference was not great.

<table>
<thead>
<tr>
<th>Period</th>
<th>Firm</th>
<th>Arthur Bell</th>
<th>John Dewar &amp; Sons</th>
<th>John Haig &amp; Co.</th>
<th>John Walker &amp; Sons Ltd.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1880-84</td>
<td>£1,966</td>
<td>£1,448</td>
<td>n.a.</td>
<td>£14,028</td>
<td></td>
</tr>
<tr>
<td>1885-89</td>
<td>£1,696</td>
<td>£1,790</td>
<td>£5,725 &quot;</td>
<td>£21,666</td>
<td></td>
</tr>
<tr>
<td>1890-94</td>
<td>£2,391</td>
<td>£9,315</td>
<td>£10,998</td>
<td>£44,606</td>
<td></td>
</tr>
<tr>
<td>1895-99</td>
<td>£7,283</td>
<td>£39,999</td>
<td>£10,254</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: 1) A prime (') indicates the number of years for which figures are available in the five year period.
2) The firms are described according to their names in 1880.

Sources: Records of individual firms.

Dewars though, had fared much better during the depression. Both firms' profits were smaller than Haig's but profits for that firm are

5. This comment does not apply to grain spirit export prices.
only available for the last two years of the 1880s. And in 1888, Haig's appear to have been hard hit by the crisis for their profits were £2,510 compared with £8,941 the following year. All three firms were far behind Walkers.

After 1890, the rise in Bell's profits on Graph 22 looks particularly dramatic. In 1900, profits were £11,795 against only £1,713 in 1890; a more than six-fold increase which outpaced the rise in consumption at home and abroad. This appears to bely Bell's principle that to be "slow and sure" in business was best. Moreover, the rate of growth of Bell's profits was greater than both Haig's and Walker's. "Slow and sure" hardly seems a fitting description for this most dynamic decade. Yet, Dewars made an even more striking advance. Their profits leapt from £2,067 in 1888 to £59,001 in 1900, and Bell's sons came to use Dewar's performance as a benchmark for their own. In this sense, in the sons' own interpretation of the development of Arthur Bell & Sons, "Slow and sure" did seem to fit.

For Arthur Bell the rise in profits after 1890 was particularly satisfying. He had shepherded the firm through the 1880s, survived the crisis of 1888, and was ready to pass on a good going business to his sons. It was a fitting reward for the total devotion to business which marked his management of the firm until his retirement in 1895.

This chapter begins with Bell's specialisation as a wholesaler. This brought him into contact with public house tenants and comparisons are made between the tied trade in the brewing industry and its absence in the whisky trade. A study of the firm's activities in England and in export markets takes its development down to Bell's retirement.
II. WHOLESALING

What sort of customers was Bell looking for? His correspondence gives the impression that, after 1870, the family trade became less important. Why this should be so is unclear and it is not possible to do more than speculate about an answer. Was it the effect of the temperance movement driving drink from the home? Or the rise in the use of coffee and tea in place of wines, beer and spirits, at meal times? There may be something in the former for the customers Bell now sought had, with the exception of the licensed grocer, one thing in common: on their premises drinking was done in public. The new emphasis is on sales to hotels, public houses, and by the 1880s, clubs.

This switch in emphasis towards wholesaling occurred round about 1870. Bell, to gain a wholesaler's rebate from his suppliers, now explains "that I am a wholesale dealer and got your whisky to supply a retailer." His business pen turned to persuading publicans and hoteliers to take his whisky and letters such as this one to James Macleod, the licensee of the 'Dreadnought' in Callander, begin to appear:

"Having just now learned that you are appointed Manager of the 'Dreadnought' I lose no time in offering my services to supply the house with what may be wanted in my line." 7.

Indeed his interest in tenants went further than just trying to persuade them to buy his whisky. He also acted to persuade the owners of premises that his customers would make the best tenants:

"I understand that you will soon be looking out for a tenant to the Star Hotel for Mr. Ferguson, and as my business transactions (now of thirty years standing) lead me to a knowledge of those in the trade, I have for some time been anxious to see Mr. A. Brown (Crown Inn, Crieff) in a superior class of house to that which he at present occupies, as I consider he and his wife are both particularly well fitted for such a house as the 'Star'..." 8.

6. L.B., 26th April 1869.
7. 24th June 1876.
8. L.B. 24th May 1873.
There were however times when exercise of this sort of influence had to be restrained:

"I have seen and spoken to two of the Justices of the Peace viz. Mr. Ferguson of Pixton hill and the Lord Provost, representing to them that there was no necessity for another licensed house at Bankfoot and from what they said I see it would be very inadvisable and imprudent, in fact it would do more harm than good if I was to speak to any other J.P. on the subject."

III. THE TIED TRADE AND INVESTMENT IN MALT DISTILLERIES

It is interesting, in view of the struggle in the brewing industry during the 1890s to tie public houses, that at no time did Bell attempt to establish a network of tied properties. He never bought licensed premises and installed tenants, and, on only one occasion did he lend to a tenant in exchange for tied purchases. All he would do was to speak up on behalf of tenants, either to the owners of the premises or to the licensing authorities. The records of the other three firms, Haigs, Dewars and Walkers reveal that only Haigs owned licensed property. In 1894, when the partnership of John Haig & Co. was converted to a private limited liability company, six licensed shops and nine hotels were conveyed to the new firm. All the properties were local ones in the towns and villages of Fife and the firm gradually disposed of them. Dewars and Walkers possessed no licensed property but they did lend to licensees. In 1897, when John Dewar & Sons Ltd. sold £25,000 10 preference shares to the public, the Company had a mere £7,652 tied up in loans to publicans. Nine licensees were involved and there was no evident pattern to this lending. The

9. L.B. 25th April, 1890.
loans were probably favours to friends and associates, rather than part of a consistent policy to establish a tied trade.\textsuperscript{11} John Walker & Sons Ltd., the largest of these three firms, owned no licensed property but were much more heavily engaged in lending to licensed customers. In 1899, they had loans totalling almost £100,000 outstanding. This lending took the form of stocks of whisky credited to the customer in exchange for an undertaking to purchase Walker's blends only. The whisky remained in bond under Walker's control and was drawn on by the customer as he required it. No property was conveyed to the Walkers in exchange.\textsuperscript{12} In never purchasing licensed property Bell's behaviour was typical of the majority of Scotch whisky dealers; the tied house remained the exception and not the rule. Why was this?\textsuperscript{13}

In the brewing industry the purchase of retail outlets has been explained by a number of factors, beginning with the restrictive licensing policy after 1869.\textsuperscript{13} This curbed the number of retail outlets, especially public houses, and raised the cost of purchase. Licensees turned to the brewers as a source of finance to enable them to buy premises. The enforcement of higher standards in public houses by the justices, and the police, involved the licensee, if he was not to have his licence revoked, in capital expenditure and again the brewer supplied the finance. Simultaneously, as the number of retail outlets declined, pressure from the supply side forced brewers to seek control over retail outlets. Substantial economies of scale were possible in the production of beer but the large scale investment necessary to achieve them was justified only if a secure market was available. Economies in distribution through national marketing reinforced this pressure. Once the process of tying began, fear of exclusion other brewing firms to join the race and, in the 1890s, a receptive Stock

\textsuperscript{11} J.D. & S., B.M.B., at 12th April 1897.
\textsuperscript{12} J.W. & S., B.M.B. No. 1 at 30th June 1899.
\textsuperscript{13} A tied trade existed in the brewing industry before 1830, and survived the free trade period between 1830 and 1869. The above account of the tied trade in brewing is taken from J. Vaizey, The Brewing Industry 1886-1951: an Economic study (London 1960) pp. 6-12.
Exchange, favourably disposed to brewers' share issues, made plenty of capital available for investment in tied property.

These factors scarcely apply to the distillers. Amongst the grain distillers, the Distillers Company did seek to establish a tied trade after the collapse of the U.K.D.A. The tie was not, however, with retailers but with wholesalers and its primary justification was defensive: to secure the loyalty of dealers who might otherwise have turned to the North British distillery for their grain whisky supplies. The tie took two forms. One, usually with the largest blenders, was a discount on each gallon of whisky purchased. The other was a credit on stocks of whisky, including both duty free and duty paid whisky. Dewars was one of the firms helped in this way. Except insofar as the Distillers Company used its ties with the wholesalers to curb speculative activity during the boom of the 1890s, the tied trade was significant only to the development of the D.C.L. It does not seem to have been adopted by other grain distilling firms. Nor did the malt distillers develop a tied trade. On the contrary, they increasingly found themselves faced with the growing market power of the blenders.

The spirit dealers who tied their grain whisky requirements to the Distillers Company gained either an advantage in price or, more importantly, additional whisky stocks. The popularity of mature spirit and the growing investment by dealers in whisky stocks was one reason for the absence of ties between whisky dealers and retailers. With the importance of maturation, most surplus capital was invested in stocks. Stock figures for Arthur Bell are available and they show (See Table 87) little change during the 1870s but a more than threefold increase in the following decade. By 1900, stocks were more than eight times the value of thirty years earlier.
TABLE 87 - Arthur Bell's Spirit Stocks (By value)

<table>
<thead>
<tr>
<th>Year</th>
<th>Stocks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1870</td>
<td>£ 2,612</td>
</tr>
<tr>
<td>1880</td>
<td>£ 2,610</td>
</tr>
<tr>
<td>1890</td>
<td>£ 8,928</td>
</tr>
<tr>
<td>1895</td>
<td>£15,997</td>
</tr>
<tr>
<td>1900</td>
<td>£21,632</td>
</tr>
</tbody>
</table>

Notes: (1) For 1870 and 1880 the source is the valuation from the balance sheets. This includes an unknown quantity of wine and duty paid stocks.

(ii) Source for 1890, 1895 and 1900 is the Stock Account Book. The figures include duty paid and duty free spirits. Duty paid stocks were valued at only £648 (1890), £717 (1895) and £1,146 (1900). Also included are special whisky investment stocks of £3,240 (1890) and £4,543 in (1895).

Some idea of the financial burden this imposed on the firm may be had from comparing the level of stocks with the firm's earning capacity:

In Table 88 two measures have been compiled. Column A shows total profits and Column B shows the amount of profits which were ploughed back into the firm.

TABLE 88 - Stocks and Profit Levels (By Value)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Profit</th>
<th>Invested Profit</th>
<th>Stocks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1870</td>
<td>£ 1,907</td>
<td>£ 968</td>
<td>£ 2,612</td>
</tr>
<tr>
<td>1880</td>
<td>£ 1,912</td>
<td>£ 970</td>
<td>£ 2,610</td>
</tr>
<tr>
<td>1890</td>
<td>£1,713</td>
<td>£1,047</td>
<td>£ 8,928</td>
</tr>
<tr>
<td>1895</td>
<td>£ 5,276</td>
<td>£2,866</td>
<td>£15,997</td>
</tr>
<tr>
<td>1900</td>
<td>£11,795</td>
<td>£5,719</td>
<td>£21,632</td>
</tr>
</tbody>
</table>

These two sets of figures are then taken as a percentage of stock valuation showing the extent to which earnings covered stock levels:

<table>
<thead>
<tr>
<th>YEAR</th>
<th>A/C%</th>
<th>B/C%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1870</td>
<td>73.01</td>
<td>37.06</td>
</tr>
<tr>
<td>1880</td>
<td>73.26</td>
<td>37.16</td>
</tr>
<tr>
<td>1890</td>
<td>19.19</td>
<td>11.73</td>
</tr>
<tr>
<td>1895</td>
<td>32.98</td>
<td>17.92</td>
</tr>
<tr>
<td>1900</td>
<td>54.53</td>
<td>31.06</td>
</tr>
</tbody>
</table>
It is necessary to use both measures for if only ratio A/C is taken, that is, total profit (which includes the proportion Bell allowed himself) to stocks, it is tantamount to saying that Bell allowed himself absolutely no income. Heroic self denial by any standards but also unrealistic for, on average, Bell drew out about half the profits each year. Ratio B/C reinvested profit to stock, is therefore the better measure for comparison. It is not the best measure for examining the stock position. That would have been the ratio of stocks to turnover but no sales figures are available from which to calculate this. Ratio B/C does not show any causal relationship. It is merely an attempt to show the extent to which Bell's additions to capital (retained profits) covered his stock holdings. It shows that at best (1870, 1880 and 1900) the firm was able to finance over a third of its stocks itself, and at worst, in 1890, just over one-tenth. However, Ratio A/C cannot be ignored for in the 1890s the firm indulged in stock speculation and the source of funds for this was the family income (mainly the sons). Further proof of the point that some of Bell's income came back into the business can be had from Table 80, page 422 which shows the sources of capital. As he did not resort to bank borrowing, and as the firm was his only source of income, the rise in his contribution to capital from £4,033 in 1870 to £11,870 in 1880 must have come from his drawings. Returning to ratios A/C and B/C these represent the extreme limits of the stock financing position. Taking the former which is the more favourable, but also the more unrealistic, it shows that even in 1870 and 1880, years when stocks were relatively small, earnings were insufficient to cover stocks. This suggests that Bell, attempting to improve the quality of his whisky, did not tie public houses simply because he could not afford to do so.

Where then did stock finance come from? The burden of stock financing should not be exaggerated. Large stocks were a good advertisement. Dewars claimed to supply "the demand for old and rare

14. See Table 84, page 450.
whiskies, which are the speciality of the firm, and Walkers boasted that they held a large enough stock to be able to guarantee that the quality of their blends never varied and was the same throughout the world. More importantly, so long as mature whisky prices rose, stocks were a very remunerative investment. James Greenlees was asked by the Select Committee on British and Foreign Spirits in 1891, whether the increase in the value of mature whiskies was a sufficient inducement to distillers to keep them in bond:

"It is an investment which is very much thought of and carried out to a very large extent in Scotland by gentlemen outside the trade altogether; there is a very large amount of money invested by the public; men who have money saved, instead of investing in railways and other things, invest it in whiskey; it is a very good and safe investment indeed." 17.

Greenlees calculated that the return was between 10 and 15% per year. At this rate additions to stock soon paid for themselves.

Stocks in bond were free of duty. An additional drain on capital came from the need to maintain duty paid stocks, especially when duty rose after 1890. Figures for Bell's duty paid stocks exist from 1889 onwards and these show that the firm kept such stocks to an exceedingly low level. At no time did they approach 1% of total stocks. 18 Economising on capital in this way was a two-edged weapon. In 1890, 1894 and 1900 the firm missed windfall gains from forestalling duty increases but in 1895 it avoided losses on the reduction of duty. Again though, stock financing requirements kept the dealers out of the market for licensed property.

Just as a feature of the brewing industry in the 1890s was the struggle for tied trade, so blending witnessed the growth in malt distilleries controlled, either by outright purchase or share holdings, by the blenders. Unlike the brewers who moved forward to

15. J.D. & S., Miscellaneous Papers.
17. B.P.P. 1891, Vol. XI, Minutes of Evidence of the Select Committee on British and Foreign Spirits, at 3rd March 1891.
control retail outlets, the blenders went one stage back in the
production process to dominate sources of supply. This again
involved additional capital. One reason for this movement was the
desire to ensure the supply of particular malt whiskies vital to
the blend. Another was the increased profit margin from cutting
out the distiller's agent or merchant. An element of prestige,
both economic and social, was also involved. Ownership of a distiller's
licence entitled blenders to use the word "distiller" in advertise-
ments and labels. For Lowland blenders and English spirit merchants
possession of a "North Country" distillery brought social standing,
and "sporting Managing Directors" who visited "the north twice a
year" combined distilling with the pleasures of rod and gun on
Highland estates.19

The dependence of the malt distillers on the blenders for
their large fillings was evident by the early 1870s20 but it was not
until the recovery in spirit consumption at the end of the 1880s
that investment in malt distilling by spirit merchants and brokers
became noticeable. In 1887, Gilbeys, the London wine merchants,
bought Glen Spey distillery in Glenlivet with the aim of cutting out
the middleman's profit in their purchases of malt whiskey.21 By
1904, they possessed three distilleries in Glenlivet.22 In 1893,
Walkers bought Cardow distillery.23 Three years earlier Dewars had
leased Tullymet distillery at Ballinluig from the Duke of Atholl
and in 1896 they began to construct their own distillery at Aberfeldy.24
Within the short space of the three years 1895 to 1898 the number of
Highland malt distilleries rose from 72 to 89. This expansion, the
Wine Trade Review noted rather darkly, "cannot go on indefinitely";
a comment rather offset by its own prediction that "Scotch whiskey
is destined to become the drink of the world." It also noticed three
other features of the boom: "a great crowd of outsiders" were going
into the trade; nearly all the distilleries were being "promoted or
shared in by the large spirit merchants and brokers in commercial

19. J.D. & S., Correspondence at 1st October 1916.
20. N.S.W.D.A., M.B. No. 1 at 20th January 1874.
   (London 1957), p. 43.
22. In addition to Glen Spey, Strathmill and Knockando.
24. J.D. & B.M.B. at 28th February 1898.
centres in Southern cities", and capital was being raised by public share issues in which half the capital, normally 5% preference shares, was offered to the public and the other half, the ordinary shares, was retained by the vendors. The vendors "get ready money from the outside public and only 5% for the use, and have ordinary shares to skim the cream off." The Review also criticised the excessively optimistic claims of distillery promoters about anticipated profits and warned of the danger of overcapitalisation. Overoptimism and overcapitalisation were as much features of the blenders' entry into malt distilling as the brewers' rush to tie the public house trade. Neither Arthur Bell or his sons joined the scramble after malt distilleries. Not until 1934 did the firm buy Dufftown-Glenlivet distillery, its first malt whisky distillery.

Underlying any attempt to control public houses is the assumption that this particular form of retail outlet is crucial to the prosperity of the industry. Yet was it? The export market, which was to become increasingly important, involved no control over retail outlets and at home the public house was only one channel of distribution. The licensed grocer and the club seem to have become major retail outlets and this may have detracted from the importance of the public house. The evidence from Bell's records is impressionistic and this is unfortunately also the case for the rest of the industry. One point about retail outlets often made by blenders was the importance of capturing contracts from multiple retail networks. James Buchanan, for example, dated his breakthrough in the London market from the time he secured the friendship of Mr. Newsom Smith, the Chairman of the United Music Halls Company. The Company owned practically all the leading music halls in London in the 1880s - the Pavilion, Metropolitan, Oxford, Canterbury and several others - and Buchanan's contract guaranteed him a superb advertisement as well as substantial sale for his whisky.26 Hotel chains - another beneficiary of the Stock Exchange boom in the

1890s — and railway station refreshment rooms were also prized contracts because of their widespread network. T.H. Dewar, like James Buchanan, marked the effective arrival of Dewar's whisky in England from 1888 when Spiers & Pond chose it in competition with other samples for the sole supply of their numerous catering establishments.27

The public house may not have been the most important retail outlet but that does not mean it was unimportant. Blenders, malt distillers and grain distillers watched the growth of the tied public house with some concern. The blenders because some brewers had found it more profitable to blend their own spirit rather than buy a proprietary blend for their tied houses. The malt distillers because they believed that the brewers tended to sell poor quality whisky in order to keep beer sales up, and the grain distillers because the brewers were sufficiently important customers to be able to ask and obtain substantial discounts.

The last reason for the absence of any form of tied trade as far as Bell is concerned lies in the fact that on the only occasion when he did lend to a publican, in Glenlyon in 1868, he not only had great trouble getting his cash back but the publican drew his supplies of whiskey from someone else. It was a case of biting the hand that feeds you twice. Bell was not amused:

"You wrote me on 21st August last that if I would give you till Martinmas, you would then send me some money, and that if not, I was not to spare you, and now you insult me by sending a single pound as part payment of the prefixed large amount (£41.11.10), three pounds being all I have received during the whole year. You must consider me a great simpleton if I am content with that paltry sum, and knowing that you have received £41.11.10 in addition. I have now to tell you that I will not be content unless you pay the amount by instalments as you proposed, say £2 every month which is little enough to ask from you and I think the least you can do for me in addition is to take your supplies of whisky from me paying cash as you get it and I trust you will see the necessity of agreeing to this..." 28.

28. L.B. 12th December 1868.
In the event payment was not forthcoming and Bell, as usual in the problem of bad debtors, engaged the services of a lawyer to write "...and threaten the terrors of the law if a payment to account is not at once sent." 29.

Bell's enthusiasm for the law evaporated rapidly after 1875 when he found himself the subject of a prosecution by the Excise. In 1873 Bell took on a sales agency for Alexander Connacher, a malt distiller in Pitlochry. Bell was looking for new openings for the firm in the Scottish market and pushing Connacher's whisky in Glasgow looked like a profitable venture. Moreover, as he was able to get his nephew Fitzroy Sandeman to do the actual hard slog selling, Bell was only involved to the extent of guaranteeing debts to Connacher and commission to Fitzroy. From the start the agency ran into problems, the main difficulty being that they had to "...cut prices as low as possible to meet the competition of the West Country distillers." 30 This left little room for profit and after five months Fitzroy decided to take up an appointment in Exeter, leaving Bell to find another agent. This he did, persuading Fitzroy's brother Charles to add it to his existing agencies. At the same time as he did this, Bell, no doubt taking a pessimistic view of the money making potential of the agency, terminated the agreement with Connacher. Unknown to Bell, Connacher, who was apparently equally disenchanted with the low level of profit, had decided that the venture could yield more cash if the Excise permits were falsified and duty avoided by sending out more spirit than the permitted amount. Bell knew nothing of this and was horrified when the Excise, having uncovered a shortage in Connacher's stocks jointly charged Connacher and Bell with making false returns. On the advice of his M.P. Bell wrote to the Commissioners of Inland Revenue expressing the hope "...that your Honours will be pleased to countermand the instructions given for my prosecution." 31 They did not, and in December 1875, he was fined £10.

It was an unfortunate episode in Bell's business career and one which:

29. L.B. 23rd March 1869.
30. L.B. 18th April, 1873.
31. L.B. 24th November 1875.
"...I feel very acutely about...it being so widely known, and so much talked about, everyone acquainted with the circumstances express much astonishment at the harsh treatment by the Excise, casting an apparent slur on my character, as if I had been in some way connected with Connachter's misdeeds, instead of being a victim of his deception..." 32.

Like the trouble over his loan to the publican, the distressing outcome of this agency made Bell wary about ever again becoming involved in such connections. As such it probably adds to the reasons why Bell, unlike other blenders, did not seek close links with distillers.

On top of these troubles Bell was, as he expanded his sales beyond the immediate neighbourhood of Perth, plagued with another type of dishonesty. His extended distribution network involved a heavy reliance on the railway and steam ship companies, and pilfering was extremely common. It is difficult to say which form of transport had the greatest loss of goods through thieving but what is certain is that neither helped improve Bell's temper. In the following instance the Loch Lomond Steam Boat Company fell foul of his wrath:

"...As in almost every instance when I send whisky by your boats my customers complain of considerable quantities being abstracted I am determined that such shall now be put a stop to, and that somebody will pay for it. I have therefore to inform you that unless you remit me the 15/3 I will have the case tried against you in the Law Courts..." 33.

Eleven years later it was:

"...Those wretched railway servants...at their old tricks again, thinking that one bottle from each case would not be missed, they have loosened the cord and nails and pressed up a board, replacing them as before, after abstracting the bottles..." 34.

Whilst these incidents are minor ones, they serve to highlight the

32. L.B. 17th December 1875.
33. L.B. 25th December 1869.
34. L.B. 26th October 1880.
many mundane tasks involved in running the firm. Indeed what is frequently striking from Bell's correspondence is the amount of detail Bell immersed himself in. Witness this letter to a Glasgow carting firm:

"When your carter was as usual receiving goods today from me for the Railway Company I had the curiosity to compare the food which he gave his horse with that which Messrs. Cameron gave, his cart being also at my door and I must say that the latter was much more nourishing, a much larger proportion of corn being in his bag. In mercy to your poor horses you should look to their feeding." 35.

Bell devoted little space in his correspondence to customary business pleasantaries; the enquiries after the health of friends and their families; the well wishing for holidays and sporting occasions. Nor was there often any mention of events in the trade as a whole such as temperance and licensing; trade agreements and Government policy. A total absorption in, and unrelaxed attention to the running of the firm marked Bell's business career. Unlike the Haigs and the Dewars he did not seek public office, even at a local level. Even his correspondence with members of his own family was highly related to business affairs. Most letters were peppered with advice on investment, especially foreign investment, which, next to whisky stocks, he regarded as the safest outlet for capital. "The best plan", he told Imrie Bell in 1886, "would be to send the money to James Walker for investment in Australia at 8%, as you cannot get more than 4% for a safe investment in this country...I do not approve of so many eggs being placed in one basket but I don't know where to find another so safe and yielding so much in return." 36.

35. L.B. 24th January 1877.
36. L.B. at 18th September 1886.
IV. EXPORTS: A START

Despite the shadow cast by the Excise prosecution and the "...cruel, heartless and ungrateful treatment." of his errant customers not all was gloom, for in 1871 came the first enquiry after his whisky for export. This came from one of the old contacts he had made in London. There were certain problems, however, to establishing an export business. Bell lacked facilities for blending, bottling and packing spirits in bond and this meant that whisky for export would have to be sent from his duty paid stock and drawback obtained from the Customs. After enquiry Bell found out that rectifiers alone had this privilege and that the only alternative would be:

"...to have a small cask of each of the different whiskies sent from the Customs Bond here under bond to the port whence you would wish it to be shipped, the freight and charges would then be much less than sent in bottle."

This lack of bottling premises became an increasing source of bother. It affected the home trade as well where sales in bottle, as opposed to bulk or cask sales were growing. The only bond which the company had access to at this time was the old Speygate bond which T. R. Sandeman had promoted and this had no bottling facilities, so that bottling and casing were carried out from duty paid stock in the cellar underneath the shop. This was no use for export purposes and by the 1890s it was quite insufficient for the home trade. A partial solution to the difficulty was to make use of the bottling services of specialist warehouse keepers in the main blending centres like Edinburgh, Leith and Glasgow but this was expensive. Not until 1900, when the firm moved from the shop in Kirkcaldie to new premises in Victoria Street, were adequate bottling facilities available.

37. L.B. 15th November 1873.
38. L.B. 28th December 1871.
Whether Bell's plan for shipping via the Customs Bond suited his enquirer and resulted in sales the records do not say. He certainly does not appear to have pushed the matter. The first enquiry for export whisky had come from an old customer but the next two came from strangers which suggests that Bell's whisky was securing a reputation in the market, and that his policy of allowing "...the qualities of my goods... to speak for themselves" was paying dividends. Most of the early export business in whisky followed the Flag. British emigrants to the Empire took their native tastes with them. Also the leisured and affluent British tourist of the late nineteenth century required the comforts of home whether he be in Cairo or Zermatt nursing his health, or in Monte Carlo and Biarritz at play. It was then no coincidence that the second enquiry came from a Miss Dick, the proprietress of "Le Hotel des Anglais" in San Remo, in June 1882. The whisky which was despatched was amongst the finest that Bell had in stock — and more expensive than the normal home trade blend at 7/8 p.p.g. Not only did it satisfy Miss Dick but she ultimately passed on the good news to her friend Miss McPherson of the Hotel Britannique in Naples. Unfortunately Miss McPherson's order ran into shipping difficulties and did not arrive until the tourist season was over. Bell claimed off the shipping company, but the damage was done:

"I was in hopes this would be the commencement of many future shipments to Naples, but must say my first experience has not been fortunate..." 39.

These were all small footholds in the export market, probably not greater than fifty gallons in all. Shortly after the San Remo enquiry came a more promising opening from H.J. Hollins, an old customer in Southport:

"...asking if I cared about doing business in South Africa, as two friends of his who sailed last week for Durban think they could do business out there in whisky, that I would run no risk as they had capital of their own, and one had been out before for several years, and that if I liked to do

39. L.B. 11th June 1890.
"business he would tell me where to send the required supply." 40.

This letter was to a friend who had been in the Customs house in Perth and now being stationed in Preston was asked to give a reference for Hollins: "...as you are aware of the prudence necessary in business". Prudence and no risk: these criteria were no different from those used in his early attempts in the London market. They are repeated with monotonous regularity in his export correspondence.

Again the records do not say what the outcome of this contact was, but the two South Africans were as close as he had come to appointing agents for the sale of whisky overseas. In the home market he still shied away from doing so. Here the problems of communication were less though it is almost certain that his business suffered from his unwillingness to build a network of agents to push sales. In exporting good agents were vital. Fortunately Bell could call on the far flung members of his family to recruit suitable agents. Thus in 1889 he asked a cousin, Charles Bell, an engineer in New Zealand if:

"...among your various acquaintances in New Zealand you can recommend any safe and trustworthy house who would have it in their power to introduce my fine old Scottish whiskies in New Zealand...I ship to various parts of the world, but have not yet received any orders from New Zealand. My best old blend of Scottish Whisky is sold here at 8/- per gallon f.o.b. but I have intermediate qualities at 5/-, 6/- and 7/- per gallon.

Being also connected with the firm of Laidlaw and Sandeman, Galashiels of which firm my nephew Abbott Fitzroy Sandeman is partner along with me, we have some 80,000 gallons of various ages and qualities selected from the best distilleries in Scotland...we would prefer to receive orders at a fixed price in casks of any size from 15 gallons upwards.

My son Arthur has been learning the business with a wholesale firm in Edinburgh for the last 3½ years, and in six months more he will join me here, and I am very anxious to have a good colonial connection, so that he may be independent of the Home Trade which is so much cut up with keen competition..." 41.

40. L.B. 29th August 1882.
41. L.B. 16th May 1889.
Apart from the mention of a "safe and trustworthy house..." the letter is interesting because it raises the issue of succession. Bell, now having been forty-one years in the trade, was concerned to hand over a thriving firm to his sons, and exports offered a way past competition at home. So too did the English market.

After the long period of neglect of the English market, Bell redirected his efforts to expanding sales of his whisky down south. In short order he reversed his traditional policy and began to appoint agents. London came first in May 1886, followed by Manchester three months later, although here again he repeated his reservations about agents:

"...I do not feel inclined to have an agent unless his customers agreed to remit payment direct to me, and unless I have an written guarantee from a thoroughly satisfactory party or firm, that he or they will be responsible for the due payment of all goods sent..." 43.

The necessary guarantees were forthcoming and by 1893 he had two more agents covering the west coast of England, another in Leicester for the Midlands, and one in the South of England to supply the seaside towns. In Brighton alone the firm was selling over seven hundred gallons a year. There was no doubt that the English market was expanding exceedingly rapidly. From 1887, the worst year in the 1880s, when English spirit consumption was 14.7 m.p.g., consumption rose to 25.6 m.p.g. in 1900. As Bell himself remarked to his agent in Southport:

"...There is little doubt that owing to the demand from England for the finest qualities of Highland whisky, Scotch whisky is rapidly coming into general use across the Border..." 44.

42. They were Arthur Kinmond and Robert Duff Bell, what training Robert received is not known.
43. L.E. 16th August 1886.
44. L.E. 13th October 1892.
V. COMPETITION AT HOME

Demand in Scotland was also recovering from the fall during the 1880s. Why then the continuing complaints about competition? Direct price competition from other blends was one reason and the prices Bell was obtaining in Scotland seem to have been lower than those in England. There was too the duty increase in 1890 which Bell, following "the plan generally adopted by the trade", reacted to by lowering the strength of his blends three degrees to cover the extra duty. Fear of consumer resistance to higher prices lay behind this tactic and it was repeated again in 1894. On neither occasion did English consumption falter, but there was a temporary fall in Scotland in 1895. Also in 1890, Bell introduced a new blend known as "Hotel Quality" at 15 degrees under proof, a cut in strength which more than covered the extra duty.

Direct price competition may have been less hurtful than changes in other items in Bell's profit margin. As was discussed above the gross profit margin is the gap between the cost of the raw materials and the price at which the blend is sold. The net profit margin is arrived at after deducting storage costs, insurance, casks, freight and selling costs. There are good reasons for believing that the firm was exceedingly vulnerable to changes in these items. The cost of grain whisky can be largely excluded for not only did grain spirit prices fall from 1/8 p.p.g. to 1/3 between 1891/1895, but "Robertson and Baxter continue to allow me 1d. per gallon from the grain distillers' price..". Even when Bell was not buying through Robertson and Baxter he was able, because of the large quantities he was now taking, to get very cheap terms. Against this there is some evidence that as speculation in whisky stocks gathered momentum after 1890, the leading grain distillers fought to discourage it and withdraw customary discounts. Thus Bell complained to the North British Distillery Co. that:

45. See pp.
"I am always allowed 2½% discount off my rents, as the whisky is for my own use and not for speculation. I think you should give me and other regular consumers some advantage over speculators, which I think we are entitled to." 46.

The evidence as to whether Bell was paying more for his grain spirit is contradictory. In view, however, of the fact that he started to speculate in whisky stocks and was frequently able to inform his customers, that "grain whisky is well worth buying at present at the low price I offer, indeed I question if you have ever been offered it as cheap before." 47, the probability is that he was at no disadvantage.

There is less uncertainty about his supplies of Highland malt, for despite the growth in consumption, the output of Highland malt was well in excess of demand and the North Country distillers were unable to charge even for rent or carriage so small was their market power. The only limit to the extent to which Bell could benefit from this favourable movement was his unwillingness to change the constituents of his blend. In 1891 he was forced to turn down a sample of Lagavulin malt even though:

"I think your sample good and would like to do business with you. I am afraid to change from Ardberg, which I have used for years." 48.

This unwillingness, which reflected his persistent emphasis on quality, suggests one way in which he found price competition hurtful. In 1886, the average age of the whiskies in his best blend was six years. A year later it had increased to nine and whilst "...the constantly increasing sale is the best proof of it pleasing..." it also meant that sales outran stocks and Bell was forced to turn to outside stock holders for sufficiently mature whisky to maintain, never mind improve his blend. The problems of forecasting stock requirements were acute, and in 1891 he was even forced to seek one year old stock held by McEwan, the Edinburgh brewer. The cost was

46. L.B. 9th February 1893.
47. L.B. 16th May 1893.
48. L.B. 23rd June 1891.
prohibitive:

"...I am sorry, your price for Rosebank a year old is too high. The price in '89 was 3/- less allowances and as no rent is chargeable you are wanting 5d. a year profit or equal to 13% which is out of the question..."\textsuperscript{49}

Rosebank distillery produced Lowland Malt whisky and it seems to have been of this type of whisky where speculation was at its worst.

Lowland malt distilleries were fewer in number than the Highland Malt distilleries and speculators found it easier to create a shortage in the market by keeping stocks back and forcing prices up. A similar problem existed with the output of the Campbeltown distilleries which were equally few in number. In addition, the Lowland malt distillers themselves restricted output in attempts to get higher prices. Bell warned Bartholomew, the owner of Auchertool distillery, that: "I buy your whisky for my cheap blends only, but if you are going to raise your price 5d. per gallon in one year, I must look elsewhere..."\textsuperscript{50} This warning Bell repeated a year later to Rankine of Rosebank distillery, when he found to his surprise that:

"...you restrict me to a single butt, as I was going to bond equal to 8 butts this year. If you cannot supply me with the quantity I require, I will have to give up Rosebank and introduce another Lowland Malt such as Linlithgow into my blends. It is very expensive buying old whisky from speculators instead of bonding it new oneself..."\textsuperscript{51}

At this point the firm seemed to be caught up in a vicious circle. Bell had built up a reputation for a quality product based on a well matured stock of whisky. This achievement had then been expanded by appointing agents to push sales, but the very success of this policy created a shortage of stocks sufficient to cast doubt on his ability to maintain quality without pricing himself out of the market. Adding to this problem was the fact that not only was

\textsuperscript{49} L.B. 14th July 1891.
\textsuperscript{50} L.B. 10th October 1890.
\textsuperscript{51} L.B. 24th February 1891.
the cost of buying mature whisky rising but the cost of storing it and insuring it increased also. The firm's warehouse space was quite inadequate and paying rent to distillers and other blenders to keep the firm's whisky ate into the profit margins. Commission to agents did likewise but here at least increased sales resulted. To Bell, however, commission was a new cost and one which the firm had not had to bear in the past. What Bell was discovering was simply that there was no proportionate relationship between increased selling costs and the resulting sales revenue. This, more than straight price competition, explains his complaints about the home market.

These additional selling costs, the squeeze on profit margins and the burden of stock financing might be expected to show through in the rate of return Bell was earning on his capital. For the years 1870, 1880 and 1890 it has been possible to calculate this:

<table>
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<tr>
<th>Year</th>
<th>Profits</th>
<th>Capital</th>
<th>A/%</th>
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<tr>
<td>1870</td>
<td>£1,907</td>
<td>£6,250</td>
<td>30.5</td>
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<tr>
<td>1880</td>
<td>1,912</td>
<td>13,144</td>
<td>14.6</td>
</tr>
<tr>
<td>1890</td>
<td>1,713</td>
<td>22,141</td>
<td>7.7</td>
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These calculations suggest a drastic fall in the rate of return to capital. It is worth remembering, however, that 1890 was Bell's worst year for profits since 1867 and this probably exaggerates the fall. It is unfortunate that there are no figures for sales revenue, for this shown as a multiple of capital employed, would have allowed a judgement on whether the firm was able to generate increasing business from the largely increased capital. Even taking the profit/capital figures alone, they suggest that Bell's emphasis on quality and the large stock investment that this involved, allied to the squeeze on profit margins, were making it increasingly difficult for him to maintain the rate of return on his capital.
By 1895, when A.K. Bell, the eldest son, became a partner, the firm was exporting to Australia, Tasmania, New Zealand, Ceylon, India, the south of France and Italy. There are no figures to indicate the order of importance of each market or the relationship between home and export sales, but, in all probability, Australia came first. Despite persuading his cousin to find him an agent in New Zealand this appears to have been a slow market to develop, though it became the lynchpin of the company's export business after the First World War. In Ceylon the firm shared an agent, an arrangement which seldom proved satisfactory and again orders were slow in coming. So slow in fact that Bell's second son, Robert, whose philosophy of life was overwhelmingly hedonistic, was persuaded to make a detour on his return from a pleasure trip to Australia to spend a few days in Ceylon and see if some more business could be done on the island. No agent was appointed in India and the firm's business only amounted to four or five ten-gallon casks annually, less than was being sold in Brighton. The annual order came from a customer in London who wanted "...my oldest and best whisky to divide amongst his friends there." Bell was always hopeful that these friends would spread the good word about his blends but, without an agent on the spot, there was not much chance of sales expanding in any satisfactory manner. What is noticeable from this description of the overseas markets is the absence of any sales in North West Europe except for the tourist trade in the South of France and Italy. The same is true of the whisky trade as a whole. It was not until after 1900 that the really big blenders expended a lot of effort on the European market and, by 1914, it was still insignificant by comparison with the Empire market and the U.S.A. Bell's whisky was not in evidence at all in Paris or Berlin in 1914.

52. L.B. 10th December 1889.
Whisky exports followed the British overseas. On what terms and conditions was the trade carried on? The appointment of agents was a significant development. Prior to this most companies sent goods on a consignment basis. Traders entrusted their whisky to a shipping company who undertook to sell at the best price obtainable in the chosen market. The cargo was auctioned, the exporter receiving the price obtained, less a percentage for freight and services. This system had the great advantage that sales were for cash and therefore there were no problems of outstanding credit. On the other hand, the exporter flung himself on the mercy of the market. In times of glut, whisky reached rock bottom prices at auctions and the fickle nature of colonial trade with income dependent on harvest success or mineral prices made the auction a risky proposition. Moreover, the system gave the exporter no control over the distribution of his product and, as brand names and advertising developed, this became a highly unsatisfactory feature. What was the point in spending money on advertising if importers could pass off any whisky bought at the auction under a falsely described brand name? Giving an agent exclusive distribution rights over an area of colonial territory obviated these difficulties. It placed the responsibility for sales and advertising on his shoulders. At the same time, however, unless the agent had substantial cash resources to pay for the goods on arrival, this system necessitated a credit network and its corollary a large amount of trust. As has been argued, these very features had given Bell extreme trouble in the home trade, though by 1890 his previous distrust of agencies had undergone a profound change.

Did this change carry over into the export trade? In a sense he avoided rather than met the problem when he started selling in Tasmania, for his brother, William, who appears to have been in the whisky trade in Glasgow, found an agent and undertook the finance of the operation. The first order of four quarter casks in February 1889 was followed by another a year later, and this "I am glad to
learn is likely to lead to further orders." The price "for this blend is 7/6, but as I was anxious to start a connection with you, I reduced it to 7/- and I really cannot lower it further without altering the quality. I can however ship a whisky of less age at a lower figure if wanted...For my future guidance I should be obliged by you informing me if you think my blend is highly enough flavoured for your trade or if you would prefer it with less or more flavour." The price for this export blend he drew on stocks held by Laidlaw and Sandeman, advising them "that our present blend costs 4/- and we get 7/-..." The problem of choosing the conditions under which to organise his trade could not be avoided in the Australian market. This time a contact in Australia introduced Bell to a Mr. Mussabini who was prepared to act as agent, but that was all, Bell had now to negotiate the method of conducting business. "I do not care" Bell wrote to his contact "for the consignment plan he proposed which is very risky, especially as I notice from the trade papers that the Melbourne market is glutted with Scotch whiskies, and auctioneers cannot get buyers. I would far rather get orders from customers out and out, through Mr. Mussabini and give him a commission..." The commission was 1/- on every gallon which was the same as in the home market. "This method" he told Mussabini "give you very little trouble after you get a few good houses to take regular shipments, as all you have to do is to send on the orders and I remit you your commission. I export whiskies of all qualities and prices from 4/- up to 9/- per bulk gallon f.o.b. London". Cash under the agreement was to be remitted directly the goods were received. Mussabini agreed and all that was left was for them to fix on a quality of blend to suit the market. Again Bell's insistence on quality came to the forefront:

"...I see by your letter that the great majority of the whiskies sold in Melbourne are 'utter filth, being subordinated to the frantic advertising' and I think that this is the more reason, why I should keep up the quality, and only export No. 6, which you could push among merchants, clubs and private gentlemen, and, when once tried would be sure to keep its hold owing to the quality being so superior to what is usually

53. L.B. 26th February 1890.
54. L.B. 17th February 1890.
55. L.B. 17th June 1890.
56. L.B. 17th June 1890.
"sold in Melbourne.
You might also get orders by explaining to your friends, that the reason I can keep up the quality is, that I do not advertise.." 57.

For the moment Mussabini conceded the point. Up until then all the sales had been of bulk whisky, which the Australian agent bottled and split amongst wholesalers. Now Bell wanted to start a retail trade in bottled cases, and also he was "...thinking of bringing out a finer whisky and registering it as the 'White Heather Whisky' which I think you might be able to push." 58 The question of branding his whisky - something which he had not yet tried in the home market - raised, at least in Mussabini's mind the apparent contradiction of Bell's position. What, after all, was the point in going to the expense of bottling, labelling and registering the whisky if the agent was not allowed to advertise it? To Mussabini, Bell was hiding his light under a bushel. Bell saw the matter differently:

"...I am quite prepared to ship my No. 6 at 15 u.p. in cases, but I am not willing to advertise. You mention that the whiskies which are largely advertised such as the Galley whisky and others are utter trash, but it stands to reason that no exporter can ship a good quality if he is called upon to expand such large sums in advertising, and I have decided not to advertise, but to try what can be done by the quality alone.

Our advantage and I may say a good one is that you will find that when once tried your customers will stick by you when they find they are getting a first-class whisky. I have a number of clubs who have got this No. 6 for many years and will have no other, which is more satisfactory than doing a big business (for a time) in something inferior and finding in a year or two that one's trade is rapidly decreasing owing to the public finding what trashy stuff one sells.

With regard to the registration it would be as well to wait until you got some regular customers for cased whisky so as to have some foundations to work upon.

In conclusion I think you will agree with me that after taking everything into consideration it is the best policy to export as I am doing, a good quality and secure a good

57. L.B. 16th January 1891.
58. L.B. 13th April 1891
"steady and increasing trade instead of advertising and exporting an inferior quality, which might catch the eye and bring in a larger trade for the time being but which would certainly not last." 59.

There was Bell's philosophy and there the matter rested. His approach seems to have worked for the following year he expressed his satisfaction by doubling the agent's commission and granting £1,000 credit to help secure further expansion.

The foundation of the export market was old Arthur Bell's last great act. He had laid the conditions for passing on the inheritance. At home the business, despite competition, was in good shape. Profits which in 1890 had only been £1,713 were £5,276 in 1895 and by 1900, the year Arthur Bell died, were over £11,000. Underlying these figures was a rapid growth in consumption of scotch whisky at home and overseas. Thanks to the long hard grind of Arthur Bell the firm was in a fine position to benefit, and in 1895 with both his sons in partnership he gradually withdrew leaving policy and day to day management in their hands. The affairs of the family were in good order also. Hard thrift and wise investment had built up a portfolio worth over £15,000. Little wonder then that Bell could advise his nephew Elliot out in Canada, that:

"..If my advice to you is of any use I would say, stick to your commission or Agency business only, until you have made money to spare to invest in speculative concerns. I think the best motto in business is 'slow and sure', but I see the present generation prefer 'fast and insecure', and in most cases they land themselves in the mud." 60.

Sad to say Elliot joined the ranks of the 'fast and insecure' and went bankrupt less than a year later. The question for the future was whether Bell's sons could avoid the same pitfalls.

59. L.B. 4th November 1891.
60. L.B. 26th July 1898.
VII. CONCLUSION

The last four chapters have traced the development of a firm that began in 1825, the venture of Thomas Sandeman, and, for thirty years after 1865 of Arthur Bell. Until the 1890s it was not a story of dynamic development but rather of cautious, careful, plodding management. But that perhaps is its very fascination, for without advertising, overseas sales trips, brand registration and, except latterly, a network of agents Bell was able to manage a business which by 1890 was selling Scotch whisky in England and in export markets. Kinship ties helped to open export markets for Arthur Bell and the firm provided the family with a more than adequate income. In discharging his family responsibilities and passing on a growing firm to his heirs, Bell fulfilled the aims he set himself. When he died in 1900 his estate yielded an estimated £45,000. Three-fifths of this came from capital accumulated in the business and the remainder from his investment portfolio, the bulk of which was in foreign investments. By the standards of his generation Bell died a wealthy man. His life-style gave little indication of his wealth. Partly this was because so much of it was tied up in the firm and not therefore available for consumption. It was also though an undoubted reflection of his own character. The firm was his life and careful, detailed supervision left little room for other interests. Surplus income went back into the business and not into personal pleasure. No grand property was left to mark Bell's departure from the whisky trade in Perth. At the time of his death he was living in a modest villa a few streets away from the firm's premises; indistinguishable from many others built in Perth around the 1880s.

Personal experience was Bell's university and the lesson it taught him was that modest advance was better than risky expansion. No corners were to be cut at the expense of stability. Nor did Bell delegate his responsibilities. The unfortunate experiences of his
partnership with Sandeman and then the desire to bring his sons into the firm, convinced him of the need to maintain personal control. No successor was groomed from amongst his employees and even his salesmen were allowed little discretion, especially where credit was concerned. In 1893, Bell appointed a salesman to handle his Scottish business and instructed him that:

"direct payment is to be made by purchasers to me; you act only in the capacity of salesman and let it be understood that I first satisfy myself with regard to the standing of such customers, before executing any orders..." 61.

Bell was never really able to resolve the conflict between selling more whisky and attracting less credit worthy customers. Nor by the time of his retirement was he decided about advertising. Quality and the loyal clientele it might secure still seemed to him the best policy though it is noticeable that the range of prices of his blends and begun to widen, suggesting that quality was being less rigidly adhered to. These conflicts and the cautious approach they gave rise to owed much to the uncertain state of the market in Scotland on which Bell was for so long entirely dependent. Other firms such as Dewars and Walkers shared the same market and it was not until the boom of the 1890s that the truly expansive and successful salesmen, the flamboyant figures who became "The Whisky Barons", emerged. It was their firms who came to dominate wholesaling and attention must now be focussed on them.

61. L.B. 18th July 1893.
CHAPTER SEVENTEEN

THE BLENDERS - "THE BIG THREE"

JOHN WALKER AND SONS LTD. (1890–1910)

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GRAPH 23: Net Profits of Dewars, Walkers, Haigs and Bells (1890 - 1924)
NET PROFITS

JOHN DEWAR & SONS LIMITED (1890-1919)

JOHN WALKER & SONS LIMITED (1890-1922)

JOHN HAIG & COMPANY LIMITED (1902-1925)

ARTHUR PEIL & SONS LIMITED (1890-1925)
I. INTRODUCTION

Arthur Bell's firm was chosen to describe the distributive section of the trade until 1895 for two reasons. The first was that the firm possessed a particularly rich vein of documentary material and business history, as much as any other type of history, is constrained by the sources that are available. In the case of Arthur Bell & Sons - as the firm was known after 1895 - the constraints begin to operate with the second generation. Bell's sons were less meticulous hoarders of recorders. Only one letter remains in the firm's archives and, after 1922, a set of highly summarised Board Minute Books. A few of the officials in the present day Company remember the firm in the 1920s but, between 1895 and the 1920s, there is a large gap in documentation. The second reason for examining Bell's firm was the belief that it would offer a more accurate picture of wholesaling, or, at least, a counter-weight to existing accounts based on the house histories of Buchanans, Dewars, Walkers and Haigs. Because the earnings of Bell's, Dewars and Haigs were not widely dissimilar in 1890 there was reason to suppose that Bells told as much about blending as the other firms. After 1890, it becomes increasingly difficult to adhere to that belief. Graph 23 shows the reason why. It plots the net profits of Dewars, Walkers, Haigs and Bells. The development of Arthur Bell and Sons in the 1890s was, by its own past standards, impressive. When set alongside Dewars, the other Perth firm with which Bells was most comparable in 1890 and the one that A.K. Bell frequently referred to, its performance is much less impressive.
Walkers too grew rapidly in the 1890s and, as the Graph suggests, the future of the industry was coming to lie with these firms. Equally, and this shows the futility of regarding the "Big Five" as having had anything like a common experience, Haigs were well outpaced by Bells. In 1890, Haigs had been more profitable than Bells. The Graph does not plot Haig's figures until the series becomes continuous after 1900, but the figures for the 1890s suggest that the firm, almost unique amongst the blenders, stagnated during the boom. After 1900, the firm was virtually moribund, the private bank of a family devoted to professional soldiering, until, in 1919, it was purchased by the Distillers Company and Haig's whisky was pushed as one of the D.C.L.'s leading brands.

The lack of information on Bell's history after 1895 is disappointing. It is not, however, critical to an understanding of the development of the Scotch whisky trade. After 1900, the U.K. spirit market began to contract and in 1909 received its severest jolt when Lloyd George increased spirit duty from 11/- to 14/9. The export market continued to grow until 1914 and, as the home market declined, became increasingly important to the trade. It could not, however, wholly offset the decline at home. Almost from the moment the home boom subsided, amalgamation became the theme amongst grain and malt distillers. The blenders were slightly slower to turn to amalgamation as a solution to their problems and it was not until Lloyd George's budget that the proprietors of Buchanans, Dewars and Walkers began preliminary discussions on a closer union of interests. Bells never participated in the merger movement and its history would have cast little light on this important feature. By sheer luck the business papers of A.J. Cameron, the secretary of Dewars from 1904 to 1911, (and a director from 1911 to 1928) have survived. These include correspondence between the proprietors of "The Big Three" (Buchanans, Dewars and Walkers) and between "The

1. Average profits 1890/94 were £10,998. 1898/99 they were £10,254.
2. Cameron died suddenly in 1928 and his papers were put in a packing case to await sorting. This was never done and the packing case was placed in a warehouse, where it escaped the eager eyes of efficient secretaries. I am indebted to Mr. R.L.C. St. Murray of Dewars for bringing these papers to my attention.
Big Three" and the Distillers Company. They give a thorough account of "the race for the premier position in the trade." 3 The purpose of this chapter and the following one is to trace the development of Walkers and Dewars, and, in rather less detail, of Buchanans 4 mainly between 1890 and 1909 so as to understand the position each firm occupied when amalgamation talks began.

Bells were not runners in the great race but their subsequent history after 1895 will not be passed over. What is known about the firm: its ability to grow, to remain independent, and to survive the vicissitudes of the early 1920s provides a useful reminder that not all blending firms rushed for the embrace of the D.C.L. group or found trading impossible outside it.

In the early years of the twentieth century, the cult of antiquity marked many blenders' advertisements. Pride in the age of the product and the longevity of the firm were dominant advertising themes. John Haig & Co., for example, went to great legal expense in 1913 5 to establish their claim to the title "The Oldest Distillers in the World" and in the process traced the firm's pedigree back to 1627. 6 The Haig family had, of course, been a dominant force in the Lowland distilling industry at the end of the eighteenth century but the separate blending firm of John Haig & Co. was only created

4. The Distillers Company kindly made available the business papers of Walkers, Dewars and Haigs. Buchanans were, however, in the process of reorganization at the time this research was carried out and it was not possible to arrange a visit to the firm. The most important features of Buchanans' trade from 1900 until "the Big Amalgamation" in 1925 are, however, covered in Cameron's papers.
6. Their statement ran as follows: "John Haig & Co. Ltd. are the oldest distillers in the World having been established since 1627 by Robert Haig, the firm having traded as John Haig & Co. since about 1800... The family... are descended from William Haig of Kincaple (fifth son of John Haig of the Garthlands near Alloa) who owned Kincaple and Seagoe Distilleries and was succeeded by his son John Haig who acquired Cameronbridge Distillery in 1824, he also founded the business at Markinch which he carried on in conjunction with his two elder sons, the late William Henry Haig and Hugh Veitch Haig..." For full text see ibid. at 12th November, 1913.
in 1877 when their distillery at Cameronbridge was sold to the D.C.L. Despite attempts to establish an export trade before the First World War it remained predominantly a local firm serving a local market in Fife. John Walker & Sons Ltd. coined the slogan "Johnnie Walker—born in 1820—still going strong" for their advertising in 1911. Their product was "the bottled experience of four generations in the art of distilling" and their guarantee of uniform quality throughout the world was:

"not the empty 'guarantee' of an irresponsible firm, but the warranty of a firm with ninety years reputation; an unbroken family management since 1820...

Dewars too, from 1899, employed the slogan "The Whisky of his forefathers" in their advertising. Only Buchanans, as befitted a firm founded in 1884, eschewed the cult and adopted "Black and White" as their brand name and trade mark from 1904. Walkers were founded in 1820 and Dewars in 1846 but, as Graph 23 illustrates, spectacular expansion only came after 1890. By then the second generation of Dewars and the third of Walkers were in charge of the family firms. These two businesses at least do not appear to have been afflicted with late Victorian entrepreneurial thrombosis. No profit figures are available for James Buchanan & Co. Ltd., except for the years 1900 to 1909, but by then the firm was earning larger profits than either Dewars or Walkers and given that firm's brief history its rise must have been even more rapid than the other two.

7. This is the shortened slogan. In 1911 Walkers had pretensions to poetry:

"Fashions come and fashions go!
With "Johnnie Walker" 'Tis not so
"Born in 1820" He
Still is going strong you see."

8. Newspaper advertising included among miscellaneous records of John Walker & Sons. Ltd.
II. JOHN WALKER & SONS LTD.

The firm in the 1880s.

In 1890, John Walker & Sons Ltd. earned profits of £24,856 which made it the largest of the three firms under consideration. It was also the oldest, having been founded in 1820 by John Walker. The founder was the son of an Ayrshire farmer, Alexander Walker of Todriggs, who owned "twenty acres and two roods of plowed land", according to the inventory of his estate. In 1819, on the death of his father, John Walker inherited the estate valued at £537.15.6. John Walker was a minor and his trustees invested the capital in an Italian Warehouse, Grocery and Wine and Spirit Business in Kilmarnock to provide for him when he reached the age of majority. Until the 1840s, when the railway connected Kilmarnock to Glasgow, Carlisle and the South, the firm's trade was purely a local retail one. John Walker's son, Alexander Walker, joined him in business sometime in the 1850s after training with a spirit merchant in Glasgow. The expansion of the firm into wholesaling and exporting is attributed to him.

According to the House History, Alexander Walker exploited connections made through wool merchants visiting Kilmarnock's carpet weaving industry to begin participating in a consignment trade with Australia. Whisky was only one of the items shipped and cargoes included pig iron, bricks, cement, crockery and gunpowder. By the 1880s, when the only surviving letter book becomes available as a source, Walker was still participating in the consignment trade as a partner in the firm of Mason Brothers, an import-export house with branches in London and Sydney. It is not clear at what date he began to specialise in whisky but a series of "disastrous ventures" in Mason's general consignment trade convinced him of the need to change the method of marketing his whisky in Australia. "Great laxity" in the Australian management "has been proved" and in

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11. The last was the product of a local industry.
1887, Alexander Walker sent his second son, Jack Walker,\textsuperscript{15} "a cautious, long headed and keen business man"\textsuperscript{16} to take charge of Mason's business in Sydney with the ultimate aim of establishing a separate branch of Walkers there, dealing exclusively in whisky.

At home Alexander Walker was convinced that only Scotch whisky was a growing item of trade:

"...I am not very sure but that the old Country is about played out. The leading industries of the Country are in a deplorable state. Agriculture, Coal and Iron. All are on their last legs. We cannot complain of dull trade. July was the heaviest month we have ever had in consumption..." \textsuperscript{17}

Like Arthur Bell, Alexander Walker's attention turned to the London market sometime after the equalisation of spirit duties.\textsuperscript{18} Initially, Walker used an agent in London but in 1880, after visiting the capital, decided that the trade merited a separate branch. James Kilgour, the agent, was offered the job of manager and by 1886 the London branch consisted of "offices, vaults and premises" at 3 Crosby Square, Bishopsgate Street, in the heart of the city. A retail shop was connected with the office. This ran at a loss until 1887 but it was, as Walker noted, "an advertisement"\textsuperscript{19} and as sales were increasing the loss gradually diminished. The Kilmarnock headquarters which, by 1886, consisted of bonded stores and offices in Strand Street and Croft Street, together with a shop, bore two-thirds of the loss in London because "it benefitted in a profit on the £2,000 goods invoiced."\textsuperscript{20} The willingness to suffer a short term loss in the hope of a longer term gain marks Alexander Walker out as a rather different entrepreneurial figure than Arthur Bell. At the same date employees numbered twenty, eleven in Kilmarnock and nine in London.

\begin{itemize}
\item \textsuperscript{14} J.W.& S., L.B. at 1st July 1887.
\item \textsuperscript{15} First name was actually John but all the correspondence refers to him as Jack.
\item \textsuperscript{16} J.W.& S., L.B. at 1st July 1887.
\item \textsuperscript{17} J.W.& S., L.B. at 10th September 1886.
\item \textsuperscript{18} T. Boyd, \textit{Op. Cit.}, P. 59.
\item \textsuperscript{19} J.W.& S., L.B. at 20th June 1884.
\item \textsuperscript{20} J.W.& S., L.B. at 20th June 1884.
\end{itemize}
In the 1880s, Walker was already selling branded whisky. His two proprietary brands, that is, whiskies sold under the label of the blender rather than the distiller, were "Old Highland", a mixture of malt whiskies and "Walker's Kilmarnock Whisky", a blend of malt and grain. The former was the main export blend.

III. Walker's Export Trade

Australia, the main export market for British spirits in the 1880s, was also Walker's largest export market until South African sales overtook Australian in the early 1890s. Alexander Walker delegated heavy responsibilities to his sons at an early age. Jack Walker was only twenty-one when he was sent to Australia to sort out Mason Brothers' marketing arrangements. When he arrived in Sydney he found the business in a poor state. Two of the partners had absconded, the consignment account was "in a very ragged condition", and costs were exceptionally high due to the Sydney office being packed with a "Crowd of Clerks.. many of these are drones." Jack Walker set about reorganising the business, a process which sufficiently upset the one remaining partner to cause him to hope "that Mr. John Walker - like whisky - will improve with age." Jack Walker drastically pruned "the drones" in Sydney and instituted a system of accounting to enable the profit on each item to be calculated. Adopting his father's principle that in the colonial trade "what pays is what is wanted" the loss incurring items were dropped. In less than a year he had reduced the Sydney overdraft to £16,000. His father called this "a

splendid reduction" but it perhaps gives a measure of the extent of the losses then being incurred. Marketing next received his attention. All the defects Arthur Bell had noted about the consignment trade were evident in Walker's Australian business, and, once Jack Walker had cleared the firm's account with Mason Brothers, he established a separate branch office with a network of travellers to solicit orders. By November 1889, Walker's whisky was the leading brand in Sydney. In Melbourne, where Walkers were selling through agents, sales were less satisfactory and, as John Blaikie informed Jack Walker, Alexander Walker considered the position bad:

"An Australian Trade Review was sent to Kilmarnock, and your Father writes deploring our second or third rate position in the Melbourne Market. I give you his 'ipsissima verba': 'I don't think we are getting the same honour in Melbourne we have a right to expect and I think a little fillip on your part might do some good...I think we are quite able to cope with Ushers in any market so far as quality goes but they seem to have got hold of the young rising generation with more go in them than our Agents and I am almost disposed to recommend that we should advise the Melbourne people to put a good man on to sell our goods alone.' Your father's suggestion as to having a special man on the road for our goods, is a capital one, and George and I in talking on the subject think that as we are spending say £330 a year on advertising could the half of this, say £150, not be saved from posters and newspapers and be devoted to a traveller. We are persuaded that personal visits would have a salutary effect on consumption! what do you think? we do not grumble overmuch as the sales for last year are considerably in advance, of any previous one, but, at the same time we are not in the first position and we ought to be..." 27.

Alexander Walker believed "Our Blend cannot be beat"; anything less that first place was an insult and a challenge.

Jack Walker originally went out to Sydney to reorganise the business and then to return to Kilmarnock. Colonial life, however, proved to be to his liking and the temporary visitor became a permanent settler. He developed the branch as his own business,

26. John Blaikie was an employee of long standing who became a director when the firm was converted into a private limited liability company in 1886.
27. J.W.& S., Ltd. at 25th January 1889.
suffering badly during the depression of 1892/93. His firm survived, but in 1896, worrying reports began to filter back to Kilmarnock about Jack Walker's mental health. His elder brother, George Patterson Walker (the Chairman of the firm after 1890), sailed for Sydney and on his arrival found "that Mr. John Walker had been certified as insane". There was no prospect of recovery and the business was insolvent with Walkers as the principal creditors. Walkers took it over, paid off the debts, and George Walker, as his brother had done before him, reorganised it under a new manager. Jack Walker died the following year aged only 31.

Australia was not the firm's only export market in the 1880s. Alexander Walker was always searching for agencies. In 1885, he appointed agents for "Old Highland" in Penang and Singapore:

"there is a large trade to be done if your firm will take it up heartily. We trust therefore the arrangement may lead to the pushing of 'the brand', and add materially to an increase in sales." 29

The following year, George Lipscombe, a traveller in the home trade, went to America "in search of health". Walker suggested that "Colorado and West America should be a fair field for Old Highland".

In fact Colorado turned out to be a "strictly teetotal state" and not much could be done there. 30

By May 1887, South Africa was covered by three agents. This arrangement brought nothing but trouble:

"As you may know we have three agents in South Africa namely Dunn & Co., White Muller & Co. and Holfes Nebel & Co., and every mail brings letters of complaint from each. They are and have been all importing our whisky very largely and now they are all interfering with each other's markets and cutting one another's throats in regard to price. White Muller & Co. are sole agents for Capetown and district and they have been selling our whisky in both Port Elizabeth and Kimberley against our agents in those places and as they have broken faith with us in this way we propose to

"Stop their supplies. Messrs. Dunn & Co. have appointed sub-agents in Kimberley to cut against our agents Rolfes Nebel & Co. there and are now selling our whisky at ruinous prices which will make our sales account show a sad loss. We propose to take the initiative and cancel their agency. We have had a very good offer from Rolfes Nebel & Co. here (a house of undoubted standing) to take up our agency for the whole of South Africa to be worked through their several agents and to pay us cash 14 days after the ship leaves for everything they order and they guarantee to take not less than 8,000 cases a year.

Our whisky can only be worked by one firm in South Africa and now unless the change is made at once in 18 or 20 months we won't be sending 500 cases a year to that colony as no one will keep it if there is no profit to be made out of it. One agent alone in South Africa will be the only course to save our brand from ruin in that market."

By June the other two agencies had been terminated and Rolfes, Nebel & Co., a partnership of two German immigrants, given exclusive rights. This was backed with a grant of £300 for advertising.

Walker paid close attention to his agent's reports and was ready to alter the type of whisky he supplied to meet competition from other blenders:

"Today we send you a sample of Usher's Grand Old Highland as arranged with Mr. Rolfe. He could only get this by seeing the Agent and telling him his private supply was run out! We have looked at it carefully and came to the conclusion that 'Ardberg' is the sum and substance of the whole matter and that our 'special' is 'head and shoulders' ahead. There will be no difficulty in meeting Rolfes with his request for about 100 dozen a year. Only a special Label will be a necessity. We would say just a black bottle (2 gallons) with our ordinary 'Very Old Label' printed across 'Special High Class' in red ink! As you will see the demand will be a very limited one but it will show the South African friends that we can produce something very old as well as our neighbours..."

Rolfes Nebel & Co. had contracted to take not less than 8,000 cases and by 1889, were selling between 25 and 30,000. For

33. A case contained twelve bottles and two gallons of whisky. A bottle held 1 1/3rd pints. The order for 8,000 cases amounted therefore to 16,000 gallons.
1890 they expected to sell 100,000 cases and South Africa was developing so rapidly that Walkers began to provide finance for Holfes to open branches in the main towns. Success on this scale made the agency particularly attractive to other blenders looking for a proven firm to develop their trade. In 1888, Walkers had faced competition from the D.C.L. in Australia after that firm began exporting in response to the formation of the North British distillery:

"With regard to the new departure of the Distillers Company we have known of this for some time but only know of one agency appointed, Phipps Turnbull & Co., Melbourne. There is little doubt that this action on their part will have the tendency to reduce prices all round, and the line you propose "maintenance of quality" is the most effective for holding our own. It is certainly very sharp practice on the part of such a Company but suppose its a "quid pro quo" for not getting the support of the large blenders. P.J. Jack is fully posted up with this, and we advise our different Agencies that these competitors are the Large Grain Distillers - plain spirit - which many authorities consider to be poison!" 34.

Mud-slinging was also part of a blender's stock in trade, but poisonous or not, by 1893, the D.C.L. were seeking an agent in South Africa and prepared to spend £650 on advertising in the first year to develop trade there. 35 The D.C.L. approached Holfes Neble & Co. and Mr. Holfes asked Walker's permission to accept the agency. George Walker did not conceal his disappointment:

"This coming as it does now on the back of our large expenditure for advertising is to me a bit disappointing. I don't so much fear the D.C.L. whiskies but the transference of part of your energies to push a brand equal in price... You should not become frightened of every new brand that makes its appearance.

The D.C.L. has been trying hard for the past few years to get in their various brands in every market and so far has not succeeded in making very much headway." 36.

Walker's contract gave them the power to veto Holfes Neble accepting the D.C.L. agency. It was not enforced. Instead, Walkers raised the

35. D.C.L., L.S. No. 7 at 7th July 1893.
minimum guaranteed sale from 8 to 12,000 cases and lowered the commission. Rolfes Nebel continued as Walker's South African agents until October 1914, when anti-German feeling in South Africa and a boycott of goods supplies by German firms, forced Walker — rather reluctantly — to cancel the agency. 37 Still, Rolfes Nebel & Co. fared rather better than Dewar's agents in South Africa. They too were German and an "infuriated mob" burnt their premises to the ground. The principals fled to Portuguese territory. 38

South Africa, for all the competition, was a successful market for the firm. Paris, where Alexander Walker decided to open a shop in 1887, had a disastrous start. Walker appointed a manager and gave him £300 to set up the shop in the Place d'Opera. An absence of orders and reports from the manager raised Walker's suspicions. An envoy from Kilmarnock investigated and could find no trace of the manager or, for that matter, the shop. Walker dolefully informed his fellow directors: "we have reason to believe he used the money for his own purposes. It will make a handsome contribution to his estate!" 39 The Paris shop was never opened and instead agents were given exclusive distributing rights for Walker's whisky in the whole of Europe. This arrangement does not appear to have been too successful though it was not until 1911 that the Continental agency was divided amongst agents for each major market. 40

37. Rolfes Nebel were paid compensation (£3,000) for the loss of their agency. J.W. & S., B.M.B. No. 1 at October 1914.
40. J.W. & S., B.M.B. No. 1 at October 1911.
IV. **Alexander Walker's Home Trade**

The home trade in the 1880s seems to have been much more easily conducted. Alexander Walker never lost sight of the importance of watching the quality of his competitors' blends and how they compared with his own. Walker's attitude towards quality was different from Arthur Bell's. The firm would blend a spirit to any price the customer cared to quote but, beneath a certain price, the firm would not attach its name to the blend. This separated Walker's whisky from general blends yet allowed the firm to chase contracts where keenness in price rather than quality was wanted. Thus Walker's supplied catering contracts such as that for bar whisky at the Empire of India Exhibition in 1894. Walker's correspondence is not marked by the agonising paralytic which inflicted Arthur Bell when low prices rather than quality were what the customer was after.

Walker spent a lot of time discussing advertising and packaging in the 1880s. Increasing importance was being attached to the "get up" of his bottled blends. The shape of the bottle and design of the label were coming to receive as much attention as the whisky itself. Advertising by poster, newspaper and show card was the main form of sales propaganda. J. W. & J., mainly aimed at retailers rather than the public, were suggested to salesmen. Sales were not thought much of;

"the bonus system for the 'Gaelic' whisky we will not likely condescend to. The feature consisting in a one pound coupon being put into one of a hundred cases..." 43.

At this stage in the firm's development, advertising aimed at wholesalers and retailers mainly through the medium of the trade press, was considered more important than advertising to attract consumers directly. If wholesalers and retailers found it worthwhile to stock Walker's whisky then they would push it. Not until 1894 did

42. J. W. & J., L.B. at 29th March 1884. This is the phrase still used today by blenders.
43. J. W. & J., L.B. at 20th July 1887.
the firm embark on an advertising campaign to gain public attention and even then Walker's spent much less on advertising than Dewars and Buchanan's.

Advertising and branding did bring one particularly annoying problem. This was the re-use of Walker's casks and bottles by retailers to pass off cheaper blends under Walker's name. Walker held a contract to supply the Midland Railway's hotels but in London consumers were not seeing much of Walker's whisky:

"...during the last month we have been hearing sundry accounts of the strained position of Walker's whisky at the 'Midland Grand'. Mr. Smith, cashier, with some of the Railway officials was in for a 'three of walkers' when they were recommended by the girl at the bar (who brought down a bottle) to take a much better whisky "The Lorne" (!!!). They would have 'none of the trash'. Mr. Wharton's friends... were in another night and were told that the first had gone forth that Walker's was to charged 6d. while the others were to be 6d. Wharton would have none of it and sent for Mr. Towle who asked the barmaid her authority for making such a charge. She had been told to do so by the head store keeper. Mr. Towle put the matter right and said there was to be no difference. Night before last Mr. Hodge was seeing off some friends to Scotland and went into one of the bars for a 'doch an doris' (excuse my Gaelic the spelling is not what it should be) there was only a dribble in one of Walker's bottles which managed to 'spin' over the three gentlemen. Mr. Hodge declares there was not a drop of walkers in the bottle and the girl hung her head when taxed with it.

Now what is to be done? First of all I expect Mr. Towle will be visiting one of these days for 12 dozen. We must simply decline to supply, and as he is worth 'powder and shot' will gladly try and fix him, as selling whisky out of Walker's bottles which have never seen Kilmarnock.

Mr. Smith tells me that from what he can gather along the different bars the attendants are instructed to fill the bottles from the tap!!" 44.

Competition took many forms amongst the blenders and not the least effective method of disrupting a rival's sales was to make backhand payments to cellarmen and barmaids to push a blend.

44. J.W. & S., Ltd. at 8th October 1886. Tap whisky was whisky sold from casks at the bar. It was sometimes referred to as 'rail' whisky after the brass footrests that graced Victorian bars.
Even in the 1880s sales material, casks and cases stamped with Walker's brand, enjoyed a flourishing secondhand market. In Australia, Alexander Walker was "amazed at the price going for our casks and cases. It is a pity you cannot put your finger on some of the blackguards who dishonourably use them." Bottles were reused also. The worst market for this type of copying prior to the First World War was India where proprietary bottles were re-filled with locally made spirit. One attempted remedy was the addition of a small label across the top of the cork. This merely resulted in forged labels. In 1912, a syndicate of bottle manufacturers was formed to develop a capsule fitment to replace the cork and make it impossible to re-fill the bottle. Walkers subscribed £5,000 for a third interest in the group, known as the Anglo-American Patent Bottle Company. It produced an aluminium fitment which split on opening leaving a ring round the neck of the bottle making re-filling hard to disguise. Walkers first used this in the Australian market beginning in 1913. It introduced "an element of novelty" into Walker's bottles and reinforced the firm's advertising claim that it could guarantee the quality of its blends throughout the world. Scarcity of aluminium during the First World War and the high cost of the capsule forced the firm to gradually abandon the fitment except in a few export markets. Its withdrawal coincided with the wartime stock scarcity and created the impression that Walkers "were not able to maintain the quality previously worth protecting."46

In May 1889 Walker was approached by a spirit dealer from Birmingham, John Kynoch, with a request to be allowed to act as agent for the Midlands. Walker was not too keen on opening in Birmingham:

"We are inclined to think that unless it was purchasing outright it would do us little good. The chances are that he would try to combine a Wholesale with a Family trade. We understand that Birmingham is in a worse position than even London with regard to loans. There

"is but few of the Hotels and Pubs, but are under the thumb of the brewers who generally tack on the wines and Spirits to their Beer. The idea we have is that bye and bye we might ask an established house to take up say Liverpool, Manchester and Birmingham, but this would naturally lock up a lot of capital and consequently it is only an idea." 47.

London, Walker thought, ought best handle the Midlands. The London office, however, had "about as much as we can set our face to. Every day new accounts are being opened, and we feel there is no end to the trade that may be done, and ought to devote our attention to what is at hand." 48. Kynoch was given an agency, and in 1897 it was terminated in favour of a separate branch office, Walkers third outside Kilmarnock.

V. MANAGEMENT & FINANCE

At least part of Alexander Walker's success must have been due to his remarkably enlightened system of industrial relations. Close contact with employees was no doubt easy when the firm only employed twenty people, but there was more to his approach than that. At home, all employees were paid a basic salary and, in addition, received an annual bonus from the firm's profits. Travellers and salesmen were included in this instead of the normal percentage commission basis of payment which most blenders

47. J.W. & S., L.B. at 22nd May 1889.
believed increased the salesman's enthusiasm. Walker's bonus gave all employees from the youngest postboy to the chief clerk an interest in the firm's expansion. Nor, unlike Arthur Bell, was Walker afraid to delegate. Branches had their own managers and Walker left the detailed running to them. Moreover, Alexander Walker's three sons did not take precedence over long serving employees. The eldest two, George Paterson Walker and Jack Walker, received a business training, like their father, in the Glasgow spirit trade. The third, Alexander Walker Junior, was apprenticed to a solicitor's firm for legal training and then to Robertson and Baxter, the Glasgow blenders. All the sons came into the firm and had to pass through each part of the business. Alexander Walker (Jnr.) joined in February 1888 aged 20, at a salary of £45, rather less than Walker's junior clerks were receiving.

In 1886, Alexander Walker converted the firm into a limited liability company, John Walker & Sons Limited. The nominal capital was £70,000 in £20 ordinary shares and £65,000 was actually issued. Alexander Walker held 2,000 of the 3,250 shares issued. The remainder were taken by employees and family. The board of the new company consisted of Alexander Walker as Chairman, James Blair and John Blaikie, both long standing employees, and Walker's two eldest sons.

According to the House History, Alexander Walker's motive for the conversion was "to ease his shoulders of the burden of an ever increasing load." This seems unlikely to have been the most important reason. Delegation had already done that for him and Walker was spending most of his time charting the firm's course of development. In this scheme limited liability status was merely a stepping stone to a public share issue. A public issue "has had our attention for a long time", wrote John Blaikie in October 1889. Why then was it not until 1923 that John Walker and Sons became a public Company?

49. Its greatest weakness was that it encouraged salesmen to take orders from uncreditworthy customers in an effort to gain commission.
50. He was educated at Ayr Academy.
The scheme to seek public participation was disrupted by Alexander Walker's death in July 1889. For a year the Company was without a Chairman and this created a critical hiatus in leadership which was less than adequately filled by John Blaikie and James Blair, Walker's two old colleagues. After conversion to a limited liability company, John Blaikie went to London as the resident director and James Blair stayed in Kilmarnock. In the interval between Walker's death and the appointment of his eldest son, George, as Chairman in July 1890 (aged 25), these two directors ran the firm. Both were minority shareholders without any clear authority other than long service and the time taken to settle Alexander Walker's estate. Relations between the two became increasingly strained with Blair complaining of Blaikie's "dictatorial spirit". 54

The main cause of the dispute between them was also the main reason why Alexander Walker had considered a public share issue desirable. Sales expansion during the 1880s had created a shortage of stock and of bonding accommodation. The latter was especially pressing because the Kilmarnock premises were acutely cramped, and Blair suggested that the firm might make use of a new bond in Kilmarnock recently built by William Wallace & Co., owners of the "Real Mackay" brand. Blaikie quashed this idea:

"With regard to utilising Mackays Bond it will not do for our Whisky to go under Mackay! About the last talk I had with Mr. Walker was on this point and he was dead against encouraging Mackay as he had heard incidentally that the big alteration in the Holm had been undertaken in the belief that J.W. & S. Ltd. would require more warehouse room. Far rather make use of Lowrie 55... For the sake of our prestige in the home trade we must be able to say we bond for ourselves and if we do go to our opponents we are likely to be twitted that we play second fiddle to William Wallace & Co." 56.

Blair proposed an alternative scheme to finance stocks which involved a second mortgage for "an extra £5,000 at 4½%" on the existing premises.

55. Lowrie: a blending and bottling firm in Glasgow which acted as general stockholders and blenders to firms lacking their own premises.
Again Blaikie opposed this:

"...This would be an error in view of our probabilities - in the extension of the Bond and in forming a public company, by this time next year. Work away as quietly as possible, buy from hand to mouth from Brokers and if you require, get them to renew for what you want at the regular Bank rate. You see if you take a mortgage for £5,000 in the meantime the difficulty will arise again when you want for the new premises an additional £5,000 to £10,000. Trustees will be chary to lend on 2nd Mortgages unless exceptional Interest is given. We are quite aware that you can show a saving of 1d. to 2d. a gallon by paying cash but we have not the capital to attempt this for our wants, and believe that our profits as at May 31st, 1890, will be sufficiently good to bring the General public in to take risks with ourselves. To use a scriptural phrase 'the end of the matter is' - we must simply "Go Canny and keep on the sods" avoid cheap sales for a month or two, buy from Brokers and pay for the privilege." 57.

It was this second rebuff which inspired Blair's complaint about Blaikie's dictatorial spirit but, as Blaikie pointed out, the shortage of storage space was damaging the firm's trade rather more than their personal quarrel:

"Then about Blending in Lowries. This hint given was only in the form of a suggestion. Not a day passes but that we have complaints of the Old Highland. In our opinion the Whisky never was finer than now but we cannot shut our eyes to the fact that the Whisky is not getting time to wed 58 and a rawness is palpable and in consequence this would be obviated by making use of now and again - Lowrie's big vat. This in time would enable you to lay aside a good stock...as well as benefitting your own bottling.

We are having strong opposition and in some instances have lost orders - Dewar Perth and others are presenting some capital whisky, well matured Blends. It is not pleasant to lose orders!

Now do accept these letters in the Spirit in which they are written, we are all in the same boat, with one idea - to make John Walker & Sons Ltd. a success and surely you cannot blame us for taking an interest in the stock we have to sell." 59.

58. i.e to mix thoroughly.
From Australia, Jack Walker was also pressing "for floating J.W. & S. on a new basis". Public capital was wanted for stocks and accommodation and the time, in his view, seemed right. At conversion in 1886, profits were £13,395. Sharp buying of mature whisky released in the crisis of 1888 at especially favourable prices raised them to £25,856 in 1890, and dividends since 1886 had been 22½ per annum. Blairkie had a recent share issue by McEwan, the Edinburgh brewer, in minds

"As to what form the new Company should take consideration as to the best method must be talked over. We are a much smaller lot than McEwan. He floated for a million keeping the whole of the ordinary for himself. To tell the truth, personally I should like to have some cash or shares as I wish to wipe out my liability with the bank and whether we get part shares or cash or wholly fully paid shares I must ask leave of my Co-Directors to dispose of part of my holding retaining of course sufficient for qualification."

A month later George Walker was elected Chairman and he brought all talk of a public issue to an abrupt halt. His opposition was a compound of three elements. A public issue would mean using the services of a "financial Agent" and he considered promoters' fees too high. Fear of loss of family control was also involved though as there was agreement that the ordinary capital and hence the control of the company should remain with the existing shareholders it is doubtful if this motive predominated. Most distilling and blending companies floated in the 1890s sold only preference shares to the public and Walkers would not have had any great difficulty in devising a scheme to ensure family control. Most of all, George Walker doubted the need for a public share issue. Four years of working as a private company had returned good dividends and allowed the accumulation of a reserve fund of £10,000. The existing shareholders, Blairkie excepted, were all willing to invest more in the firm and their lending could be supplemented by retentions, debentures and bank loans. Why resort to the capital market in these

60. Alexander Walker told the A.G.M.: "In consequence of what has been termed 'the Whisky Crisis' the year has been an exceptionally favourable one for Exporters and others, who, like this Company do not purchase speculatively, but only for the requirements of their business. Large quantities of whiskies were thrown upon the market and your Directors were enabled to make considerable purchases at prices which have favourably affected the balance." J.W. & S., B.M.B. No. 1 at 3rd December 1888.

circumstances?

George Walker remained Chairman until 1923 when Walker's became a public company. On each subsequent occasion when finance was discussed he held out against a public share issue and the firm continued to be financed by this untidy assortment of capital. This method had its more ludicrous features not the least of which was the recurring tendency for the actual capital employed in the firm to get wildly out of line with the issued capital. In the boom of the 1890s exceptionally high dividends were paid culminating in a dividend of 100% in 1902! Only then was the firm's capital increased by a capitalisation of reserves, the method used right down to 1920. Table 90 details the history of Walker's authorised capital.

**TABLE 90 - Capital of John Walker & Sons Ltd.**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Capital</th>
<th>Type of Share</th>
<th>Method by which Capital Increased</th>
</tr>
</thead>
<tbody>
<tr>
<td>1886</td>
<td>£70,000</td>
<td>£20 ordinary</td>
<td></td>
</tr>
<tr>
<td>1903</td>
<td>£210,000</td>
<td>£20 ordinary</td>
<td>£140,000 capitalised from reserve.</td>
</tr>
<tr>
<td>1912</td>
<td>£420,000</td>
<td>£20 ordinary</td>
<td>£210,000 capitalised from reserve.</td>
</tr>
<tr>
<td>1920</td>
<td>£1,260,000</td>
<td>£20 ordinary</td>
<td>£340,000 capitalised from reserve.</td>
</tr>
<tr>
<td>1923</td>
<td>£2,760,000</td>
<td>£1 ordinary</td>
<td>£1.26 million from ordinary £20 shares split into 20 £1 shares.</td>
</tr>
</tbody>
</table>

Notes: 1) In 1923 £2.0 million of 6% 1st. Mortgage Debenture Stock was issued to the public.

Table 90 shows only a part of the history of Walker's capital. It does not show the total capital employed and, in particular, the borrowing done by means of debentures. In 1894 the Company obtained power to borrow up to £50,000 on debenture and the following year this was increased to £70,000, a sum that was equal to the ordinary share capital of the firm. It has not proved possible to establish the changing level of debenture.

62. George Patterson Walker (1865 - 1926); Chairman of John Walker & Sons Ltd. 1890 - 1923.
borrowing but, until 1914, it cost the firm 5% per annum, the same as Dewar's public issue of preference shares in 1897.

Debentures were only one of the forms of fixed interest borrowing that made up the total capital employed by the firm. Other forms included bank loans and trade credit. The accountants called in to investigate Walker's financial position during "the Big Three" amalgamation discussions in 1910 calculated the average total capital employed by Walkers between 1904 and 1909 as £993,621. Of this total, £418,000 was accounted for by the ordinary share capital (£210,000) and the reserve fund (£208,000). The remainder, more than half the total capital employed, was fixed interest borrowing in its various forms.

Debentures were purchased by three main groups: the family itself, employees of the firm, and trustees of private funds. Although it is not possible to give quantitative expression to the significance of each group it is unlikely that the family were major holders of debentures. The rate of interest was far too small to make them attractive to the family, especially when the rate of return on the ordinary share capital was so high. Employees, the second group of debenture holders, were invited and indeed exhorted to deposit their savings with the firm. This lending, explicable in terms of a range of motives: "rainy day" provision, self-improvement, mutual employee-employer interest in the success of the firm, was unlikely given the small number of staff (78 by 1904) to have been a large source of capital. In all probability the largest lenders on debentures were the trustees of private funds. This group included lawyers and solicitors acting on behalf of clients, local businessmen with surplus capital, widows, spinsters and charitable trusts. The investors of these private accumulations, the fruits of Victorian prosperity, were the people who enabled Walkers to maintain "the privacy of the past" whilst obtaining limited liability.

In practice if not in law they made Walkers a "public" company long before its issue of preference shares in 1923.

63. J.D.& S., Cameron Papers, Report by Edwin Waterhouse.
64. F. Payns, op.cit., p. 520.
It was not to be until 1912 that Walkers began to experience difficulties over the supply of capital. Until then the flow of funds into the firm was sufficient and there is no sign that Walkers as a private company (the firm registered as a private limited liability firm in 1908 under the provision in the Company Act of 1908) suffered from rejecting a public share issue.

VI. INVESTMENT

What use did Walkers make of the funds at its disposal? Two main areas of investment are apparent between 1890 and 1910. The first, in common with other blending firms, was investment in distilling. In August 1893, in order to secure a cheaper source of supply of malt whisky, the firm purchased Cardow distillery, a Highland malt distillery on Speyside. Cardow, built in 1824, had been almost entirely modernised in the early 1880s. Reconstruction had improved its efficiency without spoiling the character of its product. Cardow whisky was "admirably adapted for blending purposes" and, according to the guide who conducted Barnard round the works, a single gallon "was sufficient to cover ten gallons of plain spirit." The distillery's only deficiency was its lack of a connection with the railway in Speyside. In 1896 the Great North of Scotland Railway provided a branch line and Walkers, at a cost of £1,500, built a station at the distillery; yet another of the growing number of distillery halts along the Speyside line. Cardow cost Walkers £20,500 of which £5,000 was met by Walker's shares. These went to John F. Cumming, the son of the proprietress of Cardow, Mrs. Elizabeth Cumming. John Cumming was appointed manager with a seat on Walker's board. In

65. A. Barnard, op. cit. p. 211.
December 1893, Walkers secured the lease of a Lowland malt distillery, Annandale in Dumfriesshire, purchasing the plant and goodwill for £2,000.67 Annandale, like Cardow, had been modernised in 1883.68 Both distilleries showed "satisfactory returns on the outlay" and, George Walker believed, "will tend to improve the status of the firm."69 Grain whisky supplies were not forgotten either and Walkers subscribed £5,000 to the Ardgow Distillery Company in 1896. In addition to these direct investments in distilling Walkers negotiated at least one long term supply contract with Glen Albyn Distillery in Inverness.70 By 1914 Walkers had acquired an interest in two other malt distilleries. In 1907 they became shareholders in the firm of McKinlays and Birnie, owners of Glen Dohr distillery, also in Inverness. In 1912 they took shares along with the Distillers Company in Linlithgow distillery.

The second major area of investment was in warehouse facilities. Pressure on stocks of mature whisky and warehouse accommodation had sparked the discussion about a public issue before Alexander Walker's death. The profitability of the firm and the adequate supply of capital removed the need for a public issue but the imbalance between sales and warehouse accommodation remained a problem. In 1892 the firm undertook "large warehouse extensions" in Kilmarnock and improved the efficiency of existing premises by "the installation of electric light and power, and high pressure hydraulics."71 By 1900, however, "the premises at Kilmarnock had been expanded to the limit of the ground available and the various departments were somewhat disconnected."72 To have sufficient warehouse space was not simply a matter of prestige, of the firm being able to say that it did all its own bonding, or of wishing to economise on warehouse rent paid to distillers. By 1900, Walkers were selling over a million gallons of whisky and held stocks amounting to eight million gallons. Production of blended whisky on this scale demanded a new approach to the handling of

68. A. Barnard, op.cit., p. 334.  
69. J.W.& S., B.M.B. No. 1 at June 1894.  
70. J.W.& S., B.M.B. No. 1 at December 1892.  
71. J.W.& S., B.M.B. No. 1 at June 1892.  
such large volumes of liquid especially with the growth in bottled sales which added another stage to the production process.

The increased scale of blending operations was a widely noticed feature of the Scotch whisky trade in the late 1880s. In 1887 the Wine Trade Review reported the running of the "first whisky special train" on the Great North of Scotland Railway. This carried 16,000 gallons of whisky direct from Cragganmore distillery, Ballindalloch, to a blender's premises in Dundee. It also commented on "the most important blend which has ever taken place in Glasgow" in which 12,000 gallons of whisky from seven distilleries were blended in a single vat. Such large vattings caught the headlines but less frequently noticed and therefore rather less easy to trace were the changes in blender's production methods that followed. The stages in the production of a blend are easily discernible. Whisky was stored in oak or sherry casks for maturation. The casks were then emptied into a large vat where they were mixed either by mechanical stirring gear or by blowing air through the vat. After being allowed time to "marry" the blend was casked or bottled. Casked sales were less demanding. The cask was stamped with the blender's name, usually as decoratively as possible for it was the cask that caught the consumer's eye when buying "tap" whisky in public houses and hotels, filled, sealed and then despatched. Reduction in strength by the addition of water was also carried out by the blender, though the retailer might be left to make his own adjustment. For bottled sales the blend was run from the vat onto bottling lines, filled in previously washed bottles, corked, sealed, labelled, ensased in a protective straw envelope, packed in wooden cases (also labelled) and finally despatched. With so many separate stages there was constant pressure to reduce handling charges by mechanisation and by designing integrated premises in which all the stages could be carried out. "The Desideratum" was "a self contained warehouse

73. Wine Trade Review, August and September 1887.
with railway siding accommodation."74

The following account of the building programme undertaken by the blenders is based on the house histories of "the Big Three." These studies concentrated on the buildings rather than the machinery housed in them and have left a gap in the history of mechanisation of blending which it is now almost impossible to fill. The buildings have mostly survived, though often fulfilling a different function, whilst the plant has been long since scrapped. Yet, it is clear from the rapidity with which new building and new plant was created — and indeed from the contemporary photographs in the house histories — that substantial mechanisation did take place. Mainly by the application of electrical power to a range of processes the blenders radically altered their production methods to cope with the increased demand from home and export sales. In one way the concentration of the house histories on accommodation for stocks at the expense of discussion of the way stocks were handled was justified. At the beginning of the 1890s the value of stocks was the dominant item in a blender's business. In the case of Dewars, for example, stocks valued at cost amounted to £15,261 in 1887. Plant and utensils were valued at a mere £135. Plant included two vats (£14.10.0), barrows (£1.10.0), one bottling machine (£6), a bottling rack (£2), one old (£2) and one new corksinking machine (£6) a washing machine (£55), a capsuling machine (£2), centrifugal pump (£12), rapid filter (£3), exhibition case (£1) — and the transport "department" — a horse and gig, value £30.75 By 1924 Dewar's final balance sheet before the amalgamation with the D.C.L. showed that that relationship had altered little; whisky stocks were valued at £4,377.746, plant and machinery at £34,101.76

Walkers solved the problem of the shortage of accommodation in Kilmarnock by leaving Kilmarnock alone. In 1899, Walkers purchased a share interest in Slater, Rodger & Co. a Glasgow firm which

75. J.D.& S., Partnership Accounts 1880/89.
76. J.D.& S., Accounts of Buchanan-Dewar Limited and Subsidiary Companies., 31st March 1924.
had "a modern warehouse with increased storage facilities and
blending and bottling accommodation ready to hand, and a railway
siding to expedite transfer of goods." 77 Twelve years later
Walkers acquired complete control of Slater, Hodger & Co. the move
being justified on the grounds that Slater, Hodger's profits of
£4,000 per annum "were largely earned by the business walkers
passed them." 78 The purchase cost Walkers £10,395.

James Buchanan & Co., a firm which drew all its supplies
of blended whisky from W.F. Lowrie & Co. Ltd. of Glasgow, acquired
control of Lowries in 1906 and financed a new bond to meet its
growing requirements. Washington Street Bond "was one of the finest
and best equipped in the Kingdom" and had "a floor area of no less
than seven acres, and a storage capacity in casks of 2,400,000
gallons." 79

In 1891, Dewars acquired their first heritable property
when they purchased the Speygate Bond in Perth for £2,000. 80 Three
years later the firm decided to build entirely new office and bonding
accommodation in the Glasgow Road in Perth with direct sidings pro-
vided by the North British Railway. By 1903 these premises were
inadequate and new bonding accommodation was added. This included:

"two blending vats each of 6,000 gallons... power plant
for filling, labelling and nailing. We were now equipped
to cope with the large orders for cased goods... With
four bottling tables we were able to handle in comfort
an output of 2,000 cases per day, while on the blending
side our capacious vats could cope with a very large
turnover in bulk whisky. Our two bonded warehouses held
half a million gallons of single whiskies, which meant
a very considerable in distillery rents." 81

Nine years later Dewars output was over 1½ million gallons and new
building was again undertaken:

"In the record time of six months a new warehouse, rising
to a height of one hundred feet, was constructed... The
six floors of this warehouse provided storage for 17,000
butts and vatting capacity for 40,000 gallons. The

78. J.W. & S., B.I.B. No. 1 at March 1911.
80. The bond that T.R. Sandeman, the founder of Bells had financed.
81. J.L. Anderson, op. cit., D.C.L. Gazette, July 1929. Only the grain
"warehouse was equipped with all the latest appliances then known to the Trade, and additional lines of railway were laid down in our private siding giving service right to our main platform for inward and outward traffic." 82.

A common feature of both Dewar's and Walker's approach to blending operations was the establishment of separate production facilities at branch offices. The main reason for this was to cut freight costs on bottled goods. To meet the needs of their London trade, Dewars purchased the firm belonging to their bottling agents, John Roebuck & Co. in 1894. Roebuck's premises, a wharf on the Thames at Waterloo Bridge, were promptly renamed Dewar's Wharf and on an adjacent building, "The Old Shot Tower", an illuminated sign of "a Highlander" was placed. Dewars seldom let slip an opportunity to advertise. Manchester was next to receive its own bottling department and a new bottling line was laid out on premises in the Trafford Park Estate to serve Lancashire and the Midlands. Liverpool followed suit in 1903. Walkers were bottling in London as early as 1888 and in 1902, a redundant brewery, St. George's brewery in Commercial Road was purchased. St. George's Bond was reconstructed "on the most up to date lines." 84.

The location of blending, bottling and distribution, the secondary stages of production of Scotch whisky, in the Lowlands and in England marked the final stage in the shift of distribution away from the centres of malt whisky production in the Highlands. 85 In Glasgow, Edinburgh and Leith the blenders added their own contribution to a legacy of Victorian and Edwardian industrial architecture. Blenders devoted a lot of attention to the internal design of their premises but the exteriors were never intended to be purely functional.

81. (contd.) distillers were charging rent at the time. The rate was 2d. per butt and ld. per hogshead per week.
83. The Old Shot Tower was a tower where round bullets were made by the process of dropping molten lead down a long shaft.
85. For a discussion of the factors influencing location see M.G. Storrie, op.cit., pp. 100 ff.
An imposing design was a good advertisement and reflected well on the firm's prestige and stability. Office accommodation to house the administrative army that followed the growing sales of blended whisky was built with the same aims in mind. Around the Port of Leith and along the Clyde in Glasgow blenders built their own distinctive business ghettos. London, above all, was the centre of the blenders' most lavish building expenditure. James Buchanan, who had established his blending business in a single rented room in Basinghall Street in 1834, purchased the Black Swan distillery in Holborn for £27,000 fourteen years later:

"The importance of such a valuable site fronting to Holborn, called for an equally important and striking design of building, and this work was entrusted to Mr. Edward Martin, F.R.I.B.A., a young and promising architect, who subsequently designed many notable buildings in London. At that time he was much influenced by the romantic work of the Continental architects of the fifteenth and sixteenth centuries, who, untramelled by conventions and precedents, had created work of surpassing freedom and beauty. The rebuilding was carried out in Bath stone... Mr. Martin succeeded in his task, designing an imposing building with an elegant frontage having due regard to our business requirements. The premises cover an area of over 20,000 square feet, and consist of five floors of spacious offices, with ample bottling, storage and loading accommodation." 86.

T.R. Dewar established Dewar's first London office at Warwick Street off the Pall Mall in 1887. He was "so little known then that he had to find security for the rent before he was allowed to take the tenancy." 87 In 1901, the administrative staff were moved to Dewar's Wharf but six years later these premises were inadequate and the firm decided to build its own office block:

"a long lease of a valuable site in the historic Haymarket was secured from the Earl of Wimborne. Building operations were got under way as soon as possible, and in about eighteen months time... this handsome structure in free Renaissance style consisting of three floors and basement came into occupation. The building, which was designed by Mr. Frank H. Elgood cost £42,000." 88.

86. F.W. Atherton, _op.cit._, D.C.L. Gazette, April 1931.
88. ibid.
Dewar House in "the historic Haymarket", Buchanans in Holborn, by 1907 Walkers had moved into Dunster House in Mark Lane which became the Company's registered office and headquarters in 1923. Walkers registered as an English company in 1923. So too did Scotch Whisky Brands Ltd., the holding company formed by Buchanans and Dewars in 1915. Scotch whisky was beginning to have a decidedly English flavour.

Investment in mechanised blending marked the expansion on "the Big Three" in their progress towards creating a national and an international market for Scotch whisky. The revolution in production methods was probably as important as the earlier reaction by the grain distillers to the productive capacity of the Coffey still. It has received far less attention than the blenders' salesmanship but in its own way it was nonetheless vital to their growth. It was the sine qua non for the creation of a mass market. What accompanied it was a standardisation of the number of blends each blender produced. In 1908, Walkers registered "Johnnie Walker" as their trade mark and two years later began to concentrate on three standard blends: Black, Red and White Label. "Dewar" was registered in 1891 and, in 1906, one blend, "White Label" was introduced as the standard brand. 89 Buchanans registered "Black and White" as their trademark in 1904 and it too became the standard brand.

Expenditure on lavish offices is less easy to explain except in terms of the image which the firms wished to portray and the competitive emulation between them. Prestigious property was justified so long as sales and profits were rising but the fixed costs involved might appear less beneficial in altered circumstances.

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89. Dewars, with the prior registration of "White Label" objected to Walkers using the same description but Walkers maintained the description all the same. J.W.& S., B.A.B. No. 1 at January 1910.
VI. WALKERS IN 1910.

By 1910, Walkers, in addition to their Kilmarnock head­
quarters had branches in London, Birmingham and Sydney. The firm
owned Cardow distillery, held the lease of Annandale, a third
interest in Glen Albyn, and a long term supply contract with Glen
Albyn. Bonding and bottling accommodation was also adequate for the
firm's needs. Overseas, "Johnnie Walker" was being sold in South
Africa, Australia, New Zealand, India, Singapore, the United States
and Europe. Three standard blends were being marketed and the
current advertising slogan: "All the 'dry' places of the Earth are
known to Johnnie Walker", was at one and the same time a gentle
jibe at the expense of the teetotallers and a reflection of the
firm's pride in its widespread sales. Employees too had increased,
from 18 in 1886 to over 100. The Board of Directors, as in 1886,
was five strong. George Walker, aged 45, was Chairman and his youngest
brother, Alex (aged 42) was a director. The other three directors
were J.F. Cumming, Adam C. Smith and James Stevenson. Cumming's
appointment came with the purchase of Cardow and he handled the
firm's distilling interests. Smith joined Walkers straight from
school. Stevenson entered the firm at the same time as Alex Walker
after a trade apprenticeship with W.P. Lowrie & Co. 90 Five years
younger than Alex Walker, these two were to bear the main burden of
management. Overall, the Board showed Walkers to be still relying
on local talent.

Since 1903, when the ordinary share capital had been increased
from £70 to £210,000 the firm had been paying a dividend of 38%. In
1910 this was cut to 35%. The reduction was not large and not enough
to cause alarm amongst the shareholders, now a larger and more dis­
persed group due to the deaths of the original directors. Walkers
published profit record since 1904 (See Graph 23) had not been
impressive but fixed interest borrowing sheltered the ordinary share­
holders from any drop in dividend. What the public balance sheet

90. Stevenson was educated at Kilmarnock Academy. Alexander Walker
at Ayr Academy.
showed was not, however, the true position of the firm. "The
balance sheets", Sir John Dewar learnt in June 1910, "are really
made up (if the word is not too strong) to deceive the other ordi-
nary shareholders." 91 In fact, as the accountant Edwin Waterhouse
was to discover, Walker's sales had been falling since 1904. Table
91 shows his calculations.

<table>
<thead>
<tr>
<th>TABLE 91 - John Walker &amp; Sons Ltd. - Sales (gallons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1904</td>
</tr>
<tr>
<td>1910</td>
</tr>
</tbody>
</table>

The fall in sales was experienced in the home market. Exports,
by contrast, were growing and by 1910 25% of the firm's sales
went overseas. Waterhouse's computations of Walker's profits also
told a different story than could be read in the published balance
sheets. In an attempt to standardise Buchanans, Dewars and Walker's
accounts he produced two sets of figures. These are shown in Columns
2 and 3 of Table 92. Column 1 shows the published figures.

<table>
<thead>
<tr>
<th>TABLE 92 - John Walkers &amp; Sons Ltd. - Profits (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1904</td>
</tr>
<tr>
<td>1910</td>
</tr>
</tbody>
</table>

In Column 2 Waterhouse deducted directors' remuneration, taxes and
reserves from the published balance sheet. In Column 3 these items
plus interest on capital were deducted. One of the barriers to "the
Big Three" amalgamating was to be the lack of agreement on the
accounting conventions by which the firms could be valued but the
sales figures alone suggested that Walkers were under pressure in
1910, and at the Board meeting in early September 1910, George
Walker informed his colleagues that he had had "overtures from James

91. J.D.& S., Cameron Papers, Original Amalgamation Papers at
28th June 1910.
Buchanan & Co. and John Dewar & Sons." They were, he reported, interested in "a scheme of amalgamation or a pooling of interests." 92

CHAPTER EIGHTEEN

THE BLENDERS - "THE BIG THREE"

John Dewar & Sons Ltd.

James Buchanan & Co. Ltd. (1890-1910)

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CHAPTER EIGHTEEN

THE BLENDERS: "THE BIG THREE"

John Dewar & Sons Ltd.
James Buchanan & Co. Ltd. (1890-1910)

John Dewar & Sons Ltd.

I. INTRODUCTION

Dewars, like Bells, was a Perth firm. The business had been founded in 1846 by John Dewar, the son of a crofter in Aberfeldy. John Dewar, born in 1806, was educated at the parish school and then apprenticed to the local joiner. On completing his apprenticeship he formed a partnership with his elder brother and they ran a carpentry business in Aberfeldy until 1828. In that year, a relative, James Macdonald, a wine merchant in Perth, invited John Dewar to take charge of his cellars and stores. Dewar settled in Perth and in 1837 was made a partner in the firm of Macdonald and Dewar. In 1846, aged 40, John Dewar decided to establish his own business and the partnership was dissolved. Dewar opened a wholesale wine and spirit business in the High Street. His trade was a local one until about 1860 when he engaged his first traveller to expand sales beyond Perth. Another was taken on during the 1870s. Dewar married in 1845 and in 1879 his second surviving son, John Arthur Dewar, became a partner. J.A. Dewar had been schooled at Perth Academy and then apprenticed to Condamine & Co., a spirit dealers in Leith. He was twenty-three when he received his partnership.

1. More detailed coverage of the firm's history before 1890 is to be found in J.L. Anderson, The House of Dewar, D.C.L. Gazette, April 1929.
John Dewar died the following year, leaving a widow, five sons and two daughters. His widow Jane inherited the firm which meant, in fact, the stocks and fittings of the shop in the High Street, no premises being owned. These were valued at £9,336 and constituted the entire capital of the firm. Jane was sixty when her husband died and appears to have played no active role in the business, John A. Dewar assuming responsibility for management. She did, however, receive income from the firm under an arrangement which gave her 4½% interest on the stocks and a half share of the profits. These in 1880 amounted to £1,321, about £600 less than Bell's and equivalent to a 14% return on capital. The stock sheets for 1880 show the firm to have been trading in a wide range of drinks: whisky, brandy, rum, beer, port, claret, "raspberry vinegar, lime juice and ginger." Whisky was the largest item in stock, over 11,000 gallons of aqua being listed compared to only 1,900 gallons of brandy, 500 of rum and 51 of gin. Provision for Mrs. Dewar and the rest of the family absorbed 64% of profits but John A. Dewar still managed to reinvest 70% of his remaining share, and, by 1887, the value of stocks (at cost of purchase) had increased from £9,336 to £15,261. By 1886, profits had grown to £2,277 but the following year they fell back to £1,322, almost exactly the level of 1880.

Besides John only one of the seven children came into the firm. This was Thomas R. Dewar, John's junior by eight years. After school at Perth Academy he had served short spells with two blending firms, Forrest & Turnbull of Leith and Robertson & Baxter of Glasgow. He was only 17 when he returned to Perth in 1881, his apprenticeship cut short by his father's death. Although the other three sons became shareholders when the firm adopted limited liability status in 1894 none sought employment in the whisky trade. James became a tea planter. Charles went into farm management and ultimately purchased a farm in Norfolk. Arthur qualified as an advocate in Edinburgh. Tommy Dewar served as an employee for four
years and, in 1885, was admitted into partnership with a third share in the profits of John Dewar and Sons. Tommy Dewar's interest lay in selling, his brother's in finance and administration. John Dewar passed his whole career based in Perth whilst Tommy pioneered new markets in England and overseas. At incorporation in 1894 John became the Chairman of the firm and Tommy the Managing Director. The only other member of the Board was J.W. Kippen, the family's solicitor. Despite rapid expansion during the 1890s and a public share issue in 1897, the Board's membership was not increased until 1911. In 1911, Kippen retired and his seat went to the Chairman's eldest son (also called John Dewar). Three new directorships were created and filled by A.J. Cameron, P.M. Dewar (no relation) and P.G. Whitefield. All were local men who had joined the firm in their teens and played an important part in its expansion. In Dewars, as in Walkers, talented employees found it possible to secure promotion to the Board.

II. EXPANSION

By 1885 the firm had agents in London and Manchester but "the resulting business was not quite so satisfactory as the partners had anticipated."² In order to expand sales it was decided that Tommy should go to London and personally canvas customers. At the age of twenty-one he moved South for what was to be a seven year stint in the capital. In later life — once successful — he was to joke about the unhappy start in London:

"I arrived in London with cards of introduction to two prospective customers. The first man had died — to evade me, as I then thought — and the other had gone bankrupt. The whole goodwill of my business was gone in one morning!"³

³. Obituary Notice, D.C.L. Gazette, April 1930.
Anecdote and humour were to be important weapons in Tommy Dewar's sales armoury but a rather more pedestrian account of the firm's London operations was given by Graham Morrison, one of the travellers at the time:

"Our office consisted of one room, part of a suite of business chambers, long since demolished. We had no office hours in those days, as there was no one to take charge, the staff consisting of another traveller and myself, between whom, in a general way, North and South London was partitioned for our operations.... When I commenced operations, we had about a dozen open accounts, but, fortunately, they were all good ones. I was instructed to call on these, and get as many introductions to their friends as possible. Having secured an order, I adopted the same methods with the new customers, so that, in time, I got quite a presentable list to call on. In those days, publicans bought only in bulk, for general use, and cased goods were mostly reserved for the Christmas trade, the bottled trade being almost entirely conducted by the 'off' licence trade at that time and much less important than it is now.

...A considerable time elapsed before Messrs. Dewar adopted any recognised form of publicity. My calling card, which was of generous dimensions, was the only exhibit in that way. Our first real achievement... was our well known 'Ancestor' Showcard, which became associated with our brand throughout the world. A publican in Fleet Street was asked by the police to remove this showcard from his window, as the crowd which congregated outside his premises blocked the traffic.

We were, I think, the first firm to exhibit a brand of Scotch whisky at the Brewers' Exhibition. ...Looking back it is surprising how publicity creates publicity."4

Morrison's account contrasts sharply with other versions of Tommy Dewar's activities in London. According to the house historian, moving to London "was a momentous step...the firm practically staked all its resources on the gamble of a dice's throw."5 And Daiches described it as "a tremendous gamble, financed by bank overdrafts."6 It is easy to appreciate how these verdicts were reached but difficult to agree with them.

Some statistics of the firm's performance between 1881 and 1899 will help to show how the move to London has been given this heroic interpretation. Table 93 shows Dewar's net profits between 1881 and 1899.

**Table 93 - John Dewar & Sons Ltd., Net Profits 1881/1899**

<table>
<thead>
<tr>
<th>Years</th>
<th>Net Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1881/84</td>
<td>£ 1,448'</td>
</tr>
<tr>
<td>1885/89</td>
<td>£ 1,790'</td>
</tr>
<tr>
<td>1890/94</td>
<td>£ 9,315</td>
</tr>
<tr>
<td>1895/99</td>
<td>£39,999</td>
</tr>
</tbody>
</table>

*Note: A Prime (') means only four out of five years figures are available.*

*Sources: 1881/1893 Partnership Accounts.*
*1893/1899 Private Profit and Loss Accounts.*

In the second half of the 1880s profits were growing. The increase was hardly dramatic though it was achieved against a background of falling spirit consumption in the United Kingdom. Marked advance came in the 1890s and in the latter half of the decade the firm's performance was particularly impressive. Other historians were also struck by the rapidity of changes in the firm's status. In March, 1894, the partnership was reconstituted as a private limited liability company with a capital of £100,000 (£10 ordinary shares). Three years later, in April 1897, it became a public company with an expanded capital of £600,000. £250,000 of this capital was in 5% Cumulative Preference shares of £10 each which, when offered to the public, fetched a premium of £1 per share.

Throughout the 1880s however, John Dewar, a much more cautious businessman than his brother, steered the firm along a tight course bounded by the family's dependence on the firm and a desire for expansion. He was acutely aware of the firm's
financial limitations and his main priority was not heavy advertising expenditure but rather a gradual expansion of sales, coupled with re-investment of available profits in whisky stocks. These circumstances determined that Tommy Dewar's arrival in London was not accompanied by a fanfare of publicity. Nor did the firm make any great leap forward immediately he descended on the capital. Instead, Tommy Dewar, like most whisky salesman, worked away seeking orders from the licensed trade by personal contact. Small casked sales were made to well known public houses like The Angel, Islington, The Horse Shoe, Tottenham Court Road, and The Elephant and Castle. Bottled sales came from hotel saloon bars and West End restaurants. The nearest Tommy Dewar got to a sales break-through was in 1888, after three years in London, when he won the contract for the supply of Spiers and Pond's catering establishments.

Nor, initially, was expansion financed by bank overdraft but instead by the Distillers Company. It was the D.C.L. that John Dewar approached in June 1890, and he was granted credit of between £10,000 and £12,000 provided Dewars confined their purchases of grain whisky to the D.C.L. In January 1891, Dewars reported "that owing to the facilities given by the D.C.L. their turnover for the past year had increased 50% on the previous year." In expanding so quickly Dewars exceeded their credit limit and the D.C.L. asked them to restrict their borrowing. Thirteen months later Dewars were back asking for an increase in their credit from £12 to £20,000. The Distillers Company felt, however, that Dewars were "pushing out too rapidly" and would only increase credit to £16,000. Table 94 shows Dewar's annual sales revenue from 1889 to 1899.

---

7. D.C.L., B.M.B. No. 6 at June 1890. These were the terms; (1) Dewar confines purchases of grain spirit to the D.C.L. except where unavailability of particular ages of spirit makes this unavoidable; (2) D.C.L. allow an unsecured credit (including Bills and Open account) of £12,000, any spirits bought in excess of this amount to be paid for before removal; (3) Price to Dewars, the D.C.L.'s usual gross price for respective qualities and ages of whisky, less 1d. per proof gallon for Bonus and the usual wood and removal allowances, but without any further allowance for Rebate.
8. D.C.L., B.M.B. No. 6 at 8th January 1891.
9. D.C.L., B.M.B. No. 6 at February 1892.
TABLE 94 - John Dewar & Sons Ltd., Total Sales Revenue 1889/99 (and %age Increase)

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales Revenue (£)</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1889</td>
<td>£11,250</td>
<td>(-)</td>
</tr>
<tr>
<td>1890</td>
<td>£16,813</td>
<td>(49%)</td>
</tr>
<tr>
<td>1891</td>
<td>£27,934</td>
<td>(66%)</td>
</tr>
<tr>
<td>1892</td>
<td>£36,341</td>
<td>(30%)</td>
</tr>
<tr>
<td>1893</td>
<td>£42,364</td>
<td>(18%)</td>
</tr>
<tr>
<td>1894</td>
<td>£64,383</td>
<td>(50%)</td>
</tr>
</tbody>
</table>

1895 £75,000 (16%)
1896 £113,422 (51%)
1897 £163,508 (44%)
1898 £215,133 (32%)
1899 £235,419 (9%)

Sources: Partnership Accounts and Private Profit and Loss Account.

"Take-off" for Dewars came with the granting of credit facilities from the D.C.L. and only when the D.C.L. was not prepared to finance the firm's expansion at the speed the partners desired did they turn to bank borrowing. Even then the credit from the D.C.L. remained an important part of Dewar's cash flow. By 1896, Dewar's debts to the D.C.L. "were in excess of stock in bond at £76,790." The Board noted, however, that:

"although this was considered a very large risk to have with any single firm, it was not deemed necessary to take any steps to reduce it as the firm referred to were thought to be of undoubted stability." 10.

Reliance on the D.C.L. diminished after 1897 when Dewars made their public share issue. Significantly though, John Dewar wrote to the Directors of the D.C.L. advising them of his firm's intentions and reassuring them that Dewars would continue "to give the D.C.L. a preference in their grain spirit orders." 11

Knowledge of the existence of credit links between the D.C.L. and blending firms like Dewars has not been available to other historians but they were important for lender and borrower alike. For the D.C.L. they went some way to restoring the firm's goodwill amongst the dealers after the antagonism engendered by the U.K.D.A. They also gave the D.C.L. an interest in the most dynamic section of the whisky trade and lessened the prospect of blenders starting patent still distilleries in opposition to the D.C.L. Significantly, Dewars did not participate in the floating of the Ardgowan Distillery.

11. D.C.L., B.M.B. No. 8 at May 1897.
Company. Nor, when the Distiller's credit diminished in importance was all the goodwill lost. For Dewars, access to credit gave them resources for expansion. Also, John Dewar's meetings with the Distillers Company brought him into contact with William H. Ross, the secretary of the D.C.L. from 1889, its General Manager in 1897, and three years later, aged 38, its Managing Director. Ross was six years younger than Dewar but the two men established a close and friendly personal relationship during the negotiations over credit facilities. Both shared an accountant's approach to business and, after 1900, gradually developed a common set of assumptions about the problems facing the Scotch whisky industry. Both wished to see greater stability in the trade, a reduction in the influence of speculators, and an end to certain "unbusiness like methods", beginning with a curtailment of "the very extravagant distribution of advertising material."\(^{12}\)

The resources set free by the Distiller's credit were used to achieve ends in line with John Dewar's priorities and not, as the heroic accounts relate, on advertising. The accumulation of whisky stocks was accelerated. At cost price these amounted to £15,658 in 1889, scarcely more than two years earlier. By 1892 they stood at £47,644, a more than threefold increase. The partners purchased the Speygate Bond, their first heritable property, and, to secure supplies of malt whisky, began malt distilling by the cheapest means possible, the acquisition of the lease of Tullymet distillery. Most striking of all, and the move which really created Tommy Dewar's reputation as a salesman, the partners financed a world sales tour. Tommy Dewar, having opened a branch in London, embarked on a round the world tour in search of representatives in foreign and colonial markets. He was away two years, between 1891 and 1893, during which he visited twenty-six countries, appointed thirty-two agents, and arranged for opening consignments to each country he had visited.\(^{13}\) The tour cost the firm £14,000 in expenses over the two years, a hefty increase in costs when the firm's current profits were less than £7,000 per year. The tour was a bold move to break into export markets. It was not a gamble

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but a carefully planned operation and it laid the foundations for Dewar's exports.

(III) ADVERTISING

The expansion of Dewar's sales, first in England, and then overseas, brought with it a start in advertising. In 1891, "Dewar", the brand name was registered as a trade mark and to back this up £688 was spent on showcards. The subsequent growth in advertising expenditure is detailed in Table 95.

<table>
<thead>
<tr>
<th>Year</th>
<th>Showcards</th>
<th>Advertisements</th>
<th>Total</th>
<th>Total Expenditure on Publicity as a Percentage of:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1891</td>
<td>£ 688</td>
<td>nil</td>
<td>£ 688</td>
<td>Total Costs 3%</td>
</tr>
<tr>
<td>1893</td>
<td>£ 957</td>
<td>£ 3,156</td>
<td>£ 4,113</td>
<td>Total Sales Revenue 2%</td>
</tr>
<tr>
<td>1895</td>
<td>£ 2,189</td>
<td>£ 6,258</td>
<td>£ 8,447</td>
<td></td>
</tr>
<tr>
<td>1900</td>
<td>£ 11,680</td>
<td>£10,564</td>
<td>£22,244</td>
<td></td>
</tr>
</tbody>
</table>

Sources: Private Profit and Loss Accounts.

In their profit and loss accounts Dewars recorded two separate forms of expenditure, on showcards and on general advertising. The latter did not begin until 1893 and was timed to bring Dewar's whisky to the public notice in the overseas markets Tommy Dewar had visited. The absolute level of advertising expenditure grew rapidly in the 1890s until by 1900 it had reached £22,244. When measured as a percentage of total costs and total sales revenue, however, the proportion of resources devoted to advertising actually declined between 1895 and 1900.
Initially, Dewars placed their advertising contracts with outside agencies but, by 1913, the firm was using an advertising agency in which Tommy Dewar held a share interest. Tommy Dewar justified this to Dewar's shareholders on the grounds that it lowered the cost of advertising:

"...with reference to the arrangement between me and J.W. Courtenay Ltd. (Advertising Contractors), Mr. John Arthur Dewar (my nephew) of Victoria B.C., holds £30,000 worth of shares in this company, and he receives, and will receive, for the next twelve months, at least, all the benefits of that investment, the money for which I found for him, but it is possible and probable that these shares may be transferred to me some time in the future. The Company is governed by Directors who are the nominees of Sir Joseph Beecham (Beecham & Co., Pill Manufacturers, St. Helens), Mr. Thomas J. Darrett (Chairman of A & F Pears Ltd) and Mr. J. Arthur Dewar. I am consulted as to the policy of J.W. Courtenay Ltd., who are trading with John Dewar & Sons Ltd., and this representing each firm in a dual capacity was the reason I disclosed this arrangement through which John Dewar & Sons Ltd. are benefitting to the extent of getting their advertising on buses and trams at rates 50% less than we paid last year, which goes to show that up to the present John Dewar & Sons have lost nothing by my association with this Company." 14.

There was something peculiarly fitting in Dewars sharing an agency with Beecham's pills and Pears' soap, both commodities pushed to national prominence by other "retailing revolutionaries."

The use of Raeburn's portrait of "The McNab" in conjunction with the slogan "The Whisky of His Forefathers" in Dewar's advertisements from 1899 emphasised the age and distinctive nationality of Dewar's product. More garish, but very successful in attracting public attention, was the electric sign on the Old Shot Tower at Dewar's wharf. The bearded Highlander periodically raised his glass of Dewar's whisky and as he did so his kilt and beard appeared to sway in the wind. The whole sign was topped by the name "Dewars" in bold lettering. 15 These two schemes are remembered for their distinctiveness but Dewars, like other blenders, employed a multiplicity of more commonplace techniques: "advertisements in papers, periodicals, magazines, posters, plates, paintings, literature,

15. D. Daiches, op.cit., p. 86.
special bottles, window lettering, Christmas gifts, .. and subscriptions to outings and regattas."\textsuperscript{16}

Even more than Walkers, Dewars complemented their advertising with a framework of branches. London came first in 1887 and was followed by Bristol in 1894. By 1900, a further seven branches in Manchester, Birmingham, Liverpool, Glasgow, Edinburgh, Dublin and Cardiff had been opened. Production facilities, as has already been discussed, were expanded to match and, at two of the branches, London and Manchester, separate bottling lines were built. Overseas branches came later: New York in 1902, Calcutta in 1903, Sydney in 1904, and Melbourne in 1908.

IV. EXPORTS

Although export branches were not established until after the firm founded a distribution network at home, Waterhouse's investigations in 1910 showed Dewars to have the largest export sales of "The Big Three".

\begin{table}
\centering
\begin{tabular}{|c|c|c|c|c|}
\hline
{} & Buchanans (\%) & Dewars (\%) & Walkers (\%) & Industry (m.p.c.) (\%) \\
\hline
1905 & 297,098 (28) & 340,830 (39) & 212,692 (17) & 7.191 (17) \\
1909 & 444,518 (30) & 454,331 (40) & 256,230 (20) & 7.847 (24) \\
1910 & 433,870 (29) & 496,568 (45) & 281,629 (25) & 9.800 (30) \\
\hline
\end{tabular}
\caption{"The Big Three", Export Sales (By volume and as a \textit{\%} of each firm's total sales)}
\end{table}


Table 96 presents the export sales of "The Big Three" both by volume and as a percentage of each firm's total sales. It also, for comparison, shows the volume of exports for the spirit industry.

\textsuperscript{16} J.D. & S., Cameron Papers, 1st June 1912.
as a whole and those exports as a percentage of the total consumption of British spirits. Dewars did not have the largest overall sales amongst "The Big Three". In 1905, Walkers held that honour; by 1907, it belonged to Buchanan’s. Both Buchanan’s and Dewars were dependent on exports to a greater degree than the industry as a whole, and, Dewars had the largest volume of export sales of "The Big Three."

Why were Dewars such successful exporters? Tommy Dewar’s world tour of 1891/93 was but the first of many made by representatives of the firm and Dewar’s history was to be punctuated by these sales campaigns. In 1898, Tommy Dewar went off again:

"Dewar has left London on a tour round the world similar to that he made six years ago. He is to visit Khartoum, the North-West Frontier of India, Siam, Peking, Korea, Japan and the Pacific Islands, returning via Canada and the United States." 18.

Four years later Peter Dewar 19 repeated the exercise. He surveyed the Indian market, opened a branch in Calcutta, and established Dewar’s whisky in Burma. From there he sailed to Australia and founded branches in Sydney and Melbourne. In 1910, the task fell to John A. Dewar’s eldest son, John Dewar. He had been with the firm only three years but the third generation of the family were weaned early. Peter Dewar undertook his second, and the firm’s fifth, world tour in 1914. It was not completed due to the outbreak of war but an incident during it symbolises the firm’s attention to exporting. In October 1914, news was received in Perth that the premises of Dewar’s agents in Johannesburg had been destroyed in an anti-German riot. Peter Dewar was in Sydney and he was cabled to proceed at once to Johannesburg. He arrived the following month, opened a branch, and within six weeks two

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17. i.e. Home consumption plus exports.
18. Wine Trade Review, 15th December 1898.
19. Peter Dewar: Born 1st November 1870 at Innerwick; first job with the Union Bank of Scotland, Killin. October 1890 joined John Dewar & Sons; 1897 appointed Inspector of Branch Offices and Agencies, responsible for opening six of Dewar’s English branches. 1911 appointed Director of John Dewar & Sons Ltd.
employees from Perth were in Johannesburg. By the New Year of 1915, the office was fully functioning and this rapid response saved Dewar's interests in South Africa from "utter destruction." After the First World War these sales trips were resumed again, John A. Dewar, undertaking the sixth in 1921.

There is little doubt that these frequent trips were the main reason for Dewar's outstandingly successful export record. The firm did not simply appoint export agents and wait hopefully for sales to roll in. Constant pressure was maintained on agents and the firm's own overseas salesmen by these visits. It was supplemented, in the absence of a home official, by a regular flow of correspondence from Perth. To ensure that branch managers and agents kept on their toes Dewars operated a system of accounting which supplied monthly returns of sales and expenses. This was the brainchild of Thomas Herd who joined Dewars in 1892. He was with Dewars for five years and revolutionised their accounting techniques. The old single entry accounts were scrapped, double entry introduced, and "an excellent method of summarising and balancing the book-keeping system" established. Herd moved to Watsons of Dundee and established a sales reputation when he opened up an export market for their "No. 10" blend before it had been sold at home. He joined the D.C.L. in 1923 and succeeded Ross as Chairman in 1935.20 Using Herd's system the firm was immediately able to identify weaknesses in its export sales as the experience of the New York branch will serve to illustrate.

Dewar's agent in the East Coast was Frederick Glassup. At the start Glassup was, in John Dewar's words "a most remarkable success" and Dewar boasted to his brother that: "You will find "Dewar" to be well placed in the United States... we are now quite top of the tree in that market."21 In 1902, Dewars opened a

20. Thomas Herd: Born 31st January 1873. First job with William Young & Co., of Grange Distillery, Burntisland; 1892 joined Dewars; 1897/99 in whisky trade in Glasgow; 1899 joined James Watson & Co. Ltd. of Dundee in charge of export department, became Director 1912. On liquidation of Watsons in 1923 joined D.C.L. as Deputy General Manager in charge of blending and distributing; Director in May 1925. Also founded D.C.L.'s Statistical Department.
branch office in New York and Glassup was appointed Manager. Glassup was, however, a less effective manager than salesman and by October 1903, Cameron was writing to him expressing the Directors' disappointment at his efforts:

"The Directors naturally feel disappointed at the present position of matters and express the hope that you may soon be able to show better results. At our half yearly Balance on 31st July, last, your sales for the six months were £33,000 and your expenses no less than £13,000. This is an increase in your expenses of £5,000 for the six months, while the increase in sales is only £3,300. You can readily understand that the U.S. business is meantime being conducted at a loss, and we feel that next year a great curtailment must be made in your advertising expenditure. The Directors naturally feel that with the great initial expenses which we had when the office was opened that the days of working at a loss should now be ended..." 22.

Five months later there had been no improvement: "in fact there has been a deterioration in the agency. Expenses have increased £13,000 over the year and sales are stationary."23 In October Cameron again wrote to Glassup:

"The Directors express keen disappointment in the sales for the U.S.A. for the 8 months to 31st August. The figures:

<table>
<thead>
<tr>
<th>Sales</th>
<th>Expenses</th>
<th>To sell each case it costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 months 1903 - 30,345 cases</td>
<td>£17,676</td>
<td>11/8</td>
</tr>
<tr>
<td>8 months 1904 - 31,625 &quot;</td>
<td>£19,349</td>
<td>12/3</td>
</tr>
</tbody>
</table>

"At the present rate of expense it would require a turn-over of not less that 6,500 cases per month to convert this loss into a reasonable profit, while presently your average turnover is just under 4,000 cases. The above expenses do not include the expenditure of £1,100 for fitting up the new offices, which constitutes a further heavy charge on your Branch... It must be understood that no Advertising Contracts will be entered into until Sir Thomas A. Dewar24 is able to visit the Branch in the beginning of next year... to consider the advisability of closing the Branch. At present it acts simply as a drag on the other Branches and this cannot be allowed to continue..." 25

22. J.D. & S., L.B. at 14th October 1903.
24. Tommy Dewar received a knighthood in 1901. See p. 550-551 below.
25. J.D. & S., L.B. at 7th October 1904.
Accurate and rapid indentification of sales costs gave the Board in Perth the information needed for changes in policy. Implementation of these changes was then made the responsibility of a senior representative from Perth.

Dewar's export trade, like Walker's, was not free from snags. Their first agent in Capetown sought sales "by allowing everyone to taste the whisky free and leaving them the bottles. He pushed the brand by going into a bar and calling for it, and treating those from whom he wanted an order." In six months he got through 500 cases by this means for which Dewars received nothing. Worse still, an employee sent from Perth to investigate borrowed £45 from the agent, "took a single ticket to Mafeking, and was seen no more." 26 Such blemishes should not, however, be allowed to tarnish the other fine features of Dewar's export performance. Not the least of these was the firm's attitude to exporting which dictated that overseas sales were a task for senior personnel and not something to be delegated to junior members of the firm as an afterthought. Moreover, senior personnel were given full power to take decisions affecting exports on the spot, without reference to Head Office. A convention seems to have existed that where a decision subsequently turned out to have been wrong the home Directors did not engage in carping criticism. As a consequence those engaged in exporting gained confidence in their own judgement and did not have to waste time explaining how different market conditions were in Melbourne or Calcutta from Perth. Dewar's exporting was not marked by tedious delays whilst export salesmen received clearance from the Board at home. World sales tours were jobs for senior management but many of the agents and branch managers were young men and the Dewar brothers seem to have been able to inspire them to devote themselves to the firm's interests. There was too just a tinge of Imperial adventure about exporting. Here are the instructions given to Neil Finlayson in 1914 on his appointment as manager of the Indian business:

"Your work will consist largely of controlling the
travellers and inside staff, and organising, planning
and carrying out schemes for the development and
furtherance of our business in India by advertising,
publicity and personal effort. Your ground will
embrace the whole Peninsula of India with Ceylon and
Burma in addition. You will require to take frequent
journeys on the more important commercial and tourist
routes, and open up new fields of business in any
parts of the Provinces hitherto undeveloped. India
being a country of such diverse and complex features,
much has to be learned which can only be picked up by
experience, but we are confident that with well directed
enthusiasm, tempered with discretion and good judgement,
that you will make steady headway in the expansion of
our Indian connection. In this you will be ably assist-
ted by Mr. Little who has now been out there for many
years, and is thoroughly acquainted with the trade
customs and practice peculiar to that country. Meanwhile
it might be to your advantage to get acquainted with the
geography of India, and to read up one or two of the
standard works on the history, customs and commercial
practice of that country, as this will enable you to
add to your general stock of information regarding that
important part of the British Empire to which you are
presently to set out." 27.

Sad to relate Finlayson contracted fever in India and was dead
within four months of his arrival; exporting had costs not dis-
played in balance sheets.

What was the importance of export sales? In discussing
the effects of the collapse of the boom of the 1890s, a distinc-
tion has to be drawn between the Scotch whisky industry as a whole
and the experience of particular firms within the industry. For
the industry, the significance of exports was that they operated
as a partial offset to the decline of the home market after 1900.
The experience of Buchanans and Dewars shows, however, that even
within a declining home market it was possible for particular firms
to increase sales and hence their share of the market. Table 97
shows the sales of Buchanans, Dewars and Walkers in 1904 and 1909.

27. J.D. & S., L.B. at 10th February 1914.
Walkers, as had already been discussed, were under much more pressure to consider amalgamation than were Buchanans or Dewars. Walker's home sales were down almost 2%, they had ceded their premier position in the home trade, and although great effort was put into exporting the increase in export sales did not offset the poor showing at home nor did it prevent their profits from declining. Walkers, the sales figures seemed to suggest, would be most amenable to amalgamation. Dewar's sales showed almost no sign of the crisis that was enveloping the industry after 1900. Both home and export sales were increasing, even if not by as much as Buchanans. Yet Dewars were to become supporters of amalgamation. How is this to be explained?
V. "COSTLY COMPETITION"

Table 97 shows only the volume of sales. What is required to assess the market situation Dewars faced is a measure of the revenue from these sales and its effects on the firm's profits. Table 98 shows the average annual percentage changes in Dewar's sales revenue and profits. It also shows profits as a percentage of turnover. The table covers the five year periods from 1890 to 1909 and the single year, 1910, the year after the budget.

<table>
<thead>
<tr>
<th>Average Annual Percentage Change in:</th>
<th>Profits as %age of Sales Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales Revenue</td>
<td></td>
</tr>
<tr>
<td>1890/94</td>
<td>42.8</td>
</tr>
<tr>
<td>1895/99</td>
<td>30.6</td>
</tr>
<tr>
<td>1900/04</td>
<td>10.4</td>
</tr>
<tr>
<td>1905/09</td>
<td>24.1</td>
</tr>
<tr>
<td>1910</td>
<td>-3.8</td>
</tr>
<tr>
<td>Profits</td>
<td>61.3</td>
</tr>
<tr>
<td>23.5</td>
<td></td>
</tr>
<tr>
<td>30.8</td>
<td></td>
</tr>
<tr>
<td>16.2</td>
<td></td>
</tr>
<tr>
<td>34.7</td>
<td></td>
</tr>
<tr>
<td>-5.3</td>
<td></td>
</tr>
</tbody>
</table>

Note: For 1905/09 only 3 years figures are available.

Source: Private Profit and Loss Accounts.

The changes in sales and profits between 1890 and 1899 underline the rapid growth of the firm. They also, of course, reflect the low base from which sales and profits grew. Dramatic percentage increases were not difficult to achieve when, in 1890, profits were only £3,597 and sales revenue £16,813. By 1900, when the respective figures were £64,192 and £266,283, percentage increases might have been expected to be smaller. So, between 1900 and 1904 they were. In the subsequent five year period there is unfortunately, a break in the series of profit and loss accounts for 1905 and 1906. Given though, that sales volume was rising, such large increases in revenue and profits are not probably untypical though profits for 1909 at £161,326 received a small windfall gain from profits taken on pre-budget clearances. This, however, only amounted to £6,804. Nor does the right hand column, which shows the profit margin on
turnover, indicate any reason for Dewar's disquiet at the competition prevailing between "The Big Three". Profit margins on sales showed a continuous rise over the period.

Sales revenue and profits do not therefore appear as significant influences on Dewar's desire for amalgamation. What about the costs incurred in achieving these sales? By 1909, three main items were present in sales costs: branch expenditure, advertising (including showcards), and discounts. Table 99 shows the number of branches, total branch expenditure, and branch expenditure as a percentage of total costs.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Branches</th>
<th>Total Branch Expenditure</th>
<th>Branch Expenditure as % of Total Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1900</td>
<td>9</td>
<td>£38,872</td>
<td>19%</td>
</tr>
<tr>
<td>1904</td>
<td>11</td>
<td>£73,292</td>
<td>27%</td>
</tr>
<tr>
<td>1909</td>
<td>13</td>
<td>£92,659</td>
<td>24%</td>
</tr>
<tr>
<td>1910</td>
<td>13</td>
<td>£89,146</td>
<td>24%</td>
</tr>
</tbody>
</table>

Note: For some reason not explained in the accounts the expenses of the New York branch were listed as agency expenses although a branch was opened in 1902. Its cost has been added to total branch expenditure, but the branch has not been added to the number of branches.

Source: Private Profit and Loss Accounts.

The absolute cost of maintaining branches rose until 1909 but branch expenditure as a proportion of total costs declined after 1904. With the growth in sales volume and revenue between 1905 and 1909 branches were well justified.

Advertising expenditure was more problematic. Tommy Dewar was responsible for advertising and was a confirmed believer in its efficiency. One of his sayings — they became known as 'Dewariams' — was: "A businessman who does not advertise is like a man smiling at a pretty girl in the dark. He knows he is doing it, but nobody else does." His brother was far less convinced about the value of
advertising. He was never entirely certain about what exactly constituted a successful advertisement and he recognised the danger that in a competitive situation advertising expenditure could easily get out of hand. In August 1900, he wrote to Ross of the D.C.L. proposing a limitation on advertising:

"Dear Mr. Ross,

Permit me first of all to congratulate you on your recent appointment as Managing Director of your Company. You very richly deserve this promotion which you have earned, and I am quite sure that the Company will benefit from the change as well. I thought of bringing another matter to your notice. We have been trying in conjunction with several other firms to curtail as far as possible the very extravagant distribution of advertising material which has been going on for some time through the unbusiness like methods of certain Leith houses with whom we had to compete. Our South American representative sends us a report today where he complains that the position in this regard of the Leith House is being taken by the D.C.L. Now I have never complained about your Company selling us whisky here, and then competing with us in our foreign markets, although I know many of the people in our trade think of this as a grievance, but I hope you will join us in suppressing as far as possible the issue of advertising material which might very well be dispensed with. I may mention that while this year we are spending a very great deal less in advertising than we used to do, our sales are very much increased, and as we have just completed our half yearly balance we find our profit is also for the half year very much higher. Of course I know that a certain amount of advertising material is absolutely necessary, and all I ask is that it should be discouraged and curtailed as much as possible. I am quite sure this will be for the benefit of us all."

Either John Dewar was unsuccessful in persuading other firms to restrain their advertising, or his brother won him over, for, as Table 100 makes clear, the absolute level of advertising expenditure increased until 1908 when it accounted for 13% of total costs and 10% of total revenue.

TABLE 100 - John Dewar & Sons Ltd., Advertising Expenditure (1900-1910)

<table>
<thead>
<tr>
<th>Year</th>
<th>Showcards</th>
<th>Advertising</th>
<th>Total</th>
<th>As Percentage of Total Costs</th>
<th>As Percentage of Total Sales Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>1900</td>
<td>£11,680</td>
<td>£10,564</td>
<td>£22,244</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>1904</td>
<td>£9,244</td>
<td>£26,324</td>
<td>£35,568</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td>1908</td>
<td>£8,863</td>
<td>£40,770</td>
<td>£49,633</td>
<td>13</td>
<td>10</td>
</tr>
<tr>
<td>1909</td>
<td>£7,622</td>
<td>£35,397</td>
<td>£43,019</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>1910</td>
<td>£6,459</td>
<td>£34,068</td>
<td>£40,527</td>
<td>11</td>
<td>8</td>
</tr>
</tbody>
</table>

Source: Private Profit and Loss Accounts.

With Dewars facing competition from Buchanans and Walkers, the important factor was the changing level of competitors' advertising expenditure. Waterhouse showed quite clearly that between 1905 and 1908 all three firms had greatly increased their advertising expenditure. His figures are shown in Table 101.

TABLE 101 - "The Big Three", Advertising Expenditure (1905-1910)

<table>
<thead>
<tr>
<th>Year</th>
<th>Buchanans</th>
<th>Dewar</th>
<th>Walkers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1905</td>
<td>£37,652</td>
<td>£54,913</td>
<td>£9,265</td>
</tr>
<tr>
<td>1908</td>
<td>£48,499</td>
<td>£60,782</td>
<td>£24,211</td>
</tr>
<tr>
<td>1909</td>
<td>£47,425</td>
<td>£50,463</td>
<td>£35,406</td>
</tr>
<tr>
<td>1910</td>
<td>£40,191</td>
<td>£50,018</td>
<td>£32,059</td>
</tr>
</tbody>
</table>


Walkers, spending heavily in an attempt to retrieve their sagging sales, continued to spend heavily during 1909 but Buchanans and Dewars began to curtail their expenditure. Waterhouse, to standardise the accounts of the three firms, used an extremely broad definition of advertising expenditure. It included discounts and bonuses which accounts for the discrepancy between Dewar's individual figures in Table 100 and those in Table 101. Discounts really belong under the heading of pricing decisions but as an alternative form of sales policy to advertising they could be significant in a competitive situation. For Dewars it is possible to
trace the changing scale of discounts to customers. In Table 102, discounts are set alongside advertising expenditure for comparison, and the total of both taken as a percentage of total costs and total sales revenue.

**TABLE 102 - John Dewar & Sons Ltd., Discounts (1900-1910)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Advertising</th>
<th>Discounts</th>
<th>Total</th>
<th>As a percentage of Total Costs</th>
<th>Total Sales Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>1900</td>
<td>£22,244</td>
<td>£23,735</td>
<td>£45,979</td>
<td>22.7</td>
<td>17.2</td>
</tr>
<tr>
<td>1904</td>
<td>£35,568</td>
<td>£33,611</td>
<td>£69,179</td>
<td>25.5</td>
<td>17.9</td>
</tr>
<tr>
<td>1908</td>
<td>£49,633</td>
<td>£51,447</td>
<td>£101,080</td>
<td>26.8</td>
<td>20.1</td>
</tr>
<tr>
<td>1909</td>
<td>£43,019</td>
<td>£59,699</td>
<td>£103,018</td>
<td>27.1</td>
<td>18.9</td>
</tr>
<tr>
<td>1910</td>
<td>£40,827</td>
<td>£53,452</td>
<td>£94,279</td>
<td>25.6</td>
<td>18.1</td>
</tr>
</tbody>
</table>

Source: Private Profit and Loss Accounts.

When discounts are introduced it can be seen how pernicious the sales war between "The Big Three" had become. By 1908, discounts had grown to greater levels than advertising expenditure and together these sales costs absorbed an increased proportion of total costs, and, to a lesser extent, of sales revenue.

For "The Big Three" as a whole, total sales grew between 1905 and 1909. So too did advertising expenditure, but the point had not been reached where these firms through advertising were simply redistributing a fixed total of sales amongst themselves. For the Scotch whisky industry it is almost certain that this point had been reached but "The Big Three" had not yet started to suffer that self-inflicted wound. Competitive advertising was more a potential than an actual threat to their profitability and the situation could be easily remedied by an agreement between them to gradually lower advertising expenditure. More immediately pressing was the problem of the huge sales discounts being offered to attract customers. Following the budget of 1909 Buchanans and Walkers both increased their trade discounts by 1½%. If Dewars followed suit the cost to the three businesses would be "some £20,000 per annum."
Tommy Dewar was loathe to sanction an extra discount:

"I feel that we are drifting into more aggressive and costly competition and making allowances involving large sums which could be saved by immediate agreement." 29.

If there was any possibility of a merger of "The Big Three" within twelve months Dewars would not increase their discount.

VI. DEWARS IN 1910

By 1910, Dewars, with sales of over 1 million gallons, a strong export position, and an improving trading and profit record since 1900 were in a much more favourable position than Walkers. Nevertheless they were very interested in amalgamation in order to eliminate "aggressive and costly competition." For Dewars, amalgamation was seen as a way of curing ills inherent in the trade. It was at no time considered as a remedy for personal or family reasons, as John Dewar explained to Cameron in November 1909:

"I do not think that just at present we could come to any definite plan with reference to how we should proceed with the combine. After I have seen Mr. Buchanan we will be better able to judge, he is I know more keen than we are to amalgamate, he wishes his interests consolidated and perhaps some of his money out. The other lot (Walkers) for other reasons of shareholders would like a reshuffling of affairs, for my part I neither wish my money out or to take less

"interest in the practical work, but more if necessary and have every confidence in the future of John Dewar and Sons. Unless we are to see considerable benefit and get full credit for our goodwill, and receive as much for our share annually and a prospect of more in the future, I see no reason why we should hasten matters. Our business has improved so considerably since we last compared balances, and I believe we would compare equally as well in another two years time. With the three, however, one has improved just as much, and from balances might appear to have made greater progress but I cannot think that its prospects are better than our own taking the last years results...I cannot think that the three can come together now, the older one in the field will never admit it has been beaten, and the question is would two be sufficient to induce others to join afterwards. I will let you know what transpires at my interview, but I am not disposed to take the initiative of hastening any discussion..." 30.

John Dewar's appraisal of the situation was to prove correct. Walkers retained a hope that they might recover their premier position without an amalgamation. Meanwhile, John Dewar was fully prepared to carry the management burden but if Dewars entered a combine he wished a full return for his firm and his effort.

It would be impossible to explain the success of John Dewar & Sons Ltd., its advance from local insignificance to national prominence, without recognising both brothers' enthusiasm for business. Both the Dewar brothers, in their different ways, enjoyed business and revelled in the affairs of the whisky trade. For Tommy Dewar, business offered an entree to London society. It also gave him freedom to indulge in public service, first on the London County Council, then in 1897 as Sheriff of London, and, from 1900 to 1906, as Conservative M.P. for St. George's-the-East division of London. In 1901, he received a knighthood in King Edward the Seventh's Coronation Honours. In 1919, he was elevated to the peerage, becoming Baron Dewar of Homestall in Sussex. The style of his peerage was significant. Lord Dewar never returned

30. J.D. & S., Cameron Papers, Letter from Sir John Dewar to Cameron, 5th November 1909.
to his roots in Perth. He adopted the traditions of English businessmen and purchased an estate in Sussex where, as a country gentleman, he pursued his passion for breeding thoroughbreds; not just race horses but poultry, pigeons, goats, ponies and greyhounds. He also found time to write a number of books, all of which were crammed full of his idiosyncratic views. Baron Dewar was not the first of the Whisky Barons. That honour went to his brother John in 1917. In 1907 John received a baronetcy for his public services. John Dewar remained throughout his life closely tied to Perth and it was to Perth that he gave his services. In 1885, he became a town councillor. As Treasurer from 1888, he rearranged the city’s finances, and, from 1893 to 1899, as Lord Provost he pushed through locally important housing and sanitary reforms. He retired from the Council in 1899 and the following year won the Inverness-shire division as Liberal candidate. He held the seat again in 1906. Other public service included chairing two commissions of enquiry into medical conditions in the Highlands and Islands, membership of the Perthshire County Council and Education Authority, and chairmanship of the Territorial Force Association. John Dewar eschewed London society. In 1910 he acquired the estate of Dupplin and set about his self-chosen task of rural regeneration, constructing the model hamlet of Forteviot. It was as Baron Forteviot of Dupplin that he entered the House of Lords.

31. The City did, however, benefit from his generosity. In 1924 he gave Kinnoull Hill to the citizens.
32. He wrote five books: "A Ramble round the Globe", "Experiences of Prohibition in the United States, Canada and New Zealand", "Experiences of the Gothenburg System", "Toasts and Maxims" and "Wisdom Compressed."
Bells, Dewars and Walkers were all firms whose roots lay in the small market towns of Scotland. At some stage in their development the restraints imposed by narrow local markets acted as a spur for expansion. From Perth and Kilmarnock the three firms sought sales at a national and then international level. In the growth of all three London, the largest single urban market, acted as a powerful magnet. The last firm in "The Big Three", James Buchanan & Co. had no local market in Scotland as a base from which to expand. Nor did the founder, James Buchanan, inherit a long established family firm. Buchanan was truly a self-made man. He was born in Canada in 1849, the child of Scottish emigrant parents. The family returned to Scotland when he was still an infant and ultimately settled in Ulster. Buchanan began work at fourteen with a Glasgow shipping firm. He stayed with the firm for three years and then became a Custom's clerk. Low pay, long hours and dull routine convinced him that the Customs service held no prospect of advancement and, in 1868, he joined his brother in the grain trade. He remained in this job until November 1879, when he secured an appointment as London agent for Charles Mackinlay & Co., the Leith whisky merchants and blenders. Success in developing Mackinlay's London trade prompted him to seek a partnership in another Leith firm but he was rebuffed, and, in 1885, aged thirty-six: "I made up my mind to start business on my own account."\(^2\)

1. For fuller accounts of Buchanans see F.W. Atherton, \textit{op.cit.}, \textit{D.C.L. Gazette}, April-July 1931; R. Bruce Lockhart, \textit{op.cit.}, pp. 99-111; and D. Daiches, \textit{op.cit.}, pp. 93-95.
Lacking capital to establish his firm, Buchanan turned to an old friend W.P. Lowrie, the Chairman of W.P. Lowrie & Co., the Glasgow blending and bottling company. Lowrie acted as suppliers of bulk blended whiskies to the trade and Buchanan was given whisky on credit. Rather than use one of their established blends, however, Buchanan developed his own. According to Buchanan this decision was based on his reading of the state of public demand in London:

"The wants of the Licensed Trade in London were pretty well met by Messrs. Greenlee's whose Lorne whisky practically held the monopoly of the supply. I found many of the licensed houses were users of 'self whiskies' - heavy Highland malts and Lowland malts - with the public inclination certainly inclining towards the use of Scotch whisky. What I made up my mind to do was to find a blend sufficiently light and old to please the palate of the user." 3.

Buchanan, unlike the other blenders, concentrated from the start on one standard blend and "Buchanan Blend" was the brand name until 1904, when it changed to "Black and White". This description was originated by the public. The blend:

"was first put on the market in a black bottle with a plain white label. These characteristic colours prompted the public to refer to it — when they were unable ... to recall the name 'Buchanan' as 'that black and white whisky'. This apt title, by which the licensed victualler knew instantly to what blend they were referring, grew rapidly, until it was decided to embody it in the label." 4.

Buchanan's distinctive advertising symbol, the two Highland terriers, one black and the other white, had a different origin. The use of dogs in Buchanan's advertisements began in the early 1890s and was actually a response to the controversy over blending.

3. Lord Woolavington ibid.
The attack on blended whisky took two forms. One was the charge that the addition of grain whisky to malt whisky, like the addition of water to milk or chicory to coffee, constituted adulteration. Grain whisky, it was asserted, was a neutral spirit, robbed of its flavouring by the Coffey still and made from inferior (and imported) materials. It was therefore less beneficial to the consumer than malt whisky. The second line of attack was on grounds of misdescription. The only genuine Scotch whisky was malt whisky made in the traditional pot still using indigenous raw materials. Blenders were therefore using a false trade description. The most common response by blenders to the first argument was to incorporate a certificate of analysis by a chemist in labels and advertisements. Thus for example, Arthur Bell in the only bit of advertising he ever did, included a statement from Dr. Stevenson Macadam, a lecturer in chemistry at Surgeon's Hall, Edinburgh:

"I have made a chemical analysis of a sample of 'Special Old Scotch Whisky' forwarded to me by Mr. Arthur Bell, Wine and Scotch Whisky merchant, Perth, and find such to possess an agreeable bouquet; to be practically free from fusel oil or other deleterious compounds; to be thoroughly matured, and to be of first class quality. In all respects an excellent spirit." 7

Others chose symbols of purity. Mackie & Co., for example, selected the legendary Norse symbol: "White Horse". Misdescription was countered by increasing the use of material in advertisements which emphasised the distinctive "Scottishness" of the blend. With colour printing the typical blended whisky label comprised the blender's name set against a background which included a loch, a moor, a few mountains, some Highland cattle and at least two resplendently bedecked Highlanders. A few words of Gaelic added, for the English consumer (and probably most Scots), a suitable element of mystery. Identity with the Highlands was thus completed. Buchanan chose different symbols to identify his blend with Scotland. Three champion Highland terriers with the title "REAL SCOTCH"

5. This summarises a long debate. For a full account see R.B. Weir, The History of the Pot Still Malt Distillers' Association of Scotland (The Association, 1970), pp.6 ff.
6. This was the only use the distributive trade ever made of chemists until after 1916.
were designed to leave the consumer in no doubt of the origins of his whisky. With the branding of "Black and White" the three terriers were replaced by two, one black and one white. Branding and the use of such symbols did not always leave the consumer's mind in the uncluttered state that advertisers desired. Dewar received the following request:

"Dear Sirs:

I have very much admired your poster of two cocker spaniels, as I have one exactly like them, and should like a copy. We always drink your 'White Horse' whisky at home here." 8.

IX. INCORPORATION AND PRODUCTION

Apart from Buchanan's distinctive advertising the rise of the firm contained many of the elements already described in Dewar's and Walker's history. In 1895, the firm began exporting and Buchanan made a number of overseas tours to promote sales and appoint agents. In 1902, the firm opened its first overseas branch in Paris, shortly followed by one in New York. By then a network of branches in major provincial cities outside London had been established. Buchanans also moved into malt distilling. In 1897, the firm built Glentauchers distillery and by 1906 had purchased Bankier and Convalmore distilleries.

In May, 1903, the firm was incorporated as a private limited liability company with an issued and paid up capital of £850,070.

James Buchanan's rise was dramatic. From being a debtor to W.P. Lowrie in 1885 he built in just eighteen years a business worth over three-quarters of a million pounds. Buchanan, as founder of the firm, retained the majority of the share capital. He became Chairman and the other four directors, as with Walkers and Dewars, were all men who had "grown up" with the firm.

One curious feature of Buchanan's growth was that the firm achieved it with minimal investment in production facilities, continuing to draw its supplies of bulk and bottled whisky from Lowries. In 1906, the onetime debtor became owner when Buchanans acquired control of their suppliers. Lowries, despite their growing trade with Buchanans, were badly hit as stockholders by the collapse in mature whisky prices following the end of the boom of the 1890s. The prospect of financial failure highlighted Buchanan's dependence on the firm and Buchanans stepped in to save the business. Lowries was reconstructed with Buchanans holding five eighths of the ordinary capital. With Lowries as a subsidiary, management of Buchanan was divided between a Board in Glasgow and a Board in London with James Buchanan as the link between them. Control was followed by a programme of expansion in the production facilities in Glasgow to meet the growing sales of bottled whisky. Mechanisation was an important part of the investment programme. In Coopering, for example:

"machinery had been improving fast and supplanting many hand methods and...the fullest advantage was taken of that mechanical progress to install the most up-to-date machinery that the ingenuity of the manufacturers could produce..." 11.

Backward integration to control malt distilling and bottling was, as has been discussed, a feature of the development of Walkers and Dewars. Buchanans were the first firm to take the process one stage further by moving into bottle manufacturing. In 1907, Buchanans through their subsidiary Lowries, acquired a half interest

9. The authorised capital was £500,000, divided into 30,000 6% Cumulative Preference shares of £10 each, and 20,000 Ordinary Shares of £10 each.
10. See p.520 above.
in the North British Bottle Manufacturing Co. Ltd. of Shettleston, Glasgow. The motive for this move was to gain access to the Owens automatic bottle making machine. The Managing Director of the firm, Peter Latta, after a visit to the United States had reconstructed the Shettleston works on "the very latest American plan", with the Owens machine as the centrepiece. Latta, an intensively chauvinistic Glaswegian, viewed the introduction of the machine as the first step "in reviving a trade lost to Glasgow", whilst Buchanans saw the tremendous potential the Owens machine offered for lowering the price of bottles and producing a more uniform bottle better suited to mechanical filling. The barrier to the full utilisation of this innovation was the "ring" of British and Continental bottle manufacturers. The "ring" wished to see "a quiet development" of this labour saving machine and attempted to restrict the output of machine made bottles. Buchanans met, according to the house historian, "considerable opposition from the ring" and decided to acquire complete control of the Shettleston firm in order to fight it. Details of the fight are not available but Buchanans were, apparently, successful and subsequently able to extend the Shettleston works.

A restrictive combination in another trade, that of case making, also motivated Buchanans to acquire control over its own supplies and, in 1907, Buchanans purchased the Acme Tea Chest Co. of Glasgow. The Company's works were extended and modern machinery installed giving Buchanans sufficient case making capacity to fulfill orders from other blenders.

13. F.W. Atherton, op. cit., B.C.L. Gazette, July 1931
Buchanan's investment in production facilities created the capacity to deal with the firm's still growing sales. Like Dewars, Buchanans continued to enjoy increased home sales in the first decade of the twentieth century. Total sales rose from 1.021 m.p.g. in 1904 to 1.484 m.p.g. in 1909. Buchanan's whisky as the largest seller overtook Walker's in the home market during 1908 and by 1909, 30% of Buchanan's total sales originated in export markets. Buchanan's enjoyment of rising sales and a growing share of the spirit market did not blind him to the increasing cost of achieving these sales. He held very similar views to Sir Thomas Dewar on the problems facing "The Big Three" and, at the meeting between Buchanan, Sir Thomas Dewar and George Walker on the 19th October 1910, it was Buchanan who opened the discussion by outlining the benefits to be gained from combining. Amalgamation was desirable:

"in view of the manifest advantages which would accrue to all three companies by the cessation of aggressive and costly competition, and the further benefits to be derived from a united policy of action in home and foreign markets..." 16.

Moreover, Buchanan felt that "business of such magnitude must 'give and take'". The proprietors should not hold out for the last penny. A generous spirit should pervade their negotiations and Buchanan was prepared to sell his business for £20 to £30,000 less than it was worth for the sake of seeing the amalgamation realised. 17

In addition to wishing to see competition curbed James Buchanan had other more personal reasons for backing an amalgamation. Of the proprietors of "The Big Three", James Buchanan, at 61, was the oldest. He had never enjoyed good health and had no one in his family to take over the business. "Mr. Buchanan," Cameron noted when the issue of future management arose, "has

15. See Table 96, p.537.
16. J.D. & S., Cameron Papers, 19th October 1910.
17. Ibid.
an only daughter, who cannot be expected to aid in the management."
By contrast, the Walker family interest was "strong". So too
was the Dewars. Sir Thomas Dewar was an avowed and determined
batchelor but Sir John Dewar had two sons. Sir John Dewar's
appraisal that Buchanan wanted his interests consolidated and
some of his money out was correct. James Buchanan's support for
amalgamation was the strongest of all the principals of "The
Big Three".

James Buchanan's concern over who would succeed him was,
in one way, surprising. Like the Walkers and the Dewars he had
encouraged employees and his ownership of the firm had not pre­
vented men who had joined the firm straight from school from
reaching the Board. He had two able and effective deputies in
Edward Stern, Export Director and William Harrison, Production
Director. Harrison, by 1910, was being groomed as Buchanan's
successor and ultimately, after the amalgamation with the D.C.L.
in 1925, became Managing Director of Buchanans. He represented
Buchanan in the preliminary amalgamation discussions as did two
other non-family Directors, A.J. Cameron and J.S. Stevenson, for
Dewars and Walkers respectively. All were, however, negotiating
for the proprietors rather than the firms themselves as separate
corporate identities. Their role as spokesmen for the proprietors
made it clear that ownership still counted for everything in what
were, for all the changes in status, still effectively family
firms. Family ownership did not prevent promotion to top posi­
tions amongst outsiders. It did, however, limit the powers of
the men who attained these positions.

18. Sir Thomas Dewar on women - another 'Dewarism' - "Do right
and fear no man; don't write and fear no woman."
D.C.L. Gazette, April 1930.
19. Harrison's background was an unusual one for the blending trade.
Born in Leigh in Lancashire in 1861, he was educated at Grammar
School. He left school at 17 and went to France to work for the
agents of his family's firm, a Harvesting and Food Preparing
Machinery Manufacturer. In 1900, he became Chairman of the
family business and, in 1907, was recruited to Buchanans where
his engineering skills were used to implement the policy of
mechanisation. After a brief spell in the Manchester office
supervising production facilities for their distribution in
Lancashire he was appointed to the Board. Profile based on
D.C.L. Gazette, July 1929.
There was too a degree of irony in Buchanan's concern over his health for he was to outlive the Dewar brothers and George Walker. Buchanan was knighted in 1920 and became Lord Woolavington of Lavington in 1924. Like Tommy Dewar he purchased an estate in Sussex and took up race horse breeding with considerable success. Part of his fortune from blending went in benefactions to The British Museum, Edinburgh University and Middlesex Hospital. He died in 1935 a few days before his 86th birthday.
CHAPTER NINETEEN

CONCLUSION AND POSTSCRIPT

Conclusion and Postscript  Pages
561-570
Since Chapter Twelve the Scotch whisky trade has been viewed through the experiences of the blenders, the men who carved out a distinctive niche in the spirits market for Scotch whisky and who established the supremacy of blended whisky so that in 1908, the Royal Commission on Whisky was able to report, that:

"The market for blended whiskies is greater than that for individual whiskies; so much so that the majority of Englishmen who drink whiskey seldom drink anything but a blend..." 1.

William Ross, Managing Director of the Distillers Company, also acknowledged the blenders' responsibility "for the great increase in consumption" 2; few in the trade would have disagreed with him.

The purpose of these chapters was not solely to describe the sales expansion that took place but also to try to account for it. The primary justification for dwelling on blending was the need to explain how, in what seemed to be an unfavourable market situation given contemporary price movements, expansion was achieved. It is clear that the main reason was the blenders' skill in creating a product suitable to a wide range of tastes and pockets. Although price flexibility was the key to the popularity of blended whisky it was not, as the history of Arthur Bell & Sons showed, used by all firms. Late Victorian society contained sufficient affluent members, for whom price was a secondary consideration, to make concentration on quality viable. The blending firms which grew fastest though, like Dewars and Buchanans, looked beyond a socially stratified market and aimed for nationwide sales. To achieve this they invested in mechanised blending,

2. R.C.W., QN.5082, p.164.
malt distilling, bottling, a network of branches, and, above all, stocks of mature whisky. The paradox of their growth was, that having broken through to a mass market, they then standardised their blends and this, ultimately, was to destroy their price flexibility.

The blenders influenced consumer choice by advertising but, as Dewar's history showed, the relationship between advertising expenditure and growth was more complex than has often been suggested. Moreover, by the early years of the twentieth century, advertising was coming to be regarded as a possible threat to the financial stability of the trade. It is less easy to see why the content of one blender's advertisements should have been more successful in generating sales than another's for certain common features were evident: the identification with Scotland, the emphasis on the age of the blend, and the longevity of the firm. No attempts were made through advertising to persuade the consumer to identify with a particular image, and the consumer was not inveigled into believing that a brand would make him instantly successful or socially popular. Perhaps, in the creation of a mass market, the sheer novelty of the choice which advertising offered was sufficient.

It is doubtful too if the blenders had any clear perception of who the largest consumers of Scotch whisky were. Advertising was not beamed at any particular age group and that was, in the long run, its greatest weakness for as the trade discovered in the 1920s Scotch whisky was predominantly a drink of the middle aged and the elderly. It suffered from what may best be described as the "choleric colonel" image. The loss of the younger spirit drinker was attributed to a combination of factors: the high duty on spirits, the availability of counter-attractions to drinking, and temperance education. Surprisingly, in the period covered during the last two chapters, blenders made no attempt to
counter temperance propaganda through advertising. One partial exception was Walkers who, beginning in 1910, ran a series of advertisements which incorporated medical testimony on the beneficial effects of whisky. But even this was low key; merely emphasising the digestive value of "Johnnie Walker". Indeed, from the business records of the blenders it would be easy to believe that the temperance movement never existed. Temperance was seldom discussed at Board level and few donations from Company funds were made for trade defence. Haigs, alone amongst the blenders examined here, made donations to trade defence associations but, between 1894 and 1913, a mere £70.10.0. was given. Amongst the distillers, the D.C.I. spent £1,125 between 1877 and 1908 on subscriptions to bodies like the Scottish National Trade Defence Association, the Perth Protection Association and the Glasgow Trade Defence Association. This was less than the Company subscribed to charitable causes such as famine relief in India (1897) and support for refugees of the South African war. Only after 1909 did the Company begin to develop a political consciousness and start to give financial support to "the Conservative and Unionist Causes" on the grounds that they "had done a great deal for the trade in the past." After 1909, £500 a year was given to the Unionist Party and smaller donations, generally between £25 and £50, were given to campaigns such as the Budget Protest League, the Tariff Reform Commission, and the Trades Disputes Act Reform League. The temperance movement's monolithic antagonist, "the Drink Trade", was, so far as Scottish distillers and blenders were concerned, a fictional entity. The reasons are not hard to find. With total spirit consumption rising until 1900 the whisky trade did not consider the movement a threat to its existence. Moreover, with the temperance attack concentrated on licensing, distillers and blenders did not feel directly involved. They had few investments in

3. One slogan used in 1910 under the heading of "The Digestive Value of 'Johnnie Walker'" was: "For as indigestion is the foe of energy, 'Johnnie Walker' being bottled energy, is the foe of indigestion." It was hardly striking advertising copy.


5. This was mainly because of the problems caused by the dumping of foreign yeast in the British market.
retail licensed property, public houses were not their only sales outlet, and on particular issues such as the abolition of tied houses, some members of the Scotch whisky trade saw abolition as a means of ending the discounts brewers demanded for the right of supply. The politics of "the drink trade" were fractured with a multiplicity of frequently incompatible interests and it was not until prohibition was espoused during the First World War that the Scotch whisky trade showed a united reaction.

Consumption of home produced spirits, at a peak of 37.1 m.p.g. in 1900, was more than six times larger than export sales at 5.7 m.p.g. and viewed in this perspective the export achievement of the blenders may seem less significant. Yet, when set alongside the criticism of other British industries it was nonetheless impressive, reflecting a commitment to expansion and a high quality of business organisation. Nor for particular firms, like Buchanans and Dewars, was the enthusiasm for exporting explicable as a reaction to decline at home. Home consumption had fallen to 24.0 m.p.g. by 1910 but Dewars and Buchanans were enjoying growing sales at home and exports were attractive because of their high profitability. In 1912, Dewars calculated that their net profit margin on export sales was 52% compared to only 14% at home. Buchanans figures were not much different: 52% and 9.6%. If, by the early years of the twentieth century, competition was becoming "costly" for "The Big Three" it was at home rather than abroad that the bulk of the costs were being incurred.

Whilst 1900 marked the break point in home consumption, export demand continued to increase until 1912. Before the war conditions in export markets were much easier for Scotch whisky exporters than for most other British industries. The discussion of the blenders' export business lacked any mention of tariffs. This was intentional: in no country were tariffs yet raised against Scotch whisky. Some restrictions, such as the Australian Govern-

6. A Bill to abolish tied houses was put forward by Scottish temperance interests in 1901. For a discussion of the malt distillers' attitudes towards it see R.H. Weir, op.cit., p.35.
7. J.D. & S., Cameron Papers, 1912.
ment's requirement of a certificate guaranteeing the age of imported whisky, were beginning to appear but the trade's greatest concern, the spurious imitations of Scotch that were appearing in overseas markets, was a happy sign of growing success. Imitation was the sincerest form of flattery. The most important reason though for the absence of tariff barriers was that in all countries Scotch whisky imports held only a very small share of the total spirit market. These opportune conditions were not to survive the Great War. The wartime attack on spirit drinking hit domestic producers and after 1918, Scotch whisky imports were much more seriously challenged by protectionist lobbies.

Although essential to a full explanation of the growth of the Scotch whisky market, the study of the blenders has resulted in a relative neglect of the distillers. The rise of the blenders did, however, pose a number of questions about the relationship between distributors and producers. Few of them had been answered by the early years of the twentieth century.

As small scale producers of a relatively more expensive product, the malt distillers were the first to feel that they had mortgaged their fortunes to the blenders. In the Highlands, the North of Scotland Malt Distillers' Association attempted, after 1874, "to put both buyer and seller on a more equitable footing" and to fix uniform "conditions of sale" amongst distillers. Enthusiasm for the Association evaporated in the golden days of the 1890s and when the bitter fruits of reckless over-expansion—falling malt whisky prices, bankruptcies, overcapitalisation, excessive stocks, declining profits, and passed dividends began to be harvested, there was little the Association could do to restore profitability to the trade. Many of the malt distilleries within the area covered by the Association had fallen under the control of the blenders either directly, by share purchase or indirectly, through relying on the blenders for orders, and the blenders were
unwilling to acquiesce in measures that would raise the price of their raw materials. Thus, not until 1907 did the Association manage to persuade blenders to pay rail freight on malt whisky and a charge for rent on malt whisky stored in distillers' warehouses was not introduced until October 1919. As James Risk, a shareholder in Dailuaine-Talisker Distilleries Ltd., one of the largest malt distilling companies, said at their Annual in 1914:

"I know from my own experience that, in a fairly good year such as we have had, the Malt Distillers in the North can make profit, but at the prices paid by the blenders in an average year, it is impossible to make what is commonly known as a living wage."

Exacerbating the malt distillers' difficulties was the failure of the N.S.M.D.A. and the other malt distillers' associations to agree on any way of reducing output. The absence of any large firm similar to the D.C.L. was an important factor in this failure. In 1910, the D.C.L. and the next largest producer of grain whisky, the North British Distillery, accounted for 88% of all grain spirit distilled in Scotland. By contrast, the two largest companies in Highland malt distilling, Dailuaine-Talisker Distilleries Ltd., and the Highland Distilleries Company Ltd. (with seven distilleries between them) accounted for only 12% of malt whisky output.

Relationships between the grain distillers and the blenders were rather different. From the dissolution of "The Whiskey Parliament" in 1888 until 1902, the Distillers Company did nothing to upset the indifferent harmony between distiller and dealer. It did not follow up its entry into export blending, made in 1885, by selling blends direct to retailers at home. Indeed, leading officials in the Company frequently reassured the blenders that it had no intention of competing with them at home. In 1891, giving evidence to the Select Committee on British and Foreign Spirits, Andrew Drysdale, the Chairman, stated: "we do not deal with re-

8. Dailuaine-Talisker Distilleries Ltd., B.M.B. No. 2 at 28th July 1914.
9. The Lowland malt distillers and the Campbeltown and Islay malt distillers had their own trade associations.
tailers at all."¹⁰ Seventeen years later, W.H. Ross re-affirmed before the Royal Commission on Whiskey that, "it is not our business to sell direct to the public."¹¹ There were basically two reasons for this self denial. One was the fear that the loss of trade caused by blenders switching away from the D.C.L. to other grain distillers would offset the gains from selling blended whisky direct to the retailers. The other was the growth of the Company's tied trade with the blenders which gave the firm large guaranteed orders without the extra costs involved in selling small quantities to the retailers.

For the blenders, the 1890s saw the D.C.L.'s influence on the supply of grain whisky diminish for three patent still distilleries were opened: Dundashill (a conversion from pot to patent still), Ardgowan and Gartloch. Moreover, the D.C.L. made no attempt to increase its ownership of grain distilleries. Indeed, between 1877 and 1902, it extended its distilling interests on only three occasions: a year after its formation it purchased Phoenix Park, the Irish pot still distillery; in 1885, it absorbed Caledonian distillery; and, in 1893, it built Knockdhu, a Highland malt distillery.¹² Growth by amalgamation was not one of the D.C.L.'s characteristics in this period. By contrast, between 1902 and 1910, it acquired five patent still distilleries (three in Scotland and two in England);¹³ negotiated the closure of another one,¹⁴ and purchased a 50% interest in the United Distilleries Ltd., the largest grain spirit producer in Ireland. After 1910, the rate of acquisition was to accelerate and between 1910 and the ultimate union of "The Big Three" and the D.C.L. in "The Big Amalgamation" of 1925 there was only one year, 1914, when the Company was not involved in a take-over bid.

¹⁰. Select Committee on British and Foreign Spirits at 17th February 1891, Qn. 2197.
¹¹. R.C.W., Qn. 5110, p. 166.
¹². This was built in fulfillment of a contractual obligation to supply John Haig & Co. Ltd. with all its malt whisky requirements.
¹³. The patent still distilleries and their dates of acquisition were: Adelphi (1902), Dundashill (1903), Ardgowan (1907). All these were in Scotland. In England the acquisitions were: Vauxhall (1907), Hammersmith (1910).
¹⁴. Saucoel (1905).
This profile can be viewed in another way. When the Company went public in 1880 its issued share capital was £650,000 and by 1901, it had only increased to £887,680. Nine years later it stood at £1,451,100 and by 1924, the year prior to "The Big Amalgamation", it was £5,835 million pounds. "The Torphicen Street Leviathan", as one trade journalist labelled the Company in 1906, was very much a creation of the twentieth century.

In 1902, the D.C.L. began a policy of "consolidation", that is, a policy of buying competing patent still distilleries and closing them to reduce productive capacity. When it commenced this policy the Company had two great advantages over the blenders and the pot still distillers: during the boom it had followed an exceptionally conservative financial policy and it was not solely dependent on the Scotch whisky market. The former was of most immediate advantage. After 1890, dividends had been held constant at 10% (a level which actually remained unchanged until 1923), there had been heavy "write-offs" of plant and buildings, and the Company had accumulated substantial reserves. This cautious financial policy made it almost unique in the Scotch whisky trade and financially it was in a strong position for the fight that lay ahead. The second advantage, the Company's non-potable spirit activities in yeast, malt extract and industrial alcohol, distinguished it from the blenders and pot still distillers who had no interests beyond the Scotch whisky trade. They were, however, only to be of significance in the long run. In 1900, these activities suffered from the fact that other patent still distilleries were adopting them to offset the decline in the potable market, and the D.C.L.'s policy of consolidation was not solely designed to eliminate patent still distilling capacity but also to pick up the attendant business in yeast and industrial alcohol. Consolidation was virtually complete by the early 1920s: after 1922 the D.C.L. controlled all but one patent still distillery in Scotland (North British), all but one in the Irish Free State.

Industrial spirit was to provide the key to the Company's prosperity in the 1930s and to its entry into the chemical industry but, in 1924, the first year for which reliable figures are available, potable spirit accounted for 65% of the D.C.L.'s profits and the Company's interests in the "Whisky Age" were still much greater than its prospects in the "Alcohol Age."

Between 1898, when the failure of Pattisons Ltd., the Leith blending firm,17 burst the speculative boom in Scotch whisky and 1909, when Lloyd George's Budget cast a dreadful gloom over the trade, it began to look as it the "Whisky Age" might be over. "The Big Three" were discussing amalgamation, and with the D.C.L. actively pursuing a policy of consolidation, relationships with blenders were entering a new phase. If "The Big Three" amalgamated what would happen to the D.C.L.'s tied trade? Would it still be guaranteed its really large "fillings"? On the blenders' side, what would happen to grain whisky supplies if the D.C.L.

16. Report of speech by W.H. Ross, D.C.L. Gazette, January 1929: "The past fifty years might be looked upon as the 'Whisky Age'! It was an age in which big businesses had been established. He doubted if those periods would ever be repeated in the Whisky Trade. It had become more and more difficult for any firm to establish itself under the conditions prevailing at the time when most of the firms now within the D.C.L. Group had been started. Then the whisky business was growing; today it was in decline. The next period would be the Alcohol Age. United States distillers had got over Prohibition by producing alcohol and correlative substances. In the United States alcohol production was almost as great as before "prohibition."

17. Pattisons Ltd. were regarded as one of the most expansionist firms in the trade. The firm failed in December, 1898, with deficiencies of £32,000. At least another nine firms, most of which had been active in distillery promotion, were pulled under by Pattison's collapse. The failure uncovered fraudulent activity by the owners, Robert and Walter Pattison, and they were jailed in August 1901. The transcript of the trial details many of the unscrupulous activities of the blenders and is available in the National Library of Scotland (Proceedings at Trial: The Lord Advocate against Robert Paterson Pattison and Walter Gilchrist Gray Pattison (Fraud and Embezzlement) 8th-17th July 1901).
managed to gain control of all the patent still distilleries? Should "The Big Three" aim for a merger amongst themselves first, and then take on the D.C.L.? Or should "The Big Three", as W.H. Ross of the D.C.L. was suggesting, participate in a larger amalgamation which would radically restructure the trade and involve the D.C.L., the North British, Ushers, Crabbies, Calders, Mackies and "The Big Three"? And should the blenders follow Ross's suggestion and combine "the way one of the Bleaching Companies did it and also the Dublin Distillers Company", by exchanging their shares for D.C.L. shares with the D.C.L. acting as the holding company? Or was the example of the tobacco trade a better one to follow:

"The Imperial Tobacco Co. Ltd. has always been in my mind as a guide in this – tobacco and whisky go together don't they? I have always conceived of 'The Scotch Whisky Co. Ltd.' as the title for the combine. The labels on the bottles are the same, price lists, etc. except that like Imperial you print in minute letters at the bottom – 'The Scotch Whisky Co. Ltd.' And like the Imperial you are always open to take in lesser rivals as they appear...instead of the D.C.L. absorbing us, we could buy up the D.C.L..." 19

Above all, at the back of everybody’s mind, was the question of what would happen to the firms and the industry if unrestricted competition proved to be the only solution.

By the end of the first decade of the twentieth century these were the unanswered questions of the Scotch whisky trade and their resolution was to be worked out in a background of falling consumption. By 1932, the worst year in the inter-war period, home spirit consumption was only 8.114 m.p.g. In 1900, it had been 37.125 m.p.g.

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19. J.B. & S., Cameron Papers, J. King-Stewart to A.J. Cameron, 2nd June 1910. J. King-Stewart was an official of the Incorporated Society of Industry and acted as Secretary of the committee set up by the principals of "The Big Three" on the 31st May 1910 to investigate the amalgamation issue. The other members were: William Harrison (Buchanans), J.S. Stevenson (Walkers) and A.J. Cameron (Dewars).
BIBLIOGRAPHY

(1) MANUSCRIPT SOURCES:

(a) Public Records

Scottish Record Office, Edinburgh (S.R.O.)

- 142 Fraser, John, Distiller, Inverness (1815)
- 150 Harper, James, Distiller, Clynelish (1827-28)
- 185 Stein, Andrew & Co. Distiller, Kirkliston (1831-35)
- 207 Beauly Distillery Company
- 208 Beauly Distillery Company (Journal)
- 209 Beauly Distillery Company (Letter Book)
- 225 Beauly Distillery Company (Cash Book (1824-28)
- 423 Stevenson, Thomas, Distiller, Oban
- 424 Stevenson, Thomas, Distiller, Oban (1829-31)
- 992 Miller, James & William, Distillers, Craigend (1820)
- 1288 Fleming, John, Spirit Dealer, Glasgow (1843-45)
- 1825 Anderson, I, Gleneeland Distillery, Cash Book (1834-28)
- 2073 MacIntosh, J.L. Wine and Spirit Dealer, Edinburgh (1829).
- 2080 Haig, James & Co., Distillers, Edinburgh (1788-94)
- 2081 Haig, John & Co., Distillers, Lochrin (1788)
- 2084 King, William, Distiller, Large (1831-32)
- 2342 Hattray, William, Beer and Spirit Merchant (1839-45).

Series CR

R.M. Customs and Excise, London (C & Ex.)

Series M.B. (Miscellaneous Bundles)

M.B. (No Number) - Suppression by Border Officers of Smuggling between Scotland and England (1849).
W.B. (No. 16) Remarks and Suggestions on Dealers in Spirits Bill by the Trade and Others (1848).
W.B. (No. 56) Deputation of Scottish and Irish Distillers and Observations of the English relative to the System of Warehousing Home Made Spirits (1839).

(b) Private Business Papers

The Distillers Company Limited, Edinburgh (D.C.L.)
Board Minute Books (1877-1925).
Works Committee Minute Books (1902-1913).
Works and Management Committee Minute Books (1913-1922).
Management Committee Minute Books (1922-1925).
Technical and Research Committee Minute Book (1925).
Letter Books: No. 1 1877
No. 2 1890-1911.
United Kingdom Distillers' Association Minute Books (1878-1888).
Contracts Files.
Accounts.
D.C.L. Gazette, 1923 ff.

Subsidiary Companies of The Distillers Company Limited:
John Dewar & Sons Limited, Perth (J.J. & S.).
Board Minute Books (1897-1923).
Letter Books (1900-1916).
Cameron Papers
Accounts.

Board Minute Books (1886-1925).
Letter Book (1883-1903).
Accounts
Advertising Material
Miscellaneous Files.

John Haig & Company Limited, Markinch, Fife (J.H. & Co.).
Board Minute Books (1894-1925).
Miscellaneous Correspondence.
Accounts.

Scottish Malt Distillers Limited, Elgin (S.M.D.).
Board Minute Books (1914-1926).
Accounts
Miscellaneous Papers
Dailuaine-Talisker Distilleries Limited, Board Minute Books (1898-1926).
Speyburn-Glenlivet Distillery Company Limited, Board Minute Books (1897-1927).
Cragganmore Distillery Company Limited (1923-1928).
(iii)

The United Yeast Company Limited, Worden, Surrey.

(Records surveyed but not used).
Board Minute Books (1899-1925).
Buying Committee Minute Book (1912-1918).
York Committee Minute Book (1912-1917).
"Between Ourselves" - The Official Organ of the The Staff of The United Yeast Company (1924 ff).
Miscellaneous Papers.

The Methylating Company Limited.
(Records surveyed but not used. This Company is now part of B.P. Chemicals (U.K.) Limited.
Minute Books (1920-1940).
Contracts Files.
Miscellaneous Papers

The North British Distillery Company Limited, Edinburgh (N.B.D.Co.)
Board Minute Books (1885-1926).
Letter Book (1891-1921).
Accounts.
Miscellaneous Files.

Arthur Bell & Sons Limited, Perth (A.B.& S.)
Board Minute Books (1922-1925)
Purchases Book (Roy and Bell) (1855).
Ledgers (Bell and Sandeman) (1837 - 1844).
Personal Journals (Arthur Bell).
Personal Ledgers (A.K. Bell).

McKinlay's & Birnie Limited, Inverness.
Glen Albyn Distillery Records.

The North of Scotland Malt Distillers' Association, Elgin (N.S.M.D.A.)
Minute Books (1874-1926).
Correspondence.

The Scotch Whisky Association, Edinburgh (S.W.A.).
The Whisky Association, Annual Reports (1919 - 1926).
Two Reports from the Select Committee on the Distillery in different parts of Scotland, and on the best mode of levying and collecting the Duties upon the Distillation of Corn Spirits in Scotland.

(1803-04) Vol.V. Report from the Select Committee on the re-committed Report respecting the Rate of Duty payable on Malt made from Barley of the growth of England, and from Barley and Bigg of the growth of Scotland.

(1806) Vol.II. Papers relating to Experiments made by order of the Commissioners of Excise for Scotland, to ascertain the relative qualities of Malt made from Barley and Scotch Bigg.

(1814) Vol.XIV. Accounts and Papers relating to the Distilleries in Scotland.

(1816) Vol.VIII. Reports of Woodbine Parish, Chairman of Scots Board of Excise on Illicit Distillation, 25th April and 24th May, 1816.

(1818) Accounts and Papers relating to the Distilleries in Scotland.

(1821) Vol.VIII. Report from the Select Committee on Petitions complaining of the additional Duty on Malt in Scotland.

(1823) Vol.VII. The Fifth Report of the Commissioners appointed by the Acts of 1st. and 2nd. Geo 4, c 90, and 3rd. Geo 4, c 37; for inquiring into the Collection and Management of the Public Revenue arising in Ireland, and into certain Departments of the Public Revenue arising in Great Britain.

(1831) Vol.VII. Report from the Select Committee on the effect of allowing a Malt Drawback on Spirits.

(1834) Vol.XXV. The Seventh Report of the Commissioners of Inquiry into the Excise Establishment and into the Management and Collection of Excise Revenue throughout the United Kingdom. British Spirits Parts I and II.

(1834) Vol.VIII. Report from the Select Committee On Drunkeness.

(1847) Vol.LIX. Report from the Board of Excise to the Treasury on the Use of Barley, Malt, Sugar and Molasses in Breweries and Distilleries.
(v)


(1865) Vol.XXIII. Report of the Board of Inland Revenue to the Treasury on the Rate of Spirit Duty, 28th February, 1865.

(1890-91) Vol.XI. Report from the Select Committee on British and Foreign Spirits.


(1908-09) Royal Commission on Whiskey and Other Potable Spirits Cd. 4180 (Interim Report, 1908), Cd. 4181 (Minutes of Evidence), Cd. 4796 (Final Report, 1909), Cd. 4797 (Minutes of Evidence).


(1931) Royal Commission on Licensing in England and Wales.

(1934) Report of The Committee on Scottish Barley for Use by Scottish Distilleries.


(3) UNPUBLISHED THESES


(4) NEWSPAPERS, TRADE PRESS

The Grocer - Wine Supplement (1868-69).

The Wine Trade Review (1864-1934).


Whiskey Trade Review (Dublin).

Breweries and Distilleries Reporter.

Wine and Spirit Trade Record.

The National Guardian.

The Scotsman.

The Press and Journal (Aberdeen).
(5) ARTICLES, BOOKS, PAMPHLETS, etc.


Anon., The Compleat Distiller (1793?).


Anon., "White Horse Distillers Limited", D.C.L. (G), October 1932 - April 1933.


Berry, J.C. "Cameron Bridge - Fifty Years Ago", D.C.L. (G) July 1927.

Birnie, W. The Distillation of Highland Malt Whisky (Privately Published, 1937 and 1964).


Bremner, D. The Industries of Scotland (Edinburgh, 1869; reprinted 1970).


Checkland, S.G. "Scottish Economic History - Recent Work" Economica, Vol. 31 (1964)


Coyne, W.P. (Ed.) Ireland, Industrial and Agricultural (Dublin 1902)

Crombie, Sir James, H.M. Customs and Excise (London 1962).

Cullen, L.M. (Ed.) The Formation of the Irish Economy (Cork 1969)

Daiches, D. Scotch Whisky (London, 1969)


Dunnett, A. The Land of Scotch (Edinburgh) 1953.


Forbes, Sir William, Memoir of a Banking House (Edinburgh, 1860).


Fraser, J.B., The Highland Smugglers, Vols. 1 - 111 (Edinburgh, 1832).

Gardner, J. The Brewer, Distiller and Wine Manufacturer (1865?)


Graham, H.G. The Social Life of Scotland in the 18th Century (London 1933)

Gunn, N. Whiskey and Scotland (London 1935).


Handley, J.E., Scottish Farming in the Eighteenth Century (London 1953)

Handley, J.E., The Agricultural Revolution in Scotland (Glasgow, 1963)


Headrick, J., General View of The Agriculture of Angus (London 1813).


Hooker, A.A., The International Grain Trade (London 1936)

Hooker, R.H., "The Course of Prices at Home and Abroad", J.R.S.S. Vol.76 (1911-12)


McCloskey, D.N. & Sandberg, L.G., From Damnation to Redemption: Judgements on the Late Victorian Entrepreneur, Explorations in Economic History, Fall 1971.
(x)


Morewood, S.A., Philosophical and Statistical History of The Inventions and Customs of Ancient and Modern Nations in the Manufacture and Use of Inebriating Liquors (Dublin 1838).

Morgan, Sir Gilbert, Industrial Alcohol (London 1917).


Olson, N. The Economics of Wartime Shortage (Durham, N.C., 1963).
O'Mahony, D., The Irish Economy (Cork, 2nd Ed., 1967).


Poddie, A., The Hotel, Innkeeper, Vintner and Spirit Dealers Assistant (Edinburgh) 1825.


Plant, M., The Domestic Life of Scotland in the 18th Century (Edinburgh) (1948).


Proceedings at Trial: The Lord Advocate against Robert Paterson Pattison and Walter Gilchrist Gray Pattison (Fraud and Embezzlement) 8th-17th July, 1901.


Ross, W., The Present State of The Distillery in Scotland (Edinburgh 1786).


Scarisbrick, J., "Spirit Manual" (Burton-on-Trent, 1891).

Scottish Malt Distillers Ltd. Notes on Distilleries (n.d.)


Sigswoth, E.M., "Some Problems in Business History 1870-1914", in G.J. Kennedy, (Ed.) Papers of The Sixteenth Business History Conference (College of Business Administration, University of Nebraska).

Sillelt, S.W., Illicit Scotch (Aberdeen, 1965).


(xii)

Smith, A., "The Wealth of Nations" (1776).

Smith Grant, Captain W., "Glenlivet, Being the Annals of The Glenlivet Distillery founded in 1824" (Privately Published, 1924 and 1959).


Thomson, T., Brewing and Distilling (Edinburgh, 1849).

Tovey, G., "British and Foreign Spirits" (London 1864).


Wilson, G.B., "Alcohol and The Nation" (London, 1940).


Wilson, R., "The House of Sanderson" (Edinburgh) (1963)


Young, S., "Distillation, Principles and Processes" (London, 1922).