MANAGEMENT STRATEGIES IN SMALL BUSINESSES: EVIDENCE FROM THE PRINTING AND SOFT DRINKS INDUSTRIES

by

Christopher John Allen, B.Com.
This thesis is dedicated to my mother, and to the memory of my father.
DECLARATION OF ORIGINALITY

I declare that this thesis has been composed by myself, and is my own work entirely.

Christopher John Allen, B.Com.
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LIST OF ABBREVIATIONS

The following abbreviations have been used throughout the thesis:

BFMP  British Federation of Master Printers

CTN  This denotes the confectioner, tobacconist and newsagent sector of the retail trades

NASDM  The National Association of Soft Drinks Manufacturers

NATSOPA  National Society of Operative Printers and Assistants

NGA  National Graphical Association

PF  This prefix identifies printing firms in the case study sample - see Appendix D for descriptions of the case studies

PKTF  Printing and Kindred Trades Federation

SASDM  The Scottish Association of Soft Drinks Manufacturers

SDM  This prefix identifies soft drinks manufacturers in the case study sample - see Appendix D for descriptions of the case studies

SLADE  Society of Lithographic Artists, Designers, Engravers and Process Workers

SMPS  Society of Master Printers of Scotland

SOGAT  Society of Graphical and Allied Trades
This thesis is a study of management strategy in small businesses. The principal concern of the research involves an examination of the interrelationship of economic and social processes of small business management. Evidence presented in the thesis is based on in-depth observations of management behaviour in a sample of small printing firms and soft drinks manufacturers. These two industries were chosen because of their contrasting technologies and environments for small firms, and they present a variety of insights into the dynamics of small company behaviour which would not have been possible through a more generalised approach to the analysis.

The study involves the construction of a model of small company dynamics as the basis for examining management strategy in the sample of small printing firms and soft drinks manufacturers. The model is derived from a critical examination of various perspectives to the study of business enterprises, and their relevance to an understanding of the dynamics of small companies. The model is examined through a series of interviews of managing directors and senior executives in small businesses. The interviews incorporated both structured and unstructured techniques, and were designed to identify management strategies for future company development and processes underlying the adoption of particular policies to achieve the desired strategic objective.
The thesis presents a detailed examination of management behaviour and small company performance in the printing and soft drinks industries. These separate studies are then synthesised into more generalisable idealisations of company behaviour, which are related to specific configurations of management and company characteristics. The ideal types of small company identified by our research provide a broad framework with which to analyse small company behaviour and performance. Our evidence links the social process of ownership and executive-control in small firms to the widely varying levels of small company performance. In broad terms, our analysis suggests that older, family-managed firms tend to be the least efficient in a particular industry, and that this process is linked to the strategies adopted by managers in response to market and technological change. Our research also identifies situations of small company demise in which owner-managers sought to liquidate company assets, as opposed to demise through financial failure. The interactive nature of social processes of small business management and economic trends within a particular industry provide important insights into the functioning of the small business sector within the UK economy.

The final part of the thesis broadens the discussion of current conclusions to present a more theoretical analysis of processes of small business management, and an examination of the future role of small businesses in the UK economy. This discussion refines and extends
previous analyses of small company growth and decline to provide a more comprehensive model of small company dynamics. These discussions suggest several implications for Government and institutional policy, which are reviewed in the final chapter.
I am deeply indebted to numerous people for their kind assistance in the completion of this thesis. I thank Dr. John Henley for his unselfish assistance and guidance during the course of the study. His comments and criticism of the early drafts have been invaluable in clarifying my conclusions from the research. I also thank postgraduate colleagues in the Department of Business Studies, Caroline Codrington, Peter Haug, Marian Higgins and Paul Gregory, for their patience and advice during the research. I am indebted to Euan Thom, Christine Wilkins and my aforementioned postgraduate colleagues for assistance with lodgings during my frequent visits to Edinburgh to revise drafts since my return to work in my family business. This thesis could not have been completed without their kindness. The research would also have been impossible without the assistance of the small business managers who agreed to participate in the study. Several managers appear to face grave commercial problems in the future, and I am extremely grateful for their willingness to discuss these problems. I thank Mrs. Sue Tatton who has done such a marvellous job in typing the thesis. I would like to acknowledge the SSRC for funding the research. Finally, but by no means least, I thank my mother who has so often provided encouragement which has lifted my sagging spirits. Without her support, both spiritual and financial, I should not have been able to complete the thesis.
To everyone who has helped me complete this thesis, but who are too many to mention, a simple "thank you" hardly seems sufficient to express my deepest gratitude.

Any misrepresentation of facts or mistakes in the construction of the thesis are entirely my own responsibility.
PART ONE

INTRODUCTION

The increasing level of industrial concentration in the US economy, and the desire to reverse this trend through rejuvenation of the small business sector, have become the focus of both economic and political debate. For example,
CHAPTER 1

INTRODUCTION

1.1. OBJECTIVES

The purpose of this thesis is to derive and test a model of small company dynamics as an aid to understanding the behaviour and performance of small firms in the UK economy. Particular attention is given to the process of strategy formation, and its translation into different modes of company behaviour. This is approached through an analysis of pertinent organisational literature and in-depth studies of management decision-making in a sample of small firms from the printing and soft drinks industries. These two industries are chosen because they exhibit different environmental constraints to small company activities, and therefore provide a variety of insights into the dynamics of small companies. This disaggregated approach to the processes of small company growth and decline offers a variety of observations which are not available through more generalised studies since it is able to identify both economic and social processes underlying managerial actions in small businesses.

1.2. THE PROBLEM

The increased level of industrial concentration in the UK economy, and the desire to reverse this trend through a rejuvenation of the small business sector, have become the focus of much academic and political debate. For example,
a report by the NEDC (1974) suggests that economic efficiency may be improved through

"... profound changes in the detailed structure of British industry, leading to a degree of concentration which transmits resources from their present dispersed sites and activities into a narrower set of high performance plants." (Research Annex)

In contrast to the NEDC view, Bannock (1976) concluded that

"... the economic evidence is now sufficiently strong to justify some serious attempt to shift the balance of advantage more in favour of small firms in Britain." (p.75)

These discordant views concerning the role of small firms in the UK economy suggest a lack of appreciation of small company dynamics. The bulk of present academic knowledge on this subject relates to an analysis of economic factors associated with increased industrial concentration, with particular emphasis placed upon stochastic growth processes (1) to explain the relative decline of small firms. However, stochastic growth processes leave unexplained a large proportion of the recent decline in the number of small firms (2). It is the purpose of the current study to argue that simple economic theory relating to the relative performance of small companies is inadequate, primarily because it fails to give due attention to social processes underlying small company behaviour. It has been suggested that the forces precipitating increased industrial concentration and relative decline of small firms are both economic (Prais, 1976) and sociological (Bannock, 1976).

But what are these social processes associated with the decline of small firms? To what extent are the economic and social processes mutually supportive? How are these
behavioural characteristics translated into management strategy and company behaviour in small firms? These are the questions which form the subject matter of the present study.

Until the Committee of Inquiry on Small Firms (1971)(3) was set up in 1969, little attempt had been made to understand the nature and role of the small firm sector - despite its numerical significance and the high proportion of the total labour force employed therein(4). The Bolton Committee highlighted the individualistic nature of small firms, whilst other recent studies have emphasised the close relationship between the characteristics of the small business manager and the type of firm - particularly in relation to its objectives vis-a-vis growth(5). Nevertheless, prescriptions to aid the small business sector have tended to be generalistic, despite the great variety of small business enterprises.

"The troubles of small firms are often discussed in general but rarely in particular: often in terms of pressure and panacea, never in terms of people." (Lester, 1970, p.85)

The small business manager is often in a position to satisfy personal objectives through the medium of a small business, particularly where there is a unity of ownership and control. Indeed, there is evidence to suggest that contrary to the "traditional" business objectives of profit and/or growth, owner/managers may take a conscious decision to seek low levels of growth and/or profitability (Golby & Johns, 1971; Stanworth and Curran, 1973). However, the
conditions under which these motivations are likely to be prominent have not been clearly identified.

Analysis of small company dynamics is inexorably linked to analysis of the motivation of small business managers. Nevertheless, previous studies of small business managers and management motivation have usually failed to examine the process of strategy formation. Studies by Smith (1967), Sadler and Barry (1970), Boswell (1972) and Stanworth and Curran (1973) have identified strategies which are consistent with the growth and development of small firms, but they have failed to examine the political and social processes underlying the formulation of particular strategies. This is an area of analysis which still requires investigation.

The majority of research related to the small business sector has been concerned with the initiation and development of new enterprises. Moreover, recent studies by Sadler and Barry (1970) and Stanworth and Curran (1973) have been based on firms which operate in environments conducive to small company growth and development (6). The relative decline in the economic significance of small firms throughout the twentieth century suggests that such environments are not typical of the UK economy as a whole. This suggests that insufficient emphasis has been given to gaining insights into the dynamics of older small firms in environments which are relatively hostile towards small firms. Do management motivations and strategies differ according to different environmental constraints?
How do management motivations and strategies differ in firms of different age or with different patterns of ownership and control? Since approximately 75% of small firms have been formed for more than 10 years (Bolton, 1971, p.7), these questions appear to be of paramount importance, but as yet remain unanswered.

1.3. AIMS AND METHODOLOGY OF THE STUDY(7)

The problems associated with analysis and interpretation of prior research in the small business sector highlight the need to study the social process of management strategy, and its impact on company performance. Since the small business enterprise is a heterogeneous entity, the present research seeks to satisfy the need for a thorough analysis of strategy formation in small businesses from different industrial environments. For this purpose, the study presents an analysis of small company behaviour in the printing and soft drinks industries.

The soft drinks industry has witnessed a marked decline in its small firm population and increased market concentration in recent years. Small company dynamics may be analysed within a relatively standard production technology for the whole industry. By contrast, the general printing industry has witnessed a marked increase in the number of small firms in recent years, and is typified by a low concentration of economic activity. In addition, the various technologies of the printing process provide a contrast in the technological environment of small firms.
The present study attempts to determine processes of small firm growth and decline by relating these environmental differences to small company behaviour patterns. The chief objective of this thesis is to determine the inter-relationship between economic determinants of small company performance, and the social process of management which influences the adoption and implementation of strategies and policies in small businesses.

To gain these insights, the theoretical basis of the present research is a reconciliation of two distinct approaches to the analysis of business enterprise. The micro-economic approach to the business firm is concerned with the impact of input factors (land, labour, capital) on company performance. This approach was used by Boswell (1972) to identify economic variables which influence the level of success among small companies, and the approach will be invaluable to the present study as a means of defining the impact of environment on small company operations.

The second perspective of the present study concerns the construction of a behavioural model of small company dynamics, which is based on approaches to business organisation suggested by Child (1972) and Ansoff (1965). The Ansoffian approach, with its emphasis on the impact of behavioural and informational (feedback) variables on the behaviour of firms, renders itself particularly useful for the purpose of the present study.
Child's (1972) approach to organisations attempts to incorporate the essentially political processes associated with the licence of organisational decision-makers to choose a particular organisational structure, by introducing the "strategic choice" concept into the theory of organisation. Although the present study is not concerned with the determination of structure per se, the strategic choice model appears to be particularly useful in the analysis of behavioural processes of small firms. Its value stems from the recognition of political processes of management control of small firms, together with recognition of the critical link between a decision-maker's evaluation of an organisation's position vis-à-vis its environment and the choice of strategy in response to specific environmental constraints. This aspect of the study is primarily concerned with the impact of social processes such as management motivation, succession in command positions and the pattern of ownership and control on the adoption of particular strategies, and the relationship of these strategies to the process of company development. By nature, this form of research is qualitative rather than quantitative, and accordingly conclusions are tentative rather than definitive.

Within this framework, the data base of the study is in two distinct phases. The study of social processes of management results from a series of in-depth, qualitative interviews with senior executives responsible for the formulation and implementation of company policies. Analysis of the economic processes of company behaviour
and performance is undertaken through a financial analysis of companies from published accounts, and a questionnaire survey of small soft drinks manufacturers to determine the relationship between performance levels and contextual variables of the firm (product range, customer-mix, pattern of ownership and control, and so on).

1.4. STRUCTURE OF THE THESIS

The first section of the thesis continues with a brief analysis of recent economic trends affecting the small business sector. The aim of Chapter 2 is to define a "small" firm, and introduce the reader to the general economic environment of small firms in the UK economy.

The second section of the thesis is devoted to deriving a model of small company dynamics, and development of hypotheses to be examined by analysis of small company behaviour in the printing and soft drinks industries. The model of small company dynamics is derived from a critique of the various approaches to the study of the business enterprise. The study of business has been multi-stranded, and designed to explain a variety of phenomena relevant to organisational functioning. The major perspectives of study are examined in terms of their applicability to providing a basis for analysis of the social processes of strategy formation in small businesses. The derived model is then used to determine hypotheses concerning the determinants and impact of management strategy in small firms. These hypotheses form the basis of subsequent
analysis of company behaviour in the printing and soft drinks industries.

Section 3 of the thesis is a report of the fieldwork, and is devoted to analysis of economic and social processes of small company performance in the printing and soft drinks industries. Chapters 6 and 7 are devoted to analysis of the soft drinks industry. Chapter 6 presents a more quantitative analysis of small company performance in the industry, and examines the influence of a variety of contextual variables as determinants of growth and profitability. Chapter 7, on the other hand, is concerned with a qualitative analysis of processes underlying the various strategies adopted by managers of small soft drinks manufacturers in Scotland. A similar division for reporting the results of the fieldwork is used in Chapters 8 and 9, in which the printing industry is analysed.

The fourth section of the thesis is devoted to a synthesis of results from the printing and soft drinks industries. This task is facilitated through an examination of the hypotheses developed in Chapter 4. The aim of this section is to derive more generalised conclusions based on evidence from the printing and soft drinks industries. This generalisation of results is undertaken through the construction of ideal types of small company; each with its specific configuration of social processes of management, management strategy and behaviour, organisational context, and level of financial efficiency.
These conclusions of the present research are then discussed in a wider context in Section 5 of the thesis. Chapter 12 examines the present conclusions in relation to previous studies which offer insights to the social process of management in small firms. In Chapter 13 the analysis is broadened to present a re-examination of the role of small firms in the UK economy, based on the evidence presented during the present report. Finally, Chapter 14 attempts to relate the processes identified by the qualitative analysis of our study in terms of policy implications for both Government and the financial institutions. The chapter presents a short synopsis of Government legislation towards small firms, and examines its effectiveness in the light of the present conclusions. From this standpoint, we are able to suggest several policy implications for the Government and Institutional policy.

REFERENCE NOTES

(1) The stochastic growth models have been based on Gibrat's Law, which is a proposition regarding the process of company growth. According to this law, the probability of a given proportionate change in size during a specified period is the same for all firms in an industry - regardless of their size at the beginning of the period. Following this law, random probability theory dictates the evolution of large firms over time, with a tendency towards concentration. For a further examination of this process see Scherer (1970).

(2) Prais (1976) concludes that stochastic growth models can explain only about one-half of the rise in concentration since 1950 in the UK economy.

(3) Hereafter referred to as the Bolton Committee.

(4) See Chapter 2 of this thesis for a more detailed analysis of the economic significance of small firms to the UK economy.
See for example Smith (1967), and Collins, Moore and Unwalla (1964) who examine entrepreneurship in the US; and Stanworth and Curran (1973), and Sadler and Barry (1970) who undertook behavioural studies of small business managers in the UK printing and electronics industries.

Table 5.3 of this thesis indicates that both the printing and electronics industries have witnessed a marked rise in the number of small firms in recent years.

The methodological considerations of the thesis are developed in greater detail in Chapter 5.
CHAPTER 2

THE ECONOMIC IMPORTANCE OF SMALL FIRMS

2.1. THE SMALL FIRM DEFINED

Various statistical indices of company size have been used to define a "small business" (for example, the amount of capital employed, level of sales turnover, number of employees). The Bolton Committee (1971) criticised these definitions because they ignore the human and social aspects of small businesses. The Committee suggested three main characteristics which should be taken into account when defining a small firm. According to this "economic" definition, a small firm is one that has a small share of its market, is managed by its owners in a personalised way and is independent of outside control. However, the Committee recognised that no single quantifiable parameter defining "small firms" in these terms could ever be entirely satisfactory. Accordingly, the Committee was obliged to define small firms in various industries using convenient break points in the available statistics - see Table 2.1.

To enable a more widespread comparison between the present and previous studies of small firms, the present analysis has adopted the "Bolton" definition. Accordingly, a small firm is defined as a manufacturing enterprise employing less than 200 people.
TABLE 2.1. The Statistical Definition of Small Firms Used by the Bolton Committee (1971)

<table>
<thead>
<tr>
<th>INDUSTRIAL SECTOR</th>
<th>STATISTICAL DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>Below 200 employees</td>
</tr>
<tr>
<td>Retailing</td>
<td>Below £50,000 turnover p.a. (a)</td>
</tr>
<tr>
<td>Wholesale Trades</td>
<td>Below £200,000 turnover p.a. (a)</td>
</tr>
<tr>
<td>Construction</td>
<td>Below 25 employees</td>
</tr>
<tr>
<td>Mining/Quarrying</td>
<td>Below 25 employees</td>
</tr>
<tr>
<td>Motor Trades</td>
<td>Below £100,000 turnover p.a. (a)</td>
</tr>
<tr>
<td>Miscellaneous Services</td>
<td>Below £50,000 turnover p.a. (a)</td>
</tr>
<tr>
<td>Road Transport</td>
<td>5 vehicles or less</td>
</tr>
<tr>
<td>Catering</td>
<td>All (excluding multiples and brewery-managed public houses)</td>
</tr>
</tbody>
</table>

Source: Bolton (1971), Table 1.1, p.3.

Note (a) The Wilson Committee (1980) to review the functioning of the financial institutions used the same definitions, amending only the turnover figures for inflation. These revised figures are £200,000 for retailing and miscellaneous services; £400,000 for the motor trades and £750,000 for wholesalers.

2.2. THE CHANGING SHARE OF ECONOMIC ACTIVITY ATTRIBUTED TO SMALL FIRMS

One of the most striking economic trends of the twentieth century has been the increased concentration of UK manufacturing industry, and concomitant decline in the importance of small firms within the structure of manufacturing industries. The Bolton Committee (1971) outlined the general decline of small firms, and more recent commentators have suggested that this decline has continued since the time of the Bolton Report (see for example,
More recent data, however, suggest that there has been a rejuvenation of small business activity during the 1970s. A change in the basis of Census of Production statistics between 1968 and 1970 means that data contained in Census reports of 1970 and after are not strictly comparable with data in reports prior to this date. Despite this problem of analysing the position of small firms over time, recent data suggest that the long-term decline of small firms levelled off during the 1960s, and that there has been revival of small business activity during the 1970s - see Tables 2.2 - 2.4, overleaf.

It can be seen from Table 2.2 that the total number of manufacturing establishments(1) and enterprises(2) continued to decline up to 1968. The proportional significance of small firms also declined during this period. However, the period subsequent to 1970 has witnessed a marked increase in the number of manufacturing establishments and enterprises. This increase is due almost entirely to an increase in the number of small businesses.

The increased number and proportion of small firms in the UK economy is matched by increases in the proportion of net output and employment attributable to small businesses. This evidence runs counter to evidence presented by the Department of Industry to the Wilson Committee (1978), in which they suggested that the downward trend of small firm activity may have redeveloped since
<table>
<thead>
<tr>
<th>Year</th>
<th>TOTAL ENTERPRISES</th>
<th>SMALL ENTERPRISES</th>
<th>% TOTAL ENTERPRISES</th>
<th>TOTAL ESTABLISHMENTS</th>
<th>SMALL ESTABLISHMENTS</th>
<th>% TOTAL ESTABLISHMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1924</td>
<td>163</td>
<td>98.2</td>
<td>97.6</td>
<td>160</td>
<td>97.6</td>
<td>94.4</td>
</tr>
<tr>
<td>1930</td>
<td>168</td>
<td>97.6</td>
<td>97.3</td>
<td>164</td>
<td>97.3</td>
<td>93.6</td>
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<tr>
<td>1935</td>
<td>148</td>
<td>96.3</td>
<td>95.4</td>
<td>144</td>
<td>95.4</td>
<td>92.8</td>
</tr>
<tr>
<td>1940</td>
<td>148</td>
<td>95.4</td>
<td>94.1</td>
<td>144</td>
<td>94.1</td>
<td>91.8</td>
</tr>
<tr>
<td>1945</td>
<td>148</td>
<td>94.1</td>
<td>93.0</td>
<td>144</td>
<td>93.0</td>
<td>90.8</td>
</tr>
<tr>
<td>1950</td>
<td>148</td>
<td>93.0</td>
<td>92.0</td>
<td>144</td>
<td>92.0</td>
<td>89.8</td>
</tr>
<tr>
<td>1955</td>
<td>148</td>
<td>92.0</td>
<td>91.0</td>
<td>144</td>
<td>91.0</td>
<td>88.8</td>
</tr>
<tr>
<td>1960</td>
<td>148</td>
<td>91.0</td>
<td>90.0</td>
<td>144</td>
<td>90.0</td>
<td>87.8</td>
</tr>
<tr>
<td>1965</td>
<td>148</td>
<td>90.0</td>
<td>89.0</td>
<td>144</td>
<td>89.0</td>
<td>86.8</td>
</tr>
<tr>
<td>1970</td>
<td>148</td>
<td>89.0</td>
<td>88.0</td>
<td>144</td>
<td>88.0</td>
<td>85.8</td>
</tr>
<tr>
<td>1975</td>
<td>148</td>
<td>88.0</td>
<td>87.0</td>
<td>144</td>
<td>87.0</td>
<td>84.8</td>
</tr>
<tr>
<td>1980</td>
<td>148</td>
<td>87.0</td>
<td>86.0</td>
<td>144</td>
<td>86.0</td>
<td>83.8</td>
</tr>
<tr>
<td>1985</td>
<td>148</td>
<td>86.0</td>
<td>85.0</td>
<td>144</td>
<td>85.0</td>
<td>82.8</td>
</tr>
<tr>
<td>1990</td>
<td>148</td>
<td>85.0</td>
<td>84.0</td>
<td>144</td>
<td>84.0</td>
<td>81.8</td>
</tr>
<tr>
<td>1995</td>
<td>148</td>
<td>84.0</td>
<td>83.0</td>
<td>144</td>
<td>83.0</td>
<td>80.8</td>
</tr>
<tr>
<td>2000</td>
<td>148</td>
<td>83.0</td>
<td>82.0</td>
<td>144</td>
<td>82.0</td>
<td>79.8</td>
</tr>
</tbody>
</table>

Source: Bolton (1971), Table 5.3, p. 60; Census of Production (HMSO), Summary Tables (Various years).

Note: Because of a change in basis for computing Census of Production data, it is not possible to make a precise link between 1968 figures and those of subsequent years.
### TABLE 2.3. Manufacturing Output in the UK, 1924-1977

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Establishments</th>
<th>Total Enterprises</th>
<th>Small Establishments</th>
<th>Small Enterprises</th>
<th>% of Total Establishments</th>
<th>% of Total Enterprises</th>
</tr>
</thead>
<tbody>
<tr>
<td>1924*</td>
<td>2586</td>
<td>3687</td>
<td>1079</td>
<td>1413</td>
<td>41.7</td>
<td>39.2</td>
</tr>
<tr>
<td>1930*</td>
<td>3687</td>
<td>4541</td>
<td>1870</td>
<td>2402</td>
<td>39.9</td>
<td>41.2</td>
</tr>
<tr>
<td>1935*</td>
<td>4541</td>
<td>6089</td>
<td>2241</td>
<td>31.7</td>
<td>36.8</td>
<td>30.1</td>
</tr>
<tr>
<td>1948*</td>
<td>6253</td>
<td>7259</td>
<td>2210</td>
<td>29.1</td>
<td>27.9</td>
<td>27.7</td>
</tr>
<tr>
<td>1951*</td>
<td>7259</td>
<td>8467</td>
<td>2364</td>
<td>27.9</td>
<td>26.8</td>
<td>26.8</td>
</tr>
<tr>
<td>1954*</td>
<td>8467</td>
<td>10851</td>
<td>2906</td>
<td>26.8</td>
<td>26.8</td>
<td>25.9</td>
</tr>
<tr>
<td>1956*</td>
<td>10851</td>
<td>15289</td>
<td>4096</td>
<td>26.8</td>
<td>26.8</td>
<td>26.8</td>
</tr>
<tr>
<td>1958*</td>
<td>15289</td>
<td>14597</td>
<td>10612</td>
<td>23.6</td>
<td>23.6</td>
<td>23.6</td>
</tr>
<tr>
<td>1963*</td>
<td>14597</td>
<td>18531</td>
<td>1707</td>
<td>20.1</td>
<td>20.1</td>
<td>20.1</td>
</tr>
<tr>
<td>1968*</td>
<td>18531</td>
<td>19028</td>
<td>10612</td>
<td>17.1</td>
<td>17.1</td>
<td>17.1</td>
</tr>
<tr>
<td>1970*</td>
<td>19028</td>
<td>20623</td>
<td>4639</td>
<td>24.1</td>
<td>24.1</td>
<td>24.1</td>
</tr>
<tr>
<td>1971*</td>
<td>20623</td>
<td>205377</td>
<td>4973</td>
<td>24.0</td>
<td>24.0</td>
<td>24.0</td>
</tr>
<tr>
<td>1973*</td>
<td>205377</td>
<td>255000</td>
<td>6382</td>
<td>25.2</td>
<td>25.2</td>
<td>25.2</td>
</tr>
<tr>
<td>1975*</td>
<td>255000</td>
<td>266980</td>
<td>9302</td>
<td>25.1</td>
<td>25.1</td>
<td>25.1</td>
</tr>
<tr>
<td>1977*</td>
<td>266980</td>
<td>35403</td>
<td>35403</td>
<td>26.1</td>
<td>26.1</td>
<td>26.1</td>
</tr>
</tbody>
</table>

**Source:** Bolton (1971), Table 5.2, p.59; Census of Production (HMSO), Summary Tables (Various Years).

**Note:** Data for the years marked "*" are at 1963 prices. Figures for the other years are at current prices. Because of the change in basis for computing Census of Production data, it is not possible to make a precise link between 1968 figures and those for subsequent years.
<table>
<thead>
<tr>
<th>Year</th>
<th>TOTAL</th>
<th>SMALL ESTABLISHMENTS</th>
<th>SMALL AS % TOTAL</th>
<th>TOTAL</th>
<th>SMALL ENTERPRISES</th>
<th>SMALL AS % TOTAL</th>
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<tr>
<td>1924</td>
<td>5115</td>
<td>2257</td>
<td>44.1</td>
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<td>5179</td>
<td>2238</td>
<td>43.2</td>
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<td></td>
</tr>
<tr>
<td>1935</td>
<td>5409</td>
<td>2375</td>
<td>43.9</td>
<td>5409</td>
<td>2078</td>
<td>38.4</td>
</tr>
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<td>1948</td>
<td>6871</td>
<td>2538</td>
<td>36.9</td>
<td>7649</td>
<td>1812</td>
<td>23.7</td>
</tr>
<tr>
<td>1951</td>
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<td>34.9</td>
<td>7846</td>
<td>1543</td>
<td>19.7</td>
</tr>
<tr>
<td>1954</td>
<td>7537</td>
<td>2500</td>
<td>33.2</td>
<td>7402</td>
<td>1412</td>
<td>19.2</td>
</tr>
<tr>
<td>1958</td>
<td>7781</td>
<td>2498</td>
<td>32.1</td>
<td>7801</td>
<td>1645</td>
<td>18.7</td>
</tr>
<tr>
<td>1963</td>
<td>7960</td>
<td>2436</td>
<td>30.6</td>
<td>7459</td>
<td>1565</td>
<td>21.0</td>
</tr>
<tr>
<td>1968</td>
<td>8268</td>
<td>2339</td>
<td>29.9</td>
<td>7268</td>
<td>1506</td>
<td>20.7</td>
</tr>
<tr>
<td>1970</td>
<td>8033</td>
<td>2241</td>
<td>27.9</td>
<td>7119</td>
<td>1558</td>
<td>21.9</td>
</tr>
<tr>
<td>1971</td>
<td>7830</td>
<td>2186</td>
<td>27.9</td>
<td>7119</td>
<td>1558</td>
<td>21.9</td>
</tr>
<tr>
<td>1973</td>
<td>7616</td>
<td>2090</td>
<td>27.4</td>
<td>7268</td>
<td>1506</td>
<td>20.7</td>
</tr>
<tr>
<td>1975</td>
<td>7467</td>
<td>2160</td>
<td>28.9</td>
<td>7119</td>
<td>1558</td>
<td>21.9</td>
</tr>
<tr>
<td>1977</td>
<td>7281</td>
<td>2151</td>
<td>29.5</td>
<td>6883</td>
<td>1152</td>
<td>22.5</td>
</tr>
</tbody>
</table>

**Source:** Bolton (1971), Table 5.1, p.58; Census of Production (HMSO), Summary Tables (Various Years).

**Note:** Because of the change in basis for computing Census of Production data, it is not possible to make a precise link between 1968 figures and those for subsequent years.
1972 "because of the economic situation and particularly inflation" (p.66). This view was not based on data subsequent to 1972, and as Johnson (1978) has remarked, there are some grounds for arguing that both factors cited by the Department of Industry could, in some respects, favour the formation of new firms. This latter argument appears to be supported by the more recent Census of Production data.

The general decline in manufacturing employment (Table 2.3) has continued through the 1970s, and is matched by increased employment in the service sectors of the economy - see Table 2.5.

In 1967, 35.7% of the working population were employed in the manufacturing sector, but by December, 1977 this figure had fallen to 32.6%. During the same period the proportion of people employed in the service sector rose from 49.1% to 57.2%, increasing in absolute terms by 1.5 million. Although data is not readily available to distinguish the size distribution of firms within the service industries, the Bolton Committee (1971) suggested that the vast majority of service firms were "small" under the definitions which they devised. McRae (1978) has suggested that this increased importance of the UK service sectors may lead to a renewed importance of small firms within the overall functioning of the economy.
<table>
<thead>
<tr>
<th>Total Employees in Employment (a)</th>
<th>1967</th>
<th>% Total</th>
<th>1970</th>
<th>% Total</th>
<th>1974</th>
<th>% Total</th>
<th>1977</th>
<th>% Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, Forestry, &amp; Fisheries</td>
<td>22808</td>
<td>100</td>
<td>22471</td>
<td>100</td>
<td>22790</td>
<td>100</td>
<td>22214</td>
<td>100</td>
</tr>
<tr>
<td>Mining &amp; Quarrying</td>
<td>542</td>
<td>2.4</td>
<td>468</td>
<td>2.1</td>
<td>417</td>
<td>1.8</td>
<td>368</td>
<td>1.7</td>
</tr>
<tr>
<td>Construction</td>
<td>1515</td>
<td>6.6</td>
<td>1294</td>
<td>5.8</td>
<td>1290</td>
<td>5.7</td>
<td>1235</td>
<td>5.6</td>
</tr>
<tr>
<td>Gas, Water, &amp; Electricity</td>
<td>424</td>
<td>1.9</td>
<td>382</td>
<td>1.7</td>
<td>337</td>
<td>1.5</td>
<td>339</td>
<td>1.5</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>8152</td>
<td>35.7</td>
<td>8164</td>
<td>36.3</td>
<td>7705</td>
<td>33.8</td>
<td>7232</td>
<td>32.6</td>
</tr>
<tr>
<td>Transport &amp; Communications</td>
<td>1591</td>
<td>7.0</td>
<td>1549</td>
<td>6.9</td>
<td>1483</td>
<td>6.5</td>
<td>1423</td>
<td>6.4</td>
</tr>
<tr>
<td>Distributive Trades</td>
<td>2734</td>
<td>12.0</td>
<td>2617</td>
<td>11.6</td>
<td>2707</td>
<td>11.9</td>
<td>2728</td>
<td>12.2</td>
</tr>
<tr>
<td>Insurance, Banking, &amp; Business Services</td>
<td>815</td>
<td>3.6</td>
<td>943</td>
<td>4.2</td>
<td>1101</td>
<td>4.8</td>
<td>1135</td>
<td>5.1</td>
</tr>
<tr>
<td>Professional &amp; Scientific Services</td>
<td>2645</td>
<td>11.6</td>
<td>2880</td>
<td>12.6</td>
<td>3284</td>
<td>14.4</td>
<td>3576</td>
<td>16.1</td>
</tr>
<tr>
<td>Misc. Services (incl. catering)</td>
<td>1965</td>
<td>8.6</td>
<td>1909</td>
<td>8.5</td>
<td>2089</td>
<td>9.2</td>
<td>2264</td>
<td>10.2</td>
</tr>
<tr>
<td>Public Administration</td>
<td>1439</td>
<td>6.3</td>
<td>1446</td>
<td>6.4</td>
<td>1551</td>
<td>6.8</td>
<td>1572</td>
<td>7.1</td>
</tr>
</tbody>
</table>


Note: (a) Employment figures are given to the nearest thousand.
Despite the recent rejuvenation of small firm activity, the historical decline of employment in small manufacturing companies would appear to have been more marked in the UK than in other industrialised countries. International comparisons are notoriously unreliable since different definitions and bases of aggregation are used, making it almost impossible to collate comparable data. Despite this drawback, the Bolton Committee (1971) attempted such a comparison - see Table 2.6.

**TABLE 2.6. Proportion of Manufacturing Employment in Small Establishments in Britain and other Countries**

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>1963</td>
<td>31(a)</td>
</tr>
<tr>
<td>Germany</td>
<td>1963</td>
<td>34</td>
</tr>
<tr>
<td>USA</td>
<td>1963</td>
<td>39</td>
</tr>
<tr>
<td>Canada</td>
<td>1968</td>
<td>47</td>
</tr>
<tr>
<td>Belgium</td>
<td>1962</td>
<td>51</td>
</tr>
<tr>
<td>Sweden</td>
<td>1963</td>
<td>51</td>
</tr>
<tr>
<td>Japan</td>
<td>1965</td>
<td>53</td>
</tr>
<tr>
<td>Holland</td>
<td>1962</td>
<td>58</td>
</tr>
<tr>
<td>Australia</td>
<td>1963</td>
<td>60</td>
</tr>
<tr>
<td>Switzerland</td>
<td>1965</td>
<td>61</td>
</tr>
<tr>
<td>Norway</td>
<td>1967</td>
<td>64</td>
</tr>
<tr>
<td>Italy</td>
<td>1961</td>
<td>66</td>
</tr>
</tbody>
</table>

**Source:** The Bolton Committee, op cit, p.68, Table 6.1.

**Note:** (a) The Census of Production (1968) showed that by the year 1968 the proportion of manufacturing employment in small establishments had fallen to 30%.

It should be noted that Table 2.6 corresponds to the number of small establishments, and the figures do not indicate the extent to which large firms own small establishments in the different industrialised nations. Nevertheless, the assertion that the decline of small firms in the UK
has exceeded that witnessed in other countries is supported when the development of very large firms is analysed. Table 2.7 illustrates that in relation to the size of the country, whether measured by size of population or employment in manufacturing, very large enterprises are more important to the UK than any other European country.

2.3. THE CHANGING PATTERN OF OWNERSHIP OF SMALL FIRMS

Between 1958 and 1968 the number of small enterprises fell more sharply than the number of small establishments. Bannock (1976) has illustrated that this is because large enterprises acquired more small establishments, and that the proportion of small establishments owned by large enterprises rose quite dramatically during this period. Because of the change in statistical basis of Census of Production data between 1968 and 1970, it is not possible to produce a precise link between the two sets of data. Nevertheless, more recent data suggest that the trend observed by Bannock has levelled off - see Table 2.8. It can be seen from Table 2.8 that while the proportion of small establishments owned by large enterprises rose between 1971 and 1973, thereafter this figure has fallen. This levelling off in the proportional ownership of small establishments by large enterprises is probably explained by the marked rise in the number of new manufacturing enterprises since 1971, particularly as the number of small establishments owned by large enterprises has continued to rise during the 1970s, but at a slower rate than the formation of new manufacturing companies. This
### TABLE 2.7. Manufacturing Enterprises\(^{(a)}\) Employing over 40,000 People; UK Compared with other Countries, 1972

<table>
<thead>
<tr>
<th>SIZE OF COUNTRY</th>
<th>LARGE ENTERPRISES</th>
<th>IMPORTANCE OF LARGE ENTERPRISES RELATIVE TO: (c)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pop. (millions)</td>
<td>Manu. Emp. (millions)</td>
</tr>
<tr>
<td>UK</td>
<td>55.8</td>
<td>7.78</td>
</tr>
<tr>
<td>USA</td>
<td>208.8</td>
<td>18.93</td>
</tr>
<tr>
<td>France</td>
<td>51.7</td>
<td>5.93</td>
</tr>
<tr>
<td>Germany</td>
<td>61.7</td>
<td>10.53</td>
</tr>
<tr>
<td>Italy</td>
<td>54.4</td>
<td>5.83</td>
</tr>
<tr>
<td>Benelux</td>
<td>23.4</td>
<td>2.47</td>
</tr>
<tr>
<td>EEC - 6</td>
<td>181.1</td>
<td>24.75</td>
</tr>
<tr>
<td>Sweden</td>
<td>8.1</td>
<td>1.05</td>
</tr>
<tr>
<td>Switzerland</td>
<td>6.3</td>
<td>0.85</td>
</tr>
</tbody>
</table>

**Source:** S.J. Prais, (1976), Table 6.3, p.156.

**Notes:**
(a) Excluding Iron and Steel.
(b) World employment by parent and subsidiary companies (also used to determine which enterprises employ over 40,000).
(c) Ratios of employment in large enterprises to national population and to manufacturing employment, converted to indices.
(d) Allowing for double counting of multinationals.
<table>
<thead>
<tr>
<th>Year</th>
<th>Total No. Small Establishments</th>
<th>Establishments Owned by Small Enterprises</th>
<th>Small Establishments Owned by Large Enterprises</th>
<th>Proportion of Small Establishments Owned by Large Enterprises (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1958</td>
<td>79748</td>
<td>69884</td>
<td>9864</td>
<td>12</td>
</tr>
<tr>
<td>1963</td>
<td>76429</td>
<td>64431</td>
<td>11998</td>
<td>16</td>
</tr>
<tr>
<td>1968</td>
<td>75525</td>
<td>62521</td>
<td>13004</td>
<td>17</td>
</tr>
<tr>
<td>1971</td>
<td>82691</td>
<td>76022</td>
<td>6669</td>
<td>8.1</td>
</tr>
<tr>
<td>1973</td>
<td>87610</td>
<td>78131</td>
<td>9479</td>
<td>10.8</td>
</tr>
<tr>
<td>1975</td>
<td>97726</td>
<td>87854</td>
<td>9872</td>
<td>10.1</td>
</tr>
<tr>
<td>1977</td>
<td>101760</td>
<td>91685</td>
<td>10075</td>
<td>9.9</td>
</tr>
</tbody>
</table>

**Source:** Data for the years 1958-1968 corresponds to Bannock (1976), Table 4, p.19. Data for the years 1971-1977 is calculated from Census of Production returns: 1971 - Summary Tables 3 and 8; 1973-1977, Summary Tables 6 and 12.

**Note:** The data for years 1958-1968 differs from Table 2.2 because it does not take account of unsatisfactory returns. This analysis excluding unsatisfactory returns used by Bannock (1976) and Bolton (1971) tends to overstate the proportion of small establishments owned by large enterprises because the majority of unsatisfactory returns tend to concern small enterprises. Because of the change in basis for computing Census of Production data, it is not possible to make a precise link between 1968 figures and those for subsequent years.
observation is supported by the fact that the number of small establishments rose by 14,900 between 1971 and 1977, compared to a rise of 15,300 in the number of small enterprises during the same period (Table 2.2).

2.4. THE CONCENTRATION OF BRITISH INDUSTRY

The decline in the relative importance of small firms within the economy's structure, and changing pattern of ownership of small firms, are part of the wider process of increased concentration in UK manufacturing industry. It is possible to distinguish two levels of concentration:

i) aggregate concentration,

ii) industrial or market concentration.

Aggregate concentration refers to the share of the largest "n" companies in UK manufacturing net output or employment. Industrial or market concentration refers to the index at the level of the specific market, using the formula:

\[
CR_k = \frac{\text{Share of the } k \text{ largest firms in the industry}}{\text{Share of all firms in the industry}}
\]

Once again, either the employment, sales, or net output index may be used.

(a) Aggregate Concentration

Aggregate concentration in UK manufacturing has increased substantially during the twentieth century. Table 2.9 illustrates that the share of total net output in UK manufacturing attributable to the 100 largest companies rose from 15% in 1909 to 41% in 1968.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LARGEST</strong>&lt;br&gt;50 firms</td>
<td>25</td>
<td>28</td>
<td>32</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100 firms</td>
<td>16</td>
<td>24</td>
<td>32</td>
<td>37(a)</td>
<td>41</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>39</td>
</tr>
<tr>
<td>200 firms</td>
<td>41</td>
<td>48</td>
<td>53</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EMPLOYMENT (%)</strong>&lt;br&gt;1935</td>
<td>15</td>
<td>21</td>
<td>24</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1958</td>
<td>22</td>
<td>28</td>
<td>33</td>
<td>38</td>
<td>37</td>
<td>36</td>
<td>36</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>1963</td>
<td>22</td>
<td>36</td>
<td>42</td>
<td>47</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| **Sources:**<br>Aaronvitch and Sawyer (1975), p.23;<br>Prais (1976), Table 1.1, p.4;<br>"A Review of Monopolies and Merger Policy" (1978), p.9;<br>Census of Production (1973, 1975, 1977), Summary Tables, Tables 12 & 15.<br>Note: (a) Includes steel companies. The figure was reduced to 36.5% if steel companies are excluded.<br>Again it should be noted that because of the change in basis of coverage between 1968 and 1970, the figures between these two time periods are not directly comparable.

The increase in aggregate concentration would appear to have levelled off since 1970. This observation is consistent with an increased share of economic activity being attributed to small firms.

Although aggregate concentration has increased throughout the twentieth century, the share of net output
and employment attributable to the largest establishments has remained almost constant - this despite the general rise in average plant sizes (Prais, 1976).

**TABLE 2.10. The Share of the 100 Largest Manufacturing Establishments in Net Output and Employment, 1930-1968**

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Output (%)</th>
<th>Employment (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1930</td>
<td>10.8(b)</td>
<td>8.2(b)</td>
</tr>
<tr>
<td>1935</td>
<td>11.2</td>
<td>8.4</td>
</tr>
<tr>
<td>1948</td>
<td>9.0</td>
<td>9.5</td>
</tr>
<tr>
<td>1951</td>
<td>9.4</td>
<td>9.3</td>
</tr>
<tr>
<td>1954</td>
<td>10.1</td>
<td>9.6</td>
</tr>
<tr>
<td>1958</td>
<td>10.5(a)</td>
<td>9.9</td>
</tr>
<tr>
<td>1963</td>
<td>11.1</td>
<td>10.1</td>
</tr>
<tr>
<td>1968</td>
<td>10.8</td>
<td>9.2</td>
</tr>
</tbody>
</table>


Notes: (a) Share of sales; (b) Approximate figure. The largest 85 firms taken, and sampling frame used.

Table 2.10 indicates that the share of net output and employment associated with the largest 100 plants has remained at around 11% and 9% respectively since 1930.

The rise in average plant sizes may be a significant factor explaining the decline in the share of economic activity associated with small firms. This force operates in several ways:

i) To pull some firms out of the arbitrary "small firm" category of companies employing less than 200 people.

ii) To hasten the demise of smaller firms that are unable to adopt larger scale methods.

iii) To increase technological scale barriers to
the entry of new firms. However, Preis (1976, p.59) has calculated that only 10% of the post-war increase in aggregate concentration may be attributed to changes in average plant size. This is in contrast to the popular view that modern technology is the chief factor explaining increases in aggregate concentration.

An alternative explanation for the increased aggregate concentration of UK manufacturing activities relates to attempts by larger companies to diversify into more profitable markets. In 1976, the 100 largest firms in the UK were responsible for at least 30% of net output in 7 of the 13 broad industrial groups defined by SIC Orders for the Census of Production - see Table 2.11.

In the vehicles and food and drinks industries, these very large firms account for approximately two-thirds of net output, and in the chemicals industries they account for over one-half of net output. At the other extreme, there is little evidence of large firm activity in the clothing and timber related industries.

In summary, it is evident that large enterprises have acquired many small establishments, and that the scope of their activities transcends several industrial frontiers. Indeed, the impact of diversification into different markets and industrial sectors, rather than increases in the average size of plant, would appear to be associated with increased aggregate concentration up to 1970. During
### TABLE 2.11. The Estimated Share of Net Output in Different Industrial Sectors Attributable to the 100 Largest Manufacturing Enterprises in the UK (measured in Terms of Net Output)

<table>
<thead>
<tr>
<th>INDUSTRIAL ORDER</th>
<th>NET OUTPUT (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1968</td>
</tr>
<tr>
<td>Food, Drink &amp; Tobacco</td>
<td>57</td>
</tr>
<tr>
<td>Chemicals &amp; Allied Industries</td>
<td>46</td>
</tr>
<tr>
<td>Metal Manufacture</td>
<td>-</td>
</tr>
<tr>
<td>Engineering &amp; Electrical Goods</td>
<td>37</td>
</tr>
<tr>
<td>Shipbuilding &amp; Marine Engineering</td>
<td>28</td>
</tr>
<tr>
<td>Vehicles</td>
<td>73</td>
</tr>
<tr>
<td>Miscellaneous Metal Goods</td>
<td>16</td>
</tr>
<tr>
<td>Textiles</td>
<td>35</td>
</tr>
<tr>
<td>Leather &amp; Fur</td>
<td>1</td>
</tr>
<tr>
<td>Clothing &amp; Footwear</td>
<td>10</td>
</tr>
<tr>
<td>Bricks, Pottery, etc.</td>
<td>25</td>
</tr>
<tr>
<td>Timber &amp; Furniture</td>
<td>3</td>
</tr>
<tr>
<td>Paper, Printing &amp; Publishing</td>
<td>36</td>
</tr>
<tr>
<td>Other Manufacturing</td>
<td>29</td>
</tr>
<tr>
<td><strong>TOTAL MANUFACTURING</strong></td>
<td>41</td>
</tr>
</tbody>
</table>

Source: Prais (1976), Table 1.2, p.8; "A Review of Monopolies and Merger Policy" (1978), p.47; Census of Production (1976), Summary Tables, Tables 13 & 16.

In the 1970s there would appear to have been a stabilisation of aggregate concentration levels, partially because of the marked increase in small firm activity.

(b) Market or Industry Concentration

Aggregate statistics can provide a broad overview of the changing pattern of concentration, but they reveal little of the dynamics of individual markets or product groups. A common measure of market concentration is the five firm concentration ratio. This figure has risen rapidly for many product groups, with the largest
five firms accounting for over 90% of sales in almost 20% of identifiable product groups - see Table 2.12.

TABLE 2.12. The Distribution of Concentration Ratios (C5-sales) for Different Commodity Groups, 1963-1975

<table>
<thead>
<tr>
<th>Five firm Concentration Ratio (Sales)</th>
<th>1963</th>
<th>1968</th>
<th>1975</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>Less than 60%</td>
<td>124</td>
<td>46.1</td>
<td>116</td>
</tr>
<tr>
<td>60% - 79%</td>
<td>69</td>
<td>25.6</td>
<td>59</td>
</tr>
<tr>
<td>80% - 89%</td>
<td>26</td>
<td>9.7</td>
<td>39</td>
</tr>
<tr>
<td>90% +</td>
<td>50</td>
<td>18.9</td>
<td>55</td>
</tr>
</tbody>
</table>

Source: Phillips and Gray (1978), Table 2, p.359.

Note: The table is based on five-firm concentration ratios (sales) for 269 product groups in which data was available for all three years of observation. Excluded from the analysis are firms in which the five-firm ratio is not available for reasons of confidentiality, and product groups which changed in terms of their basis of aggregation between 1963 and 1975.

The general upward trend identified by Table 2.12 disguises some quite marked changes - both rises and falls - in the five-firm concentration ratio. Table 2.13 shows the five-firm concentration ratio rose by more than 15 percentage points in 15 product groups between 1968 and 1975, while the ratio fell by 15 percentage points or more in 8 product groups during the same period.

Industries which have tended to become less concentrated between 1963 and 1975 include petroleum and natural gas refining, brewing and distilling, photographic and copying equipment, and fertilizers. Industries in which concentration increased include limestone and
dolomite quarrying, biscuits, clocks and watches, and industries associated with clothing and textiles.


<table>
<thead>
<tr>
<th>Relative Change in five-firm Concentration Ratio, Percentage Points</th>
<th>1963-1968</th>
<th>1968-1975</th>
</tr>
</thead>
<tbody>
<tr>
<td>-20 or more</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>-19.9 to -15</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>-14.9 to -10</td>
<td>5</td>
<td>16</td>
</tr>
<tr>
<td>-9.9 to -5</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>-4.9 to -2</td>
<td>32</td>
<td>34</td>
</tr>
<tr>
<td>-1.9 to -0.1</td>
<td>34</td>
<td>25</td>
</tr>
<tr>
<td>0 to +1.9</td>
<td>41</td>
<td>36</td>
</tr>
<tr>
<td>+2 to +4.9</td>
<td>54</td>
<td>63</td>
</tr>
<tr>
<td>+5 to +9.9</td>
<td>54</td>
<td>46</td>
</tr>
<tr>
<td>+10 to +14.9</td>
<td>32</td>
<td>23</td>
</tr>
<tr>
<td>+15 to +19.9</td>
<td>15</td>
<td>6</td>
</tr>
<tr>
<td>More than +19.9</td>
<td>18</td>
<td>9</td>
</tr>
<tr>
<td>TOTAL COMMODITY HEADINGS ANALYSED</td>
<td>307</td>
<td>296</td>
</tr>
</tbody>
</table>

Source: Phillips and Gray (1978), Table 3, p.359.

In terms of international comparisons, the UK would appear to have witnessed a more marked rise in market concentration. George and Silberston (1975) compared the level of concentration in UK industries with that witnessed in comparable industries of the EEC. Their analysis (using a four-firm employment concentration ratio) led the authors to conclude that major differences exist between the UK and other West European countries of similar size, and that these differences are much greater than those existing between founder members of the EEC. They suggested that part of the explanation for this is
likely to be found in the different competitive environment in which UK firms have been operating. But it is by no means clear how small firms perform in different competitive environments; nor are the trends of market concentration clear for different countries of the EEC.

2.5. SUMMARY

Although there have been problems inherent in the comparison of available data, it is apparent that the economic importance of small firms has declined throughout the twentieth century. However, there is growing evidence to suggest that this decline has been arrested during the 1970s, and that there has been a rejuvenation of small firm activity.

The decline of small businesses may be allied to the changing pattern of ownership of British industry and increases in both aggregate and market concentration. Hughes (1976) has suggested that increased concentration has tended to come about more by an increase in the number of plants operated by larger firms than by an increase in the scale of existing plants (p.110). This factor is related to the increased proportion of small establishments owned by larger firms.

These patterns of change form the background to the present study. Changes in the amount of economic activity associated with small firms vary from industry to industry. While several industries have witnessed a marked increase in the number of small firms, others have continued to
become more concentrated with a decline in the relative importance of small firms. However, this overview of small business dynamics leaves unanswered questions relating to strategies adopted by small businessmen to combat or adapt to changing market environments. To what extent are the rejuvenation of small firm activity or continued decline of small firms related to endogenous factors specific to individual firms or determined by exogenous constraints? It is to an examination of these questions that this study is now directed.

REFERENCE NOTES

(1) An "establishment", is defined as a "reporting unit", and usually consists of a factory or a plant.

(2) An "enterprise" is defined as "one or more firms under common ownership and control". Thus an enterprise may consist of a single establishment, or a firm with factories in different areas of the country, or a number of establishments at different addresses which, although under common ownership, keep separate accounts.

(3) The Bolton Committee (1971) estimated the following breakdown of the relative importance of small firms in different industries:

<table>
<thead>
<tr>
<th></th>
<th>SMALL FIRMS AS % OF ALL FIRMS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NUMBERS EMPLOYED</td>
</tr>
<tr>
<td>Miscellaneous services</td>
<td>82</td>
</tr>
<tr>
<td>Hotel and catering trades</td>
<td>75</td>
</tr>
<tr>
<td>Retail trades</td>
<td>49</td>
</tr>
<tr>
<td>Road transport</td>
<td>36</td>
</tr>
<tr>
<td>Building and construction</td>
<td>33</td>
</tr>
<tr>
<td>Motor trades</td>
<td>32</td>
</tr>
<tr>
<td>Wholesale trades</td>
<td>25</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>20</td>
</tr>
<tr>
<td>Mining/quarrying</td>
<td>20</td>
</tr>
<tr>
<td>Total: all groups</td>
<td>31</td>
</tr>
</tbody>
</table>

Source: Bolton (1971), Table 3.1, p.33.

Note: The data are estimates of small firm activity in different industrial sectors in 1963.
A MODEL OF SMALL COMPANY DYNAMICS
CHAPTER 3

PERSPECTIVES TO THE STUDY OF BUSINESS ORGANISATIONS:
THEIR RELEVANCE TO THE ANALYSIS OF SMALL COMPANY
DYNAMICS

3.1. INTRODUCTION

The business organisation has been studied from a multiplicity of perspectives in order to explain a variety of phenomena pertinent to organisational functioning. The purpose of the present chapter is to examine a number of these perspectives and assess their relevance towards understanding managerial processes of small businesses.

3.2. CLASSICAL ECONOMIC THEORY

Classical economic theory is basically an inter-firm model which attempts to predict the distribution of resources within a market through the price mechanism. The allocative process (price mechanism) is formed on the assumption of an "ideal world" in which there is perfect knowledge, and the motivation of entrepreneurs is one of profit maximisation. Although based on the concept of "entrepreneurship", classical economic theory makes little attempt to understand why entrepreneurship exists or the dynamics of individual firms that constitute the market. Moreover, since classical theory assumes an equivalence of entrepreneurial and company goals, it has been largely ineffective in allowing for the divorce of ownership and control. The emergence of professional managers (as
opposed to owner-managers) in response to the divorce of ownership and control has highlighted the existence of management motivations other than profit maximisation\(^{(1)}\). Consequently, the classical economic model appears to be limited in its ability to explain the formation of management strategies and their translation into modes of market behaviour.

3.3. THE MANAGERIAL ECONOMIST SCHOOL OF THOUGHT

Managerial economist models of the firm differ from classical economic theory insofar as they recognise the existence of goals other than profit maximisation. Two main groups have evolved as alternatives to the classical model:

i) models in which the firm maximises something else (for example, sales), or a more complicated function of profit and something else (Baumol, 1959; Marris, 1964);

ii) models in which the firm does not maximise at all (Hall and Hitch, 1939; Simon, 1959, 1960).

Baumol's model may be distinguished as a "sales maximising" model, and is an indication that professional managers seek growth (consistent with a satisfactory level of profitability) as the most effective means of furthering personal goals when ownership and control are divorced. His initial static model was modified later to incorporate the maximisation of the rate of growth of sales revenue as a "better" approximation to the goals of many management groups in large firms (Baumol, 1962). Whereas profit
was viewed as a constraint in the initial model, it was seen more as an instrumental variable in the later dynamic model - a means by which management worked towards its goals. The limitation of this approach within the context of the present study is that it leaves the processes underlying managerial strategies to be inferred.

The second group of managerial economists vary from the relatively crude "full cost" or "cost plus" doctrines of Hall and Hitch (1939) to the "behaviouralist" theories of Simon (1957) and the "Carnegie School" (Cyert and March, 1963). Hall and Hitch reported on the pricing policies of businessmen, and concluded that since businessmen are seldom aware of marginal revenue and marginal cost, they set prices which cover average cost (including "profits") at an expected or conventional output. This "theory" has been severely criticised as being contradictory in its reporting and findings (Stigler, 1947), and its usefulness must be doubted since it can explain any pattern of prices, and therefore forecast none.

A more modern theory of the firm embodying several features suggested by cost-plus theorists has been presented by Andrews (1964), Andrews and Brunner (1975), and more recently by Reid (1979). An important feature of these contemporary approaches is the incorporation of technical progress and the adoption of new technologies. From his derived model, Reid concluded that, among other things, followers are at a competitive disadvantage
compared to leaders in the innovatory process. In addition, his model suggests that there is no tendency towards concentration over time, unless the lower bound on cost is approached. For the purpose of the present study, these findings suggest that the nature of the innovatory process should be examined for the industry under review. This suggests the need to examine the relationship between the role of small firms in the innovatory process, and the performance of small firms in different environments.

The behaviouralist models are primarily based on the work of Simon (1957), and are concerned with the decision-making process of management. Simon rejected the idea that man was completely rational, and concluded that he could not maximise. As an alternative, he proposed that man "satisficed", and accordingly had only "bounded rationality". However, such efforts as satisficing will be prominent only if the market permits them. If there is a great deal of monopolistic shelter for companies, these non-profit objectives may become important; but if there is little shelter, the pursuit of other objectives cannot be quantitatively very important. It is in recognition of this fact that Marris (1964) includes the economies of the take-over bid in his growth-maximisation model of the firm.

A link between the two schools of thought is provided by Gordon (1961) who developed a framework of environmental
constraints surrounding and influencing executive decision-making. He suggested that it is necessary to understand the internal dynamics of organisations in order to evolve workable constraints for a model of the firm. By viewing the role of the large corporation executive as one of leadership, as opposed to risk-bearing, the managerialist approach to the modern firm may be shown as being associated with the prediction of two sets of goals:

i) the profit maximising goals of the shareholders; and

ii) the individually determined goals of the corporate managers.

Relaxation of the profit-maximisation objective provides a useful framework for the study of small firms, even though the basis of managerial theories lies in an explanation of managerial actions in large enterprises. Recognition of environmental constraints on the actions of managers appears to be highly relevant to the present study since it suggests the need to look further than the motivation of small business managers in order to understand the strategic decisions of these individuals.

A major criticism of the behaviouralist models in terms of the present study is that little effort has been directed towards understanding the decision-making processes linking the managerial goals with the organisational goals. Since ownership and control are often synonymous in small businesses, it is necessary to understand the dynamics by which managerial (personal) goals are translated into organisational goals, and the factors
which influence the formulation of particular strategies.

3.4. ORGANISATIONAL THEORISTS TAKING A SOCIETAL FRAME OF REFERENCE

In this section the relative merits of both classical theorists and the more empirical modern theorists are reviewed. Although a societal frame of reference is unlikely to be applicable to the present study, it is possible that several of the approaches may suggest environmental characteristics that may be important in understanding the role and performance of managers, particularly in relation to the environmental constraints upon managerial actions.

The central theme of Marx's writings concern social class conflict and its catalytic properties as an instrument of social change. Within his interest in the relationship between bureaucracy and wider society, he noted that the division of labour and impersonalisation of relations brought about by large scale and bureaucracy, tended to discourage personal initiative and produce dysfunctions of bureaucracy. He noted the power of large firms in relation to small firms, and his analysis is primarily concerned with the impact of large scale firms and increased bureaucracy. Consequently, Marxist theory appears to have limited import in terms of providing a framework with which to study the dynamics of small companies. However, Marxist theory does possess certain merit for the present study insofar as the dysfunctions
of bureaucracy fostered by increased company size and the division of labour are likely to be less prominent in small firms.

Differences between the work environments of small and large firms are suggested by Parkin's (1967) study of the conditions in which employees show a tendency to vote to the Right of the political spectrum. He noted that the frequent interaction between employees and management in small firms, together with the paternalistic nature of control processes, tends to obstruct the growth of collectivist and anti-capitalist ideologies which spawn more freely on the shop floor of large industrial enterprises. Similar findings are reported by Lipset and Linz (1956) who noted that more highly skilled Swedish and German workers are likely to vote for parties of the Left - lower paid and less-skilled workers tending to predominate in smaller firms. Consequently, Marx's writings are likely to have some relevance by defining certain aspects of the internal factory environment encountered by small businessmen. Indeed, the importance of shared commercial aims in small firms may influence the objectives of small businessmen, particularly where further growth is perceived to be associated with increased labour problems. Reporting on the motivation and attitudes of small businessmen, Golby and Johns (1971) concluded that:

"... in the majority of cases, the need for preserving the personal satisfaction won out and there was a clear preference to maintain the business at its existing level of activity - and to pay only lip-service to growth and expansion." (p.5)
Similar to Marx, Weber was interested in the impact of bureaucracy on wider society; but whereas Marx saw bureaucracy as an instrument of class oppression, Weber was interested in bureaucracy as a rational and efficient process (see for example: Weber, 1947; Gerth and Wright Mills, 1948). He emphasised the use of rational rules which stemmed from his concept of "domination", which was defined as authority so accepted that those subject to it believe it their duty to obey it, and those exercising it their duty to do so. He believed domination could be:

i) **Charismatic**: based on belief in the individual exercising it.

ii) **Traditional**: based on belief that what is historically so must be right.

iii) **Rational-legal**: based on belief that laws make it right(2).

The concept of traditional authority appears to be an important feature of small company dynamics because a relatively large number of small firms have a pattern of family ownership - see Table 3.1 overleaf.

Table 3.1 indicates that 38% of small manufacturing firms are controlled by one family, and that over one-half of these family businesses are in their second or subsequent generation of family management. Control processes of these older family firms are likely to owe much to the concept of traditional authority.
### TABLE 3.1. Patterns of Ownership of Small Firms - Family and Non-Family

<table>
<thead>
<tr>
<th>OWNERSHIP TYPE</th>
<th>MANUFACTURING</th>
<th>CONSTRUCTION</th>
<th>WHOLESALE</th>
<th>MOTOR TRADE</th>
<th>RETAIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Generation Family</td>
<td>18%</td>
<td>11%</td>
<td>46%</td>
<td>35%</td>
<td>49%</td>
</tr>
<tr>
<td>Second or Greater Generation Family</td>
<td>20%</td>
<td>33%</td>
<td>23%</td>
<td>14%</td>
<td>19%</td>
</tr>
<tr>
<td>Non-family and Family/Non-family Shared</td>
<td>62%</td>
<td>56%</td>
<td>31%</td>
<td>51%</td>
<td>32%</td>
</tr>
</tbody>
</table>

**Source:** Merrett Cyriax Associates, "Dynamics of Small Firms", "Committee of Inquiry on Small Firms - Research Report No. 12", (London: HMSO, 1971, Table 2.7, p.14.)
The extent to which control may be arbitrary will be reflected through the ability of small business managers to use their company to satisfy personal objectives. Michels (1949) draws attention to the fact that power held by organisational elite tends to be abused in order to satisfy their own ends. The relevance of Michels' work is the observation of two sets of goals: those of the organisation, and those of the individual role occupants (and the process of goal succession resulting from the process of goal interplay). This latter aspect was used by Stanworth (1971), and later reported by Stanworth and Curran (1973), to explain the role succession of small businessmen resulting from the interplay of social marginality and goal relationships. Consequently, Michels' model appears to provide certain import for the present study with respect to the arbitrary power of owner-managers to satisfy personal objectives at the expense of other participants in the organisation (for example, the firm's work force). This factor appears to be important in management strategies to realise company assets, either by take-over or voluntary liquidation.

An alternative branch of theory concerns consequences of the divorce of ownership and control. Burnham (1941) was concerned with the public sector, and predicted the transfer of industry from private to public ownership as an inevitable extrapolation of the process of the divorce of ownership and control. Consequently, his model does
not appear to possess a great deal of relevance for the present study.

Berle and Means (1932) argued that economic power in the United States was becoming concentrated in the hands of large corporations. The analysis presented in the previous chapter noted that similar processes of industrial and aggregate concentration have taken place in the UK economy. This may be seen as part of a natural tendency towards monopoly capital as predicted by Marxist economists (for example see: Baran and Sweezy, 1966; Braverman, 1974).

"The foundations for the theory of the monopolistic corporation were laid by Marx when he described the tendency of capital to agglomerate in huge units." (Braverman, 1974, p.257)

This tendency towards monopoly capital has been traced by Chandler (1969), with the rate of technological change determining that the most efficient use of capital is via the tendency towards monopoly. The relevance of this approach to the present study is that it suggests some of the environmental constraints to small firm activities. The theory of monopoly capital suggests that larger firms will tend to become more important in industries characterised by technological change, with a concomitant decline in small company activity.

Social implications of the divorce of ownership and control have been examined by Dahrendorf (1959), who argued that this separation has only limited import for
social conflict and stratification. He suggested that authority relationships were of greater importance, and as we have seen, these may be important elements in the growth process of small businesses. However, Dahrendorf's analysis was not intended for the small firm, and its relevance to the present study appears to be limited.

The contribution of the "Structural-functionalist" school is through viewing the organisation as a social system embracing constituent sub-systems, and itself forming a sub-system of its wider social environment (see for example: Parsons, 1957, 1964). The implication of this model in terms of the present study is the interdependence of organisations in a particular market environment. However, the model is easily criticised at the operational level since it assumes that organisations are necessarily concerned with societal goals. In addition, Blau and Scott (1963) have suggested that:

"A criticism that has been levelled at Parsons' work is that his extremely abstract conceptions yield a theoretical scheme devoid of a system of propositions from which specific hypotheses can be derived; in short, that he has only developed a theoretical framework and not a substantive theory." (p.40)

3.5. CLASSICAL ORGANISATIONAL THEORISTS TAKING AN ORGANISATIONAL FRAME OF REFERENCE

This school of thought is chiefly concerned with the work of Taylor (1947) and Fayol (1949). The emphasis of their work is on "the rules of good management". Both Taylor and Fayol intended to provide a basis for managerial
action, either through scientific management techniques (Taylor), or a delineation of managerial functions (Fayol). Neither "theory" enables a rigorous examination of managerial decision-making processes in small firms, and consequently has little relevance for the present study.

3.6. HUMAN RELATIONS/BHEAVIOURAL SCIENCE THEORIES

The major contribution of these schools of thought lies in their recognition of social determinants of output in addition to physical determinants of output. The "Hawthorne experiments" (Roethlisberger and Dickson, 1939) and the work of Mayo (1933) and his contemporaries provided evidence for the need to think in terms of "social man". However, their work was primarily concerned with shop-floor relationships, and its import to an analysis of management decision-making in small businesses appears to be limited.

More recent human relations literature has tried to assimilate ideas from other sources, and may be terms "neo-human relations" (Goldthorpe et al., 1968, p.178). Awareness of the nature of man's needs has led neo-human relations writers to discuss the concepts of "self-actualising man" (Herzberg et al, 1959) and "complex man" (Argyris, 1964), rather than the earlier concept of "social man"(5). Maslow (1954) has suggested that human needs may be classified in a hierarchy ranging from simple needs of safety, survival and security, to
self-actualising needs, in the sense of individuals seeking to fully utilise their personal resources. From the standpoint of an individual setting up his own business to satisfy personal self-actualising needs, the Maslow hierarchy may possess certain merit for analysing the entrepreneurial background. However, Stanworth and Curran (1973) found that the goal succession of small businessmen in their sample did not necessarily follow the pattern suggested by Maslow's hierarchy. The hierarchy of needs also appears to be limited in its ability to analyse the social background of managers in mature small businesses. Consequently, the universal application of a hierarchy of needs appears to be dubious.

A more complex psychological study of entrepreneurial behaviour is presented by McClelland (1961), who examined factors which determine the way in which a person thinks, as opposed to the way he acts. He argued that through the use of projective techniques, thought-samples embodied in stories may be grouped according to a dominant theme reflecting three categories of human motivation: need for affiliation (n Aff), need for power (n Pow), and need for achievement (n Ach). McClelland found the pattern of achievement motivation clearest in small companies, with successful small business managers normally having very high achievement motivation. Wainer and Rubin (1969) found that a combination of high n Ach and moderate n Pow characterised the motives of managers in high performance small companies. These findings appear
to contradict the earlier findings of Schrage (1965) who reported that entrepreneurs exhibiting high n Ach tend to be associated with high profits or losses, while firms run by managers with low n Ach tend to have low profits or losses. Wainer and Rubin reanalysed Schrage's data and questioned the validity of his findings. For them, the less successful entrepreneurs had moderate n Ach, while entrepreneurs with low n Ach tend to perform better than the former group.

This lack of consensus regarding the psychological characteristics of successful small businessmen has continued to the present date (see Kets de Vries (1977) for a review of this type of research). This lack of consensus may be traced, in part, to the questionable methodological validity of the approach and simplistic classification of motives. The psychological tests applied by McClelland and his followers cannot assess factors underlying the observed motivational factors. Consequently, the derived "theories" make no distinction as to whether the observed motivations are genetically part of the individual's make-up, or socially-conditioned and transient. Stanworth and Curran (1973) have suggested that management motivations in small businesses are transient, and change in response to environmental (social) stimuli. Since psychological tests do not differentiate the reasons for embarking upon a particular course of action, they appear to have limited import for the analysis of processes of management strategy formation in small businesses.
The majority of studies which have attempted to determine factors governing managerial actions in small businesses have been concerned with the reasons for undertaking entrepreneurial activity. These studies suggest a variety of motivations associated with the decision to go into business on one's own account. Independence (Broom and Longnecker, 1971), economic gain and social advancement (Goldthorpe et al, 1968), achieving a more creative outlet for personal talents (Penrose, 1959), increasing social status (Lipset and Bendix, 1964), have all been cited as motivating factors leading to entrepreneurial activity of the part of individuals. A theoretically more precise argument is advanced by Stanworth and Curran (1973), who suggest that social marginality is a common feature of individuals who set up their own business (see especially pp.26-40). Social marginality refers to a situation

"... in which there is a discontinuity between the individual's personal attributes (physical characteristics, intellectual make-up, social behaviour patterns) and the role or roles which the individual holds in society." (Stanworth and Curran, 1973, p.29)

However, the motivational patterns observed by Stanworth and Curran do not appear to take account of the environment in which a business operates. Their survey data was based on companies operating in environments conducive to small company growth(6). The general decline of the small business sector through the twentieth century suggests that these environmental conditions are by no means typical of the UK economy. Furthermore, the con-
cept of social marginality is found wanting in its ability to explain the motivations of second- or subsequent-generation small business managers. Miller and Rice (1967) suggest that there may be pressures on family-members to enter the family business out of some form of family loyalty. Indeed, Tyzack (1967) suggests that "building something for the son to take over" is an important motivating force of managers in more mature small businesses. This suggests that a theory of small company dynamics must take account of family influences in relation to the proposed development of the firm. The importance of these social processes to the development of small businesses suggests further limitations to the usefulness of psychological tests as a means of understanding managerial actions in small companies.

The behavioural science school of thought may be considered to revolve around the work of writers such as Simon (1957), Argyris (1964), McGregor (1960) and Likert (1964). These writers took a managerial frame of reference to indicate how managers should behave in the interest of efficient organisation(7). The culmination of these works was the development of managerial styles appropriate for effective management. The argument posed by behaviouralist writers was that effective management necessitates a participative approach to decision-making through a democratic style of leadership. This universalistic approach to management styles is easily criticised since it fails to take account of the social interactions
of individuals within a given situation. The situational
and contingent nature of leadership styles is charac-
terised by Tannenbaum and Schmidt (1958) in their concept
of a leadership continuum. They see leadership as
involving a variety of styles, ranging from one that is
highly manager-centred to one that is highly subordinate-
centred. These vary with the degree of authority a
leader or manager grants to subordinates. Thus, instead
of suggesting a choice between two styles of leadership-
authoritarian and democratic - this approach offers a
range of styles, with no suggestion that one is always
right and another is wrong. The concept of a continuum
recognises that an appropriate style depends on situ-
tations and personalities.

This situational approach to leadership styles is
emphasised by Stanworth and Curran (1973) who found that
the initial exercise of an autocratic leadership style
was replaced by a more consultative and democratic style
as a company grew. On the other hand, Hage (1965) has
discussed how an organisation is likely to move towards
higher degrees of centralisation under conditions of
environmental threat. In terms of the small company,
this may be interpreted as an increase in the personali-
sation of control and a move towards an autocratic style
of leadership. However, the impact of a particular
leadership style on the formation of management strategies
and company performance is by no means clear. Sadler
and Barry (1967) suggest that no one management style or
organisational structure is consistent with high levels of small company performance.

The conclusion to be suggested from this analysis of human relations and behaviouralist approaches to business organisations is that they are useful in terms of directing attention to intra-organisation variables affecting performance. However, their universalistic approach to organisations appears to be limited in view of the large variety of small companies in diverse industrial environments.

3.7. THE SYSTEMS APPROACH

The classical and human relations approaches to organisations have been succeeded by new approaches concerned with the study of organisations as systems. The systems approach attempts to look at organisations as "wholes", and examines sub-systems essentially as living organisms contributing towards the whole in the light of the assumed stable system of needs and mechanisms. In this view, an organisation is a pattern of inputs, outputs, feedbacks, delays and flows, as opposed to a static arrangement of jobs which can be captured in an organisation chart.

The genesis of the systems approach from a managerial perspective may be traced to the work of Barnard (1938) who determined that the task of executives was to maintain a system of cooperative effort in a formal organisation. The systems nature of organisations and the
role of executives in maintaining cooperation between various social sub-systems in order to achieve organisational objectives is central to Barnard's thesis. A major limitation of his approach is its failure to accommodate environmental constraints and conflicts within the system of managerial functioning.

The "closed system" approach of Barnard may be contrasted to systems theory developed from a societal frame of reference. The "open systems" approaches of Katz and Kahn (1966) and Miller and Rice (1967) draw heavily on the general theory of organisational functioning devised by Parsons (1964). They are open systems in that they take account of the interaction between given units of analysis and their environment: between an enterprise and its environment, between a department of an enterprise and the whole organisation, and so on. The open systems approach offers other advantages in addition to its stress on the impact of environment. The multiple interaction between parts of an organisation draws attention to the effects of change in one part of the system on other parts. Furthermore, the notion of "system" implies that organisations are collectivities and are more than the sum of their parts (Child, 1969, p.17).

However, the systems approach may be criticised as a methodological tool for the development of organisational theories, and in the case of the present research, for the development of a model of small company dynamics.
Most systems models impute a unified set of goals which are somehow established and maintained over and above the objectives of organisational members, whereas Wood (1979) notes that organisational goals may conflict and relate to different interest groups.

Systems theory assumes that the environment is a given determinant of the organisation, but Child (1972) suggests that the environment requires interpretation. Therefore, organisations cannot be assumed to monitor environments in a uniform way. In addition, organisations may have some control over their environment, and are not necessarily passive recipients of environmental influence as suggested by systems theory (Hirsch, 1975; Perrow, 1970). Similarly, Galbraith (1967) has argued that large business enterprises are able to create demand for their products and control their competitive environments.

Systems theory may also be criticised since it fails to incorporate the processes underlying managerial decisions. Elger (1975) has argued that organisational analysis should be processual since the

"... pattern of organisational arrangements which constitute the social structure of any industrial organisation must ... be analysed as an emergent product of negotiation and interpretation enacted by ... differently placed participants and within the jurisdiction of organisational decision-rules and administrative programmes."

(p.97)

Consequently, organisational analysis should be historical and concerned with organisational policy (Wood, 1979, p.339)
An attempt to incorporate the decision-making processes of management within a systems framework is introduced by Cyert and March (1963). They view the firm as an "adaptive rational system", adapting and responding to a variety of internal and external constraints in arriving at decisions. The "decision-process" models derived by Cyert and March are useful insofar as they attempt to reproduce the fabric of organisational decisions. They suggest that there is a consensus of individuals with interests in an organisation rather than organisations having goals of their own. However, their model is deficient in its ability to accommodate conflict of objectives, and suffers from similar drawbacks to open systems models. While Cyert and March show how their model can be readily translated into a computer programme which, when used in simulation studies has approximated the actual decisions of organisations in regard to price, output, and so on, their approach tends to neglect the specifically social characteristics of organisational interaction (Mouzelis, 1967, p.141). By concentrating on organisations as decision-making systems, Cyert and March stress the functions of conflict and examine the environment "only through the mind of the decision-maker" (Krupp, 1961, p.143) in order to judge how it affects the problems of the organisation. Although this perspective may prove useful in determining the direction of company development in small businesses, it leaves unexplained the social processes associated with the adoption of management strategies and their translation into patterns of company behaviour.
3.8. CONTINGENCY THEORIES OF ORGANISATION

The basic argument posed by Trist and Bamforth (1951) was that any work group or production system has a technical dimension and an accompanying socio-psychological dimension. Emphasis on the two sub-systems - social and technical - has formed the basis of many contingency theories of organisation.

"Perhaps the trouble with organisation theory is that most theorists have been trying to take in too much territory ... Both classicists and behaviouralists have been attempting to evolve theories that will apply to all organisations of human beings." (Dale, 1973, p.196)

The kernel of the contingency approach is the very simple idea that there is no one best way of organising. It has been argued that the best way to organise depends on the circumstances pertinent to the organisation - that is, on some contingency factor.

A. CONTINGENCY THEORIES BASED ON TECHNOLOGY AND SIZE

One of the earliest arguments for the importance of technology in relation to organisation structure was suggested by Chapple and Sayles (1961), who argued that technology defined in terms of work flow sequences should form the major criterion by which organisation structures are designed. Hickson et al (1969) analysed the wealth of research in this field, and concluded that the definition of technology at the organisational level caused confusion in the determination of generalistic conclusions. When taken together, the operations technology approach (Woodward, 1961)(11), materials technology approach (Perrow, 1970; Rushing, 1968)(12), and knowledge technology approach
(Perrow, 1970)(13), tend to support the view that a high degree of structuring of activities (task specialisation and high levels of role definition by rules and paperwork) is likely to be most effective under conditions of standardised mass production.

Pugh et al (1969) rejected the "engineering" view of technology (advocated by Woodward et al) as being too simplistic in construct. They used what they termed "control and coordination" dimensions of technology, and found that larger size was the most powerful predictor of higher values on their main structural factors - bureaucratic dimensions of specialisation, reliance on paperwork, and use of procedures. However, an analysis of the relative potency of technology and size led Child and Mansfield (1972) to conclude that:

"... the dispute between technology and size theorists derives largely from the fact that they have been studying different facets of organisation." (p.383)

They suggested that structure is mainly related to size, but with technology affecting a few configural variables centred on the work-flow.

Although company size appears to be related to company structure, the extent to which structure per se affects company performance is unclear. There is little evidence to suggest a strong relationship between organisational forms and performance in the small business sector. Consequently, the relative arguments posed by contingency theories based on the interrelationships
between size and technology do not appear to offer useful insights to the construction of a model of small company dynamics.

At a theoretical level, the work of contingency theorists mentioned above is concerned with organisations as wholes. Writers such as Blauner (1964) and Bell (1968) have analysed the impact of technology at the level of the individual. Since the manager of a small business is able to affect his own working environment, the approaches of Blauner and Bell may provide important insights into the actions of small business managers. However, Blauner's categorisation of technology typologies was designed to explain the "uneven distribution of alienation among factory workers in American industry". His typologies of craft technology (exemplified in the printing industry), machine minding technology (exemplified in textiles), assembly line technology (exemplified in the motor industry), and continuous process technology (typified by the chemicals industry), represent four stages in the historical trend towards mechanisation. When alienation potential is plotted against these different levels of technological complexity, the resulting U-curve suggests that alienation is lowest in craft industries, increasing to its highest in assembly line industries, and declining again for continuous process industries. While these conclusions are of interest in suggesting the work environment of small businesses in different technological environments,
Blauner's approach tends to be deterministic with respect to the influence of technology. The autonomy of the small business manager's social system, and strategic choice available to small business managers, suggests that this approach has only limited import for the present study.

B. CONTINGENCY THEORIES BASED ON THE IMPACT OF ENVIRONMENTAL CONSTRAINTS

Arguments for the potency of environmental factors depend on the observation that the maintenance of organisation relies on a degree of exchange with outside parties.

"An organisation cannot evolve or develop in ways which merely reflect the goals, motives, or needs of its members or its leadership, since it must always bow to constraints imposed on it by the nature of its relationship with the environment." (Sadler and Barry, 1970, p. 58)

The environment of organisations is important because of its effects on organisational structures and decisions. Aldrich and Pfeffer (1976) distinguish two distinct approaches to the analysis of the relationship between organisations and their environment. The natural selection model posits that environmental factors select those organisational characteristics which best fit the environment (Hannan and Freeman, 1974; Aldrich, 1971).

A complementary model, variously called a political economy model (Benson, 1975), a dependence exchange approach (Jacobs, 1974; Hasenfeld, 1972), and a response dependence model (Pfeffer, 1972), argues that greater attention must be directed towards political decision-making processes and attempts by organisations to manage
or strategically adapt to their environments.

A critical distinction between the resource dependence and natural selection models of organisational change is the relative importance of environmental selection as opposed to strategic decision-making by organisational members. Evidence supporting the natural selection model usually concerns the trend towards increased industrial concentration and high failure rate of new firms. Mayer and Goldstein (1961) estimated that as many as half of all new small businesses fail within two years of their creation. However, the Bank of America noted in its 1973 publication "Small Business Reporter":

"In the final analysis more than 90% of business failures are due to managerial incompetence and inexperience." (Koontz and O'Donnell, 1976, p.10)

This suggests the importance of managerial decision-making as a determinant of small business success, and casts doubts on the applicability of the natural selection model in the study of small business dynamics. This perspective is supported by Aldrich and Pfeffer (1976) who concluded that

"... regardless of the empirical validity of the natural selection or resource dependence perspectives, it is likely that the active, planning orientation of the resource dependence approach will make it more palatable to most organisational managers as well as to many social scientists." (p.103)

The relationship between managerial decision-making and the business environment may be analysed from several dimensions of environment. The majority of research has concerned the effects of environmental variability -
the speed, frequency and size of adjustments required of the organisation by the environment. Several writers have reached the same broad conclusion: that the greater the extent of environmental uncertainty and variability, the more the structure of the organisation should be adaptive, with coordination achieved through frequent lateral communications as opposed to solely vertical communications (see for example: Burns and Stalker, 1961; Lawrence and Lorsch, 1969; Hage and Aitken, 1967). Although Burns and Stalker (1961) provide some evidence to suggest that organic structures(14) are most appropriate to growing companies, Sadler and Barry (1967) observed no clear relationship between a firm's position on the mechanistic - organic continuum and its level of performance. Although their sample was small (four firms), a more detailed study using a larger sample came to the same conclusion (Sadler, Webb and Lansley, 1974). Indeed, the most successful firms exhibited mixed organisational characteristics. Sadler and Barry (1967) concluded that organisational characteristics of small firms (within a similar technology)

"... appeared to the investigators to reflect not so much the response of firms to the demands of growth and change, as the personal leadership styles and philosophies of management of the chief executives, together with such factors as size, geographical location and stage of development."  (p.219)

A more important variable determining company performance in highly variable environments appears to be the speed with which firms adopt innovations (Reid, 1979). However, there is no evidence to suggest a relationship between
organisational structure and the adoption of innovations by small firms.

The concept of environmental illiberality refers to the degree of threat from external competition, hostility, or even indifference to products faced by organisational decision-makers in the achievement of their goals. This is similar to the concept of "environmental stress" used by Khandwalla (1974). Environmental stress for small firms is likely to emanate from a number of sources, particularly from the tendency towards monopoly capital and relative decline of small firms within the framework of the economy (15). This suggests that any model of small company dynamics must take account of the economic environment of small firms, and the constraints imposed by environmental illiberality.

Contingency theories stressing the importance of environmental factors may be found wanting in terms of explaining how environmental constraints are translated into company dynamics.

"In other words, the predictive power of the argument from environment is further qualified by the fact that decisions about organisational structure depend upon the prior processes of perception and evaluation and that the evaluation may well have other important referents apart from those of a purely economic nature." (Child, 1972, p.1)

Therefore, although these theories suggest areas of influence on managerial strategy formation, they appear to be deficient in suggesting how environmental constraints are translated into different patterns of small company
C. LIMITATIONS OF CONTINGENCY THEORY

A recent textbook on organisation theory has described contingency theory as the dominant approach to the study of organisations (Child, 1977, p. 165). Child was one of the first writers to openly criticise contingency theory, in particular, on the grounds that it underplays the significance of choice in the structuring of organisational processes (Child, 1973).

Criticism of contingency theory has tended to centre on questions concerning organisational goals - the problems of goal conflict, multiple contingencies and the existence of different parties in an organisation. Wood (1979) reviews several criticisms of the contingency approach and concludes that contingency theory is inexorably linked with systems theory. Given the limitations of systems theory (16), it is necessary for models of organisational analysis to move away from contingency theory (Wood, 1979, p. 352).

3.9. THE STRATEGIC SCHOOL OF THOUGHT

Ansoff's (1969) approach to business organisations posits the chief executive as an intervening force between a firm and its external environment. The Strategic School differs from the models of Simon (1957) and Cyert and March (1963) insofar as it concentrates on strategic decision-making as opposed to operating decisions. Since these decisions affect a firm's relationship with its
external environment, the work of Ansoff appears to offer useful insights for the present study in relation to the impact on company performance of particular strategies for company development.

The Ansoffian approach also indicates that organisational goals may be independent of the organisation's principal participants - the external environment dictating many of the strategic decisions which are taken. In this respect, the strategic school highlights limitations to the resource dependence models of the relationship between company characteristics and environmental constraints. However, the Ansoffian approach is limited in its ability to explain the processes underlying the formulation of strategic policies in small firms.

Through an incorporation of the "strategic choice" concept, Child (1972) recognises the existence of essentially political processes in which constraints and opportunities are functions of the power exercised by decision-makers in the light of ideological values. He illustrates these postulated relationships as in Figure 3.1 overleaf.

However, Child's model of business organisation has several limitations with respect to the analysis of small company dynamics. His model assumes a limited time perspective, and is only descriptive of an organisation's initial formation or when major modifications in a firm's posture are being considered (Montanari, 1979). Thus,
FIGURE 3.1. The Role of Strategic Choice in the Theory of Organisation

Rewards expected by resource providers

Complexity
Variability
Illiberality

Prior Ideology

STRATEGIC CHOICE

1. Evaluation of Situation
2. Choice of goals
3. Strategy

Organisational Strategy

Organisational Effectiveness
(Overall performance)

Market Efficiency

Environmental Strategy

Environmental Constraints

in most situations, a manager's choice is constrained by the firm's present size and technology, in addition to previous environmental decisions.

Child also assumes that an organisation is sufficiently large to permit a certain degree of control over its environment. However, barriers to entry are often insurmountable for small companies, and increased economies of scale consistent with increased mechanisation will tend to result in small firms having little or no control over their environment.

The model of strategic choice was designed to explain structural configurations of organisations. Since the present study is not concerned with organisational structure per se, the direct applicability of Child's model appears to be limited. Nevertheless, its focus upon the political and social processes of management decision-making appears to provide a useful framework for the analysis of small company dynamics.

**REFERENCE NOTES**

(1) These factors are discussed in the following section (3.3).

(2) Weber termed the administrative machinery that accompanied rational-legal domination as "bureaucracy".

(3) Michels (1949) observed that the radical programmes of socialist unions and parties became increasingly modified and conservative once bureaucratic hierarchies had developed.

(4) These factors are discussed in Section 3.6.
(5) See Schein (1965, pp.47-63) for an analysis of the various human relations concepts of man.

(6) The firms studied by Stanworth and Curran are located in the electronics and printing industries. Later discussion will suggest that these industries provide many opportunities for small company growth, particularly because both markets are highly fragmented and witnessing rapid change due to the impact of new technologies.

(7) The behaviouralist school has been analysed already in terms of managerial objectives (Chapter 3.3). Here we consider the forms of leadership and managerial behaviour (as opposed to the objectives of management).

(8) The reference to a "stable system" does not refer to a static firm, but is merely reference to the fact that the organisation is functioning in an orderly manner - inputs, outputs and flows proceeding in an orderly manner.

(9) See Koontz and O'Donnell (1976, pp.45-47) for a precis of Barnard's thesis concerning the tasks of the executive.

(10) See Section 3.4 for a brief discussion of Parsons' work.

(11) Woodward stressed that economic success was related to the appropriateness of organisation structure for a particular production technology - unit and small batch production, mass and large batch production, or continuous process production - and not to any general theory of management.

(12) Perrow (1970) attempted to classify the different qualities of materials in the workflow. He distinguished between uniform and stable, and non-uniform and unstable raw materials to be dealt with. Rushing (1968) produced a continuum relating to the hardness of materials used.

(13) This relates to the manner in which problems are analysed and processed. Perrow distinguished the form of search behaviour (routine or non-routine), and indicated that two different factors were involved: the degree of variability and the degree to which search behaviour is analysable.

(14) Burns and Stalker (1961) produced a continuum of organisation structure types. At one end of the continuum was the "organic" structure, defined as a system which emphasises lateral rather than vertical relations, participation by lower members of the organisation in the decision-making process,
and a greater flexibility of functional roles and relations. At the other end of the continuum is the "mechanistic" structure, relating to the "classical" structure with a hierarchy of authority, specialisation of functional tasks, and rules and regulations specifying functional roles and relationships.

(15) The likely consequences of the tendency towards monopoly capitalism were discussed in Section 3.4.

(16) See Section 3.7 for a brief analysis of the approach of Cyert and March (1963) which follows from the concept of "satisficing" developed by Simon (1957).
4.1. CONSTRUCTION OF THE MODEL

The review of perspectives applied to the study of organisations which was presented in the previous chapter suggests that few approaches have attempted to make explicit the process of management strategy formation. Classical economic theory is a market model, and makes little attempt to understand the processes of management strategy formation. More recent models of the firm presented by managerial economists have relaxed the profit maximisation objectives assumed by classical economic theory, but they still fail to incorporate the social processes of management. Models of the firm which are derived from a societal frame of reference possess merit insofar as they examine the process of social change, but they are not designed to analyse management strategy formation and company behaviour. Systems theory, on the other hand, examines the relationship between different areas within an organisation, but it has limited import for the present analysis because it assumes a unified set of objectives. Systems theory appears to be limited in its ability to assess the process by which objectives and strategies are formed. Recent approaches to business organisation have tended to be dominated by emphasis on the impact of some contingency factor such as company size, technology, or the type of business.
environment. However, Wood (1979) suggests that contingency theory is inexorably linked with systems theory, and accordingly suffers from the same drawbacks as systems theory.

The strategic approach to organisations appears to offer the most fruitful insights into the dynamics of small companies, and the process of management strategy formation in small businesses. A framework for analysing strategy formation and the implementation of particular strategies is provided by Ansoff's (1969) approach to business organisations. However, his approach does not accommodate an examination of the social processes of strategy formation. The "strategic choice" concept which was introduced by Child (1972) recognises the ability of company controllers to affect organisational structure and process. Similarly, a model of small company dynamics must incorporate the essentially political processes of strategy formation and implementation if it is to portray the process of company development. Consequently, the present model of small company dynamics is an amalgamation of the approaches suggested by Ansoff and Child.

The model of strategic choice described by Child (1972) is a static model in the sense that company performance is seen as a consequence of the interrelationship between a "politically" determined organisational structure and its environment. Poensgen (1974) has produced a more dynamic model of the organisation which
suggests that strategic choice is influenced by perceptions of the relative success of an organisation within its environment. Poensgen models the factors influencing organisational success as in Figure 4.1, below.

**FIGURE 4.1. Organisational Success and its Determinants**

<table>
<thead>
<tr>
<th>Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Specific to the firm</td>
</tr>
<tr>
<td>Size</td>
</tr>
<tr>
<td>Diversity</td>
</tr>
<tr>
<td>2. Specific to the industry</td>
</tr>
<tr>
<td>Technology</td>
</tr>
<tr>
<td>Environment</td>
</tr>
</tbody>
</table>

**Success**

**Structure**

**Choice, ability of the dominant members of the organisation**


Poensgen's scheme of analysis suggests that management strategy is dynamically interactive with the relative performance of companies. The particular configuration of a firm's activities is the result of managerial decisions with respect to the firm's product range, customer-mix, type of plant, and so on. The relationship of these endogenous factors within the context of a particular industrial environment influences a firm's operating efficiency. Managerial perceptions of company performance and its implications for the future development of company activities, in turn, influence the
strategies evolved in response to particular environmental and contextual constraints to company activities.

The analysis of pertinent organisational literature has suggested several factors which must be taken into account by a model of small company dynamics. The important characteristics of the strategic approaches to business organisations may be enumerated as:

1. The political and social processes of small business management influence the adoption of particular management strategies and the direction of company development.

2. The political and social processes of management are a function of:
   i) the personal motivation and objectives of the small business manager;
   ii) the pattern of ownership and control of a small business, and the extent of family-domination in terms of both ownership-control and executive-control.

3. Company performance is a function of both a firm's operating efficiency and the environment within which the company operates. This suggests that company performance will be determined by the extent to which a small firm adapts its activities (product range, customer-mix, and so on) to be consistent with market and technological change specific to its industry.

4. Management strategy and company performance are dynamically interactive.

These relationships may be summarised diagrammatically as in Figure 4.2, overleaf.
FIGURE 4.2. A Diagrammatic Representation of the Model of Small Company Dynamics

Environmental Receptivity
(Demand and Supply of Goods)

ENVIRONMENTAL CONSTRAINTS
1. Illiberality
2. Complexity
3. Variability

Personal Goals of Manager

Ownership Pattern

Ideology of the Dominant Coalition

Strategic Choice Made by Dominant Coalition

1. Evaluation
2. Choice of Goals
3. Organisational Strategy

OVERALL COMPANY PERFORMANCE

Operating Effectiveness

Structure

Modified By

ORGANISATIONAL CONTEXT
1. Size
2. Diversity of Products
3. Technology (Relative to rest of that industry)
4. Human Resources
The present model of small company dynamics is preferred to the systems approach because it is able to take account of change and the conflict of interests in a dynamic situation. Furthermore, it avoids the complexities associated with the identification of subsystem boundaries. The model is also preferred to simple contingency theory since it attempts to make explicit the relationship between social and political (endogenous) processes of management and their translation into different patterns of company behaviour. These patterns of behaviour may be examined in relation to their impact on company performance levels.

The essence of our model is that it directs attention to factors which influence the process of strategy formation in small businesses. The basis of the model is that both economic and social characteristics of small firms must be examined if we are to understand the process of small company development. The relationship between economic and organisation theory has been recognised by Williamson (1964, 1967) in terms of econometric modelling of the business enterprise.

"The strategy of borrowing behavioural assumptions from the organisation theory literature and developing the implications of the behaviour observed within the framework of economic analysis would seem to be one which might find application quite generally. Thus, the organisation-theory approach to problems tends frequently to be rich in behavioural insights but weak analytically, while economics generally and the theory of the firm literature in particular has a highly developed modelling apparatus but has evidenced less resourcefulness in its use of interesting behavioural assumptions."
Combining the two research areas so as to secure access to the strengths of each would thus appear quite promising." (Williamson, 1967, p.138)

Although the aim of the present study is not associated with producing an econometric model of the small firm, the argument presented by the present analysis is that a model of small company dynamics must accommodate insights from both economic theory in relation to the role and performance of small firms, and organisation theory in relation to the role of the small business manager at the interface between the firm and its environment.

4.2. HYPOTHESES DERIVED FROM THE MODEL OF SMALL COMPANY DYNAMICS

The broad aim of the present study is to identify behavioural characteristics associated with both growth and decline processes of small firms. The model of small company dynamics which was developed in the previous section suggests that company performance levels are related to the strategic choice available to company controllers. In the small business organisation, where ownership and control are often synonymous, this choice is equivalent to managerial strategies for company development.

An important facet of the model is the suggestion that management strategies in small businesses are not purely factors associated with the manager's psyche, but that they are influenced by a variety of factors
both endogenous and exogenous to the firm. Consideration of the influences suggested by the model of small company dynamics suggests a number of general hypotheses which may be examined by the study of management behaviour in the printing and soft drinks industries.

Paine and Anderson (1977) suggest that perceptions of the need for change in some internal properties of the firm (product range, customer-mix, type of plant, and so on) will lead to different strategic decision patterns. However, their analysis does not attempt to determine processes underlying the adoption of different strategies, chiefly because they were concerned with the implications of adopting a particular strategy. Our model of small company dynamics suggests that perceptions of the need for change will be influenced by the personal motivation of company controllers and "political" processes of ownership and control. These factors may be collectively termed "the social process of management".

In terms of the present study's objectives, our model of small company dynamics suggests:

HYPOTHESIS 1: The social process of management influences both the mode of strategy formation and perceptions of the need for change.

This hypothesis implies the need to examine social evolution of a small business (its pattern of ownership and control, human resources, and so on), and its influence on management motivation and the adoption of
different management strategies. The "strategic choice" concept directs attention to the role of the decision-maker as a mediator between the internal characteristics of the firm and important elements from the external environment. In general, managers perceiving a highly uncertain environment are likely to use different decision patterns in strategy formation than managers perceiving a relatively stable environment (Galbraith, 1973; Mintzberg, 1973). Our model of small company dynamics suggests that the impact of environmental influences on strategy is translated via its influence of perceptions of the need for change. This suggests:

**HYPOTHESIS 2:** The influence of social processes on the pattern of management strategy in small firms is modified by perceptions of environmental constraints to small company activity.

This hypothesis directs attention to an examination of the relationship between the environment and personal motivations of small business managers. In addition, it suggests a need to examine the relationship between adaptive processes of firms (strategies to adapt to environmental change) and the pattern of ownership and control.

The present context of a small firm within a particular industry (its size, product range, customer-mix, type of plant, and so on) is the result of past operating and strategic decisions. In addition, a
firm's context influences its ability to adapt to a particular environment. For example, small firms tend to perform more effectively and adapt more quickly than larger firms in highly variable market environments (Schwartzman, 1963). This suggests:

**HYPOTHESIS 3:** The relationship between organisational context and management strategy is interactive: the firm's context both influencing the pattern of strategy formulation, and in turn being influenced by the adopted strategies.

The interaction between social processes underlying management decisions, and economic influences on small company activities, is measured in terms of the relative performance of small firms - their profitability and growth rates. Company performance is influenced by both the operating efficiency of firms and environmental conditions of a particular industry. This suggests:

**HYPOTHESIS 4:** Management strategies influence the level of company performance via their impact on a firm's organisational context (defining its operating efficiency) and process by which firms adapt to their environment.

Analysis of these hypotheses necessitates an examination of both economic and social processes underlying small company activities within a particular industrial environment. Consequently, the test of these hypotheses is qualitative rather than a quantitative determination of statistically significant relation-
The basis of our model of small company dynamics is an amalgamation of two distinct approaches to the study of business enterprise. An economic analysis is necessary to determine the structural characteristics defining the environment faced by individual firms. In conjunction with this, a behavioural approach to the firm is necessary to analyse the social processes and other endogenous variables affecting small company behaviour. However, the translation of our model into specific research strategies creates certain methodological problems inherent in an attempt to reconcile hitherto distinct methods of analysis. These problems and their proposed solutions form the subject matter of the following chapter.

REFERENCE NOTES

(1) The political process of small business management is defined here as the process by which power is exercised in small businesses. This factor is particularly relevant to an analysis of family businesses, since the collective needs of family members to maintain family control over company activities may override the personal goals of family members in command positions. The inference of this in terms of the present study is that it is necessary to determine the manner in which power is exercised in terms of strategy formation.

(2) Ownership-control refers to the pattern of ownership of firms, whereas executive-control refers to the relationship of personnel in command positions (both directorships and functional command) in small businesses.
5.1. THE SAMPLE

The broad aim of the present study is to identify behavioural characteristics associated with both growth and decline processes of small firms. The model of small company dynamics which was developed in the previous chapter suggests the need to study small company dynamics within the context of a particular industry or product market. Furthermore, the literature review noted that previous in-depth studies of small firms have been undertaken on samples operating in business environments conducive to small company growth. Arguably this is because the majority of these studies have concerned themselves with processes of company formation (for example: Stanworth and Curran, 1973; Smith, 1967; Collins, Moore and Unwalla, 1964). However, the absolute and proportional decline of small businesses within the UK economy suggests a need to study the process of small company decline, and the dynamics of small firm behaviour in environments less conducive to small company growth. To this end, a study was made of managerial strategies and small company behaviour in the soft drinks industry.

The soft drinks industry was chosen for several reasons. Foremost, the industry has witnessed a rapid decline in its population of small firms during the last
50 years. Prais (1976) distinguished the soft drinks industry as having one of the most marked declines in the number of firms employing less than 10 people - see Table 5.1.

TABLE 5.1. Trades Showing Substantial Declines in the Numbers of Small Establishments, 1935-1968(a)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Grain Milling</td>
<td>2150</td>
<td>320</td>
<td>230</td>
<td>110</td>
<td>2040</td>
<td>95</td>
</tr>
<tr>
<td>Bread, Flour &amp; Confectionary</td>
<td>1750</td>
<td>800</td>
<td>430</td>
<td>210</td>
<td>1540</td>
<td>88</td>
</tr>
<tr>
<td>Soft Drinks etc.</td>
<td>1170</td>
<td>360</td>
<td>210</td>
<td>150</td>
<td>1020</td>
<td>87</td>
</tr>
<tr>
<td>Perambulators etc.</td>
<td>3070</td>
<td>190</td>
<td>70</td>
<td>50(b)</td>
<td>3020</td>
<td>98</td>
</tr>
<tr>
<td>Jewellery</td>
<td>1280</td>
<td>440</td>
<td>460</td>
<td>200</td>
<td>1080</td>
<td>84</td>
</tr>
<tr>
<td>Leather Goods</td>
<td>1550</td>
<td>380</td>
<td>280</td>
<td>270</td>
<td>1260</td>
<td>83</td>
</tr>
<tr>
<td>Clothing</td>
<td>8150</td>
<td>1870</td>
<td>1600</td>
<td>1500</td>
<td>6650</td>
<td>82</td>
</tr>
<tr>
<td>Footwear</td>
<td>970</td>
<td>180</td>
<td>150</td>
<td>130</td>
<td>840</td>
<td>87</td>
</tr>
<tr>
<td>Timber, Mix Wood &amp; Cork</td>
<td>9220</td>
<td>2720</td>
<td>2240</td>
<td>2330</td>
<td>6890</td>
<td>75</td>
</tr>
<tr>
<td>Furniture, Upholstery, Bedding etc.(c)</td>
<td>6380</td>
<td>1740</td>
<td>1640</td>
<td>1620</td>
<td>4760</td>
<td>75</td>
</tr>
</tbody>
</table>

Source: S.J. Prais (1976), Table 1.5, p.14

Notes: (a) Prais defined small establishments as firms employing 10 or less employees. As such, this definition differs from that being used by the present study.
(b) Approximate estimate.
(c) Includes shop and office fittings.

Although the index used by Prais to distinguish small firms does not correspond to the index used in the present study, Table 5.1 is sufficient to demonstrate the rapid decline of very small firms in the soft drinks industry. At the same time, a recent Green Paper on Monopolies and Merger Policy (1978) identified the soft drinks industry as witnessing "significantly" increased concentration between
1968 and 1972 - see Table 5.2.

**TABLE 5.2. Industries Which Experienced a Rise in the Five-Firm Employment Concentration Ratio Between 1968 and 1972 of More than 5 Percentage Points**

<table>
<thead>
<tr>
<th>SIC</th>
<th>CENSUS INDUSTRY</th>
<th>CR&lt;sub&gt;5&lt;/sub&gt; EMPLOYMENT (%)</th>
<th>1968</th>
<th>1972</th>
</tr>
</thead>
<tbody>
<tr>
<td>213</td>
<td>Biscuits</td>
<td>70.3</td>
<td>70.3</td>
<td>78.0</td>
</tr>
<tr>
<td>229.2</td>
<td>Starch &amp; Misc. Foods</td>
<td>33.4</td>
<td>33.4</td>
<td>41.0</td>
</tr>
<tr>
<td>232</td>
<td>Soft Drinks</td>
<td>49.5</td>
<td>49.5</td>
<td>55.0</td>
</tr>
<tr>
<td>271.2</td>
<td>Organic Chemicals</td>
<td>67.6</td>
<td>67.6</td>
<td>74.0</td>
</tr>
<tr>
<td>279.4</td>
<td>Formulated Pesticides</td>
<td>54.1</td>
<td>54.1</td>
<td>na</td>
</tr>
<tr>
<td>279.6</td>
<td>Surgical Bandages</td>
<td>78.2</td>
<td>78.2</td>
<td>85.0</td>
</tr>
<tr>
<td>342</td>
<td>Ordnance &amp; Small Arms</td>
<td>80.3</td>
<td>80.3</td>
<td>86.0</td>
</tr>
<tr>
<td>352</td>
<td>Watches &amp; Clocks</td>
<td>81.8</td>
<td>81.8</td>
<td>86.0</td>
</tr>
<tr>
<td>368</td>
<td>Domestic Electrical Appliances</td>
<td>48.4</td>
<td>48.4</td>
<td>57.0</td>
</tr>
<tr>
<td>412</td>
<td>Spinning &amp; Doubling on Cotton &amp; Flax system</td>
<td>43.3</td>
<td>na</td>
<td></td>
</tr>
<tr>
<td>399.6</td>
<td>Metal Holloware</td>
<td>28.0</td>
<td>28.0</td>
<td>35.0</td>
</tr>
<tr>
<td>413</td>
<td>Weaving Cotton, Misc. Man-made Fibres</td>
<td>29.0</td>
<td>29.0</td>
<td>37.0</td>
</tr>
<tr>
<td>418</td>
<td>Lace</td>
<td>23.4</td>
<td>23.4</td>
<td>na</td>
</tr>
<tr>
<td>422.1</td>
<td>Household Textiles etc.</td>
<td>20.5</td>
<td>20.5</td>
<td>na</td>
</tr>
<tr>
<td>431</td>
<td>Leather</td>
<td>17.8</td>
<td>17.8</td>
<td>23.0</td>
</tr>
<tr>
<td>475</td>
<td>Wooden Containers &amp; Baskets</td>
<td>11.0</td>
<td>11.0</td>
<td>17.0</td>
</tr>
</tbody>
</table>


Note: The five-firm employment concentration ratio for 1972 marked "na" is not available for confidentiality reasons, but the BSO confirmed that in these cases the change in employment concentration rose by more than five percentage points between 1968 and 1972.

The rapid decline in the population of small firms and increased concentration of the soft drinks industry suggests an increasingly illiberal environment for small firms. Consequently, the soft drinks industry appears to provide contrasting evidence of small company dynamics compared to studies of small firms in environments which are conducive to small company development.
Soft drinks manufacturers are usually own-product firms as opposed to undertaking sub-contract work or manufacturing components. In addition, a fairly standard technology applies to the majority of soft drinks manufacturers, thus facilitating an examination of the behaviour adopted by small manufacturers in response to market and technological change.

The desire to understand nuances specific to individual industries and product markets was facilitated by the researcher's previous experience within the soft drinks industry. This has been gained through family connections with a small firm in the industry, and a prior study related to the industry (Allen, 1975). Familiarity with the industry however, provides several possible sources of response error relating to interviewer expectations. Moser and Kalton (1971) list three possible types of expectation errors: attitude-structure expectations, role expectations and probability expectations. Attitude-structure expectations concern the fact that answers early in an interview give the interviewer an indication of a respondent's attitudes. This picture that is built up may bias "marginal" responses later in the interview to be interpreted to be consistent with expected attitudes assumed from the early responses. Role expectations are similar insofar as the interviewer gains early in the interview an impression of the kind of person he is interviewing - age, social type, and so on. Once again, ambiguous responses later in the interview may be interpreted
to be consistent with responses expected from this type of person. Finally, probability expectations refer to the fact that an interviewer may expect a certain distribution of opinions and characteristics among the respondents. Nevertheless, although response error due to interviewer expectations may arise from familiarity with the industry, Moser and Kalton have suggested that interviewers' ideology is a less important source of error than has commonly been supposed (p.386). On balance, it was felt that the ability to acquire pertinent information and closeness to the product market would provide additional insights into the problems faced by small firms in the industry.

It was considered necessary to undertake a comparative analysis of small firms in an industry exhibiting different environmental constraints to small soft drinks manufacturers in order to place these findings within an overall perspective of small company dynamics. For this purpose, the research was extended to include a number of small printing firms.

The **printing industry** provides several areas of contrast with soft drinks which may be readily identified. Unlike soft drinks, the printing industry has witnessed an almost continuous rise in the number of small firms since the Second World War. Prais (1976) identified printing as one of the industries showing a substantial rise in the number of very small firms between 1958 and 1968 - see Table 5.3.
TABLE 5.3. Trades Showing Substantial Rises in the Number of Small Establishments (a), 1958-1968

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Misc. Non-Electrical Machinery</td>
<td>460</td>
<td>680</td>
<td>1000</td>
<td>540</td>
<td>117</td>
</tr>
<tr>
<td>Scientific, Surgical &amp; Photographic Instruments</td>
<td>610</td>
<td>740</td>
<td>940</td>
<td>330</td>
<td>54</td>
</tr>
<tr>
<td>Radio &amp; Other Electrical Apparatus</td>
<td>120</td>
<td>270</td>
<td>410</td>
<td>290</td>
<td>241</td>
</tr>
<tr>
<td>Misc. Electrical Goods</td>
<td>280</td>
<td>370</td>
<td>410</td>
<td>130</td>
<td>46</td>
</tr>
<tr>
<td>Shipbuilding &amp; Marine Eng.</td>
<td>410</td>
<td>480</td>
<td>510</td>
<td>100</td>
<td>24</td>
</tr>
<tr>
<td>Iron Castings</td>
<td>200</td>
<td>330</td>
<td>300</td>
<td>100</td>
<td>50</td>
</tr>
<tr>
<td>Misc. Building Materials</td>
<td>1400</td>
<td>1450</td>
<td>1840</td>
<td>440</td>
<td>31</td>
</tr>
<tr>
<td>Printing &amp; Publishing of Newspapers &amp; Periodicals</td>
<td>110</td>
<td>250</td>
<td>280</td>
<td>170</td>
<td>155</td>
</tr>
<tr>
<td>General Printing etc.</td>
<td>3450</td>
<td>3850</td>
<td>4310</td>
<td>860</td>
<td>25</td>
</tr>
<tr>
<td>Plastic Moulding &amp; Fabricating</td>
<td>320</td>
<td>510</td>
<td>670</td>
<td>350</td>
<td>109</td>
</tr>
</tbody>
</table>

Source: S.J. Prais (1976), Table 1.6, p.15.

Note: (a) Ten employees or less. It should be noted that this is a different index of "small" than used in the present study.

Furthermore, the general printing industry may be characterised as having a low level of industrial concentration - the largest five firms accounting for only 9% of net output in 1977(1). These figures suggest that the printing industry provides an environment more conducive to small company growth than witnessed in the soft drinks industry.

The printing industry is by no means a homogeneous product industry since printing encompasses diverse markets from simple stationery production to complicated photo-processes. In addition, different levels of tech-
nological sophistication and craft expertise are evident in the numerous sectors for printed products. This provides a contrast with the low skill content of the soft drinks manufacturing process, and provides further insights into processes of small company growth and decline.

The printing industry was also chosen because there is access to a reasonably large sample size at low research cost, since printing (defined under SIC Order XVII) forms the modal industry in the Edinburgh region\(^2\). In addition, previous studies of small company functioning have been based on the printing industry (notably: Sadler and Barry, 1971; Stanworth and Curran, 1973), thus permitting direct comparisons with prior research.

5.2. **SURVEY METHODS**

As stated earlier, the research is based on an amalgamation of two distinct approaches to the study of business organisations. At one level, the study is concerned with factors relevant to the economic behaviour of small firms. This analysis centres on the relative efficiency of small firms, and the economic characteristics associated with different levels of performance. At the other level, attention is focussed on social processes consistent with strategies evolved in response to environmental stimuli. In this context, environmental stimuli are taken to refer to contextual factors of individual firms (size, products, markets, and so on), and factors
within the social environment of small business managers (personal motivation, pattern of ownership and control).

At the outset, an introductory letter was sent to all small soft drinks manufacturers in Scotland, explaining the research proposals and the researcher's interest in the industry - see Appendix A1. This was followed by telephone contact to gain cooperation in the study and arrange an initial interview.

The initial interview was tackled from two diverse perspectives. One aim was to obtain background data of the company's operations - its markets, product range, type and age of plant, systems of control, and so on. This aspect of the interview was guided by use of an interview schedule - see Appendix A2. The second aim of this initial interview was to provide an opportunity for the managing director to discuss problems he wished to review. This was tackled through an open-ended approach. Such an approach was considered vital as a means of detecting areas of the firm's operations which were of particular concern to the managing director in the formation of strategic development intentions. In this way, it was hoped that some of the advantages of the "participative approach" could be introduced into the survey - particularly if the formality of the interviewer-interviewee situation could be broken down.

A second interview was designed to explore in greater depth, factors which appeared to influence
management strategies. There was no strict format for this area of the research since the factors surrounding development intentions were specific to individual firms, and could not be predicted in advance of the survey. An examination of company cost structures was also intended during this part of the research, but this information was seldom available in the small firms visited. This was usually a result of company control systems not being geared to the collation and analysis of such data, rather than managerial unwillingness to impart this information.

In addition to the interviews of Scottish soft drinks manufacturers, a financial analysis of the firms was undertaken at Exchequer House, Edinburgh. Wherever possible, detailed discussions of the financial position of small firms in the sample was not introduced by the interviewer. Discussions of the topic were followed in the initial interview if the matter was raised by the interviewee. This line of approach was adopted since earlier studies have highlighted the sensitivity of small business managers to this subject (for example, see Stanworth and Curran, 1973; Merrett Cyriax Associates, 1971). In the case of unlimited companies, the financial analysis had to be introduced into the interview schedule since financial accounts of such firms are not lodged at Exchequer House.

When this stage of the fieldwork was completed, the interviews were analysed to determine factors which appeared to influence the mode of strategy adopted by
managers of small soft drinks manufacturers. The next stage of the fieldwork was designed to test the significance of factors which appeared to influence management strategies and company performance in firms from the interview sample. A mailed questionnaire appeared to be the most appropriate sampling tool because of the dispersed nature of soft drinks manufacturers throughout the rest of the UK. The major problem associated with this aspect of the research was the determination of an appropriate sampling frame, since there were no ex-ante indicators of company or managerial characteristics provided in the reference list of manufacturers in the industry. It was decided to sample 120 small soft drinks manufacturers in England and Wales from the list provided by NASDM. Companies employing more than 200 people were excluded as it was possible to detect these firms from the simultaneous financial analysis undertaken at Companies House, London - firms employing over 200 people having to disclose the average number employed during the financial year.

Fifty-four usable replies were received to the questionnaire - this producing a response rate of 45%. This was considered to be a satisfactory response rate to a postal questionnaire.

The responses were classified into the following size-bands of company:

88
TABLE 5.4. Number of Respondents to Questionnaire by Size Band as Compared to the Number of Manufacturers in 1968(a)

<table>
<thead>
<tr>
<th>NUMBER EMPLOYED</th>
<th>NUMBER OF ENTERPRISES</th>
<th>PERCENTAGE OF TOTAL</th>
<th>NUMBER OF RESPONDENTS</th>
<th>PERCENTAGE OF TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-24</td>
<td>268</td>
<td>67.9</td>
<td>30</td>
<td>55.6</td>
</tr>
<tr>
<td>25-49</td>
<td>54</td>
<td>13.7</td>
<td>11</td>
<td>20.4</td>
</tr>
<tr>
<td>50-99</td>
<td>42</td>
<td>10.6</td>
<td>10</td>
<td>18.5</td>
</tr>
<tr>
<td>100-199</td>
<td>14</td>
<td>3.5</td>
<td>2</td>
<td>3.7</td>
</tr>
<tr>
<td>200+</td>
<td>17</td>
<td>4.3</td>
<td>1(c)</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Source: Census of Production, 1968.

Notes: (a) The Census of Production data refers to the size-distribution in the 1968 Census because Census Reports 1970 and subsequent years do not discriminate size categorisations for firms employing less than 200 people.

(b) Ignoring unsatisfactory returns, which totalled 12 in 1968.

(c) Although the questionnaire was supposed to be restricted to small firms, one reply was received from a large company employing 320 people which was not identified in the financial analysis at Company House, London.

A comparison of the size distribution of small firms identified by the Census of Production and the distribution of firm size among the questionnaire respondents reveals that the responses fit quite closely to the structure of the industry. However, this response pattern did produce insufficient replies in the groupings of firms employing between 100 and 200 people to permit certain tests of statistical significance.

The financial analysis of English and Welsh soft drinks manufacturers with limited liability status was undertaken at Companies House, London. A list of NASDM members was used to provide this sample. The firms in this analysis, together with questionnaire replies from firms with unlimited liability status, Scottish manufac-
turers with limited liability status and firms in the interview sample, provided information for 120 UK soft drinks manufacturers. In several cases, however, data was available for only a minority of the variables which were tested during the survey.

The purpose of studying the printing industry was to provide a basis by which the findings for the soft drinks industry could be placed into a more general perspective of social and economic processes of small company growth and decline. Because of the close proximity to a relatively large sample of printing firms, this aspect of the research was conducted via personal interviews and financial analysis at Excheque House, Edinburgh. The personal interview was considered superior to a mailed questionnaire for several reasons. The diverse nature of printing technologies meant that coding production methods and product markets was not a simple task easily accomplished via a questionnaire. Accuracy in determining these factors was of paramount importance in assessing the underlying economic processes affecting company performance and strategic development.

The survey method adopted for the printing industry was similar to that adopted in the study of the soft drinks industry. Again, the initial interview provided an opportunity for managing directors to highlight problems he perceived to be important for his company. At the same time, the firms product markets and production processes were examined to determine the contextual variables
specific to individual companies. Fifteen printing firms were studied in detail, and the sample size was raised to 50 with the completion of a financial analysis at Exchequer House. The size distribution of firms in the sample for which it was possible to determine the number of employees closely matched the proportional distribution of membership of the Society of Master Printers of Scotland, although this distribution tends to understate the importance of very small printing firms, as distinguished by the Census of Production - see Table 5.5.

TABLE 5.5. The Size Distribution of Small Printing Firms Constituting the Sample in the Present Study, as Compared to the Number of Printers in 1968 and Membership of the Society of Master Printers of Scotland(a)

<table>
<thead>
<tr>
<th>SIZE OF FIRM</th>
<th>PRESENT STUDY(b)</th>
<th>MEMBERSHIP</th>
<th>CENSUS OF PRODUCTION (1968)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>% Small Firms</td>
</tr>
<tr>
<td>1-25</td>
<td>22</td>
<td>52</td>
<td>56</td>
</tr>
<tr>
<td>26-50</td>
<td>8</td>
<td>17</td>
<td>20</td>
</tr>
<tr>
<td>51-99</td>
<td>7</td>
<td>16</td>
<td>15</td>
</tr>
<tr>
<td>100-199</td>
<td>6</td>
<td>14</td>
<td>10</td>
</tr>
</tbody>
</table>

Source: Census of Production, 1968, Enterprise Analysis, Personal correspondence with Society of Master Printers of Scotland.

Notes: (a) The Census of Production data refers to the size distribution in the 1968 Census because Census Reports for 1970 and subsequent years do not discriminate for firms employing less than 99 people.
(b) The total number of printers sums to 43 since it was not possible to determine the number of employees in 7 firms from the "financial analysis" sample.

Nevertheless, it was considered that the size distribution of small printing firms in the present analysis was sufficient to permit certain tests of significance without
bias created by an unrepresentative sample, since the
majority of firms in the sample employed less than 25
people.

5.3. SELECTION OF VARIABLES USED IN THE ANALYSIS

A. EFFICIENCY AND PERFORMANCE VARIABLES

A variety of indices have been applied in previous
studies to measure the efficiency of business organisa-
tions(3). This section presents an analysis of the
efficacy to the present study of the major indices of
business efficiency.

1. Return on Capital

This is the most commonly used measure of business
efficiency. The chief drawbacks of the index lie in the
conventional accounting problems associated with the
measurement of business income. These problems have been
more than adequately covered in the relevant literature
(see for example: Parker and Harcourt, 1969; Sterling,
1970). Consequently it is not proposed to discuss them
here beyond stating that the historical cost convention
of accounting, universally applied at the time of the
fieldwork, creates particular problems in providing "true"
measures of asset valuation. These problems are compounded
in times of high inflation, particularly as the manipu-
lation of stock values can distort the measurement of
profit from one period to the next.

Secondly, measuring the return on capital presupposes
that capital is the critical factor of production by
which efficiency is measured. Even if we accept this assumption, comparing performance of firms of different sizes by the return on capital should take account of imbalances in the cost and supply of capital to firms of different sizes. A large part of any imbalance in the capital markets appears to be due to small firms seeking an inappropriate form of finance (4). Nevertheless, various Commissions which have reviewed UK financial institutions - Macmillan (1931), Radcliffe (1959), and more recently Wilson (1980) - have all noted the problems faced by small firms in acquiring capital on terms equivalent to those achieved by large businesses. Such imbalances mean that comparisons of performance between firms of different sizes do not compare like with like.

2. **Profit per Employee**

An alternative measure to the return on capital is the return on the units of labour employed. Here the assumption is that firms should maximise the return on labour input. However, the Bolton Committee (1971) noted that larger firms tend to be more capital intensive than small companies (p.43). Measuring relative efficiency between firms of different sizes therefore, would have to compensate for differences in capital intensity and wage levels of firms in any sample.

3. **Value Added**

This measure corresponds most closely to the concept of "profit" as defined by economists, but although conceptually more appealing than the previous measures, it
faces several drawbacks within the context of the present research. Present disclosure policies governing the data to be included in published accounts forecloses the assessment of value added from published financial accounts. Moreover, the rudimentary nature of financial control systems in the small firms examined during the present study meant that information was not available to calculate value added per company.

Each of these indices of efficiency can be seen to have major drawbacks, at both the practical and conceptual levels of operation. White and Hudson (1977) reviewed a variety of indices measuring company performance and concluded that

"... capital productivity and rate of return on capital appeared to act as better reflections of total efficiency levels." (p. 58)

A similar conclusion was reported by Dunning (1969) who found that for all manufacturing industries, value added per head correlated less well with total factor efficiency than did value added per capital stock, and that the rate of return on capital appeared to be the best proxy for total efficiency. For the purpose of the present study therefore, the rate of return on capital was used as the major index of efficiency. It should be noted however, that this index is solely company-oriented, and makes no judgements as to the social benefits to be achieved by firms of different sizes. Moreover, resource utilisation is not adequately measured by return on capital, but detailed information on costs, productivity, and value
added was seldom available from the small firms - usually because such measures were not calculated by the firms themselves.

The return on capital (profitability) may be measured by either of two indices:

1. Gross Profitability = \[
\frac{\text{Net Profit before Interest, Directors' Remuneration, Depreciation & Tax}}{\text{Total Fixed Assets plus Total Current Assets}} \times 100
\]

2. Net Profitability = \[
\frac{\text{Net Profit before Tax}}{\text{Net Fixed Assets plus Net Current Assets}} \times 100
\]

In economic analysis, index (2) is usually preferred, but there are strong arguments for the use of index (1) in the analysis of small company performance. Using gross profitability, as opposed to net profitability, will tend to iron-out distortions created by asset valuations, depreciation charges and variations in directors' remuneration aimed at minimising fiscal liability. Both Bates (1971) and Singh and Whittington (1968) have reported that bias arises because large firms tend to revalue assets more frequently than smaller firms. This bias will tend to be more pronounced in times of high inflation. The impact of the bias is to make smaller firms appear to be more profitable than they might otherwise appear.

The other major performance index used during the course of the study was the rate of growth of firms. This was taken to refer to the growth in sales of the firms,
and related to the average percentage changes over three years - this time period being used to iron-out any freak results reported by individual companies. The formula used was:

\[
\text{Sales Growth Rate} = \frac{\left( \frac{L - M}{L + M} \right) \times 100 + \left( \frac{M - E}{M + E} \right) \times 100}{2}
\]

where \(L\) = latest year's sales, \(M\) = middle year's sales, and \(E\) = earliest year's sales.

Other performance variables used during the course of the analysis included:

\[
\text{Profit Margin} = \frac{\text{Net Profit Before Tax}}{\text{Sales}} \times 100
\]

\[
\text{Liquidity (Current Ratio)} = \frac{\text{Current Assets}}{\text{Current Liabilities}}
\]

These are company-oriented measures of performance, and do not necessarily coincide with social benefits. For this reason it was necessary to study the role of the small firm in a particular industry.

B. THE ROLE OF SMALL COMPANIES

The term "role" has been used as an all-embracing term covering the contextual variables specific to individual firms. In particular, attention was focussed upon:

i) the sectors of the market serviced by individual firms. This was contrasted with the changing market trends and areas of growth within the industry to determine whether small firms are associated with growth sectors of an industry or whether they are located in declining market sectors.
ii) The markets serviced by individual firms are related to the product range offered. This aspect was assessed at two levels. Firstly, it is possible to distinguish the speed with which a company incorporates innovatory products or processes into its range of activities. This is an important consideration if innovatory products are linked to growth sectors of a market. Secondly it is possible to distinguish the diversity of products offered by firms as a measure of the dependence firms place on particular markets for their future survival.

iii) The position of small firms within the structure of an industry will be affected by the extent and direction of reciprocal trading between firms of different sizes. This will be related to whether small firms undertake subcontract work for larger manufacturers as part of an industrial process, or whether small firms compete directly with larger firms within a standard-product market.

C. ENVIRONMENTAL CONTEXT

Environment is a rather sweeping term and, except for characteristics covered by the term "technology", includes all characteristics not pertaining specifically to individual firms. Child (1972) distinguished three dimensions of corporate environment:

i) environmental variability: the speed, frequency, and size of adjustments required of the organisation by its environment. More specifically this refers to the rate and degree of market and technological change.
affecting a firm's operations. The soft drinks industry may be characterised by \textit{product innovations} associated with new forms of packaging; whereas printing has witnessed \textit{process innovations} concerned with the expansion of colour reproduction techniques, and more recently computerised techniques of colour reproduction. The impact of these technological advances upon overall market structures for either soft drinks or printing products will define the extent of environmental variability.

ii) \textit{environmental illiberality}:- the toughness of competition, attitudes of customers, difficulty in assuring the required supplies of capital, people and machinery.

iii) \textit{environmental complexity}:- the homogeneity and range of environmental activities relevant to a firm's operations. For an individual company this will be related to the diversity of products produced by the firm and the number of market sectors within which the firm operates.

D. \textbf{TECHNOLOGY}

Technology may be examined from two perspectives: differences in the relative sophistication of plant operated by firms in an industry, and inter-industry differences in technological processes. The latter perspective formed the basis of studies by Woodward (1965) and others who tried to establish relationships between types of production process and effective organisation structures (6). However, such inter-industry comparisons are not relevant to the present analysis. Rather, technology is viewed as an exogenous variable within the
context of a particular industry. Here focus is placed on the capacity of firms to adapt to market trends and concomitant changes in production process.

Changes in production process in both the soft drinks and printing industries have tended to emanate from sources outside the main body of the industry\(^7\). For example, process changes in the soft drinks industry have tended to centre upon new materials for packaging drinks. The catalyst for these changes has been competition between the glass and plastics industries for an increased share of the packaging markets. Printing processes, on the other hand, have changed in response to increased demand for colour products. In this case, improvements in processes associated with colour reproduction have emanated from the printing machinery industry, rather than from the printers themselves. The manner in which small firms adapt to these changes of production process, and their role in the diffusion of innovations, form the basis of the present study's analysis of company technology.

Adaption to technological change was measured at a general level through an analysis of the age of plant operated by individual firms. Product and process innovations in both industries have necessitated either the acquisition of new plant or modifications to existing machines. At a more detailed level, the fieldwork attempted to determine the operational capacity of plant. In the soft drinks industry, this focussed upon the type
of products (size of container, packaging materials) that could be handled by particular plant. In particular, information was sought to determine whether existing plant could handle large-sized containers (40 fl.oz and litres), non-returnable products of various packaging materials, and whether firms had the capacity for the production of canned soft drinks. For the printing industry, attention was directed as to whether lithographic or letterpress technologies were employed by printers, and whether firms had the capacity for colour printing. These measures provide an estimate of the extent to which firms have adopted production technologies which are consistent with the penetration of market growth sectors.

E. MANAGEMENT MOTIVATION

The measurement of human motivations, within the scope of the present thesis, provides several methodological problems. In particular, the scope of our study does not permit objective measures of the strength of particular management motivations. Consequently, the research strategy adopted was to analyse the opinions and attitudes expressed by managers during the interviews, along dimensions identified as important motivational forces for small businessmen in earlier research studies. In particular, the works of Collins, Moore and Unwalla (1964); Smith (1967); Sadler and Barry (1970); and Stanworth and Curran (1973), are used to form the basis for classifying observed opinions and attitudes. Synthesising the results to these studies, it is possible to identify three distinct categories of
managerial motivation governing the actions of small businessmen.

Firstly it is possible to identify goals centred upon intrinsic job gratifications. Examples of goals entering into this category are, picking the people you wish to work with, using personal abilities to their fullest, independence, and acquiring a secure position within the company. A second category of managerial motivation centres upon the achievement of economic gain. This goal may be important irrespective of the presence of company growth. Finally, managerial goals may be associated with social aims. Important in this category are goals such as building something for one's children to take-over, being recognised by others as a "good manager", achieving positions of responsibility in wider society or the business community, and achieving personal security.

A factor to be considered in classifying managerial responses into motivational types is the transience of motivations over time, and in response to environmental stimuli (Stanworth and Curran, 1973). Motivations determined to be important at the present time may not be able to explain past motivations and their translation into modes of company behaviour. This suggests the need to take a historical perspective to case studies; getting managers to talk about past events (within both the company and their personal life) to determine the importance ascribed to these events. Consequently, the follow-up interview was designed to examine in greater detail
reasons for both past and present strategies, and resulting patterns of company behaviour. A possible drawback to this methodology is that individual recollections of past attitudes and behaviour may be influenced by current behaviour patterns, effectively rendering them ex post facto rationalisations of current roles. Despite this possible drawback, it was felt that exploring attitudes and motivations relating to past behaviour would provide useful insights into the formation of current managerial attitudes and behaviour. Given the transience of human motivations in response to environmental stimuli, the alternative methodology is to undertake a longitudinal study, monitoring motivations over a 10-15 year period. Although conceptually more satisfying, this methodology is outwith the scope of the present research. Consequently, an historical perspective to the case studies was adopted as the most practical method of charting managerial motivation and attitudes over time.

F. OTHER CONTEXTUAL VARIABLES

The index defining a "small" business is a manufacturing company employing less than 200 people. However, for certain statistical tests, the volume of sales was used as the index for company size. This manoeuvre was considered to be acceptable because of the significant relationship between the volume of sales and number of employees in firms from the printing and soft drinks industries. In the sample of soft drinks manufacturers employing less than 200 people, the simple regression
coefficient \( r = 0.71 \), \( n = 38 \). Using the derived linear regression equation, a small soft drinks manufacturer may be identified as a firm with turnover less than £3,000,000 in the financial year 1976/77.

The linear relationship between employment and the level of sales was even stronger in the sample of small printing firms. Here, the simple regression coefficient \( r = 0.95 \), \( n = 25 \). Again using the derived linear equation, a small printing company may also be defined as a firm with turnover less than £2,000,000 in the financial year 1976/77.

The extent of family dominance was measured from two perspectives reflecting family influence in both ownership and control. The former was seen to reflect the extent to which share capital was held within one particular family. Control was measured to reflect the extent to which family members were incumbent in managerial positions within a company, and the extent to which family members relied upon the firm as a source of employment and income.

**REFERENCE NOTES**


2. This was calculated from evidence presented in: Scottish Council (Development and Industry), "Manufacturing Companies in Scotland", (Scottish Council, 1974). Analysis of the firms listed in this publication showed that printing (SIC Order XVII) was the modal industry for the Edinburgh region.
(3) For an analysis of the various approaches to measuring business efficiency, see Bates (1971).

(4) The financial facilities for small firms and the "information gap" are discussed in Chapters 5.2 and 5.3 of this thesis. The latter concept is said to lie at the heart of small business managers seeking an inappropriate source of finance.

(5) For the purpose of both definitions, bank borrowing is treated as a current liability.

(6) An examination of attempts to categorise types of production systems is presented by Parker et al (1967), (Chapter 9, pp.106-120).

(7) These sources are discussed in greater detail in Chapters 6 (soft drinks) and 8 (printing) of this thesis. The factors listed as being important characteristics of the extent to which small firms have adapted to technological change within the respective industries, are a broad summary of the findings listed in the respective chapters.

(8) Managerial goals may have three parameters: 'identity', 'basis', and 'form' (Stanworth, 1971; Stanworth and Curran, 1973). The identity of a goal is the description of it given by the holder. In the context of the present analysis, this refers to the observed motivation expressed during the interviews. However, the goal identity can only be understood fully if its various relations with the goal basis and form are made clear.

The basis of a goal refers to the holder's perception of the likelihood or probability of its attainment. Stanworth saw this as being along a continuum ranging from "fantasy" to "aspiration" to "satisfaction". A goal may be said to have a latent form when its basis is fantasy. In this case it is unlikely to be stated or have much influence on current managerial behaviour. Its form becomes emergent when the individual begins to state the goal as a possibility, with its basis as an aspiration. A goal will have a manifest form when it acquires the status of a main influence on current behaviour.

(9) The relationship between sales volume and number of employees in small soft drinks manufacturers is represented in Appendix B6. The linear regression equation is:

\[ y = 103.03 + 15.34x \]

where \( y \) = company turnover 1976 (£'000),
\( x \) = number of employees.
The relationship between sales volume and the number of employees in small printing firms is represented in Appendix B10. The linear regression equation is:

\[ y = 16.88 + 9.03x \]

where \( y \) = company turnover 1976 (£'000),
\( x \) = number of employees.
PART THREE

THE FIELDWORK
CHAPTER 6

THE SOFT DRINKS INDUSTRY

6.1 INTRODUCTION

The model of small company dynamics presented in this thesis(1) places particular emphasis upon the interactive nature of social processes of small business management (management strategy formation, pattern of ownership and control, management motivation) and economic factors influencing company activities (the market and technological environment) as determinants of small business behaviour and performance. This scheme of analysis provides the framework by which small company behaviour and performance in the UK soft drinks industry is examined. Recent trends in the soft drinks industry, and in particular within the population of small manufacturers, are reviewed and examined in this chapter to determine company variables which appear to influence the relative performance of UK soft drinks manufacturers.

6.2 RECENT ECONOMIC TRENDS IN THE BRITISH SOFT DRINKS INDUSTRY

Since 1958 there has been a rapid growth in the consumption of soft drinks in the UK, and since there is a negligible import of soft drinks, there has been a corresponding increase in the production of soft drinks in the UK.

"The export trade in soft drinks is not large. The product is relatively expensive to transport
and most international companies prefer to establish bottling factories in each country where their products are consumed. Imports are even less and mainly confined to natural spa water." (NASDM, "The Soft Drinks Industry: Some Facts and Figures", May 1977, ref PR/771)

Table 6.1 shows that between 1958 and 1978 there was a 183% increase in the gallonage of soft drinks sold in the UK - this being equivalent to a 5.3% annual increase between 1958 and 1978.

### Table 6.1. Annual Sales and Per Capita Consumption of Soft Drinks in the UK, 1958-1978

<table>
<thead>
<tr>
<th>YEAR</th>
<th>CONCENTRATED SOFT DRINKS '000 gallons</th>
<th>UNCONCENTRATED SOFT DRINKS '000 gallons</th>
<th>READY-TO-DRINK (a) EQUIVALENT litres</th>
<th>PER CAPITA SOFT DRINKS SOFT DRINKS DRINK CONSUMPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1958</td>
<td>27599</td>
<td>193831</td>
<td>331826</td>
<td>29</td>
</tr>
<tr>
<td>1959</td>
<td>38786</td>
<td>227382</td>
<td>421312</td>
<td>37</td>
</tr>
<tr>
<td>1960</td>
<td>40103</td>
<td>215135</td>
<td>415651</td>
<td>36</td>
</tr>
<tr>
<td>1962</td>
<td>43400</td>
<td>230100</td>
<td>448300</td>
<td>39</td>
</tr>
<tr>
<td>1963</td>
<td>42600</td>
<td>210300</td>
<td>423000</td>
<td>36</td>
</tr>
<tr>
<td>1964</td>
<td>51400</td>
<td>237800</td>
<td>495000</td>
<td>42</td>
</tr>
<tr>
<td>1965</td>
<td>50700</td>
<td>236300</td>
<td>490000</td>
<td>41</td>
</tr>
<tr>
<td>1966</td>
<td>54700</td>
<td>244100</td>
<td>518000</td>
<td>43</td>
</tr>
<tr>
<td>1967</td>
<td>61500</td>
<td>249000</td>
<td>556000</td>
<td>46</td>
</tr>
<tr>
<td>1968</td>
<td>60400</td>
<td>253000</td>
<td>555000</td>
<td>46</td>
</tr>
<tr>
<td>1969</td>
<td>66400</td>
<td>262200</td>
<td>549000</td>
<td>49</td>
</tr>
<tr>
<td>1970</td>
<td>72100</td>
<td>267800</td>
<td>629000</td>
<td>52</td>
</tr>
<tr>
<td>1971</td>
<td>69600</td>
<td>272500</td>
<td>621000</td>
<td>51</td>
</tr>
<tr>
<td>1972</td>
<td>70600</td>
<td>291400</td>
<td>645000</td>
<td>52</td>
</tr>
<tr>
<td>1973</td>
<td>89800</td>
<td>347900</td>
<td>797000</td>
<td>57</td>
</tr>
<tr>
<td>1974</td>
<td>89965</td>
<td>365539</td>
<td>815364</td>
<td></td>
</tr>
<tr>
<td>1975</td>
<td>103376</td>
<td>396877</td>
<td>915757</td>
<td></td>
</tr>
<tr>
<td>1976</td>
<td>109209</td>
<td>438223</td>
<td>984263</td>
<td></td>
</tr>
<tr>
<td>1977</td>
<td>96919</td>
<td>427180</td>
<td>911775</td>
<td></td>
</tr>
<tr>
<td>1978</td>
<td>96926</td>
<td>455092</td>
<td>939722</td>
<td></td>
</tr>
</tbody>
</table>

Various editions, "Business Monitor PQ232" (Business Statistics Office)

Notes: (a) The ready-to-drink equivalent is calculated on the assumption of a ratio of a 4:1 water:cordial dilution, and is determined by the formula (Concentrated Soft Drinks x 5) + (Unconcentrated Soft Drinks)
For the period 1958-1978, these figures may be disaggregated to show that for the period as a whole, the major part of expansion in the soft drinks markets is attributed to increased consumption of concentrated soft drinks (squashes and cordials), whereas the rapid rise in soft drinks consumption during the 1970s is related more to increases in the market for unconcentrated drinks (carbonated "pops" and spring waters).

<table>
<thead>
<tr>
<th></th>
<th>TOTAL INCREASE</th>
<th>AVERAGE ANNUAL INCREASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unconcentrated Soft Drinks</td>
<td>135%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Concentrated Soft Drinks</td>
<td>251%</td>
<td>6.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>TOTAL INCREASE</th>
<th>AVERAGE ANNUAL INCREASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unconcentrated Soft Drinks</td>
<td>69.9%</td>
<td>6.9%</td>
</tr>
<tr>
<td>Concentrated Soft Drinks</td>
<td>34.4%</td>
<td>3.8%</td>
</tr>
</tbody>
</table>

Indeed, the continued buoyancy of the soft drinks market would appear to result from the rapid rise in the consumption of carbonated soft drinks, since there is little difference in the ready-to-drink equivalent annual growth rate for the two time periods under consideration.

This rapid expansion of the soft drinks market is reflected in the generally high level of profitability of firms in the industry. A recent ICC Report (1977) showed that in a sample of 57 industries, the soft drinks industry was the second most profitable industry in the total sample - see Table 6.2.
TABLE 6.2. The Most Profitable Industries 1975/1976*

<table>
<thead>
<tr>
<th>INDUSTRY</th>
<th>SAMPLE SIZE = 57 Industries</th>
<th>RETURN ON CAPITAL (%)</th>
<th>No. OF FIRMS SAMPLED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Furniture Manufacturers</td>
<td></td>
<td>28</td>
<td>56</td>
</tr>
<tr>
<td>Soft Drinks Manufacturers</td>
<td></td>
<td>26</td>
<td>47</td>
</tr>
<tr>
<td>Grocery Wholesalers</td>
<td></td>
<td>23</td>
<td>47</td>
</tr>
<tr>
<td>Mechnical Handling</td>
<td></td>
<td>22</td>
<td>54</td>
</tr>
<tr>
<td>Book &amp; Periodical Publishers</td>
<td></td>
<td>22</td>
<td>61</td>
</tr>
<tr>
<td>Carpet Distributors</td>
<td></td>
<td>21</td>
<td>43</td>
</tr>
<tr>
<td>Meat Wholesalers</td>
<td></td>
<td>21</td>
<td>47</td>
</tr>
<tr>
<td>Clothing Manufacturers</td>
<td></td>
<td>20</td>
<td>56</td>
</tr>
</tbody>
</table>


Note: * Year ending 7th April, 1976.

However, the soft drinks industry is prone to fluctuations in performance, as can be seen from the analysis of the various drinks industries in figure 6.1. But even in years of relatively poor performance, the general profitability of firms in the soft drinks industry appears to approximate the mean profitability of British industry in general - see Table 6.3.

TABLE 6.3. The Performance of the Soft Drinks Industry in Comparison With Average Industrial Performance

<table>
<thead>
<tr>
<th></th>
<th>Net Profit / Capital Employed (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1973/74</td>
</tr>
<tr>
<td>Soft Drinks</td>
<td>27.3</td>
</tr>
<tr>
<td>Mean of 57 Industry</td>
<td>15.8</td>
</tr>
</tbody>
</table>

Source: Computations made from Inter Company Comparisons Ltd. (1977)

Despite rapid expansion of markets and generally high profitability in recent years, the soft drinks industry has witnessed a marked decline in the number of firms engaged therein. From Table 6.4 it can be seen that the number of firms has fallen from some 2000 manufacturers in 1930 to a mere 320 in 1976. Furthermore, the pace of decline does not appear to have abated - there being a 24% fall in the number of manufacturers between 1970 and 1976. Table 6.5 indicates that the bulk of this decline
TABLE 6.4. The Number of Firms Engaged in the Soft Drinks Industry, 1890-1976

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No. FIRMS</td>
<td>4000</td>
<td>2000</td>
<td>1500</td>
<td>1100</td>
<td>660</td>
<td>420</td>
<td>320</td>
</tr>
</tbody>
</table>

Source: Personal Correspondence with NASDM.

Note: Estimated.

TABLE 6.5. Enterprises, Employees and Net Output in Firms of Different Sizes in the Soft Drinks Industry

<table>
<thead>
<tr>
<th>SIZE OF FIRM No. EMPLOYEES</th>
<th>NUMBER ENTERPRISES</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-24</td>
<td>429</td>
<td>268</td>
</tr>
<tr>
<td>25-49</td>
<td>61</td>
<td>54</td>
</tr>
<tr>
<td>50-99</td>
<td>38</td>
<td>42</td>
</tr>
<tr>
<td>100-199</td>
<td>19</td>
<td>14</td>
</tr>
<tr>
<td>200-499</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>500-999</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>1000+</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>U/R(b)</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td>TOTAL</td>
<td>574</td>
<td>407</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SIZE OF FIRM No. EMPLOYEES</th>
<th>EMPLOYEES PERCENTAGE</th>
<th>NET OUTPUT PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-24</td>
<td>16</td>
<td>10</td>
</tr>
<tr>
<td>25-49</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>50-99</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>100-199</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>200-499</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>500-999</td>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td>1000+</td>
<td>42</td>
<td>44</td>
</tr>
</tbody>
</table>

Source: Various editions of Census of Production.

Notes: (a) Estimated in Census of Production.
(b) Unsatisfactory returns.

has been in the industry's small business sector.

Ignoring unsatisfactory returns, the fall in the number of small firms is 259 as compared to a total fall of 269 firms in the industry as a whole for the years 1963-1975.
Similarly, it is possible to trace the decline in importance of small soft drinks firms in terms of employment and productivity. Their share of employment fell from 38% to 29% between 1963 and 1975, while their share of net output fell from 30% to 20% in the same period. Moreover, although the industry is not as yet highly concentrated - the industries largest 6 firms accounting for 63% of net output, 61% of total sales and 58% of employment in 1975 - Table 5.2 suggested that the level of concentration has increased in recent years.

There are several possible explanations for this decline in the number of firms in the industry - mergers, take-overs, demise by natural causes, etc. - and consequently evidence was sought to explain this decline. NASDM was approached to give assistance in this aspect of the inquiry, and figures were produced to indicate the reasons for membership loss of NASDM (which represents 85% of the firms in the industry) - see Table 6.6.

<table>
<thead>
<tr>
<th>Year</th>
<th>Ceased Soft Drinks Manufacture</th>
<th>Business Closed</th>
<th>Merged/Taken-Over</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971</td>
<td>-</td>
<td>16</td>
<td>6</td>
<td>22</td>
</tr>
<tr>
<td>1972</td>
<td>4</td>
<td>6</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td>1973</td>
<td>-</td>
<td>8</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>1974</td>
<td>3</td>
<td>9</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>1975</td>
<td>2</td>
<td>8</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>1976</td>
<td>5</td>
<td>5</td>
<td>-</td>
<td>10</td>
</tr>
<tr>
<td>1977 (up to May)</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>TOTAL</td>
<td>15</td>
<td>54</td>
<td>24</td>
<td>93</td>
</tr>
</tbody>
</table>

Source: NASDM
Firms which simply lapsed in membership of the Association were excluded from the analysis, and figures obtained for membership loss between 1st January, 1971 and May 1977. All the firms for which data was available employed less than 200 employees. The analysis showed that 74% of the membership loss was due to the business closing or ceasing to manufacture soft drinks. This latter category refers to the instances where the firm continued to trade, but not as a soft drinks manufacturer. A further breakdown was possible for 35 of the firms in the "business closed" category to determine the reason for demise.

**TABLE 6.7. The Reasons for Businesses Closing in the Soft Drinks Industry**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retirement of Principal(s)</td>
<td>7</td>
<td>20</td>
</tr>
<tr>
<td>Sold as Going Concern</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>Voluntary Liquidation</td>
<td>24</td>
<td>69</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>35</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

**Source:** NASDM.

Of this sample, 89% closed either through the retirement of the principal(s) or were put into voluntary liquidation.(2) If we assume a proportional relationship between the figures in Table 6.6 and Table 6.7, then we may conclude that 52% of the loss of membership of NASDM was due to firms being put into voluntary liquidation or the retirement of the principal(s), and consequent realisation of company assets.

For the category concerned with the number of firms that were merged or taken over, little further breakdown
was possible. In 1974/1975 five firms were merged to form a new soft drinks company based in the Midlands of England(3), whilst NASDM suggested that the remainder appeared to be small firms being taken over or merged with larger firms in the industry. The other factor considered to be of growing importance was the entrance of Investment Holding Companies into the market(4). The extent of this activity was by no means clear, although three of the small firms in the "interview sample" did report having been approached by such institutions with the aim of being taken over. The explanation of this trend probably lies in the relatively high returns produced by the industry in recent years.

Allied to the rapid decline in the population of small soft drinks manufacturers is the relatively poorer financial performance of the smaller firms in the industry. Tables 6.8 and 6.9 indicate that there is a positive relationship between the net profitability and size of the soft drinks manufacturers - irrespective of whether the employment or sales index of size is used.

TABLE 6.8. Net Profitability (1976) and Firm Size (No. Employees)

<p>| NUMBER OF | NUMBER OF | NET PROFITABILITY | COEFFICIENT OF |</p>
<table>
<thead>
<tr>
<th>EMPLOYEES</th>
<th>FIRMS</th>
<th>MEAN</th>
<th>MEDIAN</th>
<th>VARIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-25</td>
<td>29</td>
<td>9.8</td>
<td>7.3</td>
<td>135.7</td>
</tr>
<tr>
<td>26-50</td>
<td>13</td>
<td>22.1</td>
<td>20.3</td>
<td>40.3</td>
</tr>
<tr>
<td>51-99</td>
<td>12</td>
<td>33.3</td>
<td>29.0</td>
<td>46.8</td>
</tr>
<tr>
<td>100-199</td>
<td>6</td>
<td>28.7</td>
<td>25.0</td>
<td>59.9</td>
</tr>
<tr>
<td>200+</td>
<td>8</td>
<td>22.4</td>
<td>21.4</td>
<td>59.8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>68</td>
<td>19.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Financial analysis of soft drinks firms.
Taking the small firm population alone, Table 6.10 shows that the non-parametric regression analysis (Spearman's rank correlation) suggests a significant positive relationship between the relative size of the firm and its net profitability. However, the coefficient of determination in the linear regression analysis is relatively small and Appendix B4 suggests that the relationship between net profitability and the level of sales is not linear, and that a more significant relationship exists between the net profitability of the soft drinks manufacturers and the log of the level of sales. This suggests that the rate of increase in net profitability decreases with the size of the firm.

**TABLE 6.10. Test of Significance Between Firm Size (Employees) and Net Profitability (1976) - Small Firm Sample**

<table>
<thead>
<tr>
<th>NUMBER OF FIRMS</th>
<th>ALL FIRMS</th>
<th>ENGLISH FIRMS</th>
<th>SCOTTISH FIRMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUMBER OF FIRMS</td>
<td>60</td>
<td>43</td>
<td>17</td>
</tr>
<tr>
<td>COEFFICIENT OF CORRELATION</td>
<td>0.46*</td>
<td>0.56*</td>
<td>0.44*</td>
</tr>
<tr>
<td>COEFFICIENT OF DETERMINATION</td>
<td>0.21</td>
<td>0.32</td>
<td>0.19</td>
</tr>
<tr>
<td>SPEARMAN'S RANK CORRELATION</td>
<td>0.61*</td>
<td>0.70*</td>
<td>0.64*</td>
</tr>
</tbody>
</table>

**KEY:** *Significant at 1% level

**Source:** Appendix B1, B2, B3, and data base.
Despite the positive relationship between net profitability and company size, performance levels among the smallest firms in the industry appear to be highly variable. With the exception of firms employing 25 or fewer people or with sales turnover less than £500,000, the coefficient of variation does not differ to a great extent for firms in different size bands or between the two indices of company size. The generally low level of profitability associated with the smallest firms in the industry, together with the high variability of performance between firms, suggests that although these firms are generally financially inefficient, a number of firms are quite profitable. This conclusion is supported by the scatter diagram (Appendix E1), which shows that 8 of the 29 firms employing 25 or fewer employees had a rate of net profitability of 20% or more in 1976.

The positive relationship between net profitability and relative size of firms (measured in terms of the log of sales turnover) is even stronger when net profitability is averaged over the four-year period 1973-1976. Appendix B5 indicates that the coefficient of determination is 0.33 when average net profitability (1973-1976) is regressed against the log of sales (1976). This compares to a coefficient of 0.27 when 1976 profitability figures are used in isolation. Although Table 6.11 suggests that firms employing more than 200 people are no more profitable (on average) than firms in other size bands, with the exception of companies employing 25 or fewer individuals, the more
comprehensive industry data in Table 6.12 suggests that firms with a turnover greater than £3 million in 1976 were more profitable over the period 1973-1976.

**TABLE 6.11. Average Net Profitability (1973-1976) and Firm Size (Number of Employees)**

<table>
<thead>
<tr>
<th>NUMBER OF EMPLOYEES</th>
<th>NUMBER OF FIRMS</th>
<th>NET PROFITABILITY</th>
<th>COEFFICIENT OF VARIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-25</td>
<td>23</td>
<td>11.3</td>
<td>93.4</td>
</tr>
<tr>
<td>26-50</td>
<td>13</td>
<td>19.8</td>
<td>42.2</td>
</tr>
<tr>
<td>51-99</td>
<td>11</td>
<td>26.1</td>
<td>43.9</td>
</tr>
<tr>
<td>100-199</td>
<td>6</td>
<td>21.4</td>
<td>64.3</td>
</tr>
<tr>
<td>200+</td>
<td>7</td>
<td>18.9</td>
<td>72.7</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>60</strong></td>
<td><strong>17.8</strong></td>
<td></td>
</tr>
</tbody>
</table>

**TABLE 6.12. Average Net Profitability (1973-1976) and Firm Size (Sales)**

<table>
<thead>
<tr>
<th>SALES (£1000)</th>
<th>NUMBER OF FIRMS</th>
<th>NET PROFITABILITY</th>
<th>COEFFICIENT OF VARIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-250</td>
<td>9</td>
<td>6.2</td>
<td>129.0</td>
</tr>
<tr>
<td>251-500</td>
<td>14</td>
<td>14.7</td>
<td>45.5</td>
</tr>
<tr>
<td>501-750</td>
<td>12</td>
<td>25.4</td>
<td>42.9</td>
</tr>
<tr>
<td>751-1000</td>
<td>8</td>
<td>22.2</td>
<td>53.6</td>
</tr>
<tr>
<td>1001-3000</td>
<td>19</td>
<td>20.8</td>
<td>57.0</td>
</tr>
<tr>
<td>3000+</td>
<td>12</td>
<td>33.3</td>
<td>47.6</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>74</strong></td>
<td><strong>20.8</strong></td>
<td></td>
</tr>
</tbody>
</table>

This dichotomy of results regarding the average net profitability of companies in the "large firm" size bands may be explained by the nature of these firms. For example, four of the seven largest firms in the sample (when measured in terms of sales) are subsidiaries of major UK industrial enterprises (for example, Cadbury Schweppes). Although performance data were available for these firms, it was not possible to determine the number of people employed therein. This precluded their incorporation into the analysis using number of employees as
the index of size.

The general conclusion from the present analysis of the soft drinks industry is that there is a positive relationship between the net profitability and size of soft drinks manufacturers. However, both Tables 6.9 and 6.12 suggest that several medium-sized manufacturers, with a turnover between £1 million and £3 million in 1976, tend to be less profitable than firms with turnover in the range £0.5 - £1 million. This suggests that medium-sized firms incur several diseconomies of scale, and that very large firms achieve economies of scale which compensate for the diseconomies incurred by medium-sized firms.

The present conclusion that a positive relationship exists between the performance and size of soft drinks manufacturers is reinforced by the fact that the assets of smaller companies tend to be undervalued because they are not revalued as frequently as the assets of larger firms (Bates, 1971). The undervaluation of assets tends to inflate the net profitability of firms. This suggests that the relatively poor return on capital achieved by smaller soft drinks manufacturers vis-a-vis larger firms in the industry understates the relative inefficiency of very small soft drinks manufacturers (employing less than 10 people).

Bates (1971) has argued the case for using gross profitability as the chief index of financial efficiency among small firms since it tends to iron-out several
distortions created by asset valuation, directors' remuneration, and the understatement of profits. Using this index of efficiency, there appears to be little relationship between firm size and efficiency. Within the small firm sample, the coefficient of correlation for the regression between gross profitability and company size (number of employees) is 0.03. Furthermore, when gross profitability is averaged over the period 1973-1976, firms employing 25 or fewer people tend to have a higher gross profitability than larger firms in the sample - see Table 6.13.

TABLE 6.13. The Relationship Between Gross Profitability and Firm Size (Number of Employees)

<table>
<thead>
<tr>
<th>NUMBER OF EMPLOYEES</th>
<th>NUMBER OF FIRMS</th>
<th>MEAN GROSS PROFITABILITY</th>
<th>COEFFICIENT OF VARIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1976 Data</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-25</td>
<td>24</td>
<td>26.2</td>
<td>63.7</td>
</tr>
<tr>
<td>26-50</td>
<td>13</td>
<td>27.1</td>
<td>52.7</td>
</tr>
<tr>
<td>51-99</td>
<td>11</td>
<td>28.7</td>
<td>38.1</td>
</tr>
<tr>
<td>100-199</td>
<td>5</td>
<td>30.0</td>
<td>32.7</td>
</tr>
<tr>
<td>TOTAL</td>
<td>53</td>
<td>27.3</td>
<td></td>
</tr>
<tr>
<td>Average 1973-1976</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-25</td>
<td>17</td>
<td>28.1</td>
<td>45.8</td>
</tr>
<tr>
<td>26-50</td>
<td>13</td>
<td>28.9</td>
<td>33.9</td>
</tr>
<tr>
<td>51-99</td>
<td>9</td>
<td>22.7</td>
<td>34.9</td>
</tr>
<tr>
<td>100-199</td>
<td>5</td>
<td>25.0</td>
<td>19.7</td>
</tr>
<tr>
<td>TOTAL</td>
<td>44</td>
<td>26.9</td>
<td></td>
</tr>
</tbody>
</table>

Note: The number of firms reporting in the two tables differs because data was not available for the full four year period in several of the published accounts.

In both the 1976 data and averaged profitability (1973-1976), the variability of performance is greatest among the smaller firms of the industry. Taken together, these
results suggest that there is little relationship between firm size and financial efficiency. However, an examination of the level of directors' remunerations reveals that firms employing 25 or fewer people distribute a higher proportion of their profits (before charges) than larger firms in the industry. This is due mainly to the fact that profits in these smaller firms are lower in absolute terms. In addition, Table 6.14 reveals that average receipts per director are significantly lower in firms employing 25 or fewer employees than in the larger firms.

**TABLE 6.14. Directors' Remunerations as a Percentage of Profits(a), and Average Payments to Directors in 1976, According to Firm Size**

<table>
<thead>
<tr>
<th>Directors' Remuneration as % of Net Profits Before Tax (after Charges) + Remuneration</th>
<th>FIRM SIZE (No. Employees)</th>
<th>No. OF FIRMS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1-25</td>
<td>26-50</td>
</tr>
<tr>
<td>Less than 25%</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>26%-50%</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>51%-75%</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>76%-100%</td>
<td>9</td>
<td>1</td>
</tr>
</tbody>
</table>

| Average Remuneration per Director (£) | 3410 | 6746 | 7877 | 8366 |
| Coefficient of Variation | 87.8 | 50.3 | 38.9 | 27.3 |

Note: (a) Profits before directors' remuneration and before tax.

This evidence suggests that owner/managers of smaller manufacturers receive less from their firms in absolute terms than owner/managers in larger companies. Consequently, comparisons of efficiency tend to support the conclusions generated by the analysis of net profitability data, namely, that smaller firms tend to be less efficient (financially)
than larger manufacturers. Furthermore, disparities in the charges for managerial services between firms of different sizes are matched by disparities in labour costs. Table 6.15 shows that operatives in firms employing less than 100 people tend to be paid less than operatives in larger manufacturers.

<table>
<thead>
<tr>
<th>FIRM SIZE (No. Employees)</th>
<th>WAGE/SALARY PER HEAD (£)</th>
<th>NET OUTPUT PER HEAD (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-99</td>
<td>2077</td>
<td>5206</td>
</tr>
<tr>
<td>100-199</td>
<td>2241</td>
<td>9829</td>
</tr>
<tr>
<td>200-499</td>
<td>2469</td>
<td>9470</td>
</tr>
<tr>
<td>500+</td>
<td>2680</td>
<td>8264</td>
</tr>
</tbody>
</table>

Source: Census of Production, 1976, (London: HMSO)
Summary Tables, PA1002, Table 12.

The evidence of relative inefficiency among smaller soft drinks manufacturers is supported by Census of Production data relating to net output per head. This analysis reveals that highest net output per head is to be found in firms employing between 100 and 500 people. This evidence corresponds closely with the analysis of net profitability in 1976, since the highest performers tended to come from this size grouping of firms. Taking all the evidence together, it would appear that smaller firms in the soft drinks industry tend to be less efficient than medium- and large-sized manufacturers.

This relatively inferior financial performance of small manufacturers is mirrored in the growth rates.
(sales) of different sized firms.

### TABLE 6.16. Growth Rate of Sales and Company Size (Number of Employees) - the Soft Drinks Industry

<table>
<thead>
<tr>
<th>NUMBER OF EMPLOYEES</th>
<th>NUMBER OF FIRMS</th>
<th>GROWTH RATE MEAN</th>
<th>MEDIAN</th>
<th>COEFFICIENT OF VARIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-25</td>
<td>10</td>
<td>16.7</td>
<td>16.9</td>
<td>10.9</td>
</tr>
<tr>
<td>26-50</td>
<td>10</td>
<td>27.1</td>
<td>26.7</td>
<td>28.5</td>
</tr>
<tr>
<td>51-99</td>
<td>11</td>
<td>24.4</td>
<td>24.6</td>
<td>13.1</td>
</tr>
<tr>
<td>100-199</td>
<td>6</td>
<td>25.0</td>
<td>27.3</td>
<td>60.2</td>
</tr>
<tr>
<td>200+</td>
<td>8</td>
<td>28.5</td>
<td>27.5</td>
<td>33.2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>45</td>
<td></td>
<td>24.1</td>
<td></td>
</tr>
</tbody>
</table>

### TABLE 6.17. Growth Rate of Sales and Company Size (Turnover, 1976) - the Soft Drinks Industry

<table>
<thead>
<tr>
<th>TURNOVER £'000</th>
<th>NUMBER OF FIRMS</th>
<th>GROWTH RATE MEAN</th>
<th>MEDIAN</th>
<th>COEFFICIENT OF VARIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-500</td>
<td>20</td>
<td>17.4</td>
<td>18.1</td>
<td>40.3</td>
</tr>
<tr>
<td>501-1000</td>
<td>20</td>
<td>24.7</td>
<td>24.4</td>
<td>28.7</td>
</tr>
<tr>
<td>1001-3000</td>
<td>20</td>
<td>30.9</td>
<td>28.1</td>
<td>49.5</td>
</tr>
<tr>
<td>3001+</td>
<td>12</td>
<td>30.5</td>
<td>28.5</td>
<td>27.6</td>
</tr>
<tr>
<td>TOTAL</td>
<td>72</td>
<td></td>
<td>25.4</td>
<td></td>
</tr>
</tbody>
</table>

Since the average annual increase in soft drinks prices between 1973 and 1976 was approximately 22%\(^{(5)}\), the evidence from Tables 6.16 and 6.17 suggests that, on average, the sales of firms employing 25 or fewer people have declined in real terms. The bulk of the industry's expansion appears to be attributed to medium and large sized firms, although the high degree of variability associated with the medium-sized firms suggests that several of these firms have stagnated, while others have expanded quite rapidly.

The conclusion to be drawn from this analysis of
structural changes and performance in the soft drinks industry is that small firms tend to be less efficient and have inferior growth rates when compared to medium- and large-sized firms. Despite rapid growth in the industry as a whole, small manufacturers appear to have declined in real terms. The bulk of the industry's expansion appears to be associated with medium- and large-sized firms. This pattern of performance may be allied to the rapid decline in the number of small manufacturers, the majority of this decline being associated with voluntary liquidation as opposed to compulsory liquidations.

6.3 THE BUSINESS ENVIRONMENT AND BEHAVIOUR OF SMALL SOFT DRINKS MANUFACTURERS

In searching for reasons for the rapid exodus and relatively poor performance of small soft drinks manufacturers, we may examine the impact of environmental changes. The environment presents a set of conditions over which small firms have little or no control and within which they must operate. These factors may be examined from two perspectives: changing market trends, and technological developments within the industry.

A. THE MARKET ENVIRONMENT

The interviews with managers of small soft drinks manufacturers highlighted the perceived importance of competition from market leaders as the chief threat posed to future viability for these firms. The general argument of the managers was that traditional markets are increasingly
under competitive threat and that it is very difficult for small manufacturers to penetrate growth sectors of the market.

These perceptions of managing directors of small soft drinks manufacturers may be examined in terms of:

i) the changing pattern of soft drinks markets;
ii) trends in the packaging of soft drinks.

i) The Changing Pattern of Soft Drinks Markets

The soft drinks market may be divided into two major product categories: concentrated soft drinks, and carbonated soft drinks. The market for concentrated soft drinks is characterised by a large number of small firms and a small number of large manufacturers. Large firms control over 40% of the market in value terms. Accurate brand figures are only available for the grocery sector which represents 67% of the market in volume, and between 45% and 50% of the market in value terms - see Table 6.18.

### TABLE 6.18. Sales Throughput of Concentrated Soft Drinks by Outlet Type (%)

<table>
<thead>
<tr>
<th>SECTOR</th>
<th>VALUE</th>
<th>VOLUME (Gals.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grocers</td>
<td>48</td>
<td>67</td>
</tr>
<tr>
<td>Licenced Trade (incl. on-premises sales)</td>
<td>18</td>
<td>8</td>
</tr>
<tr>
<td>Catering</td>
<td>17</td>
<td>4</td>
</tr>
<tr>
<td>Confections, Tobacconists, Newsagents</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Others, incl. door-to-door &amp; chemists</td>
<td>11</td>
<td>14</td>
</tr>
</tbody>
</table>


The relatively lower share of the market attributed to the grocery sector in value terms, as compared to market
penetration by volume, is explained by the higher prices charged for on-premises consumption of cordials and squashes in the licenced trade. In addition, the strong position of own-label brands in the grocery sector will tend to keep prices down. In 1974, brand shares were estimated as the Beecham Group (19%), Reckitt and Coleman (18%), Cadbury-Schweppes (15%), and Co-ops (14%) - see Table 6.19 for a more detailed break-down of these brand shares.

TABLE 6.19. Brand Shares Through the Grocery Sector, 1974 (%)

<table>
<thead>
<tr>
<th>BRAND &amp; PARENT COMPANY</th>
<th>VALUE</th>
<th>VOLUME (bottle units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robinsons (Reckitt &amp; Coleman)</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td>Quosh (Beecham Group)</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td>Suncrush (Cadbury-Schweppes)</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Kia Ora (Cadbury-Schweppes)</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Sunfresh (Cadbury-Schweppes)</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Corona (Beecham Group)</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Tree Top (Unilever)</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Own Label/Others (a)</td>
<td>47</td>
<td>54</td>
</tr>
</tbody>
</table>


Note: (a) Co-ops (14%), Sainsbury (8.5%), Tesco (2%).

A conclusion suggested by this information is that the four market leaders for concentrated soft drinks account for some 66% of market share. This suggests that small independent manufacturers are particularly weak in this market sector.

The carbonated soft drinks market may be divided into three fairly distinct markets - cola drinks, mixers and, other carbonates. Accurate figures on market pene-
tration in these sectors are difficult to ascertain. The Economist Intelligence Unit (1975) noted that

"... estimates of the retail value of the carbonates market vary considerably among the different manufacturers - a reflection of the fact that important sectors such as the licensed trade and catering sectors are largely unaudited. This is further complicated by the fact that a significant part of the total market is taken by small manufacturers selling locally." (pp.30-31)

Consequently Table 6.20 can be taken only as a best estimate of the market size of the various kinds of carbonated soft drinks.

**TABLE 6.20. Carbonated Soft Drinks - Market Sizes**

<table>
<thead>
<tr>
<th></th>
<th>VOLUME (millions gallons)</th>
<th>VALUE (£ millions - resale prices)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cola</td>
<td>101 (29%)</td>
<td>106 (29%)</td>
</tr>
<tr>
<td>Mixers</td>
<td>35 (10%)</td>
<td>36 (10%)</td>
</tr>
<tr>
<td>Other Carbonates:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Calorie</td>
<td>5 (1%)</td>
<td>6 (2%)</td>
</tr>
<tr>
<td>Shandy</td>
<td>23 (7%)</td>
<td>23 (6%)</td>
</tr>
<tr>
<td>Others</td>
<td>185 (53%)</td>
<td>189 (53%)</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>349</strong></td>
<td><strong>360</strong></td>
</tr>
</tbody>
</table>


The pre-eminence of cola products is confirmed by data which shows that in 1972, cola had ousted the hitherto entrenched flavours of orange and lemonade.

**TABLE 6.21. Sales of Soft Drinks by Flavour, 1972 (%)**

<table>
<thead>
<tr>
<th>FLAVOUR:</th>
<th>COLÀ</th>
<th>LEMONADE</th>
<th>ORANGE</th>
<th>MIXERS</th>
<th>OTHERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>% SALES:</td>
<td>29</td>
<td>24</td>
<td>11</td>
<td>20</td>
<td>16</td>
</tr>
</tbody>
</table>

One of the main reasons for this rapid growth of the cola market since the mid 1960s appears to be the considerable advertising support given to the major brands - Coca Cola and Pepsi Cola. In 1974, these two brands accounted for 38% of manufacturers' advertising expenditure for the total carbonated soft drinks sector - this figure far exceeding their share of the carbonated soft drinks sector(7). It has been estimated that in 1974, Pepsi Cola and Coca Cola accounted for 65% of the cola market, which was 19% of carbonated soft drinks sales (by volume).

TABLE 6.22. Market Share of the Chief Cola Brands, 1974 (%)

<table>
<thead>
<tr>
<th>BRAND</th>
<th>MARKET SHARE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coca Cola</td>
<td>45</td>
</tr>
<tr>
<td>Pepsi Cola</td>
<td>20</td>
</tr>
<tr>
<td>Others</td>
<td>35</td>
</tr>
</tbody>
</table>


Invariably, this rapid expansion of the cola sector has attracted other leading manufacturers such as Barrs (Strike Cola), brewery subsidiaries (for example Minster Cola), and own-label products in the grocery sector (for example Sainsbury and the Co-ops). Despite these incursions of own-label colas, the data suggests that they have not made significant inroads into the market share held by the two market leaders. This may be explained partly by a significant degree of product differentiation attributable to the two leading cola brands. Doyle and Gidengil (1977) have claimed that for the soft drinks industry as a whole, there was a considerable degree of
product differentiation. This was the case particularly when measured by the level of advertising expenditure. However, little evidence of product differentiation has been found in the "other carbonates" sector. This suggests that a considerable degree of product differentiation exists in the mixer and cola market sectors.

The mixer market consists of such products as tonic water, bitter lemon, American dry ginger and soda water. Traditionally, Schweppes have dominated this sector. In 1968 their market share was 70%, but by 1974 this had fallen to 55%, mainly because of the advent of brewery-tied brands - see Table 6.23.

<table>
<thead>
<tr>
<th>BRAND</th>
<th>MARKET SHARE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schweppes</td>
<td>55</td>
</tr>
<tr>
<td>Canada Dry (a)</td>
<td>20</td>
</tr>
<tr>
<td>Cantrell and Cochrane</td>
<td></td>
</tr>
<tr>
<td>(Club)(a)</td>
<td>7</td>
</tr>
<tr>
<td>Britvic (a)</td>
<td>5</td>
</tr>
<tr>
<td>Hunts</td>
<td>5</td>
</tr>
<tr>
<td>Others</td>
<td>8</td>
</tr>
</tbody>
</table>

Source: Economist Intelligence Unit, (1975), p.34.

Note: (a) These firms are subsidiaries of major UK brewers.

These figures suggest that the independent soft drinks manufacturer has made few inroads into the mixer sector of the carbonated soft drinks market. Within the grocery sector, Hunts (a member of the Beecham Group) and some own-label products have made partial inroads into the
market, but there is little evidence of significant penetration by small independent manufacturers. Brewery subsidiaries have managed to increase their share of the licenced trade sector, but as later discussion will show, this is chiefly because of the control structure of the licenced trades.

It has not been possible to identify the market share of industry leaders or other firms in the "other carbonates" market sector, mainly because the vast majority of small manufacturers are located in this sector, thereby restricting accurate market data.

The different product sectors of the carbonated soft drinks market have different patterns of distribution as the following table illustrates.

TABLE 6.24. Sales (Volume) of Carbonated Soft Drinks by Outlet, 1973 (%)

<table>
<thead>
<tr>
<th>OUTLET</th>
<th>COLAS</th>
<th>MIXERS</th>
<th>SHANDY</th>
<th>LOW CALORIE</th>
<th>OTHER CARBONATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grocers</td>
<td>29</td>
<td>10</td>
<td>30</td>
<td>31</td>
<td>27</td>
</tr>
<tr>
<td>On-Licence</td>
<td>25</td>
<td>75</td>
<td>20</td>
<td>54</td>
<td>7</td>
</tr>
<tr>
<td>Off-Licence</td>
<td>10</td>
<td>15</td>
<td>15</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Catering</td>
<td>13</td>
<td>neg</td>
<td>5</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>CTNs</td>
<td>11</td>
<td>neg</td>
<td>0</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Others</td>
<td>12</td>
<td>neg</td>
<td>30</td>
<td></td>
<td>34(a)</td>
</tr>
</tbody>
</table>


Notes: (a) of which door-to-door = 25%.
(b) neg = negligible.

Most mixers are sold through licenced premises, with off-licences being an important growth area. Colas and other premium carbonates, on the other hand, have a wider distribution base, being available in most outlet-types.
In summary, the evidence suggests that small independent manufacturers are concerned primarily with the production of carbonated soft drinks for the grocery and door-to-door market sectors. Grocery sales of soft drinks were traditionally via local "corner shop" outlets. However, during the 1960s the pattern of demand changed significantly with the advent of supermarkets, self-service stores, and more recently, general discount stores and hypermarkets. The impact of this structural change in the retail trades has been a marked decline in the number of independent grocers - see Table 6.25.

**TABLE 6.25. Grocery Sales in the UK, by Type of Outlet, 1950-1977**

<table>
<thead>
<tr>
<th>Year</th>
<th>No. Shops</th>
<th>% of Total Shops</th>
<th>Turnover '000</th>
<th>Sales by Sector - % Market</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No. Shops</td>
<td>1971 prices</td>
<td>Independents</td>
</tr>
<tr>
<td>1950</td>
<td>117</td>
<td>82</td>
<td>1830</td>
<td>57</td>
</tr>
<tr>
<td>1957</td>
<td>122</td>
<td>81</td>
<td>1830</td>
<td>55</td>
</tr>
<tr>
<td>1961</td>
<td>120</td>
<td>79</td>
<td>1952</td>
<td>53</td>
</tr>
<tr>
<td>1966</td>
<td>90</td>
<td>85</td>
<td>1793</td>
<td>48</td>
</tr>
<tr>
<td>1971</td>
<td></td>
<td></td>
<td></td>
<td>42.5</td>
</tr>
<tr>
<td>1972</td>
<td></td>
<td></td>
<td></td>
<td>40.6</td>
</tr>
<tr>
<td>1973</td>
<td></td>
<td></td>
<td></td>
<td>39.4</td>
</tr>
<tr>
<td>1974</td>
<td></td>
<td></td>
<td></td>
<td>38.3</td>
</tr>
<tr>
<td>1975</td>
<td></td>
<td></td>
<td></td>
<td>37.4</td>
</tr>
<tr>
<td>1976</td>
<td></td>
<td></td>
<td></td>
<td>36.6</td>
</tr>
<tr>
<td>1977</td>
<td></td>
<td></td>
<td></td>
<td>35.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Multiples</th>
<th>Co-ops</th>
</tr>
</thead>
<tbody>
<tr>
<td>44.3</td>
<td>13.2</td>
</tr>
<tr>
<td>46.4</td>
<td>13.0</td>
</tr>
<tr>
<td>47.6</td>
<td>13.0</td>
</tr>
<tr>
<td>48.4</td>
<td>13.3</td>
</tr>
<tr>
<td>48.9</td>
<td>13.7</td>
</tr>
<tr>
<td>49.4</td>
<td>14.0</td>
</tr>
<tr>
<td>51.2</td>
<td>13.6</td>
</tr>
</tbody>
</table>


This increased importance of multiples in terms of grocery sales, is matched by increased soft drinks sales through
although more recent data is not available, the trend of increased soft drinks sales through the multiples is likely to continue. It has been reported that projections for 1980 suggest that multiples would account for 45% of soft drinks sales in the grocery sector, co-operatives 8-9%, symbols 27-28%, with small independent grocers achieving 25% of the market(8). The implication for small independent manufacturers is that traditional grocery outlets are in decline, whereas sectors traditionally served by market leaders are expanding. Furthermore, it appears to be increasingly difficult for smaller manufacturers to penetrate these growth sectors. Discount terms for bulk purchases and credit terms offered by industry leaders are often beyond the financial resources of smaller manufacturers(9).

**Off-Licences** have also been a traditional outlet for soft drinks manufacturers. The acquisition of soft drinks manufacturers by the major brewers (see Table 6.27) has resulted in many outlets being tied to the products of the soft drinks subsidiary where the off-licence is tied
to a particular brewery.

**TABLE 6.27. The Major Brewers and their Soft Drinks Subsidiaries (a)**

<table>
<thead>
<tr>
<th>BREWER</th>
<th>SUBSIDIARY OR ASSOCIATED COMPANY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allied Breweries (UK) Ltd.</td>
<td>Showerings Vine products</td>
</tr>
<tr>
<td></td>
<td>Whiteways Ltd.</td>
</tr>
<tr>
<td></td>
<td>Britvic Ltd.</td>
</tr>
<tr>
<td></td>
<td>Minster Soft Drinks Ltd.</td>
</tr>
<tr>
<td>Bass Charrington Ltd.</td>
<td>Canada Dry (UK) Ltd.</td>
</tr>
<tr>
<td>Courage Ltd.</td>
<td>Cantrell &amp; Cochrane (GB) Ltd.</td>
</tr>
<tr>
<td>Greenhall Whitley &amp; Co. Ltd.</td>
<td>Cambrian Mineral Water Co. Ltd.</td>
</tr>
<tr>
<td>Scottish &amp; Newcastle Ltd.</td>
<td>John Mackay &amp; Co. (Newcastle) Ltd.</td>
</tr>
<tr>
<td>Vaux Breweries Ltd.</td>
<td>Thompson Craik &amp; Co. Ltd.</td>
</tr>
<tr>
<td>Watney Mann Ltd.</td>
<td>Coca Cola (Southern) Bottlers Ltd.</td>
</tr>
<tr>
<td>Whitbread &amp; Co. Ltd.</td>
<td>R. White &amp; Sons Ltd.</td>
</tr>
<tr>
<td></td>
<td>Chandy Bottling Co. Ltd.</td>
</tr>
<tr>
<td></td>
<td>H.D. Rawlings Ltd.</td>
</tr>
<tr>
<td></td>
<td>Coca Cola (Western) Bottlers Ltd.</td>
</tr>
</tbody>
</table>


**Note**: (a) This list may not be exhaustive, but the firms identified are the major subsidiary associated with the brewer.

The extent of the tied structure in the off-licence market is unclear. However, in the on-licence sector, 75% of the public houses are owned directly by a brewery, and of these about one-quarter are directly managed by the brewery (10). The impact of the tied system on soft drinks purchases varies from brewery to brewery; but it usually means that where a public house is managed directly by a brewery, all soft drinks must be purchased from the brewery or from its subsidiary. In the case of a tenanted public house, all beer and certain soft drinks must be
bought from the brewer (or its subsidiary), although certain soft drinks may be purchased from a supplier of the tenants choice, notwithstanding the operation of a list of "approved suppliers". For example, in the Midlands and North West of England, breweries such as Allied Breweries and Marstons operate lists of approved suppliers of soft drinks from which tenants may make their choice. The effect of such lists on small independent manufacturers is that they must "toe the line" with regard to the brewers policies for supplying soft drinks to this particular sector. In addition, suppliers of soft drinks to tenanted houses are often required to pay a percentage commission of their sales to the brewer if they are to be placed on a list of approved suppliers - the brewer, in effect, receiving a monopoly profit(11). Consequently, small independent soft drinks manufacturers tend to find the public house and off-licence sectors increasingly restricted, with profit margins reduced if commission is payable to brewers.

The results of the questionnaire survey of small soft drinks manufacturers confirms that smaller firms in the industry tend to be more dependant upon traditional sectors of the market (independent retail trade, licenced trade, and direct to the final consumer) - see Table 6.28.

Although Table 6.28 is an extremely crude measure of the market share attributable to firms of different
TABLE 6.28. Type of Outlet Serviced by Firms of Different Sizes - Survey Sample

<table>
<thead>
<tr>
<th>TYPE OF OUTLET</th>
<th>APPROXIMATE MEAN PERCENTAGE OF SALES BY FIRMS IN EACH SIZE CATEGORY (No. EMPLOYEES)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1-10</td>
</tr>
<tr>
<td>Licence Trade</td>
<td>40</td>
</tr>
<tr>
<td>Independent Retailer/</td>
<td>35</td>
</tr>
<tr>
<td>Confectioners</td>
<td></td>
</tr>
<tr>
<td>Other Soft Drinks Firms</td>
<td>0</td>
</tr>
<tr>
<td>Cash &amp; Carry Stores etc.</td>
<td>0</td>
</tr>
<tr>
<td>Direct to Final Consumer</td>
<td>17</td>
</tr>
<tr>
<td>Cafes &amp; Canteens etc.</td>
<td>7</td>
</tr>
<tr>
<td>Supermarkets/Multiples</td>
<td>0</td>
</tr>
<tr>
<td>Others</td>
<td>1</td>
</tr>
<tr>
<td>No. FIRMS GIVING DETAILS</td>
<td>18</td>
</tr>
</tbody>
</table>

Source: Questionnaire replies.
sizes, the evidence collected from the questionnaire and interviews suggests that the growth sectors of the market (the multiples and cash and carry sectors) have not been penetrated by smaller manufacturers.

2. The Changing Pattern of Packaging in the Soft Drinks Market

Changes in the packaging of soft drinks are related to the changing pattern of distribution, and in particular, to the increased market penetration of multiple stores. The increased use of "check-out" points in supermarkets and chain stores has resulted in a fall in demand for products packed in returnable glass bottles, while there has been increased demand for canned soft drinks and one-trip bottles.

<table>
<thead>
<tr>
<th>TABLE 6.29. Soft Drinks Sales by Type of Container</th>
</tr>
</thead>
<tbody>
<tr>
<td>------</td>
</tr>
<tr>
<td>Returnable Bottle</td>
</tr>
<tr>
<td>Non-returnable Bottle</td>
</tr>
<tr>
<td>Cans</td>
</tr>
<tr>
<td>Bulk for Dispensing</td>
</tr>
</tbody>
</table>

Source: NASDM.

Note: na - Data not available.

A further packaging trend in the soft drinks markets (which has been witnessed in other foods industries) is a shift towards a larger-sized pack (40 fl. oz or 1-2 litres). However, it has not been possible to determine the degree of cross-substitution between products packed in different sized containers. Nevertheless, the questionnaire replies suggest that the smallest firms in the
industry are less likely to produce products in these larger containers. Indeed, none of the small Scottish manufacturers appeared to produce these larger-sized products\(^{(13)}\). In addition, few of the very small manufacturers appeared to produce drinks in other containers associated with growth sectors of the market, such as non-returnable bottles and cans - see Table 6.30, overleaf.

The conclusion suggested by our analysis of the market environment of the soft drinks industry is that recent packaging trends and changes in consumer tastes have tended to restrict the market opportunities available to smaller firms in the industry. Growth in the soft drinks markets appears to be associated with market sectors which are dominated by large manufacturers, who are able to offer terms of trade to the distributive trades which smaller manufacturers find particularly difficult to match\(^{(14)}\). The decline of traditional outlets for the products of smaller manufacturers, together with increased concentration of outlets for groceries and other drinks\(^{(15)}\), has greatly reduced the scope of smaller manufacturers to expand their markets. This suggests that small soft drinks manufacturers are operating in an increasingly illiberal market environment as traditional markets decline, and growth sectors are difficult to penetrate.

B. TECHNOLOGY AND TECHNOLOGICAL DEVELOPMENTS

The manufacture of soft drinks and allied products is governed by the Soft Drinks Regulations, 1964 (with
TABLE 6.30. The Percentage of Firms Producing Own-Label Products by Size and Type of Container and Size of Firm

<table>
<thead>
<tr>
<th>SIZE/TYPE OF CONTAINER</th>
<th>1-10</th>
<th>11-25</th>
<th>26-50</th>
<th>51-100</th>
<th>101-200</th>
<th>200+</th>
</tr>
</thead>
<tbody>
<tr>
<td>40oz/Litre</td>
<td>47%</td>
<td>65%</td>
<td>88%</td>
<td>78%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>25oz.</td>
<td>82%</td>
<td>88%</td>
<td>75%</td>
<td>89%</td>
<td>67%</td>
<td>50%</td>
</tr>
<tr>
<td>7oz. (Split)</td>
<td>82%</td>
<td>82%</td>
<td>75%</td>
<td>89%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Canned goods</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>11%</td>
<td>-</td>
<td>50%</td>
</tr>
<tr>
<td>Non-returnable Squashes</td>
<td>-</td>
<td>29%</td>
<td>50%</td>
<td>67%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Fruit Juices</td>
<td>82%</td>
<td>88%</td>
<td>88%</td>
<td>100%</td>
<td>67%</td>
<td>100%</td>
</tr>
<tr>
<td>No. Firms Giving Details</td>
<td>17</td>
<td>17</td>
<td>8</td>
<td>9</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: Questionnaire replies.
amendments taking place in 1969 and 1970 with regard to artificial sweeteners), and the Food and Drugs Act, 1965.

The basic process of soft drinks manufacture is relatively simple and standardised. For concentrated soft drinks there are two principal methods of manufacture - extraction and comminution. Squashes and cordials are prepared by the extraction method whereby the fruit is thoroughly squeezed and the juice used. Crushes and whole-fruit drinks, on the other hand, are prepared by the newer comminution method which involves the reduction of the whole fruit by grinding to a liquid that can be used as a base for the drinks. In practice, the industry has undergone a specialisation of process whereby specialist essence producers manufacture the cordial concentrate, while the soft drinks manufacturer simply adds water, colouring, preservatives, sweeteners, and additional flavourings to produce the final product. Similar specialisation of process has taken place in the production of carbonated soft drinks. The basic process simply involves the mixing of a prepared syrup concentrate with carbonated water.

For both concentrated and carbonated drinks, the production process consists of equipment connected by conveyor lines, to carry out three distinct operations: washing; filling and sealing; and labelling and packaging. Within each of these separate operations, it is possible to determine different levels of technological sophistication related to the size of manufacturers.
Washing: The washing process is necessary for both returnable and one-trip bottles to ensure that the bottle is clean and sterile at the filling stage. Returnable bottles must pass through both a washing and rinsing stage. Washing usually involves strong alkaline washing solutions being forced via jet streams into rows of inverted bottles which pass through the washer. Rinsing may include brushing inside and outside the bottle, or the same result may be achieved with the use of water pressure or forced air. The introduction of non-returnable glass and plastic bottles has simplified the problems associated with bottle washing and preparation since they require a fresh water rinse only. Although rinsing machines are less expensive than full washers, and cheaper to operate since no detergent solutions are required, many of the smaller firms with integrated production lines and a heavy dependence upon the returnable bottle market, find it difficult to incorporate a separate rinsing machine into the overall plant. However, some more modern washers have the facility of keeping the washing process dormant if rinsing alone is required. Consequently, there are few differences in technological sophistication at this stage of the production process for different sized firms.

Filling and Sealing: Filling units range from semi-automated machines producing only a few bottles per minute, to large rotary multiple head machines capable of filling over 600 bottles per minute. The smaller units
frequently have a syruper section which doses the bottle with a predetermined amount of flavoured syrup, and a section where the bottle is topped-up with carbonated water. The higher speed units are almost entirely pre-mix fillers in which the finished product is filled directly into the bottle - syrup, water and carbon dioxide being mixed in the proper proportions at the correct temperature and then fed to the filler. It is at this stage of the production process that some divergence in technological sophistication becomes apparent. Smaller post-mix units, with both syruper and filling sections, tend to be older machinery - the majority of newer plant being of the pre-mix type(16). Height tolerances for many of these older machines are not sufficient to permit the filling of larger-sized containers (whether glass or materials associated with non-returnable products). Consequently, many smaller manufacturers are faced with the dilemma of whether to purchase expensive new machinery which will probably result in considerable excess capacity (and consequent increased production costs), or whether to persist with old plant (or purchase second-hand machinery) and deny themselves many growth sectors of the market(17).

Labelling and Packaging: Soft drinks are generally labelled in one of two ways. They may have a permanent coloured label which is fired onto the bottle by the bottle manufacturer, or a temporary label may be applied each time the bottle is used, and removed in the washing
process when the bottle is re-used. With many of the new forms of packaging - particularly in the one-trip field - labelling techniques intermediate the two basic types are employed. Temporary labels are almost universal for returnable bottles. This is partly because of the extra cost associated with "fired" labels, but chiefly because major bottle manufacturers only produce a standard bottle for each size of container. Although quicker filling speed requires more complicated integration within the labelling and packaging process, levels of technical sophistication have not affected the ability of smaller manufacturers to supply any particular type of product.

Canned carbonated soft drinks production employs the same basic techniques as used for bottled products, although filling plant is not interchangeable between the two types of product. Moreover, there appear to be significant economies of scale in the production of canned drinks, particularly in relation to the price of cans which are labelled by the can manufacturer.

Recent innovations in the soft drinks industry have tended to be associated with the packaging of products and attainment of faster filling speeds. The impetus for recent developments in the packaging of soft drinks has come from competition between glass, plastics, and metal industries to produce containers which lower operating costs and are consistent with changing patterns of demand in the soft drinks industry. Recent "imported"
developments such as plastishield bottles\textsuperscript{(18)}, merolite packs\textsuperscript{(19)}, and strongpac plastic bottles\textsuperscript{(20)} have emanated from United Glass Ltd, ICI, and Lin Pac Plastic Mouldings Ltd, respectively. In the case of plastishield and strongpac bottles, present machinery requires only minor adjustments to accommodate the new package. However, many of the older machines operated by smaller manufacturers do not have the height tolerance to accommodate these new forms of packaging.

The adoption of new packaging forms has been largely by medium and larger-sized manufacturers. For example, plastishield bottles were used first by Carters Gold Medal Soft Drinks Ltd., who were followed later by A.G. Barr & Co. Ltd., Larkspur Soft Drinks Ltd., and a subsidiary of Rank Hovis McDougall. The smallest of these firms, Carters, employs some 165 people and had a turnover of £2.5 million in 1976; whilst Barrs are the largest independent manufacturer in the UK, employing some 1500 people and achieving a turnover of over £19 million in 1976. The strongpac bottle was pioneered by Coca Cola.

Although it has not been possible to determine the market penetration of these new packaging forms, their adoption by market leaders and price advantages afforded to consumers\textsuperscript{(21)} suggests that their introduction is likely to work against smaller manufacturers who are either unwilling or unable to adopt new packaging materials. In these circumstances, the market trends associated with
declining opportunities for small manufacturers are likely to be maintained.

Increased technological sophistication associated with faster filling speeds may be allied to economies of scale in the production process. Although little evidence is available to assess the extent and nature of economies of scale in the soft drinks industry, a number of studies have been undertaken to determine the economies of scale in the brewing industry (for example: Vaizey, 1960; Horowitz and Horowitz, 1965; Pratten, 1971; Cockerill, 1971; Scherer, 1974; Bannock, 1976). The production process of brewing and soft drinks manufacture are in many ways identical, particularly in relation to filling and labelling/packaging processes. These studies of the brewing industry show that the minimal-optimum plant size (MOS) rose quite markedly during the 1950s and 1960s. Horowitz and Horowitz (1965) calculated MOS to be 100,000 barrels annual capacity. This figure was revised by Cockerill (1971) to 1 million barrels per year, and later updated to 3 million barrels per year (Cockerill, 1975), whilst Scherer (1974) has calculated a MOS of 4.5 million barrels per annum. Since UK beer production in 1974 was 37.9 million barrels(22), it can be seen that significant production economies of scale are to be achieved in the brewing industry - MOS being 11.9% of industry production using Scherer's estimate of MOS. Muller and Schwalbach (1980) have suggested that these increased estimates of MOS in the brewing industry are
due to more highly automated brewing houses and increased speed of packaging equipment. Since these factors are common to both brewing and soft drinks manufacture, it would appear that significant production economies of scale are to be achieved in the soft drinks industry. However, products with low value to weight ratios (such as soft drinks) incur diseconomies of scale where production is centred in a few plants necessitating more extensive distribution systems. Nevertheless, on balance it would appear that economies of scale are present in soft drinks manufacturing. These production cost disadvantages appear to reinforce market disadvantages faced by smaller manufacturers, thereby creating an increasingly illiberal environment for smaller firms.

6.4 SMALL COMPANY PERFORMANCE AND THE CONTEXT OF SMALL FIRMS WITHIN THE SOFT DRINKS INDUSTRY

Smaller soft drinks manufacturers appear to be less efficient than medium- and larger-sized firms. Production economies of scale and changing patterns of demand have resulted in smaller firms facing particular problems of competing effectively with larger firms in growth sectors of the market. In this section, we examine the relationship of company size to other contextual factors specific to individual firms, and their influence on company performance levels.

A. TECHNOLOGY AND PRODUCT-MIX

This section is concerned with the extent to which firms have adapted to technological change associated
with new products and methods of packaging. Technology within the soft drinks industry is relatively standard for all classes of firm. The relative sophistication of technology relates to the type of products produced by individual firms, and the capacity of plant to permit the filling of different containers.

Evidence in the previous section (Chapter 6.3) suggests that the uptake of new products and adoption of packaging innovations is primarily by larger firms. This conclusion is supported by evidence from the questionnaire replies. Two major trends noted earlier in this chapter are the demand for large-sized containers (40 fl. oz. or litre bottles) and non-returnable products. The evidence in Tables 6.31 and 6.32 suggests that although several medium-sized firms have not adopted products associated with these growth sectors, smaller firms (particularly firms employing 10 or fewer people) are less likely to produce products in non-returnable or large-sized containers. The relationship between company size and adoption of new technologies is particularly significant in the production of soft drinks in non-returnable containers. Here, the chi-squared test rejects the null hypothesis of no relationship between company size and the production of products in non-returnable containers at the 0.1% level of significance. Although the relationship between company size and the use of large-sized products is not statistically significant, the distribution suggests that smaller firms are less
### Table 6.31. Production of 40 fl. oz or Litre Products by Company Size (No. Employees) (a)

<table>
<thead>
<tr>
<th>PRODUCTION OF 40 oz. or LITRE PRODUCT</th>
<th>COMPANY SIZE (Number of Employees)</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>1-10 (b)</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>11-25</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>26-50</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>51-199</td>
<td>12</td>
</tr>
<tr>
<td>NO</td>
<td>1-10 (b)</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>11-25</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>26-50</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>51-199</td>
<td>12</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>54</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 4.70; \text{ Degrees of freedom } = 3; \text{ Relationship not significant} \]

**Source:** Questionnaire.

**Note:** (a) This evidence is from the postal questionnaires alone. Evidence from the interviews with managers of Scottish soft drinks manufacturers is not included because none of the manufacturers visited produced products in either litre or 40 fl. oz containers. However, the reasons for this observation appear to be peculiar to the Scottish market, thus adding bias to an analysis of company behaviour in the industry as a whole. This aspect is discussed at greater length in the following chapter.

(b) Number of employees other than family members. The total of this column probably overstates the importance of firms employing 10 or fewer employees since several would probably be included in the category "11-25 employees" if family members and other employees are totalled.

### Table 6.32. Production of Non-returnable Products by Company Size (a)

<table>
<thead>
<tr>
<th>PRODUCTION OF NON-RETURNABLE PRODUCTS</th>
<th>COMPANY SIZE (Number of Employees)</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>1-10 (b)</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>11-25</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>26-50</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>51-199</td>
<td>12</td>
</tr>
<tr>
<td>NO</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>54</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 16.93; \text{ Degrees of freedom } = 3; \text{ Relationship significant at } 0.1\% \text{ level} \]

**Source:** Questionnaire.

**Note:** (a) and (b) See notes (a) and (b) Table 6.31.
likely to fill these containers than larger manufacturers.

Failure to adopt product or process innovations consistent with growth sectors of the market appears to have resulted in inferior performance levels for smaller soft drinks manufacturers. Table 6.33 shows that firms which do not produce non-returnable or large-sized products tend to be less profitable and have lower growth rates than firms which offer these product ranges.

**TABLE 6.33. Company Performance and Adaptation to Market and Technological Changes**

<table>
<thead>
<tr>
<th>PRODUCTION OF LARGE-SIZED PRODUCTS</th>
<th>NET PROFITABILITY</th>
<th>GROWTH RATE (SALES)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>Mean</td>
</tr>
<tr>
<td><strong>YES</strong></td>
<td>24</td>
<td>25.5</td>
</tr>
<tr>
<td><strong>NO</strong></td>
<td>16</td>
<td>11.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PRODUCTION OF NON-RETURNABLE PRODUCTS</th>
<th>NET PROFITABILITY</th>
<th>GROWTH RATE (SALES)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>Mean</td>
</tr>
<tr>
<td><strong>YES</strong></td>
<td>14</td>
<td>28.9</td>
</tr>
<tr>
<td><strong>NO</strong></td>
<td>26</td>
<td>15.0</td>
</tr>
</tbody>
</table>

**Notes:** n - Number of observations from questionnaire sample.

CV - Coefficient of variation.

Furthermore, performance is less variable between firms which have adapted to these environmental changes. This suggests that firms which have adopted new products and packaging materials are generally more profitable than average(23). Although failure to adopt new technologies has not affected the performance of several small manu-
facturers, in general, this category of firm is less profitable than average with sales declining in real terms over the four-year period(24).

Although none of the Scottish soft drinks manufacturers in the sample produced products in large-sized containers(25), examination of plant capacity and plant purchasing policies shows that machinery operated by the two smallest firms (Companies 6 and 7) did not have the height tolerance to permit the filling of 40 fl.oz or litre products. In each case, this may be traced to the age of plant operated - older plant being built prior to the increased demand for larger-sized containers.

The average age of plant appears to be related to plant purchasing policies adopted by managing directors. Table 6.34 suggests that smaller firms tend to purchase second-hand machinery, and that such practices are associated with lower than average net profitability. New plant is relatively expensive, with the result that it is beyond the capital base of some smaller firms. For example, a new 12-head pre-mix filler (typical of the size of filler used by firms employing between 10 and 20 people, but only one part of the total production line) costs approximately £40,000 (1978 prices)(26). In these circumstances, purchasing second-hand plant may be the only option for less profitable small manufacturers. However, such practices may result in firms being unable to accommodate new technologies within the layout of existing plant.
<table>
<thead>
<tr>
<th>COMPANY (a)</th>
<th>NET PROFITABILITY</th>
<th>GROWTH RATE</th>
<th>NUMBER OF EMPLOYEES</th>
<th>AVERAGE (b)</th>
<th>PLANT (c) PURCHASE POLICY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>18.0%</td>
<td>19.0%</td>
<td>110</td>
<td>4</td>
<td>New</td>
</tr>
<tr>
<td>2</td>
<td>19.6%</td>
<td>28.7%</td>
<td>90</td>
<td>6</td>
<td>New</td>
</tr>
<tr>
<td>3</td>
<td>24.3%</td>
<td>20.3%</td>
<td>65</td>
<td>5</td>
<td>New</td>
</tr>
<tr>
<td>4</td>
<td>9.0%</td>
<td>18.5%</td>
<td>45</td>
<td>8</td>
<td>Second-hand</td>
</tr>
<tr>
<td>5</td>
<td>9.0%</td>
<td>16.1%</td>
<td>33</td>
<td>6</td>
<td>Second-hand</td>
</tr>
<tr>
<td>6</td>
<td>-8.7%</td>
<td>n/a</td>
<td>11</td>
<td>11(d)</td>
<td>Second-hand</td>
</tr>
<tr>
<td>7</td>
<td>1.5%</td>
<td>n/a</td>
<td>12</td>
<td>15(d)</td>
<td>Second-hand</td>
</tr>
<tr>
<td>8</td>
<td>20.8%</td>
<td>23.5%</td>
<td>40</td>
<td>3</td>
<td>New</td>
</tr>
<tr>
<td>9</td>
<td>14.3%</td>
<td>27.8%</td>
<td>33</td>
<td>5</td>
<td>New</td>
</tr>
<tr>
<td>10</td>
<td>12.8%</td>
<td>25.6%</td>
<td>55</td>
<td>7</td>
<td>Second-hand</td>
</tr>
<tr>
<td>11</td>
<td>20.5%</td>
<td>21.6%</td>
<td>30</td>
<td>4</td>
<td>New</td>
</tr>
<tr>
<td>12</td>
<td>22.5%</td>
<td>n/a</td>
<td>65</td>
<td>3</td>
<td>New</td>
</tr>
<tr>
<td>13</td>
<td>19.5%</td>
<td>33.4%</td>
<td>22</td>
<td>10</td>
<td>Second-hand</td>
</tr>
</tbody>
</table>

**Average of sample**: 14.1%(e) 23.5% 47 6.7

**Source**: Interviews with the managers of Scottish soft drinks manufacturers.

**Notes**:  
(a) See Appendix D for a full description of the individual firms.  
(b) This was taken as the average of the various parts of total manufacturing plant. Usually, only sections of the plant are replaced at any one time, thus giving rise to sections of plant of different ages in the one production line. In some cases, the average age of plant was estimated by managers since exact records of plant age were not kept.
Table 6.34 contd.

(c) This refers to the company's usual practice. Typically, production lines consisted of both new and second-hand plant. Where several sections of the production line were new when purchased by the company, this practice was assumed for all sections.

(d) Plant operated by these firms did not have the height tolerance to permit large-sized containers to be filled.

(e) This figure is lower than the all-industry average chiefly because Scottish firms tend to be less profitable than firms of similar size in England. From the financial analysis of companies, mean net profitability of English firms is 23.1% (coefficient of variation = 81.6), whereas mean net profitability of Scottish firms is 13.1% (coefficient of variation = 97.7).
One point of interest arising from the scatter diagram (Appendix B4) which shows the relationship between net profitability and the log of company sales, is the presence of an outlying linear trend (A8). The disaggregated data was examined to determine the nature of firms constituting this sub-sample. Of the nine firms which appeared to constitute this trend, the three most profitable firms were located in specialist areas of the soft drinks market. These firms may be identified as:

Company 1: Sodastream Ltd., manufacturers of "Sparklet" syphons (27).

Company 2: Solent Canners Ltd., contract canners with a sizeable export trade (approximately 8% of turnover).

Company 3: J.N. Nichols (Vimto) Ltd., specialist concentrate manufacturer for branded soft drink, in addition to bottler of the product (28).

Although the performance of the remaining firms in this sub-sample could not be explained by reason of producing a specialist product, the evidence suggests that firms which perform specialist functions within the industry tend to be more profitable than similar-sized firms engaged in the manufacture of "standard" soft drinks products.

B. COMPANY AGE

No relationship exists between company age and performance in the soft drinks industry. This result arises primarily because the majority of soft drinks
manufacturers were formed prior to 1940, thus preventing statistical analysis of the age variable.

C. PATTERN OF OWNERSHIP AND CONTROL

The soft drinks industry is dominated by family-controlled firms. All company directors were related in over half the firms in which it was possible to determine familial relationships of directors; and a majority of directors were related in over 70% of the firms - see Table 6.35.

<table>
<thead>
<tr>
<th>Extent of Family Dominance</th>
<th>No.</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the Directors are Related</td>
<td>14</td>
<td>13</td>
</tr>
<tr>
<td>A Minority of Directors are Related</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>A Majority of Directors are Related</td>
<td>23</td>
<td>22</td>
</tr>
<tr>
<td>All the Directors are Related</td>
<td>55</td>
<td>52</td>
</tr>
<tr>
<td>Subsidiary</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>106</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Questionnaire replies, Scottish Survey Interviews, analysis of company accounts in Edinburgh and London.

However, this analysis tends to overstate the proportional significance of family businesses since it was not possible to trace familial relationships of directors in 12% of the sample where evidence was available only from published financial reports submitted to Companies House, London. Nevertheless, it remains valid to conclude that the majority of soft drinks manufacturers are family firms.

Within the sub-sample of firms employing less than 200 people, there is no significant relationship between
family control and company size (Appendix C2, Table 5). However, the degree of family control appears to be related to company performance levels. Table 6.36 indicates that non-family firms tend to have significantly higher levels of profitability than firms in which all directors are related, or in which a majority of directors are related.

**TABLE 6.36. Company Performance and the Degree of Family-Control**

<table>
<thead>
<tr>
<th>DEGREE OF &quot;NEPOTISM&quot;</th>
<th>NET PROFITABILITY</th>
<th>GROWTH RATE (SALES)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>Mean</td>
</tr>
<tr>
<td>All Directors Related</td>
<td>49</td>
<td>15.3</td>
</tr>
<tr>
<td>Majority Directors Related</td>
<td>21</td>
<td>19.5</td>
</tr>
<tr>
<td>Minority or No Directors Related</td>
<td>15</td>
<td>32.0</td>
</tr>
</tbody>
</table>

**Source:** Questionnaire replies; financial analysis of company returns, interviews with managers of Scottish manufacturers.

**Notes:**
- \( n \) = number of observations.
- \( CV \) = coefficient of variation.

The relatively high degree of variability between profitability rates of firms in which all directors are related suggests that, despite the generally low level of profitability among family businesses, several firms in this category are relatively profitable. This observation is supported by the cross tabulation of ownership-type and net profitability - see Table 6.37.
TABLE 6.37. Cross-tabulation of Net Profitability and Ownership-type

<table>
<thead>
<tr>
<th>DEGREE OF &quot;NEPOTISM&quot;</th>
<th>LEVEL OF COMPANY PERFORMANCE (NET PROFITABILITY)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low (Loss, 0-10%)</td>
</tr>
<tr>
<td>All Directors Related</td>
<td>18</td>
</tr>
<tr>
<td>Majority Directors Related</td>
<td>4</td>
</tr>
<tr>
<td>No, Minority Directors Related</td>
<td>2</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 10.16; \text{ degrees of freedom} = 4; \text{ reject null hypothesis at 5\% level of significance.} \]

Source: Appendix C1, Table 7.

It can be seen from Table 6.37 that over half of the high performance firms have ownership patterns in which a majority or all directors are related. However, rejection of the null hypothesis concerning company profitability is chiefly due to the higher than expected number of non-family firms in the high performance category. This fact confirms the general observation that non-family firms tend to be more profitable than family-dominated companies.

Although profitability rates appear to be related to the pattern of ownership and control, Table 6.36 suggests that no such relationship exists with respect to company growth rates. In turn, this suggests that the adoption of new technologies and product-mix of firms is not related to control-type. Table 6.38 confirms that no relationship exists between ownership-type and the production of 40 fl.oz or litre products.
However, the null hypothesis with respect to the production of non-returnable products is rejected at the 1% level of significance. This suggests a strong relationship between ownership-type and the production of non-returnable products.

**TABLE 6.38. The Production of Large-Size and Non-Returnable Products and its Relationship to Ownership-type**

<table>
<thead>
<tr>
<th>All Directors Related</th>
<th>Majority of Directors Related</th>
<th>None or Minority Directors Related</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRODUCTION OF 40 Fl.oz OR LITRE PRODUCTS</td>
<td>PRODUCTION OF NON-RETURNABLE PRODUCTS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES</td>
<td>NO</td>
<td>TOTAL</td>
<td>YES</td>
</tr>
<tr>
<td>19</td>
<td>13</td>
<td>32</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>2</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>31</td>
<td>19</td>
<td>50</td>
<td>14</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 1.21; \text{ degree of freedom} = 2; \]
Accept null hypothesis.

\[ \chi^2 = 11.71; \text{ degrees of freedom} = 2; \text{ Reject null hypothesis at 1\% level of significance.} \]

Examination of the contingency tables reveals that the null hypothesis regarding the relationship between the production of non-returnable products and ownership pattern of firms, is rejected primarily because non-returnable products are produced by more than expected firms in which a majority of directors are related, and that such products are produced by fewer than expected firms in which all directors are related. This suggests that family firms which have introduced non-family expertise into their management structure are more likely
to adopt product or process innovations than firms which have maintained family domination of management processes.

Incorporating non-family members into the managerial hierarchy is only one factor associated with the extent of managerial expertise in small family firms. Several indices may be used to measure expertise. Analysis of educational achievement reveals that managers in family businesses tend to have lower levels of qualifications than their counterparts in non-family firms (Appendix C3, Table 5). Moreover, company performance is significantly related to the level of educational achievement - the null hypothesis being rejected at the 1% level of significance (Appendix C1, Table 2). Managerial qualifications are also related to the size of small soft drinks manufacturers. Managers of firms employing more than 50 people tend to have higher levels of academic achievement than managers of smaller firms (Appendix C2, Table 2). In addition, of the 36 firms in which all directors are related, 15 are run by managers who have no formal educational qualifications (Appendix C3, Table 5). Consolidating this information, it appears that small family firms (employing less than 50 people) tend to be run by relatively poorly qualified managers, and that this low level of educational achievement is related to the poor levels of economic performance typical of these firms.

This relationship between low levels of academic achievement and poor financial performance appears to be
linked to the breadth of experience gained by managers. Managing directors in non-family firms appear to have a greater breadth of experience than managers of family firms, in terms of previous employment in another company (Appendix C5, Table 2). All managing directors in non-family firms had gained experience outwith their present company, whereas only 38% of managing directors from firms in which all directors are related had experience outwith their family business. The behavioural implications of this apparent narrowness of managerial experience and low level of qualifications (measured in terms of educational achievement and professional qualifications) will be discussed in the following chapter.

6.5 SUMMARY AND CONCLUSIONS

Although performance levels among UK soft drinks manufacturers vary widely, several factors have been identified as distinguishing characteristics of high and low performance firms. These characteristics may be summarised as in Table 6.38 overleaf.

From the variables examined, company size appears to explain a significant part of the variation in profitability rates. The importance of company size was traced through the impact of technological changes and market trends which have combined to create an increasingly illiberal environment for small manufacturers.

As a rule, small manufacturers produce "pop"(29)
<table>
<thead>
<tr>
<th>LOW PERFORMANCE FIRMS</th>
<th>COMPANY CHARACTERISTIC</th>
<th>HIGH PERFORMANCE FIRMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 10%</td>
<td>NET PROFITABILITY</td>
<td>Greater than 30%</td>
</tr>
<tr>
<td>Majority less than 20%, which is a decline in real terms (a).</td>
<td>SALES GROWTH</td>
<td>Collection of high growth firms (30% average annual growth, or more) and firms with only moderate growth (22-30%).</td>
</tr>
<tr>
<td>Employing less than 25 people</td>
<td>SIZE</td>
<td>Employing more than 25 people</td>
</tr>
<tr>
<td>Only 50% had 40oz/Litre range of products. Heavy reliance on traditional (25oz) products in returnable glass.</td>
<td>PRODUCT RANGE (manufactured)</td>
<td>Full range of products (especially 40oz/Litre range) plus range of non-returnable products - usually in one of the new packaging technologies. &quot;Specialist&quot; products.</td>
</tr>
<tr>
<td>CTNs, grocers, public houses, direct to final consumer. Heavy reliance on &quot;small-sized drop&quot; customers.</td>
<td>CUSTOMER-MIX</td>
<td>CTNs, public houses, grocers, multiples and general discount stores. Some undertake contract bottling for multiples. Wholesalers.</td>
</tr>
<tr>
<td>Relatively aged (at least 10 years old). Buy second-hand.</td>
<td>AGE OF PLANT</td>
<td>Usually under 10 years old. If buy second-hand, usually under 5 years old.</td>
</tr>
<tr>
<td>Usually family-dominated</td>
<td>PATTERN OF OWNERSHIP &amp; CONTROL</td>
<td>No relationship to ownership.</td>
</tr>
<tr>
<td>LOW PERFORMANCE FIRMS</td>
<td>COMPANY CHARACTERISTIC</td>
<td>HIGH PERFORMANCE FIRMS</td>
</tr>
<tr>
<td>-----------------------</td>
<td>------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Less than 10% NET PROFITABILITY</td>
<td>Greater than 30%</td>
<td></td>
</tr>
<tr>
<td>Generally low. Usually by family members with little outside experience.</td>
<td>MANAGERIAL EXPERTISE</td>
<td>Employment of qualified staff, irrespective of familial relationship to owners.</td>
</tr>
</tbody>
</table>

**Note:** (a) Average annual rate of price rise of soft drinks for the period covered by survey was approximately 22% - see footnote (7) for an analysis of soft drinks price rises.
and do not have the capital base of larger manufacturers which provide a more sophisticated range of drinks in a variety of containers. Accordingly, traditional outlets such as CTNs, grocers, and direct supply to final consumers tend to form the market for the majority of small manufacturers. Growth sectors such as multiples and general discount stores tend to be served by larger manufacturers. These firms are more able to offer discounts for bulk orders and non-returnable products in new lightweight packaging materials.

This competitive disadvantage of smaller firms vis-à-vis growth sectors of the industry has been compounded by their general inability to differentiate products. Doyle and Gidengil (1977) concluded that there was a substantial degree of product differentiation in the soft drinks industry as a whole. However, the evidence presented in the present research suggests that differentiation occurs only in specific sectors of the market, in particular, the cola market. Here the major franchises are held by brewery subsidiaries (Table 6.27) or major British companies in the foods industries (Cadbury Schweppes holding the UK franchise for Pepsi Cola, and the Beecham Group holding the Coca Cola franchise for Scotland and the North of England). Little evidence of product differentiation could be found in the "pop" sectors, which form the bulk of "own product" sales for small manufacturers. Consequently, smaller firms have to content themselves with relatively small accounts.
in localised markets.

The importance of product differentiation was emphasised further by the fact that manufacturers of "specialist" products tend to be more profitable than firms of a similar size producing ordinary soft drinks products. Similarly, manufacturers leading in the adoption of innovatory products tend to be larger firms with high growth rates and above average levels of profitability. As a result, penetration of growth sectors has been predominantly, although not exclusively, by these larger firms. This pattern of industrial growth witnessed in the soft drinks industry appears to support Hamilton's (1975) hypothesis that the faster an industry's growth, the greater the market share captured by large firms.

Poor financial performance and inertia with respect to the adoption of more sophisticated product ranges also appears to be related to the pattern of ownership and control of small firms. Although high performance firms are characterised by a variety of control patterns, low performance firms are typically family-dominated businesses in their second or subsequent generation of family-management. Nepotistic succession processes appear to be related to the failure to introduce adequate managerial expertise, and consequent failure to react to technological and market changes.

Failure to react to environmental change has manifested
itself in the relative sophistication of plant operated by smaller soft drinks manufacturers. Small, inefficient manufacturers tend to operate relatively aged plant which does not have the capacity for filling some forms of container associated with recent packaging innovations or, on occasions, large sized containers (irrespective of their packaging material).

Taken together, contextual variables such as the pattern of ownership and control (with its consequent implications for managerial expertise), the relative sophistication of plant, and product- and customer-mix, offer some explanation for the relatively inferior financial performance of small soft drinks manufacturers as compared to medium- and large-sized enterprises. However, the evidence presented does not distinguish processes underlying the adoption of strategies which have resulted in different levels of financial performance and company growth. It is to a detailed examination of managerial strategies, and their translation into modes of company behaviour, that attention is focussed in the next chapter.

REFERENCE NOTES

(1) See Chapter 4.1 for a full description of the model used as the basis for understanding small company dynamics.

(2) The difference between these two categories is that "retirement of principal(s)" refers to firms ceasing to trade when principal(s) come to the age of retirement and company assets are realised. "Voluntary liquidation" refers to cases of liquidation where the owner(s) are younger than the age of retirement.
Larkspur Soft Drinks Ltd. was formed by the merging of five previously independent soft drinks manufacturers in the Midlands of England.

Examples of this pattern in ownership trends are: Strathmore Springs Ltd. is held by Scottish & Universal Investments Ltd.; Crystal Springs Ltd. is held by Wittington Investments Ltd.; Panda Soft Drinks Ltd. is held by Hall and Woodhouse Ltd.; Solent Canners Ltd. were held by The British and Commonwealth Shipping Company Ltd. in 1976.

Accurate figures for the general rise in soft drinks prices are difficult to determine. Department of Industry and Department of Employment figures of retail prices combine soft drinks with tea, coffee, and cocoa - all of which are highly influenced by world commodity prices in addition to domestic inflationary pressures. Retail prices for this group of products (including soft drinks) doubled between 1974 and 1977 - see Table below:

<table>
<thead>
<tr>
<th>RETAIL PRICE INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Items</td>
</tr>
<tr>
<td>Food</td>
</tr>
<tr>
<td>Soft drinks, tea, coffee, cocoa</td>
</tr>
</tbody>
</table>

Source: "Department of Employment Gazette"

Since the food and all item indices did not rise to the same extent as the combined index for soft drinks, tea, coffee, and cocoa, it seems fair to suggest that the rise in soft drinks prices is more in line with the food index. It may be argued that an index in the region of 180-190 (January 1977) is a truer reflection of soft drinks price rises. This is equivalent to an average annual increase of 22%.

Much of the information regarding market and brand shares was obtained from the Economist Intelligence Unit, "Retail Business", Vol. 214, December 1975, pp. 23-44, Special Reports 1 & 2.

An extreme example of the credit terms given to major customers by market leaders is afforded by the terms given by A.G. Barr to motorway service stations for their canned soft drinks. Here a twelve month credit period is permitted - this far beyond the scope of small manufacturers.

Commission rates vary according to individual breweries and type of product supplied. S.R. Allen & Sons Ltd., Congleton, used to pay 15% of sales value on 7 fl.oz and 25 fl.oz products, and 4% sales value on 40 fl.oz products for goods supplied to tenanted public houses belonging to Allied Breweries and Marstons.

A.C. Nielson Co. Ltd., "The Nielson Researcher", (No. 1, 1978). This report compared trends in pack size for seven categories of food product (soft drinks not included). The report concluded that in all cases larger packs were more important in 1977 than they were in 1970, although the growth in demand for larger packs had slowed between 1973 and 1977.

This appears to be the result of informal collusion between Scottish manufacturers to restrict the diffusion of product innovations. The reasons for this managerial behaviour are discussed in Chapter 7.

An example of these terms of trade which was brought to the researcher's attention is that A.C. Barr & Co. Ltd. grant 12 months credit facilities to outlets such as motorway service stations. The low capital base of small manufacturers does not allow them to compete on these terms.

A.C. Nielson (1978) noted that 308 "buying points" controlled or influenced 77% of grocery sales in 1977 - this is a reduction in the number of "buying points" of previous years. (The number of "buying points" was calculated by summing the number of Co-operative Societies, the six Major Multiple head offices, 52 Other Multiple head offices and 44 Major Symbol Wholesalers).

Pre-mix filling units simply fill containers with a product that has been mixed already in a special unit which combines all product ingredients in the desired quantity.

Table 6.6 indicates that 16% of firms leaving NASDM between 1971 and 1977 ceased soft drinks manufacture, although they continued to trade in some other capacity. It was felt by Mr. C. Emmins (Director General, NASDM) that many of these firms continued in the soft drinks or related markets as wholesalers after ceasing to manufacture their own-label products. This trend of company develop-
The plasticshield bottle is a lightweight glass bottle which is covered in a polystyrene sleeve. The net effect is a non-returnable bottle, 6 oz. lighter than the conventional non-returnable bottle.

The "Merolite" pack was the first pack to allow carbonated drinks to be packed in a disposable plastic pouch pack. It was a by-product of ICI plastics technology. Special filling plants were required for this product, and the plant was leased from ICI.

The "Strongpac" Plastic Bottle is a 1½ litre polyester bottle which is designed to contain carbonated soft drinks and withstand high internal pressure, whilst using a minimum of material.

A previous study of an individual soft drinks company by the present author noted the following price advantage for consumers of the larger pack bottles:

<table>
<thead>
<tr>
<th>Size of Bottle</th>
<th>Price (Pre-VAT)</th>
<th>Price/Fl.oz.</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 fl.oz</td>
<td>£1.04/doz</td>
<td>.22p</td>
</tr>
<tr>
<td>25 fl.oz</td>
<td>£0.90/doz</td>
<td>.30p</td>
</tr>
<tr>
<td>7 fl.oz</td>
<td>£0.50/doz</td>
<td>.59p</td>
</tr>
</tbody>
</table>


In addition, Coca Cola report that using the 1½ litre plastishield bottle offers a saving of 5% against their glass litre bottle: "Soft Drinks Trade Journal", vol. 32, No. 6, June 1978, p.219.

Average net profitability (1976) for firms in the comprehensive sample is 23.3%. Average net profitability for the 40 firms constituting this sub-sample is 19.9%.

Soft drinks prices rose by an average of approximately 22% per annum during the period covered by this survey. See footnote 7 for an analysis of the retail price index.

The reasons for this non-production of large-sized containers are examined in greater detail in the following chapter.
(26) Information from Vickers-Dawson Ltd. This information refers to the smaller versions of the "Silver-stream" models which Vickers-Dawson developed during 1978 - the smallest size previously being available was a 45-head filler.

(27) The "Sparklet" syphon is a devise whereby the final consumer can turn ordinary tap water into carbonated soda water via the insertion of a carbon dioxide capsule into a specially designed syphon. More recently, this company has introduced a system by which the final consumer can produce his own soft drinks from a pack of concentrates and carbon dioxide fixtures.

(28) Subsequent to undertaking the fieldwork, J.N. Nichols (Vimto) Ltd. acquired Solent Canners in 1980.

(29) This refers to the "other carbonates" sector of the market.
CHAPTER 7

MANAGERIAL STRATEGIES AND SMALL COMPANY BEHAVIOUR
IN THE SOFT DRINKS INDUSTRY

7.1. INTRODUCTION

Analysis of structural change and company performance in the soft drinks industry has highlighted the relative decline and general financial inefficiency of smaller manufacturers. A number of contextual variables appear to be interrelated as determinants of relative performance levels. In particular, the pattern of ownership and control, product-mix and customer-mix appear to be related to company size, and in turn, influence relative financial performance. From this standpoint, decline of the small business sector would appear to be a function of financial inefficiency caused by the inability of small firms to penetrate growth sectors of the market. However, analysis of recent company closures reveals that the majority of firms sought voluntary liquidation prior to the retirement of principal(s), despite the fact that they were financially solvent (Table 6.6). Consequently, this chapter concerns itself with an analysis of factors underlying strategies adopted by small business managers in the soft drinks industry, and traces their translation into operational policies and modes of company behaviour.

Development intentions of managing directors in small soft drinks manufacturers may be divided into
three broad categories: strategies of growth; a desire for little or no growth (maintenance of the status quo); and, capital disinvestment. Examination of managerial decision-making in the case studies of Scottish soft drinks manufacturers highlights various modes of company behaviour and operating policies adopted to pursue these strategic aims.

7.2. STRATEGIES BASED ON DISINVESTMENT

Disinvestment is usually associated with the discontinuation of product lines, but in the present discussion it refers to a disinvestment of capital. Two forms of disinvestment appear to be important in the dynamics of small soft drinks manufacturers: disinvestment resulting in the realisation of company assets; and the cessation of manufacturing activities, but continued trading in another capacity.

A. REALISATION OF COMPANY ASSETS

18% of the questionnaire replies indicated that managers sought either the voluntary liquidation or sale of their firm as a long-term strategic objective.

**TABLE 7.1. The Intended Future Development of Small Soft Drinks Manufacturers**

<table>
<thead>
<tr>
<th>Description</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>The firm will be sold</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>The firm will be put into voluntary liquidation</td>
<td>2</td>
<td>18</td>
</tr>
<tr>
<td>Control will be passed to another member of the family</td>
<td>14</td>
<td>21</td>
</tr>
<tr>
<td>Control passed to someone unrelated to present M/D</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Little change in management and control</td>
<td>35</td>
<td>53</td>
</tr>
<tr>
<td>Other Development</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>66</td>
<td></td>
</tr>
</tbody>
</table>
Given the industry's low entry rate of new firms(1), this suggests that the small business sector is likely to continue its decline. Critical to understanding the dynamics of this decline is the fact that capital disinvestment is often a planned (and desired) objective, as opposed to being the result of financial failure.

It is possible to examine reasons for the planned realisation of company assets from two perspectives. The economic characteristics of firms may be examined to determine structural and contextual factors associated with firms in which the realisation of assets is sought. On the other hand, ownership and control in small soft drinks manufacturers are often synonymous (Table 6.35). This suggests that the personal motivation of owner-managers is likely to be an important influence on the desired direction of company development. Consequently, social processes of small business management are examined to determine their influence on strategy formation.

a) Economic Characteristics of Firms in Which the Realisation of Company Assets is Sought

All firms in which managing directors indicated their intention to realise company assets employed fewer than 25 people (Appendix C2, Table 10). Although firms employing less than 25 people tend to be less profitable than larger-sized manufacturers (Table 6.8),
the companies in which managing directors intended to realise company assets tended to have profitability levels lower than the average of firms employing fewer than 25 people - see Table 7.2. This suggests that managers who intend to realise company assets are associated with the least profitable firms in the industry.

**TABLE 7.2. Net Profitability of Firms Seeking to Realise Assets**

<table>
<thead>
<tr>
<th>NET PROFITABILITY</th>
<th>n</th>
<th>Mean</th>
<th>CV</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Firms employing 25 or fewer people</td>
<td>29</td>
<td>9.8</td>
<td>135.7</td>
</tr>
<tr>
<td>Firms seeking Realisation of Assets</td>
<td>10</td>
<td>6.3</td>
<td>181.9</td>
</tr>
</tbody>
</table>

**Source:** Table 6.8; disaggregated data.

**Notes:**
- n = number of observations
- CV = coefficient of variation.

Although firms in which managing directors intend to realise company assets appear to be less profitable than similar-sized firms with other strategic objectives, the high degree of variability of profitability rates is explained by three firms having net profitability rates higher than the all-industry average of 19.5\%(2). Consequently, although low profitability appears to be associated with management strategies for disinvestment, poor company performance of itself does not appear to be the determining factor in this decision.

Consistent with this generally low profitability of firms in which owners seek to realise company assets is a heavy dependence on "traditional" markets sectors.
Table 7.3 shows that all "disinvestment" firms are located in low growth or declining market sectors such as CTNs, independent grocers, public houses, or direct to final consumers. None of these firms supplied growth sectors such as supermarkets (and other multiples), cash and carry stores, or wholesalers.

**TABLE 7.3. Market Profile of Firms in which Owners Sought to Realise Company Assets**

<table>
<thead>
<tr>
<th>Market Sector</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a</td>
</tr>
<tr>
<td>Public House, Clubs (a)</td>
<td>40 80 10 50 10 50 20 65 85 0 10 80</td>
</tr>
<tr>
<td>CTNs, Independent Grocers (a)</td>
<td>40 10 40 25 70 45 60 5 10 50 40 15</td>
</tr>
<tr>
<td>Canteens, Cafes (a)</td>
<td>0 10 0 0 0 0 0 0 30 5 0 0 0</td>
</tr>
<tr>
<td>Direct to Final Consumer (a)</td>
<td>20 0 50 25 20 5 20 0 0 50 50 0</td>
</tr>
<tr>
<td>Supermarkets, Multiples (b)</td>
<td>0 0 0 0 0 0 0 0 0 0 0 0 0</td>
</tr>
<tr>
<td>C &amp; C, Wholesalers (b)</td>
<td>0 0 0 0 0 0 0 0 0 0 0 0 0</td>
</tr>
</tbody>
</table>

**Source:** Questionnaire.

**Notes:**
(a) Evidence presented in Chapter 7 shows these to be sectors of the market in which there is low growth or even decline.
(b) Growth sectors of the market.

A heavy dependence on declining or stationary market sectors appears to be related to the product range manufactured by these small firms. None of the "disinvestors" produce non-returnable products, and only 5 (of the 12 firms) produce soft drinks in litre or 40 fl.oz containers. Such a product- and customer-mix is consistent with the majority of managers perceiving the effects of competition, as opposed to production...
difficulties, financial problems, or Government legislation, as the chief problem faced by their company\(^3\). However, despite their influence on poor financial performance, these contextual factors do not appear to determine decisions to realise company assets. Several managers in small firms with similar product- and customer-mix do not envisage any change in company activities or ownership and control within the foreseeable future.

The conclusion to be reached from this analysis is that although contextual variables associated with poor financial performance are common to the majority of firms in which owners seek to realise company assets, taken by themselves they cannot explain the decision to disinvest. Rather, attention is turned to the characteristics of small business managers and the social process of small business management.

b) Managerial Characteristics and Social Processes of Management in Firms in which Owners Seek to Realise Company Assets

All company directors are related in 10 of the 12 firms in which managerial objectives centre on the realisation of company assets, whilst a majority of directors are related in the remaining two firms. This suggests that family ownership is an important characteristic of soft drinks manufacturers which seek disinvestment. In part, this may be due to the poor economic performance typical of small family firms (Table 6.36). In addition, concentrated control within
one family enables owner/managers to utilise the family business to satisfy personal objectives, which tend to have their basis in the manager's personal background and social evolution of the firm.

Intentions to sell their family business were expressed by two managers in the interview sample (Companies 6 and 13)\(^{(4)}\). These two firms differ quite markedly with respect to current performance ratios. Company 6 ran at a loss in the financial year 1976/77, whereas Company 13 traded with a net profitability of 19.5% (average for the industry)\(^{(5)}\) and an annual growth rate of 33.4% - a remarkably high growth rate for a firm employing 25 or fewer people\(^{(6)}\). Yet despite these differences in company performance levels, the managers share several experiences and perceptions within a common theme which provide insights into the reasons for seeking to realise company assets.

Their personal objectives to realise company assets, as opposed to maintain family control into the next generation of management, appear to be based on two factors: lack of loyalty to the concept of maintained family control, and perceived inability of the firm to survive in the long-term due to increased environmental illiberality.

Lack of loyalty to the concept of maintained family control may be traced to the conditions under which the two managers entered their respective family
businesses. Both managers were asked to run their respective firms upon the death of an uncle or cousin who previously ran the firm, and yet who had no heirs. The manager of Company 6 previously worked for Coca Cola Inc. in Singapore. When his uncle died he was asked to take over control of the family business. Discussion of the reasons for accepting his role within the family business suggests that feelings of family loyalty played only a minor part in his decision to return to Scotland. Of greater significance appeared to be concern about the standard of education his children would receive in Singapore. The manager of Company 13, on the other hand, was asked to run the family business upon the death of his cousin. Acceptance of this role was said to be under certain pressure from family-members to continue the tradition of family stewardship.

In both cases, lack of loyalty to the concept of maintained family control appears to be related to the fact that neither manager was groomed specifically to take control of the business. This situation may be contrasted with the case histories of managers in Companies 2, 3 and 5, all of whom appeared to be groomed for their future role from an early age. All these managers reported having been introduced to the business from an early age. The managing director of Company 3 said:

"My brother and I used to come to the factory with our father when he worked at weekends. He used to show us how the machines worked,
and let us help some of the workers. I guess it was only natural that we all entered the business."

The managers of Companies 6 and 13, on the other hand, had little or no introduction to their firms until they took their present positions, management previously being associated with another branch of the family.

Decisions to realise company assets also appeared to be related to the control pattern of these firms. In both Company 6 and 13, a majority of shares are held by the managing director (or jointly with his wife). Indeed, the manager of Company 13 had acquired this position through an issue of company shares to which other family members did not subscribe. The result of this action was to place control in the hands of the manager and his wife. This was considered to be important since it allowed the manager to dispose of the company as he wished rather than direct company affairs in line with the wishes of the extended family (other shareholders).

Personal objectives for the managers of Companies 6 and 13 appear to be centred upon ensuring that their children do not have to seek employment in the family business. Consistent with this objective is the emphasis placed on the virtues of receiving a good standard of education and acquiring professional qualifications(7). This factor seems to be related to the decision of the manager of Company 6 to return to
Scotland. Similarly, successful stewardship of the family business has allowed the manager of Company 13 to provide private education for his sons. This was considered desirable since it was perceived to be the most effective means of ensuring that his sons were able to gain professional qualifications and employment outside the family business.

This perception that their children's interests are best served by being able to seek a profession outside the family business appears to be based on fears that there is no long-term future for their company in the soft drinks industry. The manager of Company 6 said:

"In ten years or so, there will only be about six soft drinks manufacturers in the whole of Scotland. There is no future for an outfit like ours."

A similar scenario is shared by the owner-manager of Company 13. He appeared to be pessimistic about his firm's long-term viability, despite his firm's rapid growth of sales in recent years. He explained that recent expansion is mainly due to brewery strikes in the licenced trade. He had been able to take advantage of this situation by selling other brands of beer to tied houses affected by the strikes. He suggested that such situations did not form the basis of long-term prosperity for his company. The owner-managers of Companies 6 and 13 perceived their traditional markets to be in decline, yet found it extremely difficult to penetrate growth sectors, such as the multiples.
The perceived threat posed by changing market and technological environments is further emphasised by attitudes towards the likely impact of product innovations. In discussions of the likely impact of the merolite pack, the majority of managers believed that traditional markets such as CTNs and independent grocers would be largely unaffected by this particular product. The attitude of Company 6's manager was markedly different. Referring to the comments of other managers who suggested little impact for the merolite pack, he said:

"Anyone saying that must be an idiot. Of course it will catch on. The only problem is I haven't the space for a plant to produce these products; so I have to buy them in."

Subsequent market analysis suggests that the merolite pack has not achieved market penetration to any degree. The important characteristic to come out of this analysis is that almost all product innovations appeared as a threat to manager of Company 6. This suggests a perception of high levels of environmental illiberality for the products of Company 6.

With increased threat to company markets, the managers of Companies 6 and 13 appeared to believe that continued family stewardship would not provide a satisfactory standard of living for future generations of family members. The manager of Company 13 said:

"If I can make sure that my children obtain a profession outside this business, then I'll sell the firm when I'm 60. I'll feel I've done my duty as a father."
In effect, disinvestment decisions appear to be determined by perceived environmental illiberality as a threat to long-term financial solvency, and a lack of commitment to the idea of continued family involvement in the firm. Managers seem to believe that personal and family interests are best served through a realisation of company assets, with family heirs seeking suitable employment (8) outside the family business.

Decisions to realise company assets usually take the form of intentions to sell the business when managers reach the age at which they wish to retire. Evidence from recent instances of company demise suggests that the majority of firms succumb to voluntary liquidation as opposed to being sold as a going concern (Table 6.6). Financial analysis of firms in the present sample suggests that few have the assets or goodwill which would prove attractive to a potential buyer. This suggests that future "realisation of assets" will be associated with voluntary liquidation and the sale of land and property belonging to the firm.

B. CESSATION OF MANUFACTURING ACTIVITIES, BUT CONTINUED TRADING IN SOME OTHER CAPACITY

Environmental illiberality for small drinks manufacturers appears to emanate from recent market and technological changes within the industry. In particular, small firms do not have the financial resources to adapt quickly to changes associated with
new packaging technologies. One strategy evolved to "combat" this economic disadvantage with regard to the adoption of product innovations has been to cease manufacturing activities, but continue trading in the capacity of a wholesaler of soft drinks (and allied products). An example of such a policy is provided by the trading agreement between J.H. Ferguson & Sons of Plymouth and Britvic Ltd., whereby the former ceased to manufacture its own products, and started to wholesale Britvic products to its customers (9). The agreement was said to enable Fergusons to benefit from modern trends in computer accounting, selling and production techniques and yet still remain a private company. The responsibility for adapting to market and technological change is borne by Britvic in this case.

None of the managing directors in the interview sample classed this strategy as a desired outcome, although the managing directors of Companies 6 and 13 suggested that the strategy may be necessary because of the high cost of plant replacement. Similar comments were also received as additional information in two of the questionnaire replies from soft drinks manufacturers in England. This suggests that the cessation of manufacturing activities, but continued trading as a wholesaler in the drinks industries, may be an important strategy in the light of changing packaging technologies and market trends within the soft drinks
industry.

The extent to which such agreements are operating throughout the industry is by no means clear, although a large number of small manufacturers wholesale a range of branded goods as part of their overall package to customers.

TABLE 7.4. The Proportion of Small Soft Drinks Manufacturers Which Wholesale Branded Products in Addition to Manufacturing their Own-Label Products

<table>
<thead>
<tr>
<th>TYPE OF PRODUCT</th>
<th>% FIRMS IN SAMPLE UNDER-TAKING WHOLESALING ACTIVITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 fl.oz/Litre Products</td>
<td>3</td>
</tr>
<tr>
<td>7 fl.oz Products</td>
<td>22</td>
</tr>
<tr>
<td>Non-returnable Products (Glass)</td>
<td>27</td>
</tr>
<tr>
<td>Canned Soft Drinks</td>
<td>42</td>
</tr>
<tr>
<td>Squashes</td>
<td>22</td>
</tr>
<tr>
<td>Fruit Juices/Mixers</td>
<td>60</td>
</tr>
<tr>
<td>Beers, Wines, Spirits, Cider</td>
<td>62</td>
</tr>
</tbody>
</table>

No. Firms in Sample = 73

Source: Questionnaire replies, interviews in Scottish Survey.

It can be seen from Table 7.4 that some 60% of small soft drinks manufacturers undertake wholesaling activities for fruit juices, mixer drinks, ciders and beers. This range of products is consistent with such firms supplying the public house and off-licence market sectors.

What is not clear from this evidence is the extent to which manufacturing activities have ceased, to be replaced by wholesaling activities. Table 6.6 noted that 16% of NASDM membership loss between 1970
and 1976 was due to firms ceasing manufacturing activities, but continued trading in some other capacity. Mr. C. Emmins, Director General, NASDM, believed that the majority of these firms continued to trade as wholesalers of soft drinks and allied products. Furthermore, data from a recent 'Business Monitor' report on wholesalers and dealers (SD.026, 1979), indicates that in 1974, there were some 1384 firms engaged in the wholesaling of food and other drinks (10). Unfortunately, the Census data is not sufficiently discriminating in its ability to identify firms which were solely wholesalers, or firms in which wholesaling was undertaken in addition to manufacturing activities. However, it can be seen from Table 7.5 that the majority of wholesalers are relatively small, and that as a crude generalisation, smaller firms operate on lower gross profit margins.

TABLE 7.5. The Number of Wholesalers of Drinks Products by Company Size, and the Gross Profit Margins of these Size-Categories

<table>
<thead>
<tr>
<th>COMPANY SIZE</th>
<th>ALCOHOLIC DRINKS (Incl. Bottling)</th>
<th>OTHER FOOD AND DRINK</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. Firms</td>
<td>Gross Margin(a)</td>
</tr>
<tr>
<td>less than 50</td>
<td>514</td>
<td>-2</td>
</tr>
<tr>
<td>50-100</td>
<td>146</td>
<td>23</td>
</tr>
<tr>
<td>100-500</td>
<td>409</td>
<td>15</td>
</tr>
<tr>
<td>500-1000</td>
<td>116</td>
<td>13</td>
</tr>
<tr>
<td>1000-5000</td>
<td>149</td>
<td>21</td>
</tr>
<tr>
<td>5000-10,000</td>
<td>24</td>
<td>5</td>
</tr>
<tr>
<td>10,000 +</td>
<td>26</td>
<td>45</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1384</td>
<td>30</td>
</tr>
</tbody>
</table>

Source: Business Monitor SD.026 (London: HMSO, 1979) Table 2.

Note: (a) Gross margin as a percentage of own account turnover.
Information regarding wholesalers in the UK economy is neither sufficiently detailed nor timely to produce accurate analysis of distribution and market trends in diverse market sectors. Nevertheless, the information presented indicates that wholesalers of drinks products are more numerous than soft drinks manufacturers\(^{(11)}\). Furthermore, the increased environmental illiberality faced by smaller manufacturers with respect to adapting to technological changes suggests that this course of action will be taken by an increasingly large number of small manufacturers.

The chief advantage of this strategic policy is that it overcomes the need for relatively high capital outlays associated with re-equipping to accommodate new forms of packaging and other technological advances. This is particularly relevant to the smaller firms which have been shown to have a low capital base from which to finance expansion or changes in production process. However, it is not clear from the data whether inefficient manufacturers are likely to be any more successful when trading as wholesalers. Reservations must be expressed on this point, particularly as a large part of the inefficiency in small manufacturers can be traced to a lack of managerial expertise. It is difficult to see how this factor can be mitigated simply through the cessation of manufacturing activities. This suggests that such a strategy will be successful only where the firm has an efficient distribution system and is servicing
profitable or growth sectors of the market. Otherwise, this apparent "soft option" for inefficient small manufacturers does not seem to provide a basis for long-term survival, since it does not overcome some of the central problems associated with small company decline, namely, low levels of managerial expertise and a dependence upon declining market sectors.

7.3. STRATEGIES ASSOCIATED WITH COMPANY GROWTH

Company growth policies may be divided into two major classes: diversification and expansion. The former refers to the development of products involving design and production technologies and, usually, types of market that are new to the company. Expansion, on the other hand, refers to increased market share within markets already supplied by a particular company. None of the firms in the interview sample planned to diversify into new markets, although the management of Company 9 had diversified into the soft drinks industry — previously being involved in the transport industry. Accordingly, discussion of growth strategies and their translation into company and market behaviour is limited to behaviour associated with company expansion.

A. MARKET BEHAVIOUR ASSOCIATED WITH COMPANY EXPANSION

The analysis of managerial intentions for future development suggests that although the desirability of growth is generally accepted, few managers appear to have initiated policies designed to achieve company
growth. The exceptions to this rule are Companies 2, 8, 9 and 12.

With the exception of Company 8, these firms intended to achieve company expansion through the adoption of products associated with new packaging technologies or products associated with market sectors new to the company in question. However, none of these firms can be said to be truly innovative in the sense of expanding its product range through its own research and development efforts. Instead, expansion policies appear to be based on early adoption of product innovations imported from the soft drinks supplies industries.

Companies 9 and 12 planned to start production of non-returnable products. Company 9 was actively engaged in plans to produce drinks in 1½ litre lin-pac plastic bottles. The managing director hoped that this would enable his company to break into the cash and carry market sector. This he considered to be necessary because an increasing number of small CTNs and independent grocers obtain their supplies from cash and carry outlets. Company 12, on the other hand, intended to produce products in litre non-returnable glass containers. The managing director indicated that provisional agreement had been made for these products to be sold through the ASDA chain of superstores. However, neither of these products was new to the Scottish market. Barrs and Corona (a subsidiary of the Beecham Group) produced
non-returnable glass products through their plastic-shield range of drinks, whereas both Coca Cola and Pepsi Cola pioneered the introduction of the Lin-pac plastic bottle. Nevertheless, Companies 9 and 12 were the first small-medium-sized manufacturers to adopt products associated with recent packaging innovations.

Expansion in Company 2 was associated with the production of its own-brand fruit juices. The company had previously wholesaled nationally branded drinks such as Britvic and Schweppes fruit juices. By producing their own fruit juices, the managing director hoped to be able to increase market share in the licenced trade market sector. Through manufacturing its own fruit juices, Company 2 now bottles a full range of products required by the licenced trade. Company plans envisaged being able to undercut the price of nationally-branded fruit juices as a means of securing additional outlets for their full range of drinks products.

Market behaviour designed to expand market share through the adoption of new product lines appeared to be consistent with relatively high levels of financial performance. Companies 2, 9 and 12 are above average in terms of net profitability among Scottish soft drinks manufacturers, while Companies 2 and 9 are the second and third-fastest growing firms in the interview sample. In each case, continued growth was planned to take advantage of changing trends related to the type of
outlet and container in which soft drinks are purchased.

In contrast to the other firms seeking market expansion, Company 8 did not intend to adopt a new range of drinks products. In this case, expansion appeared to be based on offering a fuller range of services to customers. Although totally dependent on CTN, independent grocer, and licenced trade market sectors, the firm has achieved an above-average growth rate for the industry. Major tools in their expansion policy have concerned painting shop exteriors with both the customer's name and Company 8's logogram, and the provision of a range of sales-point services such as stands for soft drinks display. Use of these sales-service techniques has enabled Company 8 to increase its market share within the geographical limits of its market.

B. MANAGERIAL CHARACTERISTICS AND COMPANY EXPANSION

The case histories of Companies 2, 8, 9 and 12 suggest distinct situations in which company expansion is initiated by small business managers. The history of Company 12 traces the revival of a small firm previously in decline. Companies 8 and 9, on the other hand, provide examples where growth and revival are associated with a change of ownership. Finally, Company 2 provides an example of a family business which has continued to grow through successive generations of family ownership. These cases are examined now in greater detail to highlight some of the social processes associated with company growth in the soft drinks industry.
Small Company Revival and Company Expansion

Company 12 is a third generation family business in which a majority of shares are held by the managing director. Management motivations appeared to reflect the managing director's desire to increase his personal influence in Employers Associations such as SASDM and the Scottish Association of Beer and Cider Bottlers at the time of the fieldwork. Consequently, company expansion appears to be perceived as a means of increasing personal influence through an increased importance of Company 12 within the Scottish soft drinks markets.

The catalyst to present expansion policies may be traced to the transfer of control to the present managing director in 1964. He joined the family business upon leaving school at the age of 14, with no formal qualifications. His training in the business consisted of familiarisation with each of the company's functions. However, before this "on the job" training was completed, his father died. Professional advice received at that time was to sell the business, but this was seen as a threat to his desired life-style.

"I was about to start my time as a salesman when my father died ... At that time the firm's accountants advised me to sell the business. They said there was little future for a small firm like ours. To be honest, things were in a bit of a mess. We were located in three small buildings scattered about the town ... But I had no qualifications, and my experience was limited to the shop floor. What else could I do? I knew I could run the business; I just had to show them (the accountants and other family-members who were minority shareholders)."  
(Managing Director, Company 12)
In sociological terms, the managing director appeared to be "marginal" insofar as the role in society he desired for himself was threatened by his accountant's advice. Managerial action embarked upon to overcome this marginality included the replacement of ageing family-members in positions of responsibility by technically competent personnel. A trained accountant (now a company director) was introduced to oversee the financial management of strategies adopted to expand company markets. In addition, a salesman who previously worked for a major Scottish soft drinks manufacturer was introduced to help open new markets for the firm's products. More modern plant was purchased to facilitate the introduction of new products, with a pre-mix production system replacing the older post-mix system. This facility permitted the undertaking of contract bottling. Today the company bottles both beer and ciders under licence from national manufacturers who do not have their own bottling capacity in Scotland. Growth has continued to the point where Company 12 is now the fourth largest bottler in Scotland, and a prominent member of SASDM and the Scottish Association of Beer and Cider Bottlers.

This brief resume of Company 12's case history provides several important insights into the processes of growth and rejuvenation in small firms. Effective company expansion appears to have been made possible through the introduction of technically competent
individuals as replacements for ageing family-members in positions of responsibility. This action seems to have been facilitated by unified ownership and control when the managing director succeeded his father. Firms with control divided among several family members do not appear to be able to rid themselves of rigidities created by family-domination of company stewardship. For example, in Companies 5 and 7, ownership is shared by several family members who work in their firms. In these companies, the directors appeared to be unwilling to introduce non-family personnel into the management structure, particularly as such appointments would necessitate relinquishing control over some areas of company policy. Consequently, although the managing directors of these firms profess a desirability of company growth (against a background of stagnating or declining markets), they appear to be unable to initiate company behaviour consistent with market expansion. Evidence from Company 12 suggests that the introduction of technically competent managerial staff is critical to small company rejuvenation, and that unified ownership and control facilitates the initiation of expansion policies.

ii) Change of Ownership and Company Expansion

The process of rejuvenation in Company 12 appears to be related to the transfer of ownership and control to the present generation of family management. In Companies 8 and 9, rejuvenation seems to be
related to a change in ownership and control. In each case, the managing director indicated that their business was in a state of relative stagnation when they assumed control. Prior to present managing directors assuming control, management had been family-dominated. With the change of ownership and control, technically competent individuals were introduced into the management structure. In this respect, managerial characteristics are similar to the rejuvenation witnessed in Company 12. Again, the incorporation of managerial expertise was facilitated by unified ownership and control.

The cases of Companies 8 and 9 differ from Company 12 with respect to the catalyst for seeking company expansion. For the manager of Company 9, diversification into the soft drinks industry was seen as an opportunity to increase financial security. He had become acquainted with the previous owner of Company 9 through meetings of the Freight Transport Association. The previous owner/manager was approaching retirement age and had indicated that he was interested in selling his company. The present managing director had previous contact with the soft drinks industry through transporting drinks for various bottlers, and believed that there was sufficient scope to achieve a good return on his investment.

"I remember reading somewhere that the soft drinks industry was quite profitable. The opportunity to buy into the industry looked quite attractive. Since our family already ran a thriving transport business we were
able to arrange finance to purchase the company. At the time, it seemed a good buy."

However, the first two years of trading for the new owners proved to be difficult, particularly as the company was heavily dependent on shrinking market sectors. It was at this point that the manager realised he had to seek new markets for his products. The policy appears to have been successful in providing the owners with a relatively high financial return. In 1977, average directors' remuneration (including management charges) were £11,000, compared to an industry average of £5708 per director, and £6746 per director among small firms employing between 26 and 50 people (Table 6.14).

For the manager of Company 8, buying control of the firm was essentially backward integration, his previous business interests being associated with wholesaling a range of drinks products to the licenced trade and grocery sectors. The desire for backward integration into soft drinks manufacturing appeared to be related to his moral dislike of selling alcoholic drinks.

"I could not justify selling drinks any longer. You just have to look around you to see the damage caused by drink. I don't want anything to do with selling alcohol."

The opportunity to buy Company 8 enabled him to cease trading in alcoholic drinks, although his son remains in control of the wholesaling business (which includes alcoholic drinks). Subsequent to the change of owner-
ship, Company 8 has ceased wholesaling beers and spirits, and expanded its market for soft drinks in the CTN and grocery sectors. Social processes underlying expansion policies appear to relate to managerial desires to pass on a successful business to the next generation of family management. Effectively, the wholesaling business (currently run by his son) and manufacturing activities will be merged into one company when his son succeeds the present managing director.

iii) **Successful Family Businesses and Company Expansion**

Both Companies 2 and 12 have maintained a pattern of family ownership, despite recent growth and investment in new plant to facilitate the introduction of new products. Successful stewardship in both cases appears to be consistent with the incorporation of higher levels of managerial expertise through technically qualified individuals (irrespective of their familial relationship to company owners). However, the narrowness of control in these firms suggests a high degree of congruency between personal goals of the managing director and the mode of company behaviour.

Managerial motivations stressing expansion in Company 2 seemed to be related to managerial desires to increase market power.

"I've been associated with the firm since I was a young lad. I used to work here each summer when I was at school and university. After I passed my accountancy exams I returned to the business, and was determined to build the firm to rival companies like Barrs. I
want our business to be known in this industry."
(Managing Director, Company 2)

Reasons for his desire for expansion seem to be related to pride in the family business which has been fostered from an early age. His ability to satisfy personal goals through company expansion appears to be facilitated by the narrowness of ownership and control. Other relatively large family firms such as Companies 1 and 3 have a more widespread pattern of family ownership which has tended to restrict opportunities for expansion. Here, the need to maintain family control tends to preclude the use of external sources of finance for investments necessary in the production of new products. Finance for the replacement of plant and other assets in Companies 1 and 3 tend to be ploughed-back profits, term loans from clearing banks, or loans from company directors. The amount of finance from these sources appears to restrict the ability of firms to follow more aggressive expansion policies. They have tended to follow market leaders in the adoption of new products instead. Company 2, on the other hand, has tended to use more widespread sources of finance, including leasing and debentures. As a result, it appears to have been able to adapt more quickly to environmental changes and market trends.

Although social marginality appears to be an important feature explaining the initiation of expansion policies in Company 2, it does not appear to explain continued policies of seeking growth. Managerial motivations based on a determination to prove personal capabilities
to family members and professional advisers appear to have been replaced by a desire to prove his personal abilities to his fellow managers. Effectively, the focus of managerial goals has transferred from his immediate social group (family and friends) to areas of wider society (fellow managers in the soft drinks and allied industries). Consistent throughout this process seems to be a desire to prove his abilities as a good manager. Consequently, this process appears to determine the desire to maintain company expansion through the introduction of new products and penetration of new markets.

7.4. COMPANY BEHAVIOUR ASSOCIATED WITH STRATEGIES OF LITTLE OR NO GROWTH

Evidence presented in the previous section suggests that as a broad generalisation, managerial attitudes towards the desirability of company growth tend to be superficial rather than substantive. Whilst managers may accept the efficacy of company growth as a broad company objective, few small soft drinks manufacturers are associated with market behaviour designed to expand company markets. Instead, market behaviour tends to be associated with defending markets from the impact of environmental change and competitive action of market leaders.

This defensive mode of company behaviour is illustrated best by the collusive action designed to
restrict demand for large-sized and non-returnable products. Analysis of market trends in the previous chapter noted the increased market penetration of these types of product; yet, with the exception of Companies 9 and 12, none of the small Scottish soft drinks manufacturers bottled (or planned to bottle) 40 fl. oz, litre, or non-returnable products. Discussion of the reasons for non-production of drinks in these containers was typified by the response of a manager of Company 5:

"There's no demand for products like that in our markets. Our customers don't like the larger bottles, and they make less money by selling non-returnable bottles."

Since this manufacturer is concentrated in the CTN and grocery sectors, this response seemed at variance with trends witnessed throughout the remainder of the UK soft drinks market. However, during an informal discussion with the manager of Company 6, it was intimated that a "gentleman's agreement" existed between SASDM members to the effect that large-sized products would not be offered to the licenced trade, and as far as possible, withheld from the grocery and CTN sectors. Such an agreement was not possible for the multiples sector because of the purchasing policy of grocery chains and their demand for large-sized containers.

Collusive action to withhold particular products from certain market sectors was considered necessary partly to maintain profit margins\(^{(13)}\), and also because several small manufacturers did not have the capacity to fill large-sized products\(^{(14)}\). In addition, this
defensive action appears to be related to the low profitability of small manufacturers and relatively high capital costs associated with introducing large-sized products. Even where existing plant has the physical capacity to fill litre or 40 fl.oz containers, new machine parts, cases to pack the products, and stocks of new bottles are necessary before production may commence. Given the low capital base of these smaller firms, collusive action may be seen as an attempt to mitigate the need for investment associated with the introduction of new product ranges.

Although collusive action was said to be based on agreement among SASDM members, few managers among the smaller-sized group of firms played an active role in SASDM affairs. Such functions tended to be associated with managers of medium-sized soft drinks manufacturers (such as Companies 1, 2, 3 and 12). This suggests that although agreement to restrict the introduction of large-sized products is associated mainly with small firms, it has the acceptance of medium and large-sized Scottish manufacturers. Furthermore, the evidence suggests that collusive action between local manufacturers includes the timing of price increases in addition to policies regarding the introduction of new products.

The long-term impact of such collusive behaviour does not appear to be effective in halting the diffusion of technological change. As we have seen, Companies 9
and 12 were already in the process of introducing large-sized, non-returnable products to their markets. In addition, subsequent market analysis has revealed that two firms not included in the interview sample have introduced large-sized products since 1977. T.J. Plummer of Burntisland have introduced a returnable litre product for its market in the CTN and grocery sectors; whilst Joseph Dunn (Bottlers) Ltd. and Company B have recently introduced drinks packed in 1½ litre lin-pac plastic bottles into their product range. This suggests that collective action merely postpones the processes inducing environmental illiberality for small manufacturers. Penetration of traditional markets by market leaders with large-sized products, together with reduced soft drinks sales since the "heatwave" summer of 1976, has resulted in several firms adopting non-returnable and large-sized products to protect market shares. Such "reactive" market behaviour will tend to further weaken the market position of small manufacturers which are unwilling or unable to adapt to these environmental changes.

The extent to which such collusive action exists in the industry as a whole is by no means clear, although Scotland is the only region in which there appears to have been resistance to the introduction of large-sized containers. Nevertheless, collusive action to restrict new products focuses attention on the role played by Employers and Trade Associations in the diffusion of
innovatory products and processes. Evidence from the soft drinks industry suggests that where technological change threatens the future viability of members, Employers Associations may facilitate attempts to restrict the diffusion of innovations.

An alternative factor influencing the desire for little or no growth appears to be the need to maintain family control. This factor is evident in Companies 1, 3 and 11. Each company employs more than 50 people, but has retained a pattern of family ownership. In addition, all managerial positions in Company 3 are filled by members of the controlling family. Managerial strategies and subsequent company behaviour appear to be influenced by a desire for self-sufficiency, rather than the introduction of outside sources of capital to finance plant investment necessary for the production of recent product innovations. In firms 1, 3 and 11, plant replacement and other capital investments are usually financed from ploughed-back profits or through the use of term loans from the clearing banks.

"As far as possible, I don't want to owe money to the banks or anyone else. The firm usually has money on deposit at the bank, and we seldom need to use our overdraft facilities. However, if we do need to borrow money, the bank manager is usually very sympathetic to our cause."

(Managing Director, Company 3)

Market behaviour associated with these policies appear to be concerned with maintaining market share rather than seeking company expansion. However, the long-term impact of this behaviour is not clear, although
subsequent market analysis suggests that none of these firms has yet introduced products consistent with market trends.

7.5. FACTORS INFLUENCING THE DESIRABILITY OF FAMILY-SUCCESSION OF OWNERSHIP AND CONTROL

Although the desire to pass control into the next generation of family management is not a strategic aim in itself, evidence from the soft drinks industry suggests that this managerial motivation is related to the market behaviour of firms.

Commenting on the motivation of small businessmen, Tyzack (1967) stated that

"... the desire to leave something for the boy is one of the greatest driving forces in the western world." (p.267)

Although this may overstate the relative importance of such motivations, maintained family control is an important process explaining the direction of small company development. Stanworth and Curran (1973) note that such motivations tend to gain prominence as managers approach retirement age. Indeed, managers in four of the case studies and 21% of questionnaire respondents indicated that family-management will be maintained by the next generation of family-members.

Several characteristics distinguish firms in which family succession of control is sought from firms in which disinvestment policies are planned. For the most part, firms in which it is intended to pass control into
the next generation of family-management are of average profitability (Appendix C1, Table 11), employ more than 25 people (Appendix C2, Table 10), and tend to have a heavy involvement of family members in the day-to-day management of company affairs (Appendix C4, Table 6). However, by themselves, these company characteristics provide few insights into the dynamics of management succession in small businesses. To provide such insights, attention is focussed on the case study sample.

Evidence from the case studies suggests two distinct conditions associated with family transfer of control. In the larger, more profitable, family firms, family heirs appeared to be actively encouraged to enter their family business. The case histories of Companies 2, 3, 5, 7 and 12 have noted that present managing directors were introduced to their family businesses at an early age, with the result that employment in the family business was seen as a natural course of action. Evidence from the career history of the managing director of Company 2 suggests that even when family heirs acquire professional qualifications, employment in the family business is seen as a natural progression once they have gained their qualifications. In this case, the present managing director rejoined his family business after gaining accountancy qualifications while "articled" to a major accountancy firm. This suggests that under conditions of relatively successful family stewardship, owners not surprisingly intend to pass control into the
next generation of family management.

Family succession in smaller, less profitable firms does not appear to be encouraged to the same extent. Evidence presented earlier in the chapter noted that owner/managers appeared to encourage family heirs to seek employment outside the family business in order to facilitate the realisation of company assets. Nevertheless, there are examples of family succession of control among less profitable manufacturers. At the time of undertaking fieldwork, the process of transferring control to one of his sons had been started by the managing director of Company 5, despite the company being less profitable than average and heavily dependent upon CTN and independent grocery sectors (16). Reasons for transferring control to the next generation of family-management appear to be related to the lack of academic success achieved by family heirs, and consequent implications for achieving career success outside the family business. Manager 5's younger son had embarked upon a legal career after going to university, whereas his elder son did not achieve the same academic success, and joined the family business on leaving school. Similar experiences are shared by the managers of Companies 7 and 12. The two brothers who run Company 7 suggested that no other form of employment had been considered, particularly as they left school without formal qualifications. It seems that the common theme among these three cases is the manager's relatively poor
academic record, and the perceived problems this presented for acquiring "suitable" employment outside the family business. In these circumstances, attitudes towards family succession of control appeared to be founded on parental belief that maintained family control is a "next-best" course of action.

In summary, evidence from the soft drinks industry suggests that the desire to pass control into the next generation of family management is determined by perceptions of the firm's ability to provide security for family members in the future. Where the environment is illiberal, managerial motivations tend to stress the importance of acquiring professional qualifications as a means of securing employment outside the family business. When these goals are frustrated, then management of the family business is seen as a "next-best" alternative. On the other hand, where a small firm has relatively secure markets and "acceptable" levels of profitability, the desire to retain family control will tend to become prominent as managers approach retirement age.

7.6. SUMMARY AND CONCLUSIONS

Starbuck (1971) suggested that specific managerial actions are necessary for company growth to take place.

"Growth is not spontaneous ... but ... is necessarily dependent upon some decisions and actions which follow them." (pp.13-14)

The modes of company behaviour observed in the soft drinks industry reflect management strategies for
company development, and operating policies designed to achieve these strategic objectives. The interrelationship of these endogenous influences on Company growth may be represented as in Figure 7.1 overleaf.

Our model suggests that management strategy is modified by the degree of family-domination in both executive-control and ownership-control of small soft drinks manufacturers. The relationships suggested by this process may be summarised as in Table 7.6 on p.205.

Family-dominated firms, in the sense that managerial decision-making is the sole perogative of family-members, appears to be characterised by significant inertia with respect to the adoption of innovatory products and processes. Market behaviour may be typified as being "defensive" and designed to reduce the impact of technological change through collusive action to restrict the introduction of products associated with recent packaging innovations. Reasons for adopting defensive or collusive market behaviour may be traced to several sources.

Managerial motivation in inheritor-run family businesses appears to be concerned with maintaining a comfortable routine and standard of living to which managers have become accustomed, rather than seeking company expansion through the adoption of growth policies. Alternatively, where a number of family members share managerial decision-making, the need to maintain family
FIGURE 7.1. The Relationship Between Managerial Strategies, Company Behaviour and Performance of Small Soft Drinks Manufacturers

- **MANAGEMENT STRATEGY**
  - Diversification;
  - Expansion;
  - Little or no growth;
  - Disinvestment.

- **MODIFIED BY**

- **COMPANY BEHAVIOUR**
  - Innovative;
  - Adaptive;
  - Defensive/Collusive

- **PATTERN OF OWNERSHIP & CONTROL**
  - Extent of family domination of ownership and/or control

- **TYPE OF PLANT**
  - Age;
  - Ability to fill large-size or non-returnable bottles

- **COMPANY PERFORMANCE**
  - Growth rate;
  - Net profitability

- **PRODUCT-MIX**

- **CUSTOMER-MIX**

---

*Suggested Direction of Influence*

*Feedback Process*
### TABLE 7.6. Company Characteristics Associated with Different Managerial Strategies and Company Behaviour among Small Soft Drinks Manufacturers

<table>
<thead>
<tr>
<th>General Strategy</th>
<th>Growth</th>
<th>Little or no growth/change</th>
<th>Disinvestment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Market Strategy</strong></td>
<td>Expansion</td>
<td>Maintenance of the status quo</td>
<td>1. Realisation of company assets through sale of firm or voluntary liquidation.</td>
</tr>
<tr>
<td><strong>Market Behaviour</strong></td>
<td>Adaptive</td>
<td>Defensive/Collusive</td>
<td>1. Realisation of company assets through sale of firm or voluntary liquidation.</td>
</tr>
<tr>
<td></td>
<td>Active search for new products and markets. Innovations externally generated.</td>
<td>Attempts to slow the diffusion of new packaging technologies through collusive agreement to withhold such products. Reactive behaviour witnessed as firms adopt new products when markets threatened by market leaders.</td>
<td>1. Realisation of company assets through sale of firm or voluntary liquidation.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2. Cessation of manufacturing activities, but continued trading in some other capacity.</td>
</tr>
</tbody>
</table>

/.../
<table>
<thead>
<tr>
<th>GENERAL STRATEGY</th>
<th>Growth</th>
<th>Little or no growth/change</th>
<th>Disinvestment</th>
</tr>
</thead>
<tbody>
<tr>
<td>MANAGERIAL MOTIVATION</td>
<td>Managerial excellence &amp; desire to prove personal abilities; Financial security; Family succession of management &amp; control (a)</td>
<td>Financial security &amp; desirability of maintaining comfortable routine; Maintenance of family control.</td>
<td>Financial security for self &amp; family; Provide means for family heirs to seek employment outside family business - this usually associated with gaining professional qualifications (b); Maintenance of family control (c).</td>
</tr>
<tr>
<td>OWNERSHIP &amp; CONTROL</td>
<td>Usually family-owned. Management and executive-control by technically competent personnel, not necessarily related to owners.</td>
<td>Usually family-owned. Management and executive-control usually by family members. Nepotistic nature of succession tends to be associated with low managerial expertise.</td>
<td>Usually unified ownership and control. Where executive-control shared by a number of family members, cessation of manufacturing is the likely strategy to be adopted.</td>
</tr>
<tr>
<td>MANAGERIAL PERCEPTIONS OF THE ENVIRONMENT</td>
<td>Changing pattern of distribution and innovations in packaging provide opportunities for company expansion.</td>
<td>Markets becoming increasingly illiberal due to penetration by market leaders &amp; decline of traditional markets.</td>
<td>Little future for small manufacturing company. Market changes and product development costs create increasingly illiberal environment.</td>
</tr>
</tbody>
</table>
Table 7.6 contd.

<table>
<thead>
<tr>
<th>GENERAL STRATEGY</th>
<th>Growth</th>
<th>Little or no growth/change</th>
<th>Disinvestment</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRODUCT-MIX</td>
<td>Usually full range of soft drinks, including non-returnable packaging of drinks.</td>
<td>Range of drinks usually packaged in returnable glass bottles. In Scotland, no firms used litre or 40 fl.oz containers.</td>
<td>Drinks usually in returnable glass bottles. Where wholesaling activities replace manufacturing, wider range of products available.</td>
</tr>
<tr>
<td>CUSTOMER-MIX</td>
<td>Multiples, Cash &amp; Carry, Licenced trade, CTNs, Independent grocers.</td>
<td>Licenced Trade, CTNs, Independent grocers, Direct supply.</td>
<td>Licenced trade, CTNs, Independent grocers, Direct supply.</td>
</tr>
</tbody>
</table>

Notes: (a) Family succession of control usually desired in the more profitable (and usually larger) family businesses.
(b) This motivation usually dominant for managers wishing to realise company assets.
(c) This motivation is usually attributed to strategies of continued trading (as a wholesaler) after the cessation of manufacturing activities.
control tends to preclude effective expansion policies. This may be partly explained by the relatively low level of managerial expertise fostered by nepotistic management succession. Financial control systems in the smaller, family-dominated manufacturers tended to be of a rudimentary book-keeping nature, designed to comply with standards acceptable to auditors and fiscal authorities. However, such systems do not appear to provide adequate costs information nor interim assessments of performance and sales trends for different products. The operation of such rudimentary systems of control and low level of managerial expertise may be contrasted with arguments posed by several business commentators, that effective small business management necessitates more control than is exercised in larger firms (see, for example: Cohn and Lindberg, 1972; Drucker, 1970).

An alternative response associated with defensive market behaviour is to seek capital disinvestment. One form of disinvestment is to realise company assets, either through voluntary liquidation or sale of the business. This strategy appears to be determined by managerial perceptions that there is no long-term future for the business, and that company heirs will acquire greater financial security in professional employment outside the family business. To this end, parental motivations (and actions) tend to stress the efficacy of acquiring high standards of education and professional qualifications. Where these objectives
are realised, disinvestment strategies may be followed by owner/managers. However, where such goals are frustrated, succession of family control to the next generation of family-management may be seen as a "next best" alternative.

Strategies of disinvestment related to a realisation of company assets appear to be facilitated by unified ownership and control. Where control is shared by a number of family members, the need to maintain family control may result in the cessation of manufacturing activities, but continued trading as a factor of drinks products. Although this strategy mitigates capital investment and other product development costs associated with introducing new products, it is not clear whether it overcomes some of the central problems associated with small company decline; namely, low levels of managerial expertise and dependence upon declining market sectors.

Much of the recent growth in the sales of individual small soft drinks manufacturers appears to be linked to the general rise in the consumption of soft drinks and allied products - companies merely maintaining their share of an increased market. Effective management strategies of company growth were observed in only a minority of small manufacturers. Where company growth is a positive managerial objective, market strategies tend to be based on expansion rather than diversification.
For firms in the case study sample, social processes underlying expansion policies may be traced to two sources.

Successor interest in successful family businesses tends to be fostered from an early age. One result of this process seems to be a desire to expand market share in order to achieve increased status for the manager and company. Alternatively, expansion may be sought by small business managers in socially marginal situations due to threats posed to personal autonomy and desired life style precipitated by poor company performance. However, irrespective of the catalyst for seeking company expansion, effective strategies appear to require an incorporation of higher levels of managerial expertise. This process seems to be facilitated by unified ownership and control since shared ownership tends to be associated with maintaining family control over all facets of decision-making.

From this discussion, it can be seen that family control of small soft drinks manufacturers works in two distinct directions. On the one hand, nepotistic succession of managerial positions tends to create rigidities associated with low levels of management expertise, and a limitation of strategic policies through the need to preserve family control over management decision-making processes. At the other extreme, policies to expand company markets appear to be facili-
tated by unified ownership-control. The important distinction to be drawn here is between family-domination in terms of ownership-control, and family-domination in terms of executive-control. The latter appears to be associated with low levels of management expertise, and is manifest in relatively inferior levels of company performance. Where family businesses introduce technically competent managerial personnel, management strategies tend to result in more "adaptive" company behaviour. The manufacture of recent product innovations and penetration of growth sectors such as the multiples tends to be associated with a higher than average growth rate of sales and level of net profitability.

REFERENCE NOTES

(1) Recent entry into the industry would appear to be confined to relatively large food manufacturers associating themselves with the manufacture of fruit juices. For example, Adams Food Ltd. have launched their "Just Juice" range of fruit juices, whilst Heinz Ltd. have introduced a range of fruit juices in cans. Otherwise, there is little evidence of new firms in the "pop" market sectors. Indeed, the youngest firm in the financial analysis sample was Larkspur Ltd. This firm was founded in 1972 as the result of amalgamating five previously independent soft drinks manufacturers in the Midlands of England.

(2) See Table 6.8. This figure is the all-industry average using employment as the index of size. When sales volume is used, the average net profitability in the enlarged sample is 23.3% (Table 6.9).

(3) Replies to questionnaire question 20 by managing directors intending to sell their business or seek voluntary liquidation reveal the following distribution of "chief problems faced by the respective companies":

211
Effects of Competition 9*
Financial Problems 2
Management Succession Problems 1

* This figure includes two responses from the case study sample.

(4) See Appendix D for a fuller description of the case study firms.

(5) See Table 6.8, and note (2) of this chapter.

(6) Average growth rate for firms in the financial analysis was 25.4%. The high growth rate achieved by this particular company was said to be because it had been able to take advantage of strikes at major breweries to supply tied-trade customers with beer during these disputes. Sales of their own-label products were said to be relatively stable during the period of analysis.

(7) Both managers suggested that they would like their sons to take up either an accountancy or legal profession.

(8) See note (7). "Suitable employment" appeared to reflect the desirability of a "profession" rather than simply any job outside the family business.

(9) A report of the trading agreement between Fergusons and Britvic is presented in "International Bottler and Packer", vol. LIII, No. 3, March 1979, p.6.

(10) "Business Monitor: SD.026 - Wholesalers and Dealers, 1974", (London: HMSO, 1979). The data presented in this report must be treated with caution, since the broad trade categorisations used in the Census include products from a number of food industries. It is not possible to identify wholesaling operations on a single-product basis.

(11) In 1975, there were some 305 soft drinks manufacturers in the UK. (Census of Production, 1975, Summary Tables).

(12) With a post-mix system, bottles are dosed with a pre-determined amount of flavoured syrup and then moved to a separate section in which bottles are topped-up with carbonated water. On a pre-mix system, the finished product is filled directly into bottles - syrup, water and carbon dioxide being mixed in the right proportions, and then fed directly to the filling unit. See Chapter 6.2.B for a fuller description of soft drinks production systems.
If manufacturers use the same syrup mix for all classes of drinks, then the price differentials noted in note 21 to Chapter 6 are consistent with lower profit margins for large-sized products. Some manufacturers use a different syrup recipe for drinks packed in larger-sized containers, substituting saccharin for a certain amount of sugar. This effectively reduces the cost of raw material inputs. However, since slower filling speeds are necessary for the filling of large-sized containers, it remains valid to claim that lower profit margins are associated with filling larger-sized products - particularly as unit overheads are increased by the lower filling speeds.

Companies 6 and 7 did not have the capacity to fill large-sized products because of the low height tolerance of their manufacturing plant.

See Stanworth and Curran (1973), Chapter 7, in which the hierarchy of goals is observed to change over time in response to various stimuli.

Efficient transfer of ownership to the next generation of a family is a lengthy process if the incidence of Capital Transfer Tax is to be minimised. The managing director of Company 5 hoped to have completed this process by 1982 - five years after commencing the transfer.
CHAPTER 8

THE PRINTING INDUSTRY

8.1. INTRODUCTION

The printing industry was selected for study because of its contrasts with the soft drinks industry. It is one of Britain's more traditional craft industries (see Musson, 1954; Delafons, 1965), and is still characterised by a predominance of small units.

The industry may be divided into three major areas: the manufacture and printing of stationery; the printing and publishing of newspapers, periodicals and books; and general printing. Firms chosen for study were located in the general printing sector, and were involved in the manufacture of commercial printed goods such as catalogues, sales brochures, company reports, programmes, and so on. Comparisons between companies are complicated by the nature of the printing process, and "jobbing" nature of printing markets. The printing process involves several distinct phases, which has resulted in the specialisation of function as firms have specialised in component activities within the overall printing process (for example, lithographic plate-making). Through the specialisation of function, several firms spanned more than one of the industry's segments. However, it is this great diversity of activities which forms the basis for contrasting managerial behaviour and company performance between the printing and soft drinks industries.
8.2. RECENT ECONOMIC TRENDS IN THE BRITISH PRINTING INDUSTRY

The most consistent rise in the sales of printed products in recent years have been related to the general printing sector.


<table>
<thead>
<tr>
<th>YEAR</th>
<th>GENERAL PRINTING AND PUBLISHING</th>
<th>NEWSPAPERS, PERIODICALS</th>
<th>MANUFACTURED STATIONERY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>£ million</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1970</td>
<td>577</td>
<td>682</td>
<td>146</td>
</tr>
<tr>
<td>1971</td>
<td>677</td>
<td>740</td>
<td>182</td>
</tr>
<tr>
<td>1972</td>
<td>753</td>
<td>848</td>
<td>206</td>
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<tr>
<td>1973</td>
<td>829</td>
<td>993</td>
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<td>1974</td>
<td>995</td>
<td>1099</td>
<td>317</td>
</tr>
<tr>
<td>1975</td>
<td>1192</td>
<td>1243</td>
<td>363</td>
</tr>
<tr>
<td>1976</td>
<td>1372</td>
<td>1447</td>
<td>364</td>
</tr>
</tbody>
</table>


It can be seen from Table 8.1 that the most pronounced fluctuations of sales in recent years has been in the manufactured stationery, and newspaper and periodical sectors. The more general rise in the sales of general printing products during the 1970s has been coincidental with an increase in the number of small general printing firms — see Table 8.2. overleaf. Although there was a moderate fall in the number of small general printers between 1963 and 1968, the period subsequent to 1970 has witnessed a marked increase in their population. Between 1970 and 1977 the number of small general printers
### TABLE 8.2. The Number of Enterprises, Employment, and Net Output of General Printers, by Company Size, 1963-1977

#### A. NUMBER OF ENTERPRISES (Percentage of Total in Brackets)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>COMPANY SIZE (No. EMPLOYEES)</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1-99</td>
<td>100-199</td>
</tr>
<tr>
<td>1963</td>
<td>6608</td>
<td>233</td>
</tr>
<tr>
<td>1968</td>
<td>6579</td>
<td>146</td>
</tr>
<tr>
<td>1970</td>
<td>6810 (95.9)</td>
<td>148 (2.1)</td>
</tr>
<tr>
<td>1972</td>
<td>6331 (96.1)</td>
<td>122 (1.9)</td>
</tr>
<tr>
<td>1975</td>
<td>8189 (96.9)</td>
<td>136 (1.6)</td>
</tr>
<tr>
<td>1977</td>
<td>8935 (97.4)</td>
<td>115 (1.3)</td>
</tr>
</tbody>
</table>

#### B. EMPLOYMENT ('000) - (Percentage in Brackets)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>COMPANY SIZE (No. EMPLOYEES)</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1-99</td>
<td>100-199</td>
</tr>
<tr>
<td>1963</td>
<td>94.0</td>
<td>25.6</td>
</tr>
<tr>
<td>1968</td>
<td>86.9</td>
<td>19.7</td>
</tr>
<tr>
<td>1970</td>
<td>96.6 (45)</td>
<td>19.9 (9)</td>
</tr>
<tr>
<td>1972</td>
<td>87.3 (45)</td>
<td>16.2 (8)</td>
</tr>
<tr>
<td>1975</td>
<td>92.3 (46)</td>
<td>19.0 (9)</td>
</tr>
<tr>
<td>1977</td>
<td>93.2 (48)</td>
<td>15.8 (8)</td>
</tr>
</tbody>
</table>

#### C. NET OUTPUT (percentage) - (Net Output per head in Brackets)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>COMPANY SIZE (No. EMPLOYEES)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1-99</td>
</tr>
<tr>
<td>1963</td>
<td>39</td>
</tr>
<tr>
<td>1968</td>
<td>42</td>
</tr>
<tr>
<td>1970</td>
<td>42 (2083)</td>
</tr>
<tr>
<td>1972</td>
<td>42 (2685)</td>
</tr>
<tr>
<td>1975</td>
<td>42 (4231)</td>
</tr>
<tr>
<td>1977</td>
<td>45 (6461)</td>
</tr>
</tbody>
</table>

**Source:** Census of Production, Summary Tables, Enterprise Analysis, MLH 489, Various Years.

**Notes:**
- (a) Includes 104 unsatisfactory returns.
- (b) Includes 240 unsatisfactory returns.
- (c) Includes 5.5 thousand unsatisfactory returns.
- (d) Includes 10.8 thousand unsatisfactory returns.
increased by 2092, this representing a 30% increase in the size of the small firm sector. The increase in the number of small general printers is most pronounced for firms employing less than 100 people. 97.4% of general printers employed less than 100 people in 1977, compared to 95.9% in 1970. Although the enterprise analysis from the Census of Production does not permit a more disaggregated analysis of company size, the establishment analysis shows that the increase in small firm activity is primarily associated with general printers employing less than 10 people - see Table 8.3.

<table>
<thead>
<tr>
<th>SIZE OF SMALL ENTERPRISE (EMPLOYEES)</th>
<th>TOTAL NUMBER ENTERPRISES IN INDUSTRY (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-10</td>
<td>11-49</td>
</tr>
<tr>
<td>1970</td>
<td>4535</td>
</tr>
<tr>
<td>1972</td>
<td>4081</td>
</tr>
<tr>
<td>1975</td>
<td>5822</td>
</tr>
<tr>
<td>1977</td>
<td>6655</td>
</tr>
</tbody>
</table>

Source: Census of Production, PA 489.

Note: (1) The sum may exceed the total for the industry because some enterprises control establishments in more than one size group.

Table 8.3 shows that the number of small printing establishments employing more than 50 people has continued to decline during the 1970s. This suggests that the increased importance of small firms within the structure of the general printing industry is associated with increased activity in very small enterprises.
The increased numerical and proportional importance of small general printers has been matched by a more than proportional increase in net output associated with firms employing less than 200 people. Although the number of small general printers rose by 0.7 percentage points, net output attributable to small printers rose from 51% in 1970 to 54% in 1977 (a rise of 3 percentage points). The increased importance of small firms within the industry's structure was also witnessed in terms of employment. Although employment in the general printing sector as a whole fell by 9.4% between 1970 and 1977, employment in the industry's small firm sector fell by only 6.4%.

Similar increases in the proportional significance of small printing firms have been witnessed in the other printing sectors. Between 1970 and 1977 the number of small stationery manufacturers rose by 100 (an increase of some 28%)(1). During the same period the number of small firms engaged in the printing and publishing of newspapers and periodicals rose by 535 (an increase of 90%)(2). Similar to the general printing sector, the increased importance of small firms to these other printing industries has been coincidental with an increased proportion of net output being attributable to small firms.

Increased small firm activity within the various printing sectors has occurred with only moderate levels of industrial profitability. A recent ICC Industrial
Survey (1977) noted that the mean return on capital employed in the general printing industry was consistently below the all-industry average between 1973 and 1977 - see Table 8.4.

**TABLE 8.4.** Printing and Soft Drinks Industry Profitability Compared to the All-Industries Mean

<table>
<thead>
<tr>
<th></th>
<th>1973/74</th>
<th>1974/75</th>
<th>1975/76</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean of 57 Industry Sample</td>
<td>15.8</td>
<td>13.4</td>
<td>12.3</td>
</tr>
<tr>
<td>Printers</td>
<td>10.8</td>
<td>11.3</td>
<td>10.7</td>
</tr>
<tr>
<td>Stationery Manufacturers</td>
<td>22.2</td>
<td>23.7</td>
<td>13.8</td>
</tr>
<tr>
<td>Newspaper Publishers</td>
<td>20.5</td>
<td>12.9</td>
<td>10.5</td>
</tr>
<tr>
<td>Soft Drinks Manufacturers</td>
<td>27.3</td>
<td>12.1</td>
<td>26.0</td>
</tr>
</tbody>
</table>

*Source: ICC Business Ratios (1977)*

**FIGURE 8.1.** Return on Capital Employed (%), 1973/74-1975/76 - Different Sectors of the Printing Industry

*Source: ICC Business Ratios (1977), pp. 92-100.*

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It can be seen from Table 8.4 and Figure 8.1 that stationery manufacturers and book and periodical publishers were (on average) more profitable than general printers and newspaper publishers. Although the general printing sector is characterised by generally low levels of profitability, the present (and prior) research has noted that several firms in the industry do achieve very high levels of financial efficiency.

**TABLE 8.5. The Distribution of Profitability Rates in the Printing Industry, 1961-1976**

<table>
<thead>
<tr>
<th>RETURN ON CAPITAL</th>
<th>1961(a)</th>
<th>1966(a)</th>
<th>1976(b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMPLOYED (%)</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>0 - 5 (incl. losses)</td>
<td>2</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5.1 - 10</td>
<td>16</td>
<td>34</td>
<td>15</td>
</tr>
<tr>
<td>10.1 - 15</td>
<td>9</td>
<td>19</td>
<td>10</td>
</tr>
<tr>
<td>15.1 - 20</td>
<td>11</td>
<td>23</td>
<td>1</td>
</tr>
<tr>
<td>20.1 - 25</td>
<td>3</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>25.1 +</td>
<td>6</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>Average Return For Sample</td>
<td>13.4%</td>
<td>9.7%</td>
<td>12.4%</td>
</tr>
</tbody>
</table>


(b) Sample of printing firms in present study.

Certain tests of statistical significance are precluded because of the relatively small number of observations in each study. Nevertheless, the evidence is sufficient to demonstrate the wide range of performance levels in the printing industry. In 1966, 25% of the NEDO sample (which was not differentiated by company size) achieved a return on capital of greater than 20%. In the present sample of small general printers, 34% achieved a return of greater than 20%, whereas 30% of the sample
achieved a return on capital of less than 5%.

The observed variations of net profitability within the present sample do not appear to be related to the size of the small firms. Scatter diagram (Appendix 88) illustrates the wide dispersion of net profitability along the full range of small firms. The simple linear regression coefficient of correlation ($r$) is 0.09 ($n = 39$) and Spearman's rank correlation coefficient was 0.05. Neither of these indices of association is significant, confirming the lack of association between net profitability and size of small firm.

Within the industry's small business sector, firms employing less than 25 people tend to be less profitable than larger-sized companies when financial efficiency is measured by the level of net profitability - see Table 8.6.

**TABLE 8.6. Net and Gross Profitability of Small Printing Firms, by Company Size (Number of Employees)**

<table>
<thead>
<tr>
<th>COMPANY SIZE (No. EMPLOYEES)</th>
<th>NUMBER OF FIRMS</th>
<th>NET PROFITABILITY</th>
<th>GROSS PROFITABILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. NET PROFITABILITY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-25</td>
<td>24</td>
<td>9.7</td>
<td>30.4</td>
</tr>
<tr>
<td>26-50</td>
<td>8</td>
<td>23.9</td>
<td>27.9</td>
</tr>
<tr>
<td>51-99</td>
<td>7) 23</td>
<td>10.6(15.3)</td>
<td>23.6(23.1)</td>
</tr>
<tr>
<td>100-199</td>
<td>8</td>
<td>10.8(6.8)</td>
<td>17.7</td>
</tr>
<tr>
<td>TOTAL</td>
<td>47</td>
<td>12.4(6.8)</td>
<td>26.8</td>
</tr>
</tbody>
</table>

**Source:** Financial analysis undertaken at Exchequer House, Edinburgh.
However, the coefficient of variation is very high for all size-bands of companies, confirming the lack of association between firm size and net profitability. The most consistent and highest level of profitability is to be found in the sub-sample of firms employing between 26 and 50 people. However, the small number of observations in this sub-sample does not lend itself to a distillation of statistically significant conclusions.

When performance is examined by the index of gross profitability, the relationship between size and performance is more pronounced, although it remains statistically insignificant. The scatter diagram of this relationship (Appendix 89) shows that only 7% of the variation in gross profitability levels can be explained by the size of individual firms - the linear regression coefficient \( r = -0.27 \). It can be seen from Table 8.7 that within the small business sector, firms employing less than 25 people tend to have a higher level of gross profitability than firms in the larger-size groupings. Furthermore, the degree of variation between gross profitability levels within particular size bands of company is markedly lower than that witnessed in the analysis of net profitability. The greatest variation of gross profitability rates is found among firms employing between 100 and 199 people.

The disparity of findings concerning the relationship between company size and performance when measured by net and gross profitability may be partially explained
by the level of directors’ remunerations in small printing firms. On average, firms employing 25 or fewer people distribute a larger proportion of gross (trading) profits in the form of directors’ remuneration. However, in absolute terms the remuneration per director in firms employing 25 or fewer people is (on average) only 60% of the amount received by directors in firms employing more than 25 people - see Table 8.7.

TABLE 8.7. The Level of Directors’ Remunerations in Small Printing Firms

<table>
<thead>
<tr>
<th>SIZE OF FIRM (No. of Employees)</th>
<th>PERCENTAGE OF GROSS PROFITS DISTRIBUTED IN FORM OF DIRECTORS’ REMUNERATION</th>
<th>AVERAGE REMUNERATION PER DIRECTOR (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MEAN COEFFICIENT OF VARIATION</td>
<td>MEAN COEFFICIENT OF VARIATION</td>
</tr>
<tr>
<td>1-25 n=22</td>
<td>53.9 47.0</td>
<td>3769 59.9</td>
</tr>
<tr>
<td>26-199 n=17</td>
<td>40.7 37.8</td>
<td>6377 49.8</td>
</tr>
<tr>
<td>TOTAL n=39</td>
<td>49.1 46.6</td>
<td>4717 61.0</td>
</tr>
</tbody>
</table>


Note: The total number of observations (39) excludes data from 7 subsidiaries and one firm employing more than 100 people which did not distribute income in the form of directors’ remuneration, and did not disclose the amount of income paid to working directors in the firm.

This suggests that although smaller firms may appear to be more profitable before managerial charges are taken into account, when managerial charges are charged at the same rate, firms employing 25 or fewer people are no more or less profitable than larger firms in the industry.

The analysis of growth rates among small printers
indicates that firms employing more than 25 people tend to grow faster than smaller firms, and are characterised by lower variations of growth rate between firms - see Table 8.8.

**TABLE 8.8. Growth Rates of Small Printing Firms, by Company Size (No. Employees)**

<table>
<thead>
<tr>
<th>COMPANY SIZE (No. Employees)</th>
<th>NUMBER OF FIRMS</th>
<th>MEAN</th>
<th>MEDIAN</th>
<th>COEFFICIENT OF VARIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 25</td>
<td>10</td>
<td>2.5</td>
<td>6.2</td>
<td>630.8</td>
</tr>
<tr>
<td>26 - 99</td>
<td>10</td>
<td>18.9</td>
<td>21.3</td>
<td>55.2</td>
</tr>
<tr>
<td>100 - 199</td>
<td>8</td>
<td>16.8</td>
<td>17.2</td>
<td>38.2</td>
</tr>
</tbody>
</table>


However, this section of the analysis must be qualified since the majority of firms employing 25 or fewer employees did not present sales data in their published accounts. Consequently, the result suggesting that smaller printers grow at a slower rate than larger firms must be treated with great caution, particularly as Sadler et al (1974) found that smaller printing firms in their sample achieved the highest growth rate of sales. Nevertheless, the high variability of company growth rates among firms which employ less than 26 people suggests that several firms in this category are growing rapidly, whereas others are in severe decline. This conclusion is supported by the scatter diagram of the relationship (Appendix B10).

Bringing together the evidence regarding the relationship between the performance and size of small printers, it is not possible to draw conclusions with
certainty because of the relatively small size of the total population. Nevertheless, the evidence presented suggests that size alone does not play an important role in the determination of company performance levels in the printing industry. However, this broad generalisation masks the observation that greater degrees of variation between performance levels were witnessed among firms employing 25 or fewer employees. This suggests that several of the very small printers were financially inefficient and in severe decline, whereas others were growing rapidly and producing relatively high returns on the capital employed - despite the low level of profitability usually associated with the general printing sector.

8.3. THE BUSINESS ENVIRONMENT OF SMALL PRINTING FIRMS

Since company size does not appear to be an important variable influencing the relative performance of small printing firms, it is necessary to study the impact of both environmental and contextual variables (other than size) on the behaviour of small printers in order to determine reasons for the wide variation in performance levels between firms.

A. THE TECHNOLOGICAL ENVIRONMENT AND IMPACT OF TECHNOLOGICAL CHANGE

Unlike the soft drinks industry which tends to use a standard technology, a variety of printing technologies are available to small printing firms. The three major
processes are letterpress, lithography, and gravure.

**Letterpress:** This is the oldest of the processes. In this process the surfaces to be printed stand out as raised metal type or blocks from the non-printing blocks in the background. Text is set in metal type, either manually or by machine. The actual printing of the material is carried out by various forms of letterpress machines which vary from the simple hand press to the rotary letterpress - typical of the newspaper printing industry.

**Litho:** Litho uses a flat as opposed to raised printing surface. Initially the image is printed on a metal plate. The whole surface of the plate is then damped at the printing stage, with the result that the greasy printing surface rejects the water which remains only on the non-printing surface. When ink is spread on the plate, the ink adheres to the printing surface and not to the wet, non-printing surface. The plate is normally wrapped around a cylinder, as in the rotary letterpress, while the paper is pressed on to it by another cylinder. Usually, a third cylinder, covered in soft rubber, is used to intervene in the sense that the image is first printed from the plate on to the rubber and thence from the rubber on to the paper. This is known as offset litho. Several techniques of feeding the paper into the presses are possible varying from the sheet fed offset litho to the continuous reels of paper (web) offset litho.
Gravure: This process is used mainly in the printing of magazines and other forms of periodical. Here, the dots which make up the illustrations to be printed form indentations on the printing cylinder instead of standing out in relief. Variations in tone are achieved by variations in the depth of the indentations rather than in the diameter of the dots. This type of printing surface has the advantage that it is much less subject to wear than the relief surface used in letterpress, and consequently is particularly suited to long runs.

The fine craft traditions of printing, based in the past on individual skill and responsibility (Musson, 1954), have been transformed recently by technological developments associated with the increased penetration of web offset processes; demand for colour; the rapid evolution of methods of photo-composing type (so-called "cold type"); and the application of the computer to text creation, editing, and proofing. Since these changes have been introduced against a background of increased output for different classes of product, it is almost impossible to isolate the impact of these technological changes on the performance of small printing firms. Nevertheless, technological change in the printing industry appears to have influenced the changing structure of the industry, and more particularly, brought about the great diversity of company performance levels in this sector.

Figures produced by NEDO (EDC for Printing and
Publishing, 1969) suggest that the uptake of new technologies during the 1960s was more prevalent among larger firms in the industry. It can be seen from Table 8.9 that traditional processes such as simple letterpress, and small offset litho printing were used by a higher proportion of small printers as compared to their proportion within the NEDC sampling frame. This conclusion is supported by evidence from the Department of Employment and Productivity (Manpower Study, Report No. 9, 1970) which indicated that smaller firms in the industry were using, or were planning to use, the new technological developments to a lesser extent than larger firms.

Another characteristic to emerge from Table 8.9 is the essentially jobbing nature of small printing operations, which is characterised by an above average employment of letterpress and small offset litho processes. These processes are most appropriate for small "one-off" printing jobs. Web-offset litho printing, gravure printing, and reel-fed letterpress printing are more appropriate to large batch orders, and less likely to be appropriate for the jobbing-type of order. In addition to the unsuitability of certain technological processes to small scale operations, the high cost of capital investment may be outwith the scope of many small manufacturers. Sadler and Barry (1970) concluded that "... the necessary technical development will call for capital investment on a scale which will be beyond the resources of the vast majority of firms in the industry. Only if some degree of rationalisation and merging of
### Table 8.9. Printing Processes by Size of Firm

<table>
<thead>
<tr>
<th>PROCESS</th>
<th>No.</th>
<th>11-24</th>
<th>25-74</th>
<th>75-199</th>
<th>200-399</th>
<th>400+</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL ESTABLISHMENTS REPORTING</td>
<td>1836</td>
<td>38%</td>
<td>37%</td>
<td>16%</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>Sheet-fed Letterpress Printing</td>
<td>1519</td>
<td>38%</td>
<td>37%</td>
<td>16%</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>Reel-fed Letterpress Printing</td>
<td>153</td>
<td>12%</td>
<td>30%</td>
<td>23%</td>
<td>19%</td>
<td>16%</td>
</tr>
<tr>
<td>Letterpress Printing</td>
<td>172</td>
<td>44%</td>
<td>33%</td>
<td>12%</td>
<td>8%</td>
<td>4%</td>
</tr>
<tr>
<td>Web-Offset Litho Printing</td>
<td>32</td>
<td>0</td>
<td>25%</td>
<td>19%</td>
<td>34%</td>
<td>22%</td>
</tr>
<tr>
<td>Sheet-fed Offset Litho</td>
<td>651</td>
<td>24%</td>
<td>40%</td>
<td>21%</td>
<td>9%</td>
<td>5%</td>
</tr>
<tr>
<td>Small Offset Litho Printing</td>
<td>892</td>
<td>36%</td>
<td>41%</td>
<td>16%</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>Tin Printing</td>
<td>6</td>
<td>33%</td>
<td>50%</td>
<td>17%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Gravure Printing</td>
<td>33</td>
<td>3%</td>
<td>18%</td>
<td>27%</td>
<td>21%</td>
<td>30%</td>
</tr>
<tr>
<td>Flexograph Printing</td>
<td>42</td>
<td>14%</td>
<td>38%</td>
<td>21%</td>
<td>14%</td>
<td>12%</td>
</tr>
<tr>
<td>Screen Process Printing</td>
<td>107</td>
<td>39%</td>
<td>38%</td>
<td>14%</td>
<td>7%</td>
<td>2%</td>
</tr>
<tr>
<td>Thermographic Printing</td>
<td>117</td>
<td>46%</td>
<td>40%</td>
<td>10%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Die Stamping</td>
<td>96</td>
<td>22%</td>
<td>47%</td>
<td>10%</td>
<td>5%</td>
<td>8%</td>
</tr>
<tr>
<td>Ruling</td>
<td>358</td>
<td>31%</td>
<td>46%</td>
<td>18%</td>
<td>4%</td>
<td>1%</td>
</tr>
<tr>
<td>Letterpress Blockmaking</td>
<td>62</td>
<td>11%</td>
<td>31%</td>
<td>34%</td>
<td>15%</td>
<td>10%</td>
</tr>
<tr>
<td>Photolitho Reproduction</td>
<td>578</td>
<td>29%</td>
<td>38%</td>
<td>18%</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>Gravure Cylinder &amp; Platemaking</td>
<td>18</td>
<td>6%</td>
<td>17%</td>
<td>17%</td>
<td>22%</td>
<td>39%</td>
</tr>
<tr>
<td>Composing &amp; Typesetting</td>
<td>1363</td>
<td>36%</td>
<td>38%</td>
<td>16%</td>
<td>7%</td>
<td>3%</td>
</tr>
<tr>
<td>Electrotyping &amp; Stereotyping</td>
<td>161</td>
<td>6%</td>
<td>20%</td>
<td>27%</td>
<td>29%</td>
<td>17%</td>
</tr>
<tr>
<td>Binding, Collating, Stitching</td>
<td>1519</td>
<td>37%</td>
<td>38%</td>
<td>15%</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>Other</td>
<td>157</td>
<td>20%</td>
<td>35%</td>
<td>27%</td>
<td>10%</td>
<td>8%</td>
</tr>
</tbody>
</table>

businesses takes place will the industry be sufficiently concentrated to enable its capital resources to be used effectively." (pp.12-13)

Similarly, Pratten (1971) has argued that economies of scale can be achieved only through increased specialisation of function.

It cannot be assumed that technological progressiveness is necessarily associated with larger printing establishments, despite these arguments which favour increased rationalisation of the printing industry. Increased mechanisation in the printing industry has meant that tasks are designed to fit the capacities of machines rather than humans. In time this has led to a fragmentation of work, and specialist functions within the printing process. First generation firms in the present sample which had been set up since the mid-1960s were initiated to take advantage of specialist skills possessed by the "entrepreneur". Both Companies E and K were set up by printers who had acquired a specialist skill during their apprenticeship. One of the partners in Company K was a trained camera operator in the process of lithographic plate-making. During his training he had acquired skills associated with colour reproduction, but his former employers did not see the need to introduce colour printing into their product range.

"I could see that the future markets for printed goods would be almost totally for colour products. However, my former boss did not see things that way. I had met Bill (the other partner) when he was a rep. for one of our supplies companies, and we became quite friendly. We discussed things
over, and became convinced that there was a market for colour lithographic plates, particularly as the majority of plate-makers in the Edinburgh area did not appear to be undertaking colour printing at that time. Eventually we decided to start up our own business ... Today, almost 90% of our work is colour printing." (One of the partners in Company K)

Similarly, the owner/manager of Company E was a trained photographic designer. He felt that his skills were not being fully used by his former employer, and after undertaking some design work in his spare time, he decided there was sufficient scope to set up on his own account.

These two cases of business founding suggest that former employers were unwilling to initiate or expand activities into printing processes consistent with the changing technical environment of the industry. Although data was not available to determine the extent to which such factors are associated with the founding of new printing firms, one of the partners in Company K suggested that the majority of founders with whom he was associated had set up on their own account because former employers did not see the need to introduce more sophisticated printing processes. In a similar vein, a recent 'Financial Times' survey of the industry commented that in general printing

"... it is often the small printer who has set up shop on a green field site that has been able to exploit the best in new technology." (Winsbury, 1977, p.39).

Opportunities to set up small businesses in the printing industry may be facilitated further by relatively
low barriers to entry. Whereas the soft drinks industry is characterised by a persistent decline in its small business sector and negligible entry of new firms, the printing industry has witnessed a marked increase in the number of small firms in recent years. This may be partially explained by differences in the capital/labour ratios of the two industries. Although it is not possible to determine the minimum cost of entry, several factors suggest relatively low entry barriers in the printing industry. Printing operations may be started with relatively small amounts of capital assets and little physical space. This may be contrasted with the soft drinks industry in which stocks of bottles and cases, extensive plant, and warehousing space are necessary before manufacturing may take place. These relative differences may be illustrated via reference to net capital expenditures per company in the two industries in recent years.

### TABLE 8.10. Net Capital Expenditure per Enterprise, Printing and Soft Drinks Manufacturers, 1973-1977

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GENERAL PRINTING</td>
<td>6.32</td>
<td>7.20</td>
<td>6.84</td>
<td>7.54</td>
<td>10.70</td>
</tr>
<tr>
<td>AND PUBLISHING</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOFT DRINKS MANUFACTURERS</td>
<td>34.35</td>
<td>58.01</td>
<td>59.71</td>
<td>60.89</td>
<td>78.21</td>
</tr>
<tr>
<td>ALL MANUFACTURING</td>
<td>26.87</td>
<td>32.28</td>
<td>34.81</td>
<td>37.13</td>
<td>47.46</td>
</tr>
<tr>
<td>INDUSTRIES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Census Of Production, PA 232, 489, Summary Tables (Various years)

Table 8.10 reveals that net capital expenditure per
company is approximately seven times higher in the soft drinks industry than in printing. Furthermore, net capital expenditure per head is almost twice as high in the soft drinks industry\(^{(3)}\). This suggests that while barriers to entry are relatively high in the soft drinks industry, they are relatively low in the general printing sector, thus facilitating the entry of new firms.

Technological developments in the printing industry appear to be consistent with changes in the "skills" which are placed at a premium. Traditional printing skills have been replaced, to some extent, by skills relating to the operation of printing machinery associated with recent technological developments in the industry. The wider implications of these changes for the labour process are discussed later in the chapter when the industrial relations system is examined. However, the changing skill content of printing processes does appear to have formed the basis for much of the recent "entrepreneurial" activity in the printing industry. Individuals possessing specialist skills relating to design, photography or operation of sophisticated printing machinery have found a ready market for products and services associated with their particular skills. Furthermore, the advent of relatively cheap photocomposing systems needing little labour, and low entry barriers to the industry, has been a great stimulus to increased small firm activity\(^{(4)}\).
B. THE MARKET FOR PRINTED PRODUCTS

"The whole history of printing and publishing is the history of interplay between advances in printing technology and changes in the market demand for, or in the receptivity to, printed matter." (Winsbury, 1977, p.39)

The implications of changing markets (consistent with the advances in printing technology) for small company activity may be analysed from two perspectives: the market for different types of product; the market for different types of process.

i) THE MARKETS FOR DIFFERENT TYPES OF PRINTED PRODUCT

The range of printed products is enormous and far too large to be listed in detail. However, a common feature of most printed products is that they are "bespoke", that is, they are produced to the specific requirements of a known customer at a given point in time. Leaving aside newspapers, the industry's products may be divided into four main groupings.

(a) Periodicals This group includes all journals and magazines produced at specific time intervals. Sadler and Barry (1970) indicated that about 800 periodicals of a general nature appeared regularly in the UK; of these about 150 receiving national distribution. The majority of periodicals are produced by general printers, although some are produced by firms specialising in the production and publication of periodicals.

(b) General or Jobbing Printing This covers a wide range of products, including such diverse items as advertising material, programmes, price lists, company
reports, travel brochures, and the like. These products constitute the main field of activity for jobbing printers. These products are, by their very nature, less predictable and more open to seasonal and other fluctuations than work on periodicals.

(c) **Specialist Printing** Under this heading it is possible to classify work which involves specialised equipment or process knowledge such as the printing of currency or stamps, printing on plastic, metals or other materials used in the packaging trade, printing of maps, labels and special types of stationery.

(d) **Book Printing** This includes the growing market for paperbacks.

The range of products is such that no one printer can aim to cover the whole, although he may well operate in two or more of the above fields of activity. Evidence from a NEDO survey of the printing industry in 1969 suggests that between 70% and 80% of general printers are involved in the "bread and butter" activities relating to production of promotional materials, programmes, and booklets - see Table 8.11. General or jobbing work tends to reflect quite closely the ups and downs of economic activity in general. The major problem faced by the jobbing printer is the high volume of separate orders of varying lengths of run and with varying quality standards. This situation creates difficulty in the analysis of profitability for separate jobs. Consequently, there is a danger of seeking sales rather than seeking profitable
### TABLE 8.11. Printing Products by Size of Establishment

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>ALL ESTABLISHMENTS REPORTING</th>
<th>SIZE OF FIRM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>11-24</td>
</tr>
<tr>
<td>ALL ESTABLISHMENTS REPORTING</td>
<td>1813</td>
<td>38%</td>
</tr>
<tr>
<td>PRODUCT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Magazines &amp; Periodicals</td>
<td>867</td>
<td>32%</td>
</tr>
<tr>
<td>Books &amp; Booklets</td>
<td>1324</td>
<td>38%</td>
</tr>
<tr>
<td>Catalogues, Programmes etc.</td>
<td>1499</td>
<td>39%</td>
</tr>
<tr>
<td>Other Promotional Material</td>
<td>1300</td>
<td>38%</td>
</tr>
<tr>
<td>Labels, Tags, Tickets</td>
<td>953</td>
<td>44%</td>
</tr>
<tr>
<td>Maps and Charts</td>
<td>144</td>
<td>26%</td>
</tr>
<tr>
<td>Music</td>
<td>29</td>
<td>34%</td>
</tr>
<tr>
<td>Tin Printing</td>
<td>6</td>
<td>33%</td>
</tr>
<tr>
<td>Ruled Paper, Ledgers, etc.</td>
<td>372</td>
<td>35%</td>
</tr>
<tr>
<td>Exam. Paper, Confidential Reps.</td>
<td>615</td>
<td>31%</td>
</tr>
<tr>
<td>Security Printing (Cheques etc.)</td>
<td>132</td>
<td>16%</td>
</tr>
<tr>
<td>Continuous Stationery</td>
<td>46</td>
<td>20%</td>
</tr>
</tbody>
</table>

sales. This pitfall for small firms is all the more likely in times of low economic activity, when competition for orders is intense. The low level of average profitability in the general printing industry appears to reflect this tendency.

The market for books and booklets was stimulated considerably by the growth in paperback publishing. Indeed, the major growth area in the industry has remained that of book printing and publishing. Adjusting for the effects of inflation, sales in the printing and publishing industry were 5.4% higher in the first quarter of 1978 than for the equivalent quarter of 1977. This increase in the value of sales was due mainly to rises of 12% in book printing, 5.3% in other printing, 13.6% in book publishing and 8.3% in other publishing (5). Sadler and Barry (1970) have suggested that the main problem facing book printers at the present time is the intense competition from abroad. However, recent figures concerning UK imports and exports of printed products show that the UK is a net exporter of printed products, and of books and booklets in particular - see Tables 8.12 and 8.13.

The evidence presented in Tables 8.12 and 8.13 indicates that in 1980, 48% of imports associated with printing and publishing were books and booklets, whereas the same product group accounted for 53% of the industry’s exports. Although the UK was a net exporter of books and booklets in 1980, changes in the balance of trade
<table>
<thead>
<tr>
<th>YEAR</th>
<th>IMPORTS £ million</th>
<th>EXPORTS £ million</th>
<th>IMPORTS AS % OF EXPORTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>45.5</td>
<td>89.9</td>
<td>50.6</td>
</tr>
<tr>
<td>1971</td>
<td>53.8</td>
<td>104.3</td>
<td>51.6</td>
</tr>
<tr>
<td>1972</td>
<td>61.8</td>
<td>119.8</td>
<td>51.6</td>
</tr>
<tr>
<td>1973</td>
<td>73.6</td>
<td>136.8</td>
<td>53.8</td>
</tr>
<tr>
<td>1974</td>
<td>89.7</td>
<td>161.5</td>
<td>55.5</td>
</tr>
<tr>
<td>1975</td>
<td>107.6</td>
<td>206.9</td>
<td>52.0</td>
</tr>
<tr>
<td>1976</td>
<td>131.9</td>
<td>276.6</td>
<td>45.7</td>
</tr>
<tr>
<td>1977</td>
<td>152.2</td>
<td>344.1</td>
<td>44.3</td>
</tr>
<tr>
<td>1978</td>
<td>192.8</td>
<td>371.4</td>
<td>51.9</td>
</tr>
<tr>
<td>1979</td>
<td>231.5</td>
<td>405.6</td>
<td>57.1</td>
</tr>
<tr>
<td>1980</td>
<td>268.6</td>
<td>456.7</td>
<td>58.8</td>
</tr>
</tbody>
</table>

Source: "UK Overseas Trade Statistics", (Department of Trade), SITC Sub-group 892.0, various years.

Note: Figures are based on the twelve month period ending in December for each year.

for these products between 1970 and 1980 suggest that imports have increased their penetration of the UK market.

The cost of improving or establishing overseas representation can be daunting, especially because printing is essentially a small firm industry. It has not been possible to determine the size distribution of firms actively engaged in export markets. Nevertheless, the particular problems faced by small printing firms competing in overseas markets have resulted in the advocation of joint-marketing exercises by small printing firms to spread the high cost of initial entry into export markets (6).

There appears to be a future role for small printing firms in the book and periodicals markets, despite
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IMPORTS (£ million)</td>
<td>EXPORTS</td>
<td>IMPORTS AS %</td>
<td>EXPORTS</td>
</tr>
<tr>
<td>Books, pamphlets, Maps, Globes etc.</td>
<td>23.1</td>
<td>48.2</td>
<td>47.9</td>
<td>129.6</td>
</tr>
<tr>
<td>Newspapers, Periodicals etc.</td>
<td>5.6</td>
<td>17.9</td>
<td>31.3</td>
<td>24.2</td>
</tr>
<tr>
<td>Music (printed &amp; manuscript)</td>
<td>0.1</td>
<td>0.2</td>
<td>50.0</td>
<td>0.9</td>
</tr>
<tr>
<td>Picture postcards, greetings cards etc.</td>
<td>1.9</td>
<td>3.3</td>
<td>57.6</td>
<td>19.9</td>
</tr>
<tr>
<td>Labels, Industrial drawings, stamps, advertising material, photographs, etc.</td>
<td>14.5</td>
<td>20.2</td>
<td>71.8</td>
<td>94.9</td>
</tr>
</tbody>
</table>

**Source:** "UK Overseas Trade Statistics", (Department of Trade), SITC Sub-groups/items 892.1,2,3,4,9 (1970); 892.1,2,4,8 (1980).

**Note:** The Department of Trade classifies published and printed matter in the same category, so it is not possible to distinguish trade in published books, newspapers and periodicals from work done by British printers for customers in overseas countries, or to estimate the extent to which British publishers use foreign printers. This latter aspect was said by the manager of Company K to be an important characteristic of the book trade in recent years, although the extent to which foreign printers are used could not be estimated from available data.
increased international competition. As long as there are minority interests in the literary fields, there is likely to be a market for small printing firms engaged in the printing of books and booklets. In addition, the sub-contract nature of the printing process provides further scope for small printing firms. One of the partners from Company K suggested that major printing companies had adopted the practice of manufacturing plates (either letterpress or litho) and printing books abroad, in countries where labour was cheaper. Consequently, the time gap between final proofing and publication was usually in the order of six months. He suggested that there would always be a market for small printers where a shorter period from proofing to publication was required.

The market for periodicals has increased steadily in post-war years, since although the mortality rate is high, even more new periodicals appear each year to replace the failures. However, as the market for periodicals has expanded in recent years, there has been a strong tendency towards increased concentration. More and more periodicals have been gathered under the umbrella of a small number of publishing houses - each with its own printing resources. Sadler and Barry (1970) reported that in 1970 the International Publishing Corporation (IPC) controlled some 75 general periodicals and well over 100 other journals. The consequence of this trend is a shrinkage in the market for small
independent printers.

Several reports by NEDO (EDC for newspapers, printing and publishing) suggest that future prosperity for the small business sector lies within specialist product groups in the printing industry(7). Specialist printing may be seen to include work which requires specialist equipment or process knowledge such as the printing of currency; stamps; printing on plastic film, metal, or other special materials for the packaging trades; printing of maps, labels; and specialist stationery. Decisions to specialise are risky, in that they involve the acquisition of specialist machinery which will be specifically tailored for the product in question. Consequently, decisions to specialise will tend to be irreversible, at least in the short term. Nevertheless, Sadler and Barry (1970) concluded that specialisation was an avenue which appeared to promise not only the opportunity to increase turnover, but to do so while retaining comfortably high profit margins. Sadler and Barry's analysis is supported by the financial analysis of firms in the present survey. Four categories of printer were identified: general printers and stationers; printers and publishers(8); specialist printers - firms undertaking a specialist function or process, such as numerical and cheque-book printing or engraving and copperplate printing; and finally there was a category to encompass all the other miscellaneous activities which did not fall into any of the above categories,
for example, the activities of one firm in the sample included the manufacture of paper-lined jute bags and other wrapping papers in addition to stationery manufacture and printing activities.

As a general rule, specialist printers, and printers and publishers were more profitable than the other two groups of activities - see Table 8.14.

**TABLE 8.14. Company Performance in Different Sectors of the Printing Industry**

<table>
<thead>
<tr>
<th>PRINTING SECTOR</th>
<th>No. Firms</th>
<th>Mean</th>
<th>Median</th>
<th>Coefficient of Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NET PROFITABILITY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Printers</td>
<td>23</td>
<td>9.3</td>
<td>8.0</td>
<td>177.2</td>
</tr>
<tr>
<td>Printers &amp; Publishers</td>
<td>7</td>
<td>17.6</td>
<td>18.5</td>
<td>69.6</td>
</tr>
<tr>
<td>Specialist Printers</td>
<td>11</td>
<td>18.5</td>
<td>12.6</td>
<td>145.3</td>
</tr>
<tr>
<td>Others</td>
<td>6</td>
<td>7.4</td>
<td>6.7</td>
<td>130.4</td>
</tr>
<tr>
<td><strong>GROSS PROFITABILITY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Printers</td>
<td>23</td>
<td>26.6</td>
<td>24.5</td>
<td>55.3</td>
</tr>
<tr>
<td>Printers &amp; Publishers</td>
<td>7</td>
<td>21.8</td>
<td>23.8</td>
<td>29.0</td>
</tr>
<tr>
<td>Specialist Printers</td>
<td>11</td>
<td>29.6</td>
<td>36.0</td>
<td>60.1</td>
</tr>
<tr>
<td>Others</td>
<td>6</td>
<td>19.4</td>
<td>18.3</td>
<td>78.8</td>
</tr>
<tr>
<td><strong>GROWTH RATE (SALES)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Printers</td>
<td>10</td>
<td>12.9</td>
<td>13.8</td>
<td>91.0</td>
</tr>
<tr>
<td>Printers &amp; Publishers</td>
<td>7</td>
<td>18.9</td>
<td>19.3</td>
<td>27.5</td>
</tr>
<tr>
<td>Specialist Printers</td>
<td>8</td>
<td>12.7</td>
<td>11.4</td>
<td>87.8</td>
</tr>
<tr>
<td>Others</td>
<td>5</td>
<td>2.5</td>
<td>4.7</td>
<td>86.6</td>
</tr>
</tbody>
</table>


Differences in performance between small printing firms appear to be related to the general level of performance of firms in different printing sectors rather than factors associated with the size of firms. This proposition is supported by the low level of association between the relative size and performance of small...
printing firms in general—see Table 8.15.

**TABLE 8.15.** Spearman's Rank Correlation Coefficient Between Company Size and Performance in Different Sectors of the Printing Industry

<table>
<thead>
<tr>
<th>PRINTING SECTOR</th>
<th>NET PROFITABILITY</th>
<th>GROSS PROFITABILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Printers</td>
<td>0.19 (n=23)*</td>
<td>0.29 (n=23)*</td>
</tr>
<tr>
<td>Printers &amp; Publishers</td>
<td>-0.54 (n=7) *</td>
<td>-0.09 (n=7) *</td>
</tr>
<tr>
<td>Specialist Printers</td>
<td>-0.15 (n=11)*</td>
<td>-0.28 (n=11)*</td>
</tr>
<tr>
<td>Others</td>
<td>-0.89 (n=6) a</td>
<td>-0.89 (n=6) a</td>
</tr>
</tbody>
</table>

**Notes:** a = significant at 5% level. * = not significant.

Although the number of observations in each category is not sufficiently large to propose generalisations about the industry as a whole, the evidence does not contradict the hypothesis that specialist printers, and printers and publishers, tend to be more profitable than firms in the general printing sector.

The high degree of variation of performance levels in the specialist printing sector suggests that while several firms are financially efficient, others are relatively inefficient. Indeed, the three most profitable firms in the total sample are specialist printers. However, the two least efficient firms in the total sample are also specialist printers. One of these firms was Company G, which specialised in cheque-book printing, and had become highly dependent on one particular customer. Failure to diversify both products and customer-mix resulted in a marked decline in company operations when its chief customer started to print its...
own cheque-books and other printing requirements.

ii) THE MARKET FOR DIFFERENT PRINTING PROCESSES

The market for printed products overlaps considerably with the markets for printing processes - especially in relation to specialist products. The difference between letterpress and litho in relation to the requirements for particular products is by no means as straightforward as the technological difference in terms of printing process. Litho may be preferred where large areas of solid colour are required, whereas letterpress may be preferred where the appearance of text and sharpness of definition is important. In reality however, there appears to be a relatively high degree of cross-substitution between the two processes, although advances and improvements to lithographic techniques have tended to favour the use of lithographic processes at the expense of letterpress.

"The rapid rise of offset lithography to become the dominant commercial printing process certainly hastened and cheapened for the buyer, the availability of colour. Being basically a photomechanical printing process, offset lithography has challenged and, in many categories, defeated the older processes, such as letterpress and gravure, particularly for long-run colour work such as mail order catalogues and magazines." (Brewer, 1977, p.42)

As firms have moved towards the use of lithographic processes (to meet the increased demand for colour printing), a number of small firms have been able to secure markets despite using only letterpress processes (for example, Company D in the present sample). However,
the market for these firms tends to be restricted to small batch jobbing orders which do not require the use of colour (for example, tickets). Such activities do not appear to provide the basis for company expansion since the demand for these products and/or services tends to be restricted to a small local market.

C. THE SYSTEM OF INDUSTRIAL RELATIONS IN THE BRITISH PRINTING INDUSTRY

A review of the system of industrial relations in the printing industry is necessary if the implications of changing technologies and markets are to be understood within the context of individual company behaviour. In an earlier study of small printing firms, Sadler and Barry (1970) concluded that

"... it is impossible to understand how management in the industry functions without taking account of the ways in which relations with organised labour have developed historically and of the extent to which questions of industrial relations act as a constraint on management's scope for decision taking today." (pp.22-23)

The history of industrial relations in the printing industry is a lengthy and complex issue which is beyond the scope of the present study. An excellent account of the historical development of industrial relations in the printing industry is presented by Child (1967). Therefore, to avoid repetition, although at the risk of oversimplification, a brief outline of important aspects of the industrial relations system of the printing industry is sketched below. Particular emphasis is given to aspects of the system impinging on the
industry’s changing structure, and the ability of firms to adapt to changing technologies and markets.

Employers in the printing industry are represented at national level by the British Federation of Master Printers (BFMP), Scottish representations being made via the Society of Master Printers of Scotland (SMPS). Basic rates of pay and conditions of work are negotiated jointly by BFMP and the Newspaper Society (representing both national and provincial newspaper publishers) with the Printing and Kindred Trades Federation (PKTF) representing the unions in the industry. From the point of view of membership, the PKTF is dominated by two unions: the National Graphical Association (NGA) and the Society of Graphical and Allied Trades (SOGAT). In addition we may identify two other unions of importance to the union structure of the industry: the National Society of Operative Printers and Assistants (NATSOFA), and the Society of Lithographic Artists, Designers, Engravers and Process Workers (SLADE)(10).

The largest union is SOGAT which consists mainly of less skilled workers in newspapers, general printing, and paper and board industries, along with some skilled workers such as bookbinders and papermakers. The NGA is the largest craft union in the industry, and is an amalgamation of most of the craft unions. The other major craft union is SLADE. NATSOFA is a union composed of white collar and less-skilled workers in the newspaper industry, along with skilled labourers and unskilled
recruits from outside the newspaper industries.

An important feature of industrial relations in the industry is the pre-entry closed shop operated for craft functions. This manifests itself in several facets of the labour market. In terms of wage negotiation, basic minimum rates for each category of employee are agreed between the PFTF and the employers. The earnings of printing trade workers are made up of the basic minimum rate, together with such items as shift extras, overtime, incentive bonus, machine extras (a claim for working a special type of machinery), merit money (in effect a "retainer"), and house rates (locally negotiated rates for groups of workers). The latter element depends largely on the market rates for labour in the district and the bargaining strength on the shop floor.

The power afforded to unions by the pre-entry closed shop has been the subject of certain criticism. As far back as 1965 the National Board of Prices and Incomes criticised the unions for engaging in restrictive practices such as restrictions on entry into the trade, overmanning and pegged outputs. These criticisms were developed further in the Cameron Report (1967), which commented that employers had allowed control of certain matters to pass into the hands of unions to a degree "possibly without parallel in this country". Again, this referred to established working practices in the industry which centred upon a restriction on the intake.
of trainees and apprenticeships; demarcation practices, particularly between craft and non-craft unions; restrictions on the upgrading of workers, irrespective of whether they are fully skilled; pegged outputs and over-manning; and restrictions on the transfer of men from one firm to another.

The existence of such working practices is a reflection of the considerable bargaining strength of labour in the industry. This strength appears to emanate from several sources. Firstly, the employers federation is an amalgamation of extremely diverse sections of the industry. The Cameron Report (1967) noted that the BFMP faced particular difficulties in reconciling the interests of firms differing markedly in size and function. The Court of Enquiry formed the opinion that BFMP policy was dominated by the views of smaller members of the federation, and that this view did not encourage the adoption of sophisticated approaches to industrial relations problems created by technological change.

A second factor, noted by the Prices and Incomes Board (1965), is the extent to which increased labour costs can be absorbed or passed on to the customer in the form of higher prices. The Board noted that newspapers and periodicals were heavily dependent upon advertising revenue to such an extent that they could incur a "loss" on the printing operation itself. In general printing, the Board observed that customers
rarely queried price increases - either because no one job is exactly like another (making standards hard to establish), or because printing costs formed a small proportion of overall costs. Indeed, as later discussion will illustrate, timeliness of delivery and quality of product are often more important considerations for customers than marginal differences in price between potential suppliers.

Important factors to be taken into account for the analysis of change within the printing industry are the historical and social position of printers. Musson (1954) noted the special position of printers among working men in the early days of industrialisation. During the sixteenth, seventeenth and eighteenth centuries printers had to exercise a skill both rare and prestigious at that time - the skill of literacy. A desire to maintain their high status among manual workers and "intellectual" character of their profession spurred the desire to control the level and regulations governing apprenticeships through the operation of a monopoly in the supply of the industry's skilled labour. Union attempts to maintain traditional skills have created problems for employers with respect to the introduction of modern techniques which render traditional skills partially redundant. For example, Williams (1979) has traced the root of the dispute at Times Newspapers in 1979 to the introduction of new methods of composing type which undermine the traditional skills of compositors. Although many old
firms, particularly family businesses face problems introducing new technologies through the operation of "custom and practice" (Sadler and Barry, 1970), increased specialisation of function necessitated by increased mechanisation has afforded opportunities for printers with specialist skills to set up their own business. The discussion of printing technologies presented earlier in this chapter noted that Companies E and K were founded by skilled printers who had become frustrated in their former employment because employers were unwilling to introduce processes consistent with recent process innovations. The evidence from Companies E and K suggests that where "custom and practice" results in managers failing to adapt to market and technological change, skilled printers or machine operators may seek to set up their own business in order to take advantage of their skills and/or knowledge.

The problems of introducing new technologies and labour resistance to change were seen by Sadler and Barry (1970) to be a major factor in the relative decline of small printing firms during the 1960s. Evidence presented in the current study suggests that the changing skill content of printing processes are an important factor in the rejuvenation of small business activity during the 1970s. This argument runs contrary to Sadler and Barry's analysis of the impact of custom and practice on the structure of the printing industry. Whereas Sadler and Barry suggest that "custom and practice" is
a factor associated with the demise of small printing firms, the present analysis suggests that it may stimulate skilled printers to set up their own business. The managers of Companies E and K were critical of both former employers and their craft union (SLADE) as sources of frustrations which precipitated the decision to set up their own business. One of the partners in Company K remarked that:

"... I was a camera-operator in my former employment. I was not allowed to perform other functions associated with (lithographic) plate making because the union (SLADE) insisted that others performed these tasks. As far as they were concerned, I was a camera-operator and that's all ... In my own business I have control over the total process. That's where the satisfaction comes from."

In effect, setting up his own business appears to be related to a desire for increased job satisfaction through job enlargement within a craft function. Although technological change and increased mechanisation have altered the skill content of printing processes, job demarcation and restrictions on the tasks printers may perform have effectively reduced the craft content undertaken by individual printers. This analysis is consistent with Braverman (1974) who suggests that the only way open to workers to regain mastery of the labour process is through scientific, technical and engineering knowledge (p.443). The possession of technical knowledge and limitation of tasks to which the knowledge may be applied because of job demarcation in the printing process appears to be consistent with the increased incidence
of "entrepreneurial" activity, as printers seek to regain full control of their craft through forming their own business.

The industry's fragmented structure and market opportunities for small printing firms appear to be stimulated further because small- and medium-sized printers and publishers seem to be reluctant to incorporate certain craft skills into their organisational structure. In particular, printers and publishers appear reluctant to employ members of SLADE, preferring to sub-contract work undertaken by these craftsmen (lithographic plate-making and assembling). Their reluctance to undertake these tasks within the printing process appears to be related to traditional rivalries between craft unions, and the perceived disruption this could cause within small printers and publishers. Discussion of why printers and publishers sub-contracted their assembly and plate-making functions revealed the following comments:

"They (the publishers) don't want to become involved with Bolshie SLADE members. They seem to think we cause too much trouble. It is much easier for them to sub-contract the work than to have all the hassles of dealing with two craft unions." (Partner in Company K)

"Some of these printers seem to have enough trouble with NGA members. They seem to think that employing SLADE members in order to assemble books and the like, will be more trouble than it's worth. So, they tend to sub-contract their work to people like us." (Managing Director, Company C)

In effect, the fragmented nature of the printing industry
appears to have been fostered by the organised craft traditions of different printing processes. This fragmentation appears to provide market opportunities for small, craft-based printing firms.

The tentative conclusion of this section is that "custom and practice" in the printing industry has influenced the recent rejuvenation of small firm activity. The traditional organisation of labour, and apparent rivalry between different classes of skilled labour, has resulted in printers and publishers preferring to subcontract work to printers specialising in particular craft functions rather than incorporate these skills in their own organisational structure. On the other hand, union attempts to halt the diffusion of technology changes which erode traditional craft skills have led to frustration on the part of technically skilled printers, and resulted in many printers starting their own businesses.

8.4. SMALL COMPANY PERFORMANCE AND THE CONTEXT OF SMALL FIRMS WITHIN THE PRINTING INDUSTRY

The examination of exogenous factors which influence small company performance in the printing industry suggests that variations in performance levels may be explained by the behaviour of firms within a rapidly changing market and technological environment. In this section the interplay between endogenous factors specific to individual firms and changing market and technological environment is examined in greater detail.
A. AGE OF COMPANY

The overview of changing market and technological environments in the printing industry suggested that there is wide scope for individuals to set-up their own business to take advantage of new market opportunities, and that many established firms had slipped into decline through their unwillingness or inability to adapt to the changing environments. The inference from this is that older firms will tend to perform less effectively than new firms taking advantage of new printing processes.

This hypothesis was tested using the generation of management controlling a firm in 1976/77 as an index of company age. This information was obtained directly from the interviews or from accompanying notes in a company's published accounts. Where this information was not available in this form, it was inferred using the date of incorporation as a yardstick to measure company age (11).

Using this index of company age, first and second generation printing firms appear to be more profitable than older companies - see Table 8.16. This relationship held for both net and gross profitability measures of efficiency, and supports results obtained by Boswell (1972) with respect to the performance of small firms in general. The high variability of net profitability rates among older printing firms suggests that while some of these relatively aged firms are performing relatively effectively, others have become inefficient.
### Company Performance and the Generation of Company Management

<table>
<thead>
<tr>
<th>Generation of Management</th>
<th>No. Firms</th>
<th>Mean</th>
<th>Median</th>
<th>Coefficient of Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Net Profitability</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st Generation</td>
<td>15</td>
<td>16.2</td>
<td>14.4</td>
<td>89.6</td>
</tr>
<tr>
<td>2nd Generation</td>
<td>14</td>
<td>14.6</td>
<td>15.9</td>
<td>115.2</td>
</tr>
<tr>
<td>3rd Generation +</td>
<td>18</td>
<td>9.9</td>
<td>5.6</td>
<td>198.4</td>
</tr>
<tr>
<td><strong>Gross Profitability</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st Generation</td>
<td>15</td>
<td>29.1</td>
<td>28.7</td>
<td>44.3</td>
</tr>
<tr>
<td>2nd Generation</td>
<td>14</td>
<td>28.8</td>
<td>28.9</td>
<td>65.3</td>
</tr>
<tr>
<td>3rd Generation</td>
<td>18</td>
<td>21.8</td>
<td>18.4</td>
<td>47.2</td>
</tr>
<tr>
<td><strong>Growth Rate (Sales)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st Generation</td>
<td>6</td>
<td>14.3</td>
<td>11.6</td>
<td>63.9</td>
</tr>
<tr>
<td>2nd Generation</td>
<td>8</td>
<td>12.1</td>
<td>13.5</td>
<td>134.8</td>
</tr>
<tr>
<td>3rd Generation +</td>
<td>13</td>
<td>10.7</td>
<td>15.8</td>
<td>144.1</td>
</tr>
</tbody>
</table>

This judgement is supported by the analysis of company growth rates for firms in their third or subsequent generation of management. Again the high variability of growth rates suggests that several firms are in severe decline. An examination of the disaggregated data reveals that sales declined in absolute terms in the period 1973-76 in four of the thirteen firms in this category for which sales data was available. Since the average price of general printed products rose by almost 70% in the same period\(^{12}\), this represents a marked decline in real terms for these four companies.

Any conclusions regarding the relationship between the relative performance and age of small printing firms must be tentative because of the relatively small number of observations. Nevertheless, the tentative conclusion of the present analysis is that younger firms tend to
perform more effectively than relatively aged small firms, some of which appear to be in severe decline.

B. THE PATTERN OF OWNERSHIP AND CONTROL

Small printing firms in the present analysis have a more dispersed pattern of ownership and control than observed in the sample of small soft drinks manufacturers. The cross-tabulation of company age and pattern of ownership suggests that there is a tendency for older firms to have developed a pattern of family ownership - see Table 8.17.

**TABLE 8.17.** The Extent of Family-Domination and the Age of Small Printing Firms

<table>
<thead>
<tr>
<th>EXTENT OF &quot;NEPOTISM&quot;</th>
<th>GENERATION OF FIRM'S MANAGEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1st</td>
</tr>
<tr>
<td>All or Majority of Directors Related</td>
<td>7</td>
</tr>
<tr>
<td>Minority or No Directors Related</td>
<td>8</td>
</tr>
</tbody>
</table>

This pattern of ownership and control may be explained by two processes. First generation firms in the present sample (for example, Companies D, K, and L) were formed as a partnership, or a partner was readily introduced to undertake managerial functions outwith the founders expertise (see case history of Company B). These processes conform to the observations reported by Scott (1976) and reports of successful entrepreneurship by Roberts (1969). Consequently, many first generation firms are likely to have a dispersed ownership and control. However, as firms grow, their is a tendency to shed
partners — indeed Collins et al (1964) see this as an integral part of the growth process. The result of this process is to transform firms with a dispersed pattern of ownership and control into family-dominated firms. This process was observed in the case of Company J.

Small printing firms with a family-dominated pattern of ownership and control appear to be less profitable than firms with a more dispersed pattern of ownership and control — see Table 8.18.

TABLE 8.18. Company Performance and the Extent of Family-Domination

<table>
<thead>
<tr>
<th>EXTENT OF FAMILY DOMINANCE (&quot;NEPOTISM&quot;)</th>
<th>No. FIRM</th>
<th>MEAN</th>
<th>MEDIAN</th>
<th>COEFFICIENT OF VARIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>NET PROFITABILITY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Directors Related</td>
<td>11</td>
<td>2.0</td>
<td>3.5</td>
<td>721.1</td>
</tr>
<tr>
<td>Majority Directors Related</td>
<td>14</td>
<td>15.6</td>
<td>12.9</td>
<td>73.6</td>
</tr>
<tr>
<td>Minority/No Directors Related</td>
<td>15</td>
<td>14.5</td>
<td>14.4</td>
<td>130.3</td>
</tr>
<tr>
<td>Subsidiary</td>
<td>7</td>
<td>17.7</td>
<td>5.7</td>
<td>166.8</td>
</tr>
<tr>
<td>GROSS PROFITABILITY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Directors Related</td>
<td>11</td>
<td>23.7</td>
<td>22.6</td>
<td>58.2</td>
</tr>
<tr>
<td>Majority Directors Related</td>
<td>14</td>
<td>28.9</td>
<td>24.3</td>
<td>48.4</td>
</tr>
<tr>
<td>Minority/No Directors Related</td>
<td>15</td>
<td>24.0</td>
<td>26.4</td>
<td>102.5</td>
</tr>
<tr>
<td>Subsidiary</td>
<td>7</td>
<td>19.5</td>
<td>13.1</td>
<td>74.1</td>
</tr>
<tr>
<td>GROWTH RATE (SALES)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Directors Related</td>
<td>4</td>
<td>10.5</td>
<td>12.6</td>
<td>157.5</td>
</tr>
<tr>
<td>Majority Directors Related</td>
<td>7</td>
<td>6.1</td>
<td>11.8</td>
<td>245.3</td>
</tr>
<tr>
<td>Minority/No Directors Related</td>
<td>10</td>
<td>17.2</td>
<td>17.2</td>
<td>48.2</td>
</tr>
<tr>
<td>Subsidiary</td>
<td>7</td>
<td>13.3</td>
<td>18.6</td>
<td>129.8</td>
</tr>
</tbody>
</table>


The relationship between family control and poor financial performance is less marked when performance is measured.
in terms of gross profitability. This is partially explained by a proportionally greater distribution of gross profits in the form of directors' remuneration in family-dominated printing firms - see Table 8.19.

**TABLE 8.19.** The Level of Directors' Remuneration in Family-Dominated Small Printing Firms

<table>
<thead>
<tr>
<th>Firms in Which All Directors are Related (n=11)</th>
<th>Average Remuneration per Director (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIRECTORS' REMUNERATION AS % GROSS PROFITS</td>
<td>Mean</td>
</tr>
<tr>
<td>Mean Coefficient of Variation</td>
<td>67.3</td>
</tr>
<tr>
<td>All Small Firms in sample (n=39)</td>
<td>49.1</td>
</tr>
</tbody>
</table>

**Source:** Table 8.7; Financial analysis undertaken at Exchequer House, Edinburgh.

However, this proportionally higher distribution of gross profits to company directors is only sufficient to bring directors' remunerations to the level of remunerations received by directors in non-family firms with a proportionally lower distribution of gross profits. This suggests that the measure of net profitability provides a more accurate reflection of the relative efficiency of small printing firms in the present study, that is, that family-dominated firms tend to be less profitable than non-family businesses.

The high variability of net profit rates suggests that several family-dominated printing firms do perform
relatively efficiently. The disaggregated data reveals that two of the eleven firms in which all directors were related achieved a return on capital of greater than 20% (industry average = 12.4%) (13). The remaining nine firms achieved a return on capital of less than 6%, or traded at a loss in 1976. This evidence supports the tentative conclusion that non-family firms are more profitable than family-dominated businesses, despite the wide dispersion of performance levels among family-dominated printing firms.

C. QUALITY OF MANAGEMENT

The relatively high incidence of family-dominated companies among the sub-sample of older small printing firms (Table 8.17) appears to influence the degree of management expertise available to these firms. The analysis of the industry's industrial relations system which was presented earlier in this chapter suggested that the craft tradition and system of apprenticeships have tended to form the seedbed of recent entrepreneurial activity in the printing industry. The founders of Companies E and K appear to have been motivated to set up their own businesses because of frustrations created by former employers being unwilling or unable to adopt recent process innovations. However, the mere possession of technical (engineering) knowledge consistent with modern sophisticated printing processes does not appear to be sufficient to generate company success. The case histories of E and K may be used to illustrate this point.
Company E was set up by a skilled printer/designer who formerly worked for a major printing company in Scotland. Since setting up his own business, the managing director has been responsible for performing all managerial functions in his business; yet he admitted to being more interested in the craft and technical aspects of the production process. Indeed, little managerial effort appeared to be devoted to marketing functions designed to solicit orders and expand company markets. The relatively poor performance of this company (4% net profitability in 1976) appears to be related to the low level of managerial expertise in functional areas such as marketing and finance.

This situation may be contrasted with the history of Company K. This partnership is between two individuals from different backgrounds within the printing industry. One partner was a camera-operator in his former employment, and was concerned with the technical aspects of the printing process, whereas the other partner had been a salesman for a relatively large printing firm. These roles were maintained in their new partnership.

Company K appears to have grown quite rapidly in its infant years, although the exact level of company performance could not be verified since company accounts were not available for examination. However, the firm more than doubled its workforce between 1974 and 1976. Although this represents a small increase in absolute
terms - total employment rising from three to seven individuals - it represents a marked growth for this particular company. Company E, on the other hand, has not increased its workforce since its founding in 1969. The critical factor suggested by these two case studies is the need to incorporate adequate managerial expertise (skills) into the management structure of infant (and indeed, mature) small firms. Furthermore, the cases conform to the prescriptions for successful entrepreneurship described by both Scott (1976) and Roberts (1969).

Inheritor-managers in older family businesses in the present study do not appear to possess the same technical (production) expertise as company founders. Even where inheritor-managers have gained technical qualifications (for example, the managing directors of Companies A, G and H), training in other managerial functions appeared to be restricted to experience within the family business. Limited managerial experience and expertise appears to be related to managerial inertia with respect to adapting company activities to meet recent market and technological change within the printing industry. This factor was observed in Company G which had failed to diversify both product-mix and range of customers. The firm was heavily dependent on one customer for its sales of cheque-books, and its sales were almost halved when the bank in question started to print its own cheque-books and other printed matter. The firm's poor financial performance may be traced to
this loss of its chief customer, and its inability to diversify into new product markets associated with printed matter.

In summary, the relatively poor financial performance of older family businesses appears to be related to the narrowness of management expertise and experience typical of these firms. Where executive-control is of a non-family nature (for example, in Companies C, D, F and K), company profitability appears to be higher than the average of the total sample^{14}.

D. TECHNOLOGY

This aspect of the analysis concerns the type of plant operated by individual companies relative to other firms in their particular market sectors. Evidence presented earlier in this chapter noted that printing markets are wide and diverse, and that technologies appropriate to individual markets are equally variegated. Because of this lack of standardisation in technical processes, any comparison of technologies between firms will be limited in its ability to discriminate factors associated with different levels of company performance. The overview of printing markets and technologies presented earlier noted the increased demand for colour products (and processes) and trend favouring the use of lithographic processes at the expense of letterpress. The markets and printing processes employed by the fifteen firms in the case study sample are examined now in relation
to these trends favouring the use of lithographic processes and capacity for colour printing.

Six of the sample may be classified as specialist printers, insofar as they undertake specialist functions within the industry's framework (for example, cheque-book printing and photo-engraving). Use of specialist processes means that a simple examination of the impact of colour and trend towards lithography is not possible for these six firms (Companies D, G, L, M, N, P).

Evidence from the remaining nine companies is not conclusive in suggesting any relationship between the technology applied by individual firms and the level of company performance (as measured by net profitability) - see Table 8.20.

**TABLE 8.20. Printing Processes and Levels of Performance**

<table>
<thead>
<tr>
<th>COMPANY</th>
<th>CAPACITY FOR COLOUR PRINTING</th>
<th>LITHO</th>
<th>LETTERPRESS</th>
<th>NET PROFITABILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>-5.4</td>
</tr>
<tr>
<td>B</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>24.0</td>
</tr>
<tr>
<td>C</td>
<td>Yes</td>
<td>*</td>
<td>*</td>
<td>49.8</td>
</tr>
<tr>
<td>D</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>24.5</td>
</tr>
<tr>
<td>E</td>
<td>*</td>
<td>Yes</td>
<td>No</td>
<td>4.0</td>
</tr>
<tr>
<td>F</td>
<td>*</td>
<td>Yes</td>
<td>No</td>
<td>22.4</td>
</tr>
<tr>
<td>G</td>
<td>Yes</td>
<td>*</td>
<td>*</td>
<td>-18.8</td>
</tr>
<tr>
<td>H</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>5.6</td>
</tr>
<tr>
<td>J</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>na</td>
</tr>
<tr>
<td>K</td>
<td>*</td>
<td>Yes</td>
<td>No</td>
<td>na</td>
</tr>
<tr>
<td>L</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>6.2</td>
</tr>
<tr>
<td>M</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>44.4</td>
</tr>
<tr>
<td>N</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>na</td>
</tr>
<tr>
<td>O</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>34.8</td>
</tr>
</tbody>
</table>

Notes: * These firms performed specialist processes, and the applied technology could not be classified into any of the simple codes used for this table.

na The level of net profitability could not be verified via published financial reports, even though an approximate level of profitability was suggested by managing directors during the interviews.
The small number of observations does not permit statistical tests of any suggested relationship. Nevertheless, evidence from firms in the sample does not contradict the hypothesis that firms which lag in the introduction of recent process innovations tend to be less efficient than firms which have adopted colour and lithographic processes.

Three firms in the present study did not have the capacity for colour printing in 1976 (Companies A, J and D). Companies A and D appeared to be financially inefficient. The owner-manager of Company D indicated that his company faced certain financial problems, although the extent of these problems could not be verified via published financial data. Company A had traded at a loss in three of the previous six financial years, while the firm's mean gross profitability during the period 1973-1976 was 18.5% - which is considerably below the sample mean of 26.8%. Unlike Companies A and D, Company J achieved average levels of profitability, despite a lack of capacity for colour printing. However, net profitability had fallen from 33.9% in 1971 to 15.6% in 1976. In addition, company sales rose by 7.8% between 1975 and 1976 compared to an average rise in the price of general printed products of 13.8% (15). This represents a decline in real terms for the products of Company J, and suggests that the failure to introduce recent process innovations has precipitated the decline in company performance in recent years.
At the other end of the spectrum, two companies which appeared to have kept pace with technological changes achieved below average levels of profitability. Company E (net profitability 4.0% in 1976) was founded in 1969, and became incorporated in 1972. In its first year under incorporation it traded at a loss, although it has subsequently come into profit. The managing director attributed its relatively poor performance to the need for all monies to be ploughed-back into the business. This was said to be particularly important for the infant firm since it needed an array of sophisticated equipment to produce high quality colour products for its target markets. Company H, on the other hand, is a well established firm in its third generation of family-management. The company had acquired plant to enable colour printing in 1973, and the company was said to have grown as a result of increased market opportunities presented by colour printing. These figures could not be verified however, since sales figures were not presented in the published accounts. Both net and gross profitability remained variable, being above average in two of the last four years, yet well below average in the other two years. In these two case studies, the adoption of new technologies does not appear to be consistent with financial efficiency. The earlier analysis of managerial expertise noted that Company E's poor performance can be traced to low levels of functional expertise (particularly marketing and finance). Similarly, the family-dominated
managerial structure of Company H appears to be related to poor levels of performance, negating the advantages associated with keeping pace with technological change in the industry.

The remaining general (jobbing) printers which have incorporated new technologies into their production processes appear to have higher than average levels of profitability. Companies B, C and F all traded with net profitability higher than 20% in 1976 (industry average = 12.4%) and appeared to be expanding their markets. Although the number of observations does not lend itself to statistical analysis, the case studies suggest that firms which fail to adopt production processes in line with technological developments tend to have lower than average levels of profitability and poor rates of company growth.

8.5. SUMMARY AND CONCLUSIONS

In the absence of any documentation of detailed market data, primarily because of the great variety of printed products, it has not been possible to specify with precision the various market trends associated with the changing market environment for small printers. However, the overview of the changing market environment presented by Sadler and Barry (1970) and other research emanating from the Ashridge Management Centre (16), together with information gathered during the interviews in the present study, suggests several important
implications for the performance and behaviour of small printing firms.

The great diversity of products associated with the printing industry offers much scope for successful small-scale operations to expand and prosper.

"Printing is one of the most diverse areas for small businesses, and rapid technical progress is continually widening the scope for the individual operator, whether he simply wants to amuse his friends, earn some pin money, or make a full-time living out of it." (Kay, 1978, p. 17)

In addition, the increased demand for specialist printing products and services has provided opportunities for individuals with technical skills to set up their own business to take advantage of market opportunities afforded by technological change. The increased demand for specialist products may be contrasted with decreases in the demand for more general products. Cheaper photocopying systems and small offset machines permit many companies and organisations to cater for their own demand for printed matter. This trend has adversely affected the markets of small and medium-sized jobbing firms.

Increased small firm activity in the printing industry during the 1970s appears to be associated with increased demand for specialist products and services rather than more general jobbing activities.

Recent technological changes based on the development of web-offset processes, demand for colour and application of computer techniques to printing processes, have brought about more efficient production techniques,
but they have not necessarily resulted in new forms of printed product. The opportunities afforded to small printing firms and potential business founders from technology changes in the printing industry primarily involve the ability to increase the quality of printed products at lower production cost. New products in the printing industry tend to be related to more sophisticated techniques of advertising and sales promotion, thus increasing the demand for specialist products and processes.

The ability of small firms to expand in the printing industry appears to be related to the structure of the printing process. Specialisation of process has resulted in many larger printers and publishers sub-contracting parts of the process to small specialist firms. The fragmented structure of the printing process also appears to be a function of the industry's system of industrial relations. Union attempts to resist the diffusion of innovations which erode traditional craft skills appear to create problems for established firms when they attempt to introduce new technologies. Managerial inability or unwillingness to introduce process innovations appears to be one factor associated with skilled printers setting up their own business to take advantage of new printing technologies. At the same time, well-established printing firms may prefer to sub-contract specialist processes to small firms which are able to introduce new technologies because of greater flexibility of the labour process.
Within this changing environment of printing, the performance of small printing firms appears to be influenced by a number of contextual factors. These may be summarised as in Table 8.21, below.

**TABLE 8.21. A Summary of Associations Between the Performance of Small Printing Firms and Company Characteristics (a)**

<table>
<thead>
<tr>
<th>COMPANY CHARACTERISTIC</th>
<th>LEVEL OF PERFORMANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of Firm</td>
<td>No apparent relationship, although the least profitable firms tend to be either very small or employ more than 50 people. Both growth and profitability rates highly variable for all size groupings.</td>
</tr>
<tr>
<td>Age of Firm</td>
<td>Younger firms generally more profitable and better growth rates than older firms, although variability of performance generally high.</td>
</tr>
<tr>
<td>Pattern of Ownership and Control</td>
<td>Family-dominated firms less profitable than firms with other patterns of ownership and control.</td>
</tr>
<tr>
<td>Type of Technology and Plant</td>
<td>Firms with capacity for colour printing generally better performance than firms which do not have this capacity.</td>
</tr>
<tr>
<td>Quality of Management</td>
<td>Family-dominated firms appear to have lower levels of management expertise, which appears to be related to their below average levels of performance.</td>
</tr>
<tr>
<td>Sector of Industry</td>
<td>Specialist printers, and printers and publishers tend to be more profitable than general, jobbing printers.</td>
</tr>
</tbody>
</table>

**Note:** (a) These associations are tentative conclusions based on the financial analysis of 50 small Scottish printing firms.

Company size does not appear to be a significant influence on performance. The least profitable firms appear to be
either very small or relatively large companies. The very small firms with low levels of performance tend to be either very young firms or relatively aged family-dominated firms with little growth potential. A pattern of family ownership also appears to typify larger printing firms which have become relatively unprofitable. This association appears to be related to the low level of managerial expertise in these older, family-dominated firms. The low level of technical and commercial expertise seems to be related to managerial inertia with respect to the adoption of recent process innovations, particularly colour printing processes. The present analysis suggests that firms which fail to adopt process innovations consistent with market trends tend to be less profitable than the more-progressive firms which are early in the adoption of these innovations.

The conclusion suggested by this analysis is that technological developments within the printing process have provided a stimulus to a marked entry of new printing firms. This has served to challenge the entrenched position of older family-dominated firms, which appear to lag in the introduction of process innovations. This in turn is manifest in the relative inefficiency of older, family-dominated small printing firms.
The Number of enterprises, employment, and net output of stationery manufacturers by company size (1963-1977) was as follows:

### A. NUMBER OF ENTERPRISES (Percentage in Brackets)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>COMPANY SIZE</th>
<th>1-99</th>
<th>100-199</th>
<th>200-499</th>
<th>500+</th>
<th>U/R*</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1963</td>
<td>170</td>
<td>24</td>
<td></td>
<td>14</td>
<td>12</td>
<td>14</td>
<td>234</td>
</tr>
<tr>
<td>1968</td>
<td>178</td>
<td>30</td>
<td></td>
<td>13</td>
<td>17</td>
<td>7</td>
<td>245</td>
</tr>
<tr>
<td>1970</td>
<td>318 (80)</td>
<td>42 (11)</td>
<td></td>
<td>23 (6)</td>
<td>15 (3)</td>
<td>-</td>
<td>398</td>
</tr>
<tr>
<td>1972</td>
<td>355 (82)</td>
<td>42 (10)</td>
<td></td>
<td>23 (5)</td>
<td>15 (3)</td>
<td>-</td>
<td>435</td>
</tr>
<tr>
<td>1975</td>
<td>414 (84)</td>
<td>44 (9)</td>
<td></td>
<td>19 (4)</td>
<td>10 (2)</td>
<td>-</td>
<td>491</td>
</tr>
<tr>
<td>1977</td>
<td>426 (86)</td>
<td>34 (7)</td>
<td></td>
<td>24 (5)</td>
<td>14 (3)</td>
<td>-</td>
<td>494</td>
</tr>
</tbody>
</table>

### B. NET OUTPUT (Percentage of Total)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>COMPANY SIZE</th>
<th>1-99</th>
<th>100-199</th>
<th>200-499</th>
<th>500+</th>
</tr>
</thead>
<tbody>
<tr>
<td>1963</td>
<td>15</td>
<td>9</td>
<td></td>
<td>16</td>
<td>60</td>
</tr>
<tr>
<td>1968</td>
<td>13</td>
<td>9</td>
<td></td>
<td>11</td>
<td>67</td>
</tr>
<tr>
<td>1970</td>
<td>19</td>
<td>12</td>
<td></td>
<td>15</td>
<td>54</td>
</tr>
<tr>
<td>1972</td>
<td>22</td>
<td>13</td>
<td></td>
<td>15</td>
<td>50</td>
</tr>
<tr>
<td>1975</td>
<td>24</td>
<td>13</td>
<td></td>
<td>13</td>
<td>50</td>
</tr>
<tr>
<td>1977</td>
<td>27</td>
<td>12</td>
<td></td>
<td>19</td>
<td>42</td>
</tr>
</tbody>
</table>

Source: Census of Production, Various Years, Summary Tables, Enterprise Analysis, MLH 483.

Note: * Unsatisfactory Returns. It should be noted that the dramatic increase in the number of reporting units between 1968 and 1970 in the size band 1-99 employees is probably due to the change in basis of data collection, rather than any dramatic increase in the number of firms in the industry. See Chapter 2 of this thesis for an account of the change in statistical base used by the BSO.

The Number of enterprises, employment, and net output of firms engaged in the printing and publishing of newspapers and periodicals (1963-1977) was as follows:
### A. NUMBER OF ENTERPRISES (Percentage of Total in Brackets)

<table>
<thead>
<tr>
<th>COMPANY SIZE</th>
<th>1-99</th>
<th>100-199</th>
<th>200-499</th>
<th>500-999</th>
<th>1000+</th>
<th>U/R(a)</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>YEAR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1963</td>
<td>566</td>
<td>55</td>
<td>33</td>
<td>16</td>
<td>18</td>
<td>27</td>
<td>715</td>
</tr>
<tr>
<td>1968</td>
<td>548</td>
<td>49</td>
<td>37</td>
<td>14</td>
<td>16</td>
<td>49</td>
<td>715</td>
</tr>
<tr>
<td>1970</td>
<td>547 (82)</td>
<td>49 (7)</td>
<td>43 (6)</td>
<td>14 (2)</td>
<td>18 (3)</td>
<td>-</td>
<td>671</td>
</tr>
<tr>
<td>1972</td>
<td>630 (84)</td>
<td>56 (7)</td>
<td>45 (6)</td>
<td>10 (1)</td>
<td>22 (3)</td>
<td>-</td>
<td>813</td>
</tr>
<tr>
<td>1975</td>
<td>1048 (89)</td>
<td>54 (5)</td>
<td>45 (4)</td>
<td>16 (1)</td>
<td>19 (2)</td>
<td>-</td>
<td>1182</td>
</tr>
<tr>
<td>1977</td>
<td>1073 (89)</td>
<td>56 (5)</td>
<td>43 (4)</td>
<td>12 (1)</td>
<td>20 (2)</td>
<td>-</td>
<td>1206</td>
</tr>
</tbody>
</table>

### B. NET OUTPUT (Percentage of Total)

<table>
<thead>
<tr>
<th>COMPANY SIZE</th>
<th>1-99</th>
<th>100-199</th>
<th>200-499</th>
<th>500-999</th>
<th>1000+</th>
</tr>
</thead>
<tbody>
<tr>
<td>YEAR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1963</td>
<td>12</td>
<td>5</td>
<td>8</td>
<td>8</td>
<td>67</td>
</tr>
<tr>
<td>1968</td>
<td>10</td>
<td>4</td>
<td>8</td>
<td>6</td>
<td>72</td>
</tr>
<tr>
<td>1970</td>
<td>8</td>
<td>4</td>
<td>9</td>
<td>6</td>
<td>73</td>
</tr>
<tr>
<td>1972</td>
<td>9</td>
<td>5</td>
<td>8</td>
<td>4</td>
<td>74</td>
</tr>
<tr>
<td>1975</td>
<td>10</td>
<td>4</td>
<td>9</td>
<td>7</td>
<td>70</td>
</tr>
<tr>
<td>1977</td>
<td>9</td>
<td>5</td>
<td>9</td>
<td>6</td>
<td>71</td>
</tr>
</tbody>
</table>

**Source:** Census of Production, Various Years, Summary Tables, Enterprise Analysis MLH 485, 486.

**NOTE:**

(a) Unsatisfactory Returns.

(3) Data derived from Census of Production, PA 232, 489 (1977).

(4) See Winsbury (1977, p.39) for a fuller description of this trend towards cheaper photocomposing systems.

(5) These figures were reported in "Financial Times", 1/9/78, p.6.

(6) "British Business" (31/10/80, p.379), reports a speech by Mr. N. Tebbit, the then-Secretary of State for Industry, in which he urged small printing firms to adopt joint-marketing techniques as a means of fighting increased printing imports by increasing their own exports.

The distinction here is whether a company undertakes publishing activities. Firms which do not publish books, but undertake work such as book assembly and plate-making, are classified as general printers.

See also Figure 8.1, which suggests that general printers are less profitable than book and periodical publishers.

In 1981, members of SLADE agreed to an amalgamation with the NGA. At the time of writing, this agreement had still to be implemented.

The yardstick used to determine "generation of management" from information concerning the year of incorporation was: firms incorporated after 1955 were assumed to be first generation companies, whereas firms incorporated prior to 1930 were assumed to be in their third or subsequent generation of management. This "rule of thumb" categorisation adds a certain degree of arbitrariness to the analysis since "founding" and "incorporation" are by no means equivalent. Firms usually trade without limited liability for some time prior to seeking limited liability status (Bolton, 1971). Nevertheless, it was felt that the adopted rules provided a reasonable approximation to reality, particularly as firms in the case study sample conformed to these "rules".

These figures are calculated from British Printing Industries Federation, "Facts and Figures about the British Printing Industry", Table 6, p.6 - see below:

<table>
<thead>
<tr>
<th>YEAR</th>
<th>WEEKLY EARNINGS</th>
<th>RETAIL PRICES</th>
<th>PRICE OF GENERAL PRINTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>1971</td>
<td>109.3</td>
<td>109.4</td>
<td>108.7</td>
</tr>
<tr>
<td>1972</td>
<td>125.2</td>
<td>117.2</td>
<td>116.9</td>
</tr>
<tr>
<td>1973</td>
<td>140.7</td>
<td>128.0</td>
<td>124.7</td>
</tr>
<tr>
<td>1974</td>
<td>162.6</td>
<td>148.4</td>
<td>151.9</td>
</tr>
<tr>
<td>1975</td>
<td>199.0</td>
<td>184.4</td>
<td>184.8</td>
</tr>
<tr>
<td>1976</td>
<td>233.1</td>
<td>215.0</td>
<td>210.4</td>
</tr>
</tbody>
</table>

Source: Department of Trade Department of Employment.

See Table 8.5.

The net profitability of these four firms was as follows: Company C - 24.5%; Company D - 49.8%; Company F - 22.4%. It was not possible to determine the net profitability of Company K because of its legal status of a private partnership.
(15) See footnote (12) of this chapter.

(16) For example, P. Sadler, T. Webb, P. Lansley, "Management Style and Organisation Structure in the Smaller Business Enterprise", (Ashridge Management Research Unit, November, 1974). This study lists other reports emanating from the Ashridge studies of small firms in the printing and building industries - see their preface, p.(i).
9.1. INTRODUCTION

Our analysis of small company performance in the printing industry suggests that older, family-managed firms are less profitable than younger firms because company processes have not been adapted to the needs of a changing market and technological environment. In particular, older, family businesses have lagged in the introduction of colour and lithographic printing processes. Consequently, they tend to be located in static or declining market sectors which are associated with non-colour and letterpress printing processes. This suggests that the performance of small printing firms is related to the strategies adopted by small business managers in response to environmental change. The purpose of this chapter is to examine those factors which appear to influence management strategies and modes of company behaviour in our case studies of small printing firms(1).

The variegated nature of printing markets and technologies means that environmental change has not been uniform across the industry. The change required of company processes varies according to the particular market(s) served by individual printing firms. Consequently, management strategies are analysed with respect to their impact on the direction of company development,
rather than in terms of specific policies within the context of the printing industry. Strategies for company development may be divided into three broad categories: strategies for growth; quiescent strategies based on little or no change in company activities; and strategies of disinvestment. The present analysis of factors underlying the adoption of different management strategies is based on our case studies of small printing firms. The small sample size does not permit a quantitative analysis of the relative importance of identified processes. Instead, detailed observations are transposed into more generalisable idealisations of company behaviour.

9.2. MANAGEMENT STRATEGIES FOR GROWTH

Ansoff (1969) identifies two general strategies of company growth: diversification and expansion. Diversification refers to the development of products involving design and production technologies (and usually types of market) that are new to the company, whereas expansion involves an increased share of markets within which firms currently operate. None of our case studies intended to seek growth through a diversification of company activities, and accordingly our analysis of company growth processes is limited to an analysis of company expansion.

A. MARKET BEHAVIOUR AND COMPANY EXPANSION IN THE PRINTING INDUSTRY

Firms in the case study sample which appear to have a growth orientation are Companies B, C, F, K, N and P. In addition, the managing directors of Companies G and H
indicated the desirability of company growth, but as we shall see in the following section (9.3), the ability of these two firms to achieve this strategic objective appears to be limited.

The market behaviour of individual firms in the printing industry varies quite markedly, primarily because of the diversity of markets for printed products and fragmented nature of the printing process. Nevertheless, several facets of market behaviour appear to distinguish small firms which have adopted effective expansion policies.

None of the growth-oriented printing firms can be said to be truly innovative since expansion policies are based on the adoption of innovations from external sources, rather than the result of self-generated research and development. However, these growth-oriented firms appear to be early to adopt process innovations relevant to their particular markets. The markets and adopted process innovations for these growth-oriented firms are summarised in Table 9.1, overleaf. A common factor among these printing firms is the adoption of printing processes which are related to specialist processes and services, or growth sectors of the market associated with the increased demand for colour products. Market behaviour associated with the introduction of capacity for colour printing and installation of more-modern machinery which permits more effective colour reproduction may be termed "adaptive".
<table>
<thead>
<tr>
<th>COMPANY</th>
<th>CHIEF PRODUCT/ACTIVITY</th>
<th>MARKET</th>
<th>PRODUCTION PROCESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>General Printer, Stationer</td>
<td>Letterheading for company stationery etc. Other jobbing activities</td>
<td>Colour processes for printing of stationery products. Also letterpress for small jobbing orders.</td>
</tr>
<tr>
<td>C</td>
<td>Lithographic platemakers</td>
<td>Printers</td>
<td>Colour processes. Recent introduction of colour scanner (a)</td>
</tr>
<tr>
<td>F</td>
<td>Printer and Publisher</td>
<td>Book shops and other stationery retailers. Also some printing of books for other publishers.</td>
<td>Modern machinery. Recently installed new printing press.</td>
</tr>
<tr>
<td>K</td>
<td>Lithographic printers</td>
<td>Chiefly other printing firms.</td>
<td>Recently installed colour capacity, and introduced colour scanner.</td>
</tr>
<tr>
<td>N</td>
<td>Printing on clothing &amp; other jobbing printing</td>
<td>Various commercial &amp; non-commercial organisations</td>
<td>Both screen printing and colour lithography</td>
</tr>
<tr>
<td>P</td>
<td>Specialist typesetters</td>
<td>Books &amp; pamphlet printers both in UK and abroad</td>
<td>Purpose-built machinery installed in 1975</td>
</tr>
</tbody>
</table>

Note: (a) A Scanner breaks a particular image into the four basic colours (red, yellow, blue and black) and translates this image onto film, which is then used by assemblers and printing platemakers. The employment of a colour scanner permits greater productivity (and accuracy) in colour reproduction.

since growth policies are related to adapting to environmental change rather than sponsoring change through internal
research and development activities.

B. MANAGEMENT PROCESSES OF "ADAPTIVE" MARKET BEHAVIOUR

An important process supporting the adoption of "adaptive" market behaviour appears to relate to the diffusion of technical and market information in a rapidly changing environment. The managing directors of Companies B, F, N and P claimed to be active participants in both the commercial and social activities of SMPs. Similarly, one of the partners in Company K was still an active member of SLADE since he was involved in the daily production process of his company. In addition, the other partner in Company K and the managing director of Company N had retained their membership of their craft union, although neither manager was actively involved in the union's affairs. The importance of these links with other employers and printers appears to be in providing an arena for discussion of the likely market impact of technological innovations, thus facilitating a diffusion of ideas and change in the industry.

A second source of information appears to be sales representatives - from machinery manufacturers, other printers and the firm's own sales force. The importance of this process may be linked to the fragmented nature of the printing process. Companies C, F, K and P are all at the interface with other printers. Companies C, K and P may be termed "intermediary" printers because they undertake processes and produce goods that are used by
printers at the final stage of production. Company F, on the other hand, is located at the final stage of production, but sub-contracts work to "intermediary" printing firms such as Companies C and K (lithographic platemakers). Consequently, there is frequent contact between the managers and sales representatives of these firms, and this provides a further arena for discussion of market and technological trends. The importance of this source of information may be illustrated by a quote from one of the partners in Company K:

"We decided to introduce capacity for colour printing after a visit from a rep from one of the printing machinery manufacturers. He showed me figures which indicated the growing number of general printers in England who had the capacity for colour printing. You know, Scotland always seems to be about two years behind the South of England in the introduction of new printing processes, and my partner and I thought that it would be in our long-term interest to start colour printing. After all, we had the know-how ... Today, 90% of our work is colour. If it wasn't for that rep and his figures, I suppose we'd still be scraping a living doing small jobs in black and white."

An important characteristic of these processes associated with the diffusion of technical and market information is the receptivity to change of managing directors and/or company owners. This may be partially traced to the motivation of managing directors in this sub-sample. Within the framework of management motivations outlined in Chapter 5.3, the managing directors of Companies C, F, N and P appear to be motivated chiefly towards the achievement of social aims centred on personal security and being recognised for managerial excellence.
The primacy of a growth-orientation in Companies C and P may relate to the divorce of ownership and control in these two firms. The managing director of Company P indicated that he believed the most effective means by which he could illustrate his managerial competence to the company's owners was via the implementation of policies which would result in high levels of growth and profitability for his company. The adoption of "adaptive" behaviour and specialisation of process were seen as a means of achieving security in his present job, while providing a record of managerial excellence should he wish to seek employment in another company. In this respect, personal security and being recognised for managerial excellence appear to be coalescent.

Managerial orientations towards growth in Company N appear to have a similar basis to the case history of Soft Drinks Company 12. The manager's family business was in a state of low profitability and relative stagnation at the time the present managing director assumed control from his father. The present managing director had become skilled in the screen printing process during his apprenticeship in a larger printing firm, whereas his family business was engaged in general jobbing activities, usually with a letterpress process. However, desiring to work in his own business, employment in the family business provided a ready-made vehicle to fulfil such ambitions. When he assumed control of the family business, the present managing director decided to use his personal skills to
introduce the printing of tee shirts as an additional activity to the general jobbing activities of the firm. This aspect of the firm's activities grew to the extent that it now accounts for the majority of company sales. The growth-orientation of this manager appears to emanate from the threat posed to long-term personal security by the decayed state of company affairs which was inherited when the manager assumed control of his family business. The improved performance of the company since its change of activities and re-equipping in 1972 may be measured by its steady rise in net profitability. In 1971 the firm achieved a return on capital of 7.1%, whereas this figure had risen to 44.4% in 1976. In addition company sales rose by 7% in real terms between 1975 and 1976(3). A further similarity between Company N and Soft Drinks Company 12 is that the manager has started to play a more active role in his Employers' Association (SMPS). This appears to reflect a shift in the motivations of the manager of Company N, away from goals centred on a desire for independence towards social aims of managerial excellence. This process is consistent with the theory of management motivation posited by Stanworth and Curran (1973)(4).

The motivation of the managing director in Company F appears to reflect a desire for increased personal status within the industry. Company F is a well-established family business in its third generation of family control, insofar as the position of managing director has been passed down to members of the controlling family, and
indeed, development intentions include family succession of the position of managing director to the present managing director's son. However, several command positions such as financial director and sales manager are the prerogative of personnel unrelated to the controlling family, and the company has maintained a relatively high level of profitability and growth in recent years. This may be partially explained by the higher level of profitability in printing and publishing (the firm's chief activities) compared to the general or jobbing printing sectors, but also appears to be related to management staffing according to functional expertise rather than familial relationship. The company has long-standing expertise in the printing of specialist products such as maps, and the managing director indicated his desire to maintain the family firm's prominence in the printing industry, particularly as this secured his personal prominence within the industry.

A common theme of these managerial goals is that they are directed towards the managers' role in areas of wider society - in particular, within the framework of the printing industry or local community. However, the pattern of management motivation observed in Company K appears to be based on achieving intrinsic job gratifications. Company K was formed in 1974, and has grown quite rapidly since its formation. The partner in charge of sales and administration suggested that growth was sought because it was a challenge and a source of great satisfaction to continue the success that had already
been achieved. This attitude may be contrasted with the attitudes expressed by the owner-managers of Companies E and L (both formed since 1969). Management motivations in both these companies also stressed the maintenance of intrinsic job gratifications, but in these cases job gratifications referred to personal involvement in the craft process of printing. The two partners in Company L and the owner-manager of Company E are all trained craftsmen, whereas the partners in Company K come from different backgrounds - one partner being a printer-craftsman, the other being involved in "selling" throughout his working life. Intrinsic job gratifications for the latter partner appear to be centred on a desire for company growth rather than the maintenance of craft traditions of the production process, and this appears to form the basis for Company K's growth-orientation.

The existence of "complementary" management expertise in Company K, and its relationship to the adoption of adaptive market behaviour, directs attention to the influence of the pattern of ownership and control on market behaviour. The pattern of ownership does not appear to influence the market behaviour of small printing firms in our sample. Among the sub-sample of printing firms characterised as being associated with adaptive market behaviour, Companies C and P are non-family businesses, Company K is a private partnership, Company F is a well-established family business, while there is effective unity of ownership in Companies B and N. A more
important feature of these firms appears to be non-family executive-control. This pattern of control in Companies C, K and P appears to be a function of non-family ownership. However, family businesses B, F and N also have non-family executive-control, with management positions (other than managing director) being staffed according to functional expertise rather than familial relationship. Non-family executive-control appears to facilitate the adaption of company processes in response to market and technological change. In contrast, family-managed firms such as Companies G and H appear to have been ineffective in introducing colour processes or reacting to market threat(7).

9.3. QUIESCENT STRATEGIES OF NO CHANGE

A. MARKET BEHAVIOUR ASSOCIATED WITH QUIESCENT STRATEGIES IN THE PRINTING INDUSTRY

Quiescent strategies of little or no change in company activities were observed in seven of our case studies (Companies A, D, E, J, L, M and O), while the market behaviour of Companies G and H appears to be consistent with market stagnation, despite managerial objectives which are related to a desire for company growth through expansion or diversification. Two modes of market behaviour appear to be associated with quiescent strategies in the printing industry: "reactive" behaviour, in which policies are of a defensive nature and directed towards maintenance of market share; and "passive" behaviour, in which managers appear to make little attempt
to bring company activities into line with recent market
and technological changes.

"Reactive" behaviour is similar to adaptive beh-
aviour insofar as managerial policies are directed
towards the introduction of product or process innovations.
However, Company J appears to have lagged other general
printing firms in the introduction of colour printing
processes. At the time this case study was analysed
(February 1978), Company J only had capacity for black
and white printing. Subsequent market analysis has re-
vealed that colour printing was introduced in 1979,
although this action appears to have been in response to
declining markets for its products based on non-colour
printing, rather than aggressive market behaviour to
expand company markets.

"Passive" market behaviour is consistent with the
desirability of maintaining a comfortable routine, with-
out the problems associated with change. Such policies
were apparent in Companies L and M, while the case his-
tories of Companies G and 0 provide vivid insights into
the implications of adapting this mode of company behaviour
in the highly variable market and technological environ-
ment of printing.

Company G was founded as a jobbing printer, but
later started to specialise in numerical printing. Even-
tually, this market was expanded to include cheque-book
printing, the market for which grew as more individuals
used banking facilities. Having achieved relative market security, strategic planning appears to have become lax, with the result that the company failed to detect threats to its market - particularly from banks printing their own cheque-books and other printing requirements. Failure to detect these threats has culminated in decay for the company (29% decline in sales in real terms between 1973 and 1976\(^{(8)}\)) together with poor financial performance (18.8% net loss in 1976).

In a similar vein, the manager of Company O was quite content to "muddle through" with small jobbing orders for circulars, price lists, and so on. The owner-manager's failure to invest in colour process has ultimately restricted the firm's market opportunities, with a consequent decay in company performance\(^{(9)}\). The implication to be drawn from these two case studies is that managerial attitudes and company behaviour which are typified as "passive" have resulted in the ultimate decay of company operations.

B. MANAGEMENT PROCESSES OF QUIESCENT STRATEGIES IN THE PRINTING INDUSTRY

Passive market behaviour appears to be related to management motivations which are centred upon intrinsic job gratifications and personal involvement in the production process. This may be partially traced to the craft nature of printing, and the circumstances surrounding the decision of printers to set up their own business. Companies E and L are relatively young firms (both formed
since 1969) in which the owner-managers intend to maintain the small scale of company operations. The two partners in Company L both joined a relatively large firm which specialises in advertising and promotional material after leaving art college, where they had majored in film setting and illustrative artwork. They became frustrated within the framework of the advertising agency, and believed they could utilise their artistic/craft background to set-up their own business. Having set up their own business, their chief motivation appears to have been to achieve a "reasonable" standard of living whilst retaining full control over their work environment.

A similar career history and pattern of motivation was observed in Company E. The owner-manager of Company E formerly worked for a major Scottish printing company, but became frustrated in this employment, primarily because he wanted to be more fully involved in the total printing process. A desire for independence and personal involvement in the production process appear to govern managerial actions in this company.

"As long as I can earn a living for myself in my own company, I'll be happy with my lot."

The desire for independence and intrinsic job gratifications centred upon the production process of printing appear to form the basis of the production-oriented strategies of Companies E and L. Neither firm appears to have evolved management processes designed to solicit
orders. Both firms are almost totally dependent on repeat orders from customers which were acquired in the early stages of the firms' development. Company E has the capacity for colour printing, while Company L is located in a "specialist" sector of the printing industry. The relatively poor performance of these firms appears to be related to the adoption of passive market behaviour, which is related to management motivations which stress independence and personal involvement in the production (craft) process, and a narrowness of management expertise which is concentrated on the production process at the expense of other managerial functions.

A narrowness of management expertise also appears to permeate family businesses which have evolved family executive-control. Companies A, G, H and M have evolved family executive-control through the succession of control from father to son, while family-control in Company J has materialised through the shedding of a partner.

"My ex-partner wanted to get the company into debt to finance this and that. I was not prepared to take the risks which his policies required. In the end we decided it was in our interests to split the partnership. Although we didn't part on the best of terms, I'm glad to see he's made a success of his company; but at the same time, I feel more secure in my own position, especially as my son has now joined the company. I hope he will take over one day." (Owner-manager, Company J).

An important characteristic of these five firms is that executive-control appears to be the prerogative of family members. Moreover, management motivations appear to stress the desirability of maintaining family control.
of management processes, despite the current problems faced by several of these family-managed printing firms. Discussion earlier in this chapter noted that Company G appeared to be in severe decline, while the firm's limited management expertise appears to be related to its inability to diversify effectively into other sectors of the printing industry. Similarly, Company H is characterised by a narrowness of management expertise insofar as the expertise of the inheritor-managers appears to be concentrated on the production process at the expense of other facets of management expertise. Again, the production-orientation of these family-managed firms, and the desire to maintain control within controlling family, appears to be manifest in the adoption of passive or reactive market behaviour. This mode of company behaviour appears to be related to the relatively inferior performance of these family-managed firms.

9.4. STRATEGIES OF DISINVESTMENT

Disinvestment is usually associated with the discontinuation of product lines, but for the present discussion emphasis is placed on the disinvestment of capital. One firm in the financial analysis, John McQueen & Son Ltd., ceased printing activities in 1976, but continued to retail stationery products. The firm's controllers were approached with the intention of incorporating this firm in the current analysis, but they were unwilling to discuss their reasons for selling the firm's printing
activities. Nevertheless, management objectives of capital disinvestment were observed in Companies B and O.

In the case of Company B, the present managing director intended to realise his share in the company since he had no children to whom he could transfer his company interests. The firm's market behaviour does not appear to have been affected by the manager's intention to realise his share in the company. This is probably due to the fact that the other working director intends to carry on the firm's management when his partner retires. Moreover, there is an understanding that the present sales director will be able to increase his personal stake in the company through purchasing some of his partner's shares.

Company O, on the other hand, is a company which appears to be in relative decline. The owner-manager has no heirs, but readily accepts that he is unlikely to sell his company as a going concern, particularly because his current customers can be served by any of the many general (jobbing) printers in the Edinburgh area (10). The firm's market behaviour may be characterised as "passive", and its production technologies appear to be relatively dated. These factors seem to be related to the owner-manager's desire to continue trading until he is able to retire (circa 1981) and realise company assets (freehold property, stocks, and so on).
"It's unlikely that the firm could be sold as a going concern, so it's not worth pumping money into the business - I might as well spend it myself. As long as the business gives me a living for the next 5 years or so, I'll be quite content." (Owner-manager, Company 0).

9.5. CONCLUSIONS

The derived ideal types of behaviour patterns may be linked with evidence presented in the previous chapter to suggest a broader model linking management strategies, market behaviour and company performance levels. These relationships may be represented diagrammatically as in Figure 9.1, overleaf, and are summarised in Table 9.2, on page 294.

The case study evidence suggests that firms in which managing directors have sought company expansion have tended to adopt "adaptive" market behaviour, whereas either "reactive" or "passive" market behaviour has characterised firms in which little or no change in company activities has been sought. These modes of market behaviour appear to be related to the relative sophistication of technology operated by small printing firms, and consequently to the contemporaneity of products and processes relative to recent market and technological trends. Firms characterised by reactive or passive behaviour have tended to lag in the introduction of colour processes, and are usually located in relatively static markets for small jobbing orders.

Certain variables centred upon the organisational
FIGURE 9.1. The Relationship Between Managerial Strategies, Company Behaviour and Performance Suggested by the Case Studies of Small Printing Firms

- **MANAGERIAL MOTIVATION**
  - Intrinsic Job Gratifications
  - Security
  - Managerial Excellence

- **Desirability of family succession of control**
- **Desirability of concentration of ownership.**

- **COMPANY PERFORMANCE**
  - Net Profitability
  - Sales Growth

- **MARKET BEHAVIOUR**
  - Passive
  - Reactive
  - Adaptive
  - Innovative

- **MANAGEMENT STRATEGIES**
  - Diversification
  - Expansion
  - No Growth
  - Disinvestment

- **ASPECTS OF ORGANISATIONAL CONTEXT**
  - PATTERN OF OWNERSHIP & CONTROL
  - AGE OF FIRM
  - RELATIVE TECHNOLOGY
    - Age of Plant
    - Litho or Letterpress
    - Capacity for colour printing
  - CUSTOMER-
  - PRODUCT-MIX

- **Direction of Influence**
- **Feedback Process**
<table>
<thead>
<tr>
<th>GENERAL STRATEGY</th>
<th>GROWTH (EXPANSION)</th>
<th>LITTLE OR NO CHANGE IN COMPANY ACTIVITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>MARKET BEHAVIOUR</td>
<td>Adaptive</td>
<td>Reactive</td>
</tr>
<tr>
<td></td>
<td>Active search for new products and markets. Innovations generated from external</td>
<td>New products adopted when traditional markets threatened.</td>
</tr>
<tr>
<td></td>
<td>sources.</td>
<td></td>
</tr>
<tr>
<td>CUSTOMER-MIX; PRODUCT RANGE</td>
<td>Colour products; lithographic processes; intermediary printing processes.</td>
<td>Generally colour products &amp; use of litho; usually small jobbing orders.</td>
</tr>
<tr>
<td></td>
<td>Customers - printers &amp; publishers, advertising agencies, etc.</td>
<td></td>
</tr>
<tr>
<td>PATTERN OF OWNERSHIP &amp; CONTROL</td>
<td>Ownership pattern does not appear to be significant. Executive-control usually non-family, and according to functional expertise.</td>
<td>Ownership &amp; executive-control usually by members of one family - especially in smaller firms.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ownership and executive-control by members of same family. Low levels of management expertise.</td>
</tr>
<tr>
<td>MANAGEMENT MOTIVATIONS</td>
<td>Managerial excellence; financial security; family succession of control (a).</td>
<td>Maintenance of personal or family control of management processes. Intrinsic job gratifications (b).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maintenance of personal or family control of management processes. Intrinsic job gratifications (b).</td>
</tr>
<tr>
<td>COMPANY PERFORMANCE</td>
<td>Generally above for particular sector (c).</td>
<td>Average profitability, low growth rate.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Generally below average profitability and growth for particular sector (c).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A,D,E,G,L, &amp; O</td>
</tr>
</tbody>
</table>

Notes: see overleaf.
Notes to Table 9.2:

(a) This motivation pattern was observed in successful family firms (for example, Company F) where the current managing director is approaching the age at which he intends to retire.

(b) These refer to the craft nature of the printing process.

(c) Mean profitability of the general printing industry 1976 - ICC (1977) = 10.7%, present sample = 9.3%.
Mean profitability of printing and publishing sector, 1976 - ICC (1977) = 22.0%, present sample = 17.6%.

context appear to modify the translation of strategic policies into modes of market behaviour. In particular, the pattern of executive-control appears to influence the ability of managers to adopt effective policies of company development. Firms which are characterised by nepotistic succession of executive-control (for example, Companies A, G and H) tend to be least effective in terms of adapting to market and technological change. This pattern of behaviour is reinforced by the pattern of management motivation. Inheritor-managers in family businesses appear to be motivated towards maintaining family control over managerial processes, and the maintenance of a lifestyle to which they have become accustomed. Older family firms which have achieved relatively high levels of financial efficiency (for example F and N) are associated with non-family executive-control, while management motivations tend to be related to the managing director's role(s) in wider society - in particular, within the political framework of the industry (11).

Our analysis in the previous chapter noted the high
variability of growth rates among the first generation printing firms. The examination of management processes presented in this chapter has noted that several company founders do not seek growth, but are motivated more towards the maintenance of intrinsic job gratifications centred upon the craft process of printing, and personal control of management processes. These motivations appear to be related to the adoption of passive market behaviour and consequent low levels of company performance.

In summary, the printing industry case studies have provided a more diverse set of managerial strategies and processes associated with various modes of company behaviour than witnessed in the soft drinks industry. In part, this may be explained by the very nature of printing, with its variegated markets and methods of production. Nevertheless, the ideal types of behaviour patterns observed in the sample of small general printing firms suggest a broad model of company behaviour which is related to the performance of small printing firms. The interactive nature of management processes and aspects of organisational context has resulted in different modes of company behaviour which reinforce the economic and structural influences on small company performance in the printing industry.

REFERENCE NOTES

(1) See Appendix D for descriptions of the case studies.
The extent to which managers belong to both a craft union and an Employers Association is by no means clear from the evidence of our study. However, the managers of Companies K and N suggested that the majority of company founders would belong to both bodies, whereas inheritor-managers who have not undertaken a craft apprenticeship are unlikely to belong to a labour union. One reason suggested for the dual-affiliation is that if their own company failed, they would still be able to find employment in the printing industry if they retained their union membership - bearing in mind the pre-entry closed shop nature of employment in printing.

Sales rose by 19% at current prices. The computation to real terms is based on the average rise in general printing prices - see footnote 12 to Chapter 8.

See Stanworth and Curran (1973), especially pp.132-145, in which they trace the changing pattern of motivations of one particular small business manager over time.

This phrase is used to denote management expertise in different functional areas.

This refers to where the managing director (and his wife) own more than 50% of the company's shareholding.

The factors influencing this mode of company behaviour are analysed in the following section (9.3).

Computation made using the index of inflation for the general printing industry - see footnote 12, Chapter 8.

This has to be a subjective assessment because no financial analysis was possible since the firm did not have limited liability legal status. Furthermore, the manager indicated that his accounting system was highly unstructured - some job payments being in the form of undeclared earnings. However, the letterpress plant, which served as the sole printing plant, was relatively aged (at least 15 years old). The administration of the firm appeared to be haphazard in comparison to other printing firms visited which performed a similar function. In addition, employment in the company has remained static for many years - two other employees (besides the owner-manager) being employed in the company.

Printing is the modal industry for the Edinburgh area - see footnote 2, Chapter 5.
(11) This refers to the manager's personal status in such bodies as SMPS, and the local Chamber of Commerce.
PART FOUR

A SYNTHESIS OF MANAGEMENT STRATEGIES

IN THE PRINTING AND SOFT DRINKS

INDUSTRIES
A SYNTHESIS OF THE RESULTS

10.1. INTRODUCTION

Analysis of management strategies and small company behaviour in the printing and soft drinks industries has suggested patterns of management and company behaviour specific to each industry. The purpose of this chapter is to synthesise the results of these two studies through an examination of the hypotheses derived from the model of small company dynamics (Chapter 4.2). From this synthesis of results, it is possible to derive generalised "ideal types" of small company based on behavioural characteristics of small firms with different profitability and growth rates. These behavioural characteristics take account of both managerial attitudes and strategies, and their translation into different patterns of company behaviour. Although "pure models" in the sense that ideal types are representations of extremes of individual and company characteristics, they provide a useful criteria by which actual observations may be analysed (Duncan, 1977).

Several hypotheses were derived from our model of small company dynamics in Chapter 4.2. These may be recalled as: (i) social processes underlying the management function influence the mode of strategy-making and perceptions of the need for change; (ii) the influence
of social processes on the pattern of management strategy in small firms is modified by perceptions of environmental constraints to small company activity; (iii) the relationship between organisational context and management strategy is interactive: the firm's context both influencing the pattern of strategy formulation, and in turn being influenced by the adopted strategies; (iv) management strategies are related to the level of company performance via their impact on a firm's organisational context (defining its operating efficiency) and process by which firms adapt to their environment.

These hypotheses are not stated in terms of statements which can be tested through the determination of statistically significant relationships, but are designed to provide the basis for a qualitative examination of the relationship between economic and social processes associated with management strategy formation in small businesses. These areas of analysis are now examined in greater detail.

10.2. SOCIAL PROCESSES UNDERLYING MANAGEMENT STRATEGIES IN SMALL FIRMS

The scope of the present research has been to determine social processes surrounding the role of the small business manager as a mediator between the firm's internal characteristics and its environment. Within this scope it has been possible to examine the influence of the pattern of ownership and control, and the pattern
of managerial motivation, on the processes of strategy formation and implementation.

A. THE PATTERN OF OWNERSHIP AND CONTROL

The vast majority of small soft drinks manufacturers are relatively aged firms which were formed prior to the Second World War (Appendix C1, Table 4). This reflects a relatively low entry of new firms into the industry. The majority of these relatively aged soft drinks manufacturers have evolved a pattern of family ownership (Table 6.35). In contrast, the sample of small printing firms comprises firms from all age groupings. However, older printing firms in their third or subsequent generation of management tend to have a higher degree of family control than first generation printers (Table 8.17).

There are several possible explanations for this trend. First generation firms in the past may have been associated with a greater incidence of family ownership than witnessed in present-day first generation firms, and have simply maintained their pattern of family ownership over time. However, there is no evidence in the present study to support or reject this hypothesis.

An alternative explanation is offered by the case history of Printing Firm J(1). This suggests that first generation firms with control divided between a number of partners evolve into family businesses as partners are shed, and one individual assumes effective control of the company. This process was also witnessed by
Collins, Moore and Unwalla (1964), who suggested that the shedding of partners is an integral part of the growth process of small firms. This suggests that there is a tendency for small firms to evolve a pattern of family ownership.

The implications of family ownership for management strategies in small businesses appear to depend on the type of family ownership and mode of executive-control. Ownership-control may be distinguished at three levels: unity of ownership, in which one individual owns a majority shareholding; a dispersed pattern of family ownership, in which no one individual owns a controlling interest in the family business; and non-family ownership, in which company owners have no familial relationship. Executive-control may be differentiated by the extent to which command positions are the prerogative of family members. These criteria of ownership and control may be used to analyse the pattern of ownership and control in the case studies of small printing firms and soft drinks manufacturers. These are summarised in Table 10.1, overleaf.

i) Unified Ownership and Control

Unity of ownership and control is typically associated with small firms in which all executive tasks are performed by a firm's owner. The five firms in this category may be divided into two distinct groups. SDM 6 and 13 and PF 0 are relatively aged firms in their third
<table>
<thead>
<tr>
<th>OWNERSHIP-CONTROL</th>
<th>EXECUTIVE-CONTROL</th>
<th>FIRMS IN PRESENT SURVEY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unified (a)</td>
<td>Executive-control and ownership-control are synonymous</td>
<td>SDM: 6 &amp; 13</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PF: E, L &amp; O</td>
</tr>
<tr>
<td>Unified (a)</td>
<td>Non-family</td>
<td>SDM: 2, 6, 9 &amp; 12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PF: B &amp; N</td>
</tr>
<tr>
<td>Dispersed-family</td>
<td>Family</td>
<td>SDM: 3, 4, 5 &amp; 7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PF: A, G, H, J, &amp; M</td>
</tr>
<tr>
<td>Dispersed-family</td>
<td>Non-family</td>
<td>SDM: 1, 10 &amp; 11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PF: F</td>
</tr>
<tr>
<td>Non-family</td>
<td>Non-family</td>
<td>PF: C, D, K &amp; P</td>
</tr>
</tbody>
</table>

Note: (a) Although unified ownership was defined as ownership-control by one individual, ownership-control by husband and wife has been classified as "unified" ownership for the purpose of this analysis.

Among the older firms in this category, the managing director of PF E is a sole-inheritor of his family business, whereas the managing directors of SDM 6 and 13 achieved ownership-control after assuming executive-control of their family business (2). Unity of ownership-control appears to be an important feature of firms in which managing directors intend to seek capital disinvestment through a realisation of company assets (sale or voluntary liquidation). Capital disinvestment was observed to be one response to perceived environmental
illiberality. The ability of managing directors to adopt this particular strategy appears to be facilitated by a situation in which he is not restrained by the dictates of members of the wider family circle. Evidence from SDM 6 and 13 and PF 0 suggests that where a managing director perceives little future for his firm, and there is unified ownership and control, personal objectives may be fulfilled through a realisation of company assets. Consistent with this strategy is the observation that family heirs do not depend on the family business for their future employment thereby leaving the owner/manager free to realise his firm's assets at a time he considers to be appropriate.

PFs E and L are relatively young printing firms, Company E being formed in 1969 and Company L in 1972. Unity of ownership and executive-control appears to be consistent with management goals which stress a desire for independence and achievement of intrinsic job gratifications associated with the craft process of printing. Both firms have remained small, and management strategies do not appear to be growth-oriented. Both managing directors suggested that they were content to maintain their firm at its present size.

ii) Unified Ownership and Non-family Executive Control

These firms differ from companies with unified ownership and executive-control insofar as several management functions are delegated to personnel unrelated to the firm's owner. Firms in the present study which
may be classified in this category of ownership-control tend to be larger than firms with unity of ownership-control and executive-control. Management strategy in SDM 2, 8, 9 and 12, and PF B and N tends to be growth-oriented, and is typified by an early adoption of product and process innovations as a means of penetrating growth sectors of the printing and soft drinks industries.

Unity of ownership-control appears to be an important factor associated with strategies of small company rejuvenation. The cases of SDM 12 and PF N suggest that breaking the rigidities which are fostered by family ownership is facilitated by unified ownership-control. In the case of SDM 12, rejuvenation appears to be related to the replacement of ageing family members in command positions by personnel with higher levels of technical competence. This process may be contrasted with the cases of SDM 4 and 7, and PF G and M, in which managing directors appeared to be unable or unwilling to break the rigidities of inadequate technical and commercial expertise which has been fostered by nepotistic succession of executive-control and the pattern of family ownership-control. Unified ownership-control in SDM 12 appears to have enabled the managing director to adopt policies designed to satisfy personal objectives, while non-family executive-control appears to have facilitated the adoption of effective strategies of company growth and development.
iii) Dispersed Family Ownership-Control and Family Executive-Control

The effective strategies of company growth adopted by managers of small firms with non-family executive control may be contrasted with the behaviour of family firms with a pattern of executive-control by family members. The managing directors of SDM 7 and PF G both indicated a desire for company growth - particularly because company markets had declined in real terms (3). However, neither company appears to be associated with strategies necessary to penetrate market growth sectors. The failure to adapt to market and technological change in these cases appears to be related to the relatively low levels of technical and commercial expertise available to the companies. All three partners in Company 7 (which employs 12 people) are involved in the firm's day-to-day functioning. Each partner joined the family business after leaving school, none of them acquiring formal qualifications. Consequently, technical and commercial expertise has been limited to "on the job" learning within the family business. However, the partners appeared to be unwilling to introduce non-family expertise into the firm's management structure, particularly as this would tend to usurp their authority. Similarly, executive-control in Company G is the prerogative of family members with limited commercial experience outside their family business.

The desire (or need) to maintain family control
often conflicts with the desirability of company growth and expansion. The managing directors of SDM 4 and PF A and J suggested that they did not seek company growth because they wanted to maintain the present control structure of their firm's. Expansion in SDM 5 and 7 appeared to be limited because of managerial hostility to perceived "outside interference in company affairs" should external sources of finance be sought. Consequently, investment in plant necessary for the manufacture of product innovations in the soft drinks industry must be financed from internally-generated sources. The below average profitability of these firms appears to result in a failure to introduce product or process innovations, and is manifest in the relative decline of company markets. This suggests that family ownership and executive-control tends to be associated with the adoption of non-aggressive strategies which result in little or no growth in company markets.

The need to maintain family control over company processes, and poor financial performance which restricts funds for reinvestment, may give rise to an alternative strategy of company development in firms with a dispersed pattern of family ownership. The cessation of manufacturing activities, but continued trading as a wholesaler or retailer of products formerly manufactured, has been adopted by J. H. Ferguson & Sons of Plymouth (previously manufacturers of soft drinks) and John McQueen & Son Ltd., (formerly printers, now retailers of printed products).
Moreover, the managing directors of SDM 6 and 13, and two respondents to the questionnaire suggested that a similar strategy may be adopted by their companies, particularly because of the high cost of re-equipping their firms in order to manufacture recent product innovations. All these firms are relatively aged family businesses with executive-control by family members. The ability of these firms to respond effectively to market and technological change appears to be hindered by the desire to maintain family control. Wholesaling or retailing the products of "national" manufacturers relieves the need for investment in new plant and machinery necessary for the manufacture of products innovations, and enables company controllers to retain the firm's pattern of family ownership and executive-control.

iv) Family Ownership-Control and Non-Family Executive-Control

Several family businesses in the present study have evolved a pattern of non-family executive control. These firms tend to be relatively large family firms. SDM 1 and PF F employ more than 100 individuals, while SDM 10 employs some 55 people. It is not clear from the evidence of the present study whether non-family executive-control has evolved because there have been insufficient family members to fill command positions as firms have grown, or whether non-family executive-control has facilitated the process by which firms have grown.
However, given the low level of performance of family firms with family control, tentative support is given to the hypothesis that non-family executive control facilitates the adoption of effective policies of company expansion. Although the family firms in this category do not appear to lead in the adoption of product or process innovations, management strategies are associated with the adoption of innovations as market leaders penetrate growth sectors through the manufacture of product innovations.

v) Non-Family Small Businesses

The four firms which constitute this category may be sub-divided into two classes: relatively aged firms which have evolved a pattern of non-family ownership and control, and relatively young firms which have been founded by individuals unrelated to each other. PF C and P provide examples of the former. Both companies are associated with growth-oriented strategies. Company C adopted colour printing processes in 1965 (relatively early in terms of the present study), and Company P has developed a specialist market for mathematical typesetting. Growth-oriented market strategies and relatively high levels of management expertise appear to be related to the above average performance of these two firms.

Companies D and K, on the other hand, were both less than 10 years old in 1976. Company K has grown quite rapidly since its formation in 1974. This may be
traced, in part, to the early adoption of colour printing processes. The growth orientation of Company K also appears to be related to the complementary expertise of the two founders. One partner had technical expertise with respect to the production process, while the other partner's expertise related to the sales function. This breadth of expertise may be contrasted with Companies E and L in which there is unity of ownership and control, with managerial expertise relating solely to the production process. Companies E and L traded with inferior performance levels compared to Company K, which suggests that the greater breadth of management expertise in Company K is related to more effective strategies of company development.

In summary, evidence from the printing and soft drinks industries suggests that firms with a non-family pattern of ownership and control tend to be associated with adaptive market strategies which are manifest in above average levels of company performance.

B. MANAGEMENT MOTIVATION AND MANAGEMENT STRATEGIES

Analysis of management motivation in the present study is based on a classification of management attitudes and desires into patterns of motivation suggested by prior research of management motivation in small business (for example, Stanworth and Curran, 1973; Smith, 1967; Collins, Moore and Unwalla, 1964), as opposed to an experimental determination of personality
The basis of comparison are the findings of Stanworth and Curren (1973), who posit three basic types of management motivation: intrinsic job gratifications, a desire for economic gain, and social aims of the manager.

Management motivations based on the maintenance or achievement of intrinsic job gratifications appear to be important for a number of managers in the sample of small printing firms (for example, Firms K and L). In part, this may be traced to the craft basis of printing processes, and the circumstances surrounding founders' decisions to set up their own business. Evidence from cases L and K suggests that company founders set up their own business to increase the craft content of their work through increased control over their own work environment. However, motivations stressing the maintenance of intrinsic job gratifications associated with the production (craft) process also appear to be related to the adoption of non-aggressive development strategies once the business is firmly established.

The managing directors of Firms E, J and L indicated a desire to maintain their personal involvement in the craft processes of their firms through the maintenance of a small craft workshop environment. Continued growth and increased mechanisation were perceived to jeopardise the achievement of these goals.

For the purpose of their research, Stanworth and
Curran (1973) recognised social aims such as "management recognition", "personal security", and so on, as belonging to the same identity. However, the current research suggests the desirability of recognising two categories of "social aims", based on the social processes implied by the adoption of a particular objective. For example, management motivations stressing the desire to be recognised for management excellence relate to the manager's desired role in society, insofar as they imply an evaluation of the manager's performance by fellow managers (or others) in the industry or local community. Motivations such as these may be termed "status" objectives. Alternatively, managerial motivations which stress the importance of security and maintaining family control over company processes may be termed "class" objectives, since they are centred on control of the means of production and authority(6).

Evidence from the printing and soft drinks industries suggests that managerial "status" objectives are associated with the adoption of development strategies of growth and expansion. For the managers of non-family businesses (for example PF C and P), company expansion and profitability were perceived to be a means of achieving personal security. They appeared to believe that high levels of company growth and profitability were necessary in order to demonstrate their managerial competence to the firm's present owners, and indeed, to prospective employers should they seek
alternative employment in the future.

A primacy of status objectives for managers of family businesses appears to be associated with the managing director's desire to increase both his personal and company's influence within the industry or local community. This objective is observed in SDM 2 and 12 and PF B, F and N by the managing directors' active participation in the social and political activities of their respective Employers and Trade Associations. In these cases, increased personal influence in the politics of a particular industry appears to be synonymous with company growth and technological progressiveness. For example, SDM 12 was the first independent small manufacturer to introduce products packed in non-returnable containers to the Scottish markets. Similarly, the managing directors of PF B and F claimed that their firms were early in the adoption of new processes associated with colour reproduction. The emphasis in each of these cases is on the early adoption of product or process innovations as a means of increasing market share, and influence within the industry. These adaptive processes appear to be facilitated by policies which include the recruitment of technically competent personnel into the firm's management structure.

A primacy of class objectives tends to be common for managing directors in family businesses with a dispersed pattern of family ownership. Inheritor-
managers in the present sample did not appear to be motivated towards company success to the same degree as company founders. Management strategies in these older family businesses tend to be non-aggressive, in accordance with management motivations which stress the desirability of maintaining a comfortable routine and standard of living to which they have become accustomed. Increased commitment to the status quo is witnessed in the defensive and collusive behaviour of small soft drinks manufacturers in their attempt to halt the diffusion of product innovations in certain market sectors (8).

Management Motivation and Social Marginality

In their study of small businessmen, Stanworth and Curran (1973) suggested that very often the owner-manager of a small business was a socially marginal person. By social marginality they meant a situation in which there was a discontinuity between the individual's personal attributes - for example, his physical characteristics, intellectual make-up, social behaviour patterns - and the role or roles which he held in society. The adoption of the role of entrepreneur was, according to them, a behavioural response to a perceived marginal situation.

This framework of analysis appears to be supported by the cases of company founding in the present study (for example, PF K and L). Frustrations and dissatisfaction experienced by printers in their former employment appear to have been fostered by previous employers.
being either unwilling or unable to adopt new technological processes, or union "custom and practice". The response to these frustrations was to set up their own business.

However, the present study suggests several extensions to the marginality theory as posited by Stanworth and Curran. In particular, the analysis suggests situations in which a small business manager may perceive himself to be in a marginal situation as a small business manager. Marginality may arise where environmental illiberality is perceived to threaten a firm's future viability, and consequently jeopardise the manager's desired role in society. Marginality appears to result in two opposite responses: essentially "entrepreneurial" behaviour (in the sense of seeking rapid growth) in established small firms, and strategies of disinvestment.

Rejuvenation in SDM 12 and PF N can be traced to the time when present managing directors assumed control of their family business(9). In each case the firm was relatively unprofitable and located in declining market sectors. Perceived environmental illiberality and poor company performance appeared to threaten the cultivation of a desired life-style based on their role within the family business. In effect, this placed the managing directors of Companies 12 and N in a marginal situation. The response to perceived marginality was to embark upon growth strategies of company development. In both cases
the adoption of growth strategies appears to have been facilitated by unified ownership and control, thus enabling the replacement of ageing family members in positions of responsibility by personnel with higher levels of technical expertise.

These cases of small company rejuvenation may be contrasted with the cases in which a disinvestment strategy was proposed. The opinions of managing directors in SDM 6 and 13, and PF 0, appeared to reflect the belief that there was little future for their firms. Their response to increased marginality was to seek a realisation of company assets.

Characteristics differentiating these response patterns appear to be the age of managers and social processes of management. The managing directors of Companies 6, 13 and 0 intend to realise company assets at a time they consider appropriate for retirement (within the next ten years or so). In contrast, the managing directors of Companies 12 and N (the rejuvenated small firms) were at an early stage in their careers when they embarked upon growth strategies. This suggests that "marginal" managers at an early stage of their career are more likely to seek growth than capital disinvestment.

Stewardship of the family business does not appear to have been a freely-chosen career for the managing directors of Companies 6 and 13, but undertaken due to
family pressures to maintain the tradition of family stewardship. In neither case was the managing director groomed specifically for the task of running the family business, but had accepted the appointment after the unexpected death of an uncle or cousin who did not have any heirs. Lack of loyalty to the concept of maintained family control may be traced, in part, to the socialisation process of the managers which did not include a closeness to the family business. In contrast, the managing directors of Companies 12 and N had been introduced to the functioning of their family business from an early age. The socialisation of these managers included an affinity with the family business, which resulted in family heirs seeking employment in the family business as a natural course of action.

The conclusion suggested by the present research is that social marginality may be fostered by perceived environmental illiberality, and its perceived threat to the cultivation of a desired life style based on long-term company survival. When the "marginal" manager is relatively young, and not constrained by the dictates of a wider family, the response to marginality may include expansion policies and incorporation of higher levels of management expertise. Alternatively, where the "marginal" manager is nearing the age of retirement, and he is able to ensure that family heirs do not depend on the firm for future employment, then the response to marginality may include a strategy of disinvestment through the
realisation of company assets.

This analysis extends the framework developed by Stanworth and Curran. They hypothesised that individuals may become socially marginal in highly bureaucratised organisations. One response to this marginality is to set up their own business. They then suggest that entrepreneurs (business founders) may become marginal in their role of small businessman as their company becomes more bureaucratised in response to continued growth(11). However, it may be argued that the situations identified in the present study are likely to have greater import for an understanding of small company dynamics. This may be argued because only a small minority of small firms develop into highly bureaucratised enterprises, and the trends towards increased aggregate and industrial concentration are likely to create an increasingly illiberal environment for small companies. The evidence presented in this study suggests that in certain industries, market and technological change creates a situation in which the satisfaction of managerial objectives is threatened. The relatively high incidence of voluntary liquidations in the soft drinks industry (Table 6.6) appears to be in response to managerial perceptions of increased environmental illiberality for small firms in the industry. This suggests that the perceived impact of environmental illiberality is likely to be a more important stimulus to capital disinvestment strategies than the bureaucratisation of small firms in response to company growth.
C. MANAGEMENT SUCCESSION IN SMALL BUSINESSES

Management succession may be taken to include all processes in which new or existing command positions are filled by individuals other than current occupants. Management succession in small businesses is inexorably linked with the pattern of ownership and control, and the conclusion suggested earlier in this chapter is that small firms tend to evolve a pattern of family ownership and executive-control. This process appears to be stimulated by management motivations which stress a desire to pass control into the next generation of family management.

The social processes of family succession appear to involve a long diachronic process of socialisation whereby family successors are gradually prepared for leadership through a lifetime of learning experiences (Longnecker and Schoen, 1978; Davis, 1968). Examples of family succession in the present study indicate that family heirs were introduced to their family business at an early age, and were actively encouraged to take an interest in company affairs (see for example, the case histories of SDM 2, 3, 5, 7 and 12, and PF A, F, G, H, M, N and O). The result of this process is that family heirs see employment in the family business as a natural course of action, even where their management training involves initial employment outside the family business (see for example, SDM 2 and PF N). Moreover, this socialisation of family heirs appears to encourage motivations which stress the desirability of maintaining family control over
managerial processes (see for example, SDM 3, 5, 7, PF A, G, H and M).

The implications of family ownership and control appear to be important factors explaining small company performance in both the printing and soft drinks industries. Older, family-managed firms tend to be less profitable and have lower growth rates than other classes of small company (Tables 6.36 and 8.18). The case studies suggest that nepotistic succession restricts the level of managerial expertise available to these firms, with the result that older family firms have failed to adapt to technological and market change (see for example, SDM 5, 7, PF A and O).

Evidence presented in the previous section suggests that where there is an absence of this socialisation which encourages successor interest (see for example, SDM 6 and 13), there appears to be less commitment to maintaining family control into the next generation of family management, particularly where managers perceive little long term future for their company. The socialisation of family heirs to SDM 6 and 13 appears to be directed towards ensuring that they do not seek employment in the family business. Parental actions seem to be directed to ensure that family heirs achieve qualifications which enable them to obtain employment outside the family business. This factor appears to have been an important consideration in the decision of the managing director of SDM 13 to provide private education for his children. The managing directors of SDM 6 and 13 suggested that they would realise
company assets only when they had ensured that family heirs did not depend on the family business for their future employment. The case of SDM 5 suggests that where family heirs do not achieve academic success, then employment in the family business may be viewed as a next-best alternative.

There appear to be several important implications of succession processes which encourage family members to seek employment in their family business. The desire to maintain family control over management processes appears to be associated with the adoption of more conservative development strategies. These are manifest in late adaption to market and technological change, and consequent failure to penetrate market growth sectors. For example, the managing directors of SDM 3, 4, PF A and M sought neither growth nor radical changes to company activities. An important consideration in the formulation of these strategies appears to have been the desire to maintain family control over managerial processes. Alternatively, evidence from SDM 5, 7, PF G and H suggests that nepotistic succession of executive-control restricts the technical and commercial expertise available to small firms. Consequently, family-managed firms appear to have limited know-how to achieve the desired development, even where growth is sought.

10.3. THE INFLUENCE OF THE BUSINESS ENVIRONMENT ON MANAGEMENT STRATEGIES

A. ENVIRONMENTAL DIFFERENCES BETWEEN THE PRINTING AND SOFT DRINKS INDUSTRIES

Printing and soft drinks markets vary quite markedly in nature and in terms of the environmental constraints to small firm activities. The printing industry is
characterised by a fragmentation of craft functions, usually undertaken by small-scale firms specialising in one particular aspect of the printing process. This fragmentation of the printing process is manifest in a large element of sub-contracting by printers to "intermediary" printers specialising in the assembling of materials and preparation of printing plates to be used by printers to manufacture the final product.

In contrast, soft drinks manufacturers are usually own-product firms. The manufacturing process is relatively simple insofar as manufacturers simply combine soft drinks ingredients in the correct quantities; then bottle and pack their product. Bottling and packing is undertaken through automated or semi-automated plant. In this sense, soft drinks technology is relatively standard across the industry, whereas several printing technologies are applied to a wide range of products.

Both industries have experienced rapid technological change in recent years. In both instances, innovations have tended to emanate from either machinery or materials supplies industries, rather than self-generated innovations from firms within each industry. However, technological change differs insofar as innovations in the printing industry are concerned with improvements or modifications to the printing process, whereas innovations in the soft drinks industry tend to be related to new forms of packaging. The use of new packaging materials
(for example, lightweight plastic containers or plastic-shield bottles) may be associated with new products for the soft drinks markets in the sense that distributors and consumers are offered a wider range of containers with different utility values, despite the fact that the contents of containers have remained relatively standard. Improvements to the printing process through more efficient colour reproduction techniques and refinements to the lithographic process, have not necessarily been associated with new printed products, but rather have improved the quality of products or reduced the cost of manufacture at the various printing stages.

The impact of technological change on industrial structure appears to vary between the two industries. Increased technological sophistication appears to have reinforced the fragmented nature of the printing industry, particularly where skilled printers have set up their own business to take advantage of market opportunities afforded by increased demand for specialist printing products and services associated with recent technology changes. In contrast, technological changes associated with increased filling speed of bottling and packaging plant, together with the relatively high capital costs associated with adopting new packaging products, appear to have reinforced the economic forces favouring increased concentration of the soft drinks industry.
Concentration of the soft drinks industry also appears to be fostered by trends in the markets for soft drinks products. The majority of soft drinks are sold through the grocery sector (Table 6.18), which has itself witnessed a trend towards concentration since the abolition of resale price maintenance in 1964 (Bates, Small 1976; Bolton, 1971, paragraph 9.8, p.95). Soft drinks manufacturers do not appear to be able to compete with the terms of trade offered by larger manufacturers to the larger retail groups. In addition, brewery-ownership of the licenced trades often precludes penetration by small independent manufacturers - these sectors being serviced by brewery subsidiaries. In contrast, markets for printed products are many and variegated. This is partly a function of the printing processes which is characterised by specialisation of process by manufacturers. Printing processes vary according to the type of product, and because there is a great variety of printed products, the opportunities for small firms to specialise in one particular aspect of the process appear to be many.

The printing industry's fragmented structure, and the ability of firms to respond to market and technological changes, also appears to be related to the system of industrial relations in the industry. The labour process is characterised by a high degree of unionisation. A pre-entry closed shop operates for most printing activities, and job demarcation exists insofar as only workers of a
particular grade may operate certain machines or perform particular craft tasks. This system appears to have resulted in strong defense of "custom and practice" by labour unions to resist technological change which erodes traditional craft skills.

Custom and practice in the labour process of printing appears to affect small company dynamics in a number of ways. It does not appear to be as strong in smaller firms as compared to larger printing companies. Printers in small firms may be required to fulfill a number of craft functions which would be the subject of demarcation in larger organisations\(^{(12)}\). In addition, older established printing firms appear to find greater difficulty introducing new technologies, either because of low levels of technical expertise (fostered by nepotistic management succession) or custom and practice in the labour process. Evidence presented in Chapter 8 suggests that these firms may prefer to sub-contract work to small firms which specialise in the craft or service function associated with the particular innovation. Alternatively, union attempts to restrict the diffusion of innovations which erode traditional craft skills may stimulate craftsmen-printers skilled in the use of the new technologies to set-up their own business to take advantage of technological change. Evidence from PF D, K and L suggests that the founders of these firms undertook entrepreneurial activity specifically to take advantage of new technologies or craft skills
within their possession. These responses to custom and practice and technological change may be represented as in Figure 10.1, overleaf.

In contrast, the soft drinks industry is characterised by unskilled or semi-skilled labour processes. There is no appreciable organisation of labour, so the system of industrial relations appears to have little import for factors associated with industrial structure or the relative performance of small firms.

The conclusion suggested by this discussion is that technological and market changes in the soft drinks industry appear to be associated with increased environmental illiberality for small soft drinks manufacturers; environmental illiberality being defined as "the toughness of competition, attitudes of customers, and difficulties in assuring the required supplies of capital, people, machines, materials, and so on". Evidence presented in Chapters 6 and 7 suggests that the toughness of competition and changing structure of the retail trades are important factors in the relative decline and poor performance of small soft drinks manufacturers.

The printing industry does not appear to be associated with the same degree of environmental illiberality. Although the industry has witnessed a "technological revolution" in recent years (Winsbury, 1977), the impact of technological innovation appears to have led to extensive sub-contracting of different parts of the
FIGURE 10.1. Custom and Practice, and Fragmentation of the Printing Process

LARGE ORGANISATION
Highly unionised

Union attempt to restrict diffusion of innovations

RESTRICTION ON INTRODUCTION OF INNOVATIONS

By-pass restriction by sub-contracting part of printing process

Craftsman-Printer sets up own business to take advantage of innovation

SMALL PRINTING FIRMS
Greater flexibility of labour in production process

OLD ESTABLISHED FAMILY BUSINESS
Low level management expertise

Insufficient expertise to introduce technological innovations

By-pass restriction by sub-contracting part of printing process
printing process, resulting in an increased number of small companies. This fragmentation appears to offer market opportunities for small printing firms in specialist market sectors, and seems to provide a relatively liberal market environment for small printing firms, despite recent environmental variability (13).

B. THE TYPE OF ENVIRONMENT AND MANAGEMENT STRATEGIES

a) Environmental Illiberality

One response to perceived illiberality is the defensive and collusive market behaviour adopted by small soft drinks manufacturers, who attempted to halt or slow the market diffusion of products incorporating new packaging techniques. Collusive action was also observed in the pricing of products and the timing of price increases. A parallel situation to this has been hypothesised by Bunzel (1962) and Bechhoffer and Elliott (1968) who examined the reaction of small shopkeepers to threats posed by large business enterprises. They suggested that collective action, as opposed to individual opposition, was an increasingly important response.

The organisation through which collective agreement is reached appears to be the regional employers association. This is analogous to what Levy (1942) distinguished as the direct influence of Trade Associations. By this he meant seeking to limit competition through pricing policies and restrictions on entry to trade, as opposed to the "cooperative functions" con-
cerned with the promotion of knowledge among trade members. However, there was no evidence of collective action to restrict the diffusion of process innovations in the printing industry. This absence of collusive action to restrict innovation diffusion in the printing industry may be explained by several factors.

The number of soft drinks manufacturers in Scotland is relatively small\(^{(14)}\) and products are relatively standard between manufacturers. This similarity of process and markets across the industry appears to facilitate agreement between manufacturers to adopt policies which are perceived to be in the interests of members. In this case, smaller manufacturers appear to be unable or unwilling to adopt product innovations associated with new packaging techniques, either because of financial constraints to new investments or lack of technical expertise to accommodate the new technologies. In contrast, the number of general printers in Scotland is relatively large\(^{(15)}\), while printing markets are many and diverse. The impact of process innovations is not standard across the industry, particularly because of the diversity of printing processes. Not surprisingly, these differences in process and markets for general printers appear to preclude collective agreement to reduce the impact of environmental change.

The implementation and effectiveness of collusive action also appears to be related to the incidence of
new firms and entry into the industry. Analysis of the changing structure of the soft drinks industry suggests that few, if any, new soft drinks manufacturers have been formed in recent years (16). In contrast, the number of general printers has risen quite markedly (17), reflecting a relatively high entry of new firms into the industry. Evidence presented in Chapter 8 suggests that many of these new firms were founded by printers to take advantage of new printing process. Consequently, any attempt to halt the diffusion of process innovations would probably be ineffective.

Differences in new firm entry between the two industries appear to be related, in part, to the relative costs of entry. Table 8.10 indicated that capital expenditure per company is approximately seven times higher in the soft drinks industry than in the printing industry. Moreover, capital expenditure per enterprise in the soft drinks industry is almost double the average for all manufacturing industries. This suggests that a relatively large capital base is necessary to initiate the manufacture of soft drinks, whereas the cost of setting up a printing firm is relatively low. Therefore, the relatively low barriers to entry and craft basis of new firms appear to negate any attempt to halt the diffusion of process innovations.

The long-term effectiveness of collusive action in the soft drinks industry is also questionable. Market
analysis has noted that a number of firms have subsequently adopted large-sized and non-returnable products, although the small family-dominated manufacturers have still failed to adopt recent product innovations. The "reactive" strategies of several manufacturers may be traced, in part, to the relative decline of markets since the high sales levels of 1976(18), and the penetration of traditional sectors by market leaders who have adopted product innovations. This suggests that under conditions of increased illiberality, attempts to halt the diffusion of innovations will be effective for only a short period, and collapse as members to the "agreement" react by adopting the innovations in response to market penetration by industry leaders.

An alternative response to environmental illiberality is to adopt a strategy of capital disinvestment, either through the sale (or voluntary liquidation) of the company or cessation of manufacturing activities, but continued trading as a wholesaler or retailer within the industry. The social processes underlying the adoption of these policies have been discussed at length earlier in this chapter. In brief, a strategy of assets realisation may be adopted where there is unified ownership and control, company heirs do not depend on the family business for their employment, and the present owner/manager is nearing the age of retirement. A strategy of continued trading is more likely where there is a dispersed pattern of family ownership, and need to
maintain family control over management processes.

Managerial strategies in response to environmental illiberality appear to reinforce the social processes which result in poor financial performance among small firms. Evidence from SDM 4, 5, 6, 7 and 13, suggests that managing directors were unwilling to incorporate higher levels of management expertise into their firm's management structure through the introduction of non-family management personnel. Indeed, the evidence suggests that managers, in fact, sought to increase their personal control over company processes in response to perceived environmental illiberality. This conclusion is supported by the action of the managing directors of Companies 6 and 13, who acquired ownership-control of their firms after assuming their present positions. This is analogous to the situation reported by Hage (1965), in which large organisations move towards a higher degree of centralisation under conditions of extreme threat. Given the need to harness the various facets of management expertise into the management process of small firms (Roberts, 1969), the concentration of management control in response to environmental threat appears to further hinder the ability of small firms to adapt to market and technological change.

b) Environmental Variability

The extent of environmental variability refers to the degree of change relevant to an organisation's
operations. In the past, environmental variability in the printing and soft drinks industries was relatively low, although recent advances in both product and process innovations have created increased variability for small firms. In both industries, variability has tended to emanate from materials or machinery supplies industries. Therefore, analysis of management strategies in response to variability has centred upon the manner in which firms have adapted to market and technological change.

It is possible to group management strategy response to environmental variability into three categories in each of the industries. In both industries it was possible to identify adaptive market strategies. Among the soft drinks sample this was associated with the early adoption of product innovations such as non-returnable and large-sized products, whereas this was associated with the capacity for colour printing in the printing industry sample. A more defensive strategy witnessed in the two industries was characterised as reactive, insofar as there is a lag in the adoption of new technologies or products. These firms appear to adopt innovations only in response to penetration of traditional market sectors by industry leaders who have adopted the innovation in question. The third category of response appeared to differ between the printing and soft drinks industries. Failure to adapt to market and technological change in the soft drinks industry appeared to be associated with defensive or collusive market behaviour, in
which firms attempted to halt the diffusion of innovations through collective action. However, the discussion of strategies in response to environmental illiberality noted that this type of behaviour is not practical in the printing industry. Failure to adapt to environmental changes in the printing industry was termed passive, in which managers and owners appeared to be quite content to "muddle through" without adopting innovations associated with growth sectors of the industry.

This similarity of strategies adopted by small manufacturers in the printing and soft drinks industries suggests that environmental variability plays only a minor role in the evolution of a particular strategy. The mode of management strategy appears to be determined by the political and social process of small business management, as discussed earlier in this chapter. The impact of environment seems to be in relation to the economic consequences of a particular strategy. Defensive or passive strategies in a highly variable market environment appear to result in a decline in a firm's markets as the firm fails to adapt to market and technological change. The relative decline of markets appears to be more rapid in more variable environments. This process appears to be related to the continued rapid decline in the number of small soft drinks manufacturers as markets become more variable because of rapidly changing packaging technologies, particularly as smaller manufacturers appear to be least likely to
adopt product innovations. This process is more disguised in the printing industry because of the relatively high entry of new firms. However, the evidence of the present study suggests that firms which have failed to adopt colour printing processes or other recent process innovations tend to be in marked decline—see for example, Company G.

10.4. ORGANISATIONAL CONTEXT AND MANAGEMENT STRATEGIES

In many ways, the context of an organisation within its industry or environment is a reflection of past strategies and decisions with respect to direction of development and adaption to environmental change. The purpose of this section is to examine the extent to which contextual factors have influenced development and adaption strategies of small business managers.

A. THE SIZE AND AGE OF FIRMS

The soft drinks industry is characterised by a low entry of new firms, and consequent numerical domination of relatively aged, family-managed small firms (19). Within this industrial structure, there appears to be a positive relationship between company size and levels of financial efficiency (net profitability and growth rate of sales) (20). However, no such relationship holds for the printing industry, which comprises both young and relatively old firms. Older, family-dominated firms in the printing industry tend to be less profitable and have lower growth rates than younger firms with a
non-family pattern of ownership and control (see Tables 8.16 - 8.18). A synthesis of this evidence from the printing and soft drinks industries suggests that older, family-dominated firms which have remained relatively small tend to be the least efficient firms in a particular industry.

The poor financial performance of small firms may be traced, in part, to the social processes of management in older, family-managed small firms, which have resulted in a failure to adapt to market and technological change. Inheritor-managers of family businesses in the present study did not appear to be motivated towards company growth to the same extent as business founders or managers in firms with non-family executive-control. In addition, the low level of technical and commercial expertise which is fostered by nepotistic succession processes appears to frustrate management strategies which seek growth and expansion.

In contrast, young firms in the printing industry appear to adapt more quickly to environmental change. However, not all first generation printers appeared to have a strong growth-orientation. For example, the managing directors of Printing Firms D, E, J and L appear to prefer the maintenance of intrinsic job gratifications associated with the craft nature of printing processes, rather than the achievement of company growth. This lower growth-orientation may be traced to the processes
of the founders' decision to set up their own business. In these cases, founding decisions appear to have their basis in perceived marginality of their role as skilled craftsmen. Managing their own business has created a marginality-free situation, and a desire to maintain this situation may dictate little or no growth in company activities. This evidence is supported by Francis (1980) who suggests that craftsmen who set up their own business to utilise new technologies appear to have less strongly held growth objectives than other types of marginal individuals who set up their own business (for example, immigrants and other minority groups in society). Management strategies in these low growth young firms appear to be more "reactive" rather than "adaptive", with their basis in defending market position rather than seeking growth opportunities.

B. HUMAN RESOURCES

The human resources of an organisation may be considered at both the operative and managerial levels. The scope of the present research, with its emphasis on management decision processes, precludes a detailed analysis of labour processes at the operative level. Accordingly, the conclusions of the research are limited to the management process of small firms.

Evidence from the printing and soft drinks industries suggests that poor financial performance among small firms is related to relatively low levels of management expertise. This relationship is supported
by Collins and Roberts (1975) who found that company directors had no qualifications applicable to their business in 70 of the 73 cases of small firm insolvency which they analysed. The present study suggests that low levels of managerial expertise is manifest in management strategies which fail to adapt company processes to market and technological changes.

Discussion of the social processes of management, earlier in this chapter, suggested that management resources in small firms are linked to the pattern of ownership and control. The conclusion suggested by this analysis is that nepotistic succession processes reduce the available management expertise in small family businesses. Successful family businesses appear to have broken the rigidities of family-domination of the management process. For example, SDM 1, 2, 8, 9, 10, 11 and 12, and PF 8, F and N, have evolved a pattern of non-family executive control, despite the fact that they have retained their pattern of family ownership. The incorporation of these higher levels of management expertise is associated with relatively high levels of performance in these ten relatively aged family businesses.

C. TECHNOLOGY

The present research is not concerned with a discrimination of technological typologies along the dimensions proposed by Woodward (1965) and others. Instead, interest is directed towards the adoption of
new technologies within a particular industrial environment.

Evidence from the printing and soft drinks industries suggests that social processes of management (management motivation, pattern of ownership and control, degree of management expertise) determine the extent to which firms adopt new production technologies. Low levels of management expertise fostered by nepotistic succession processes tend to be associated with defensive or passive market behaviour, and failure to adopt process innovations. On the other hand, small firms which incorporate higher levels of management expertise into their management structure tend to be early in the adoption of new technologies. In this sense, "technology" does not appear to influence strategy, but is a result of strategy.

D. PRODUCT-RANGE AND CUSTOMER-MIX

The product range of firms in the sample appear to be inexorably linked to the extent to which recent process innovations have been introduced into the production process. Firms which failed to penetrate growth sectors of the printing or soft drinks industries did not have the capacity to produce products required by these particular market sectors. In this sense, the product-range and customer-mix of small firms is the result of past management strategies with respect to market behaviour.
The impact of customer-mix on market strategies in the soft drinks industry appears to be associated with increased concentration of the retail trades, and the increased market share attributed to the multiples sector. Evidence presented in Chapter 6 suggests that large manufacturers possess several economic advantages over smaller manufacturers in their ability to penetrate these growth sectors; particularly in relation to quantity discounts and credit facilities. Consequently, even where small manufacturers have adopted product innovations, they may still face considerable market illiberalty.

One of the conclusions from the study of management strategies in the printing industry was that the type of customer did appear to influence management strategy. The influence of customer-type lies in the fragmentation of the printing process. "Intermediary" printers (such as Firms C, H, K and N) appear to have a greater propensity to adopt new processes than firms at the final stage of printing (for example Firms A, E, J, L, M and O). Similarly, contract bottlers in Scotland (such as Companies 1 and 12) had more modern plant, and were able to incorporate modifications to products required by the main contractors. This suggests that manufacturers at an intermediary stage in the production process tend to be more adaptive in their behaviour than small firms at the final stage of the production process.
An alternative influence of customer-mix on management strategy may be traced to the process of market penetration. For example, soft drinks manufacturers that are currently located in growth sectors such as the multiples and cash and carry sectors, are in frequent contact with these markets. Consequently, the diffusion of information with respect to future product requirements and market trends means that these firms are better able to adapt product lines to satisfy the needs of a changing market. Firms that do not have frequent contact with market growth sectors can only react to the action of market leaders. This suggests that innovation and market growth are interactive. On the one hand, high performance small firms in the printing and soft drinks industries tend to be those firms which are early in the adoption of product and/or process innovations. On the other hand, firms that are currently located in growth sectors of the market are better placed to react to the changing needs of the growth sectors. The interactive nature of innovation and company growth appears to widen the gap between the performance of "adaptive" small firms and firms which lag in their response to environmental change.

10.5. THE RELATIONSHIP BETWEEN MANAGEMENT STRATEGIES AND COMPANY PERFORMANCE

In both the printing and soft drinks and printing industries there appears to be a link between manage-
ment strategy and company performance. This link appears to be associated with market behaviour with respect to adaption to environmental changes.

Without repeating the processes underlying the adoption of different strategies, and at the risk of over-simplifying the economic and social processes of performance determination, a generalised link between management strategy and company performance may be summarised as in Table 10.2 overleaf. It can be seen from Table 10.2 that the study of small company dynamics in the printing and soft drinks industries suggests several broad conclusions for the analysis of small company performance.

High performance firms are usually associated with adaptive market behaviour. In both industries, successful firms had adopted product or process innovations associated with growth sectors of the market. Although none of the firms studied can be said to be truly "innovative", in the sense that innovations are the result of self-generated research and development, the most successful firms tend to be market leaders in the adoption of new technologies.

Early adoption of product and process innovations is consistent with penetration of growth sectors of the market. For example, SDM 9 and 12 were able to penetrate the multiples sector through the adoption of large-sized, non-returnable products. Similarly, investment in a
<table>
<thead>
<tr>
<th>MANAGEMENT STRATEGY</th>
<th>MARKET BEHAVIOUR, SOFT DRINKS INDUSTRY</th>
<th>MARKET BEHAVIOUR, PRINTING INDUSTRY</th>
<th>COMPANY PERFORMANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>GROWTH THROUGH EXPANSION</td>
<td>ADAPTIVE - Early adoption of large-size and non-returnable products</td>
<td>ADAPTIVE - capacity for colour printing</td>
<td>Relatively high profitability and growth rate of sales.</td>
</tr>
<tr>
<td>NON-AGGRESSIVE, LITTLE OR NO GROWTH DESIRED</td>
<td>REACTIVE - late adoption of large-size or non-returnable products</td>
<td>REACTIVE - late adoption of process innovations.</td>
<td>Profitability is generally near to the average for the industry. Low growth rate.</td>
</tr>
<tr>
<td>DEFENSIVE/COLLUSIVE - Attempt to restrict the diffusion of product innovations through collusive agreement of small manufacturers.</td>
<td>PASSIVE - failure to adopt process innovations. No capacity for colour printing.</td>
<td>Low profitability. Decline in sales (in real terms).</td>
<td></td>
</tr>
<tr>
<td>CAPITAL DISINVESTMENT</td>
<td>CESSATION OF MANUFACTURING, CONTINUED TRADING AS WHOLESALER OF DRINKS PRODUCTS.</td>
<td>CESSATION OF PRINTING ACTIVITIES, CONTINUED TRADING AS RETAILER OF PRINTED PRODUCTS</td>
<td>Generally low growth and profitability.</td>
</tr>
<tr>
<td></td>
<td>REALISATION OF ASSETS - sale of firm or voluntary liquidation.</td>
<td>REALISATION OF ASSETS - sale of firm or voluntary liquidation.</td>
<td>Generally low growth and profitability</td>
</tr>
</tbody>
</table>
colour scanner (22) has enabled PF K to expand its market for lithographic printing plates. In contrast, firms which have failed to adopt new technologies (for example, SDM 5, 6, 7 and 13, and PF A, J and 0) have been unable to penetrate growth sectors of their industry. Instead, they tend to be located in stationary or declining market sectors which are economically unattractive to market leaders (23). This market profile for small firms is manifest in low growth and profitability rates.

Two modes of company behaviour associated with non-aggressive market strategies were observed in the printing and soft drinks industry. Market behaviour characterised by late adoption of product or process innovations may be termed "reactive". SDM 8 adopted large-sized, non-returnable products three years (1980) after their introduction to Scotland by market leaders such as Barrs and the Beecham Group (24). The adoption of these products appears to be in response to market penetration by the industry leaders, and an attempt to maintain market share, rather than an aggressive strategy of market penetration. Similarly, the managing directors of PF A and J indicated that they intended to introduce capacity for colour printing processes, but no such facilities existed at the time of the fieldwork. Profitability rates for these "reactive" firms tend to approximate the industry mean, although growth rates (in real terms) tend to be relatively low. 

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In contrast to "reactive" behaviour, several firms had failed to adapt markets and production processes to the changing environment of their industry. The response of several small soft drinks manufacturers to market change was to seek collusive action to halt the diffusion of product innovations. These firms were typically smaller companies with neither the capital base nor management expertise with which to introduce new technologies (for example Companies 5, 6, 7). Defensive strategies through collusive action were perceived to be necessary to ensure the survival of firms which could not respond to recent market and technological changes.

Collusive action in the printing industry did not appear to be practical because of low entry barriers to new firms and the variegated nature of printing markets. Failure to introduce process innovations was characterised as "passive" insofar as managing directors appeared to be content to "muddle through" without changing company processes. Passive and defensive strategies were observed in firms which were located in declining market sectors and appeared to be related to low levels of financial efficiency.

Disinvestment strategies among small printing and soft drinks manufacturers were typically (although not exclusively) related to firms with poor financial performance indices. However, in this case the direction of causality appears to be reversed. While the mode of
strategy appears to influence the relative performance of small firms, disinvestment strategies in SDM 6 and PF 0 appear to be in response to perceived environmental illiberality and poor financial performance, which threatens the satisfaction of personal objectives. Although the poor performance of these firms appears to be related to the adoption of passive or defensive market behaviour in the past, current strategies of disinvestment appear to be based on perceptions of the future viability of firms. Consequently, although Company 13 has relatively high levels of profitability and growth in sales, managerial perceptions of little future for the firm may be traced to the fact that recent financial results have been influenced by "windfall" sales resulting from strikes in the brewery sector. The managing director suggested that sales of the firm's own-brand products had declined in real terms in recent years, and he perceived little long-term future for his firm.

10.6. SUMMARY

The hypotheses which were developed from our model of small company dynamics have been examined in this chapter through a synthesis of small company behaviour in the printing and soft drinks industries. This synthesis of results relates social and economic processes specific to the printing and soft drinks industries. In the next chapter, our results are presented in a more general framework through the construction of "ideal types" of small company.
Where convenient, soft drinks manufacturers in the case study sample will be identified by the prefix 'SDM', while printing firms in the case study are identified by the prefix 'PF'.

The managing director of Company 6 acquired ownership-control through the purchase of shares belonging to his aunt. These shares, together with his original holding which was inherited from his father, gave the managing director over 50% of the company's shareholding. Ownership-control was acquired by the managing director (and his wife) of Company 13 through a rights issue of the firm's shares which was not subscribed to by other family members. Their rights were acquired by the managing director and his wife, thereby rendering over 50% of the firm's shareholding to the managing director and his wife.

The sales of PF G rose by 19% in absolute terms between 1973 and 1976. This may be compared to an average rise in the price of general printing products of some 70% in the same time period - see Chapter 8, footnote 12. This represents a marked decline in real terms for the markets of Company G. Although exact financial data was not available in the case of SDM 7, the managing director suggested that the sales of his company rose by approximately 5% between 1975 and 1976. This may be compared to an average rise in the price of soft drinks of approximately 20% - see Chapter 6, footnote 5.

It was argued in Chapter 3.6 that psychological testing was limited in its ability to determine factors underlying observed personality traits, and therefore was limited in its ability to analyse managerial behaviour in small firms.

See Chapter 5.3.E for a description of these motivational identities. Also see Stanworth and Curran (1973, pp.96-106) for a fuller analysis of factors associated with these motivation typologies.

The identification of these two categories of "social" aims is based on Robinson and Kelley's (1979) analysis of processes by which social advantage is passed from one generation to the next. They distinguish two distinct processes: the status system centring on education and occupational status; and the class system.
centring on control of the means of production and authority. The present analysis of managerial social aims attempts to distinguish the process by which small business managers seek to maintain their social advantage or pass it to the next generation of family members.

(7) The political processes of Employers or Trade Associations here refer to activities such as involvement in making representations to Governmental bodies and labour organisations, and the determination of policy with respect to environmental changes in the industry (such as legislation).

(8) See Chapter 7.4 for an analysis of collusive behaviour of small soft drinks manufacturers.

(9) Both managing directors worked in their family business while it was controlled by their fathers. However, the process of rejuvenation may be traced to the time they assumed control.

(10) The socialisation process is discussed in greater detail Chapter 12.3.


(12) Where the number of employees involved in the production process is less than the number of activities which are the prerogative of printers from a particular grade, then union rules permit printers to perform tasks which would otherwise be performed by printers from another grade. However, several managing directors of small printing firms suggested that in reality, strict demarcation does not exist in small printing firms, and is only practiced when the full-time union officer visits the particular plant. Custom and practice affects small printing firms insofar as the adoption of new technologies may affect terms of employment as determined by union negotiation. For example, the use of a colour scanner (see footnote 22) means that all employees in a particular firm have their basic week reduced from 40 hours to 35 hours, because the scanner enables greater productivity in colour reproduction.

(13) This refers to the degree of change relevant to an organisation's activities. Consequently, the faster the pace of technological change, the greater the degree of environmental variability.

(14) In 1976 there were 37 independent members of SASDM, which represents approximately 80-85% of soft drinks manufacturers. SASDM is divided into three regions, with the result that regional
membership is limited to 10-15 members, thus facilitating collusive agreement between members to follow a particular course of action.

(15) It is not possible to determine the exact number of general printers in Scotland. However, the Census of Production, (PA 1003, 1977), lists 399 establishments from the paper, printing and publishing industries in Scotland. Census of Production data also reveals that approximately 75% of firms in the printing and publishing industries may be classified as "general printers and publishers". This suggests that the majority of the 399 establishments in Scotland are general printers.

(16) See Appendix C2, Table 4. This indicates that 6 firms from the financial analysis were formed later than 1960. However, analysis in Chapter 6 suggests that the majority of these were new firms formed from the merger of previously independent small firms. See also Chapter 7, footnote 1, which notes that recent entry into the industry has tended to be associated with large firms from the food packaging industries.

(17) See Table 8.2. This shows that the number of small general printers rose from 6958 in 1970 to 9050 in 1977.

(18) See Table 6.1. The exceptionally high consumption of soft drinks in 1976 was prompted by the "heatwave" conditions of that particular summer.

(19) See Appendix C5, Table 3. This shows that 74% of firms in the analysis were family dominated (a majority or all directors related) and formed prior to 1940.

(20) See analysis in Chapter 6.1; and Tables 6.10, 6.16 and 6.17. These tables suggest that smaller firms are generally less profitable and grow at a slower rate than larger firms in the industry.

(21) See Chapter 3.8.A. for a brief analysis of some approaches to the construction of "technology" typologies.

(22) A scanner is a machine which scans across the transparency of a particular image, breaking it down into the four basic colours (red, yellow, blue and black). This image is then translated by the machine onto film, which is used by assemblers and lithographic plate-makers. The employment of a colour scanner permits greater productivity (and accuracy) in colour reproduction.
For example, small independent grocers and CTNs are less likely to be attractive to large soft drinks manufacturers because of the small size in orders. Large manufacturers such as Barrs, Britvic, Coca Cola now operate a minimum order scheme in which outlets must purchase at least six cases of products. This may be beyond the scope of very small retailers. Consequently, small independent manufacturers who do not operate a system of minimum order size will tend to supply these segments of the market. Similarly in the printing industry, small jobbing orders of a small run-off will tend to be unattractive to larger printers, thus providing a market for small jobbing printers.

The Beecham Group trades under product names of Corona and Idris, and also holds the franchise for Coca Cola in Scotland and the North of England.
11.1. INTRODUCTION

The synthesis of results presented in the previous chapter suggests that the social and political processes of small business management are related to the performance of small companies. Our research notes that there is a tendency for small firms to evolve a pattern of family ownership and executive-control. Nepotistic succession in command positions appears to limit the technical and commercial expertise available in small firms. This relatively low level of management expertise, and the desire (or need) to maintain family control over the management process, appears to result in inertia with respect to adapting to market and technological change. Family-dominated executive-control also appears to be related to the adoption of defensive or collusive strategies in response to increased competition and environmental illiberality. The long-term effectiveness of these strategies appears to be limited, and our research suggests that firms which lag in the adoption of product and process innovations which are necessary for penetration of market growth sectors tend to be relatively low performance companies.

The process of small company development and its relationship to management motivations, the pattern of
ownership and control, and mode of management strategy suggests the identification of five "ideal types" of small company; each with a specific configuration of management processes, organisational context, and consequent level of financial efficiency. The current chapter presents a synopsis of factors which influence small company development in the printing and soft drinks industries, and suggests a more general scheme of analysis through a discussion of the ideal types of small company suggested by our research.

11.2. IDEAL TYPES OF SMALL COMPANY

A. THE ADAPTIVE SMALL COMPANY

An "adaptive" small company may be distinguished as a high performance small firm in which growth is sought through the early adoption of product or process innovations. Accordingly, the product range and customer-mix of adaptive firms reflect a penetration of growth sectors of the market. In the soft drinks industry this is associated with the production of large-sized, non-returnable products for the multiples and cash and carry sectors; while in the printing industry, it is associated with the capacity for colour printing for the advertising material, and book and booklet sectors. Consistent with the adoption of product or process innovations, adaptive small firms operate relatively modern plant which is capable of manufacturing products for market growth sectors.

Firms in the case study sample which conform most
closely to the market profile and level of financial efficiency of adaptive small firms are PF B, C, F, K, N and P, and SDM 2, 9 and 12. All of these firms are located in growth sectors of their respective industries, and all firms produce products incorporating recent innovations associated with either the printing or soft drinks industry. The financial performance of these adaptive small firms is summarised in Table 11.1, below.

**TABLE 11.1. The Financial Performance of Adaptive Small Firms in the Current Study**

<table>
<thead>
<tr>
<th>PRINTING INDUSTRY</th>
<th>SOFT DRINKS INDUSTRY</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPANY</td>
<td>Profitability</td>
</tr>
<tr>
<td>B</td>
<td>24.0</td>
</tr>
<tr>
<td>C</td>
<td>24.5</td>
</tr>
<tr>
<td>F</td>
<td>22.4</td>
</tr>
<tr>
<td>K</td>
<td>na</td>
</tr>
<tr>
<td>N</td>
<td>44.4</td>
</tr>
<tr>
<td>P</td>
<td>34.8</td>
</tr>
<tr>
<td>INDUSTRY AVERAGE</td>
<td>12.4</td>
</tr>
</tbody>
</table>

Notes: (a) At current prices.
(b) This is the average net profitability of Scottish soft drinks manufacturers. The average profitability of Scottish manufacturers is markedly lower than English soft drinks manufacturers. The average profitability of all UK soft drinks manufacturers is 25.4%.
* These figures are approximate growth rates suggested by managing directors during the interviews. However, since this information was not included in published accounts, it could not be verified.
na Financial information was not available.

It can be seen from Table 11.1 that all firms have traded with levels of financial efficiency higher than the industry-average. However, this level of performance
does not appear to be determined by the relative size of firms. Company K employs 7 individuals, whereas Company F employs some 180 people. Similarly SDM 9 employs 33 individuals, while Company 2 employs approximately 90 people. Of greater significance to the process of small company development are the pattern of ownership and control, and other processes of management.

Our examination of management processes of small firms in the printing and soft drinks industries suggests that no one pattern of ownership distinguishes adaptive small firms. PF C, K and P are non-family firms, SDM 2, 12 and PF B, N have effective unity of ownership-control, while SDM 9 and PF F have a dispersed pattern of family ownership. A more important characteristic of these nine firms is the pattern of non-family executive-control. Several managerial command positions are filled by technically competent (qualified or widely experienced) individuals, not necessarily related to company owners. Although the position of managing director and/or chairman in SDM 2, 12 and PF F, N appears to be the subject of hereditary succession, other command positions are not filled according to familial relationships.

Management motivations in adaptive small firms tend to be centred upon the managing director's "status" objectives. The managing directors of Companies C and P (non-family businesses) sought company growth and profitability as a means of achieving personal security in their role as a "professional" manager(1), while the managing
directors of "adaptive" family businesses appeared to be motivated towards increasing their personal status within the industry or community. A primacy of status objectives appears to be related to the adoption of expansion policies in small firms.

B. THE REACTIVE SMALL COMPANY

A reactive small company may be distinguished as a relatively successful firm in terms of profitability, although company owners are content to maintain the firm's present position relative to the rest of the industry. Market behaviour in this type of company is typified by a lag in the adoption of product or process innovations. Consequently, these firms tend to achieve only limited penetration of market growth sectors. Firms in the case study sample which conform to this profile are SDM 1, 3, 8, 11 and PF J.

The late adoption of innovations by these firms may be traced, in part, to their process of management. With the exception of SDM 8, all the reactive firms are family businesses in their second or subsequent generation of family ownership-control. Whereas adaptive family businesses tend to have a relative unity of ownership-control, reactive small firms in our sample have evolved a more dispersed pattern of family ownership. This wider spread of ownership-control appears to be manifest in more conservative strategies of company development and response to environmental change. SDM 8 produced soft drinks in large-sized, non-returnable con-
tainers only after significant penetration of its markets by industry leaders which introduced these products to the market. Companies 1 and 11 have still to introduce products incorporating the most recent packaging techniques, although they are less dependent on the grocery sector than Company 8, and the need to modify their product range is consequently reduced.

The performance of reactive small firms tends to approximate the average for a particular industry, despite the relatively late adoption of product or process innovations. This appears to be related to the pattern of non-family executive-control\(^{(2)}\). Although the need to preserve family-ownership control appears to restrict aggressive market strategies through restricting several external sources of finance, non-family executive-control appears to facilitate the successful implementation of policies once they are embarked upon.

C. THE INERT SMALL COMPANY

An inert small company may be defined as a relatively low performance company characterised by management strategies of little or no growth. The product range of inert small firms reflects a failure to adopt product or process innovations. Customers tend to be located in static or declining market sectors. Managerial failure to adapt company product lines and production processes in line with recent market and technological changes is manifest in, and related to, the operation of
relatively aged plant which does not have the physical capacity to accommodate new technologies.

Management processes of inert small firms tend to reflect a more dispersed pattern of family ownership. Moreover, nepotistic management succession results in command positions becoming the sole prerogative of family members, with a consequent reduction in the level of management expertise relative to adaptive small firms. Management motivation in inert small firms tends to reflect managerial "class" objectives associated with the desire to maintain family control and authority over company processes.

Firms in the case study sample which may be classified as inert are SDM 4, 5, 7 and 10, and PF A, G, H, L and M. By the large, these firms have failed to restructure their activities to meet market and technological change in their respective industries. None of the soft drinks manufacturers in this category have the capacity to manufacture recent product innovations, while PF A does not have the capacity for colour printing. Even where colour printing has been introduced in Company H, the low level of management expertise which has been fostered by nepotistic management succession appears to negate any advantages which have accrued through the capacity for colour printing.

D. THE DIVESTING SMALL COMPANY

A divesting small company is a small firm in which
the firm's controllers intend to cease manufacturing activities, but continue trading as either a wholesaler or retailer of products formerly manufactured. The product range and customer-mix of divesting firms are similar to inert small firms. Similarly, managerial processes of divesting firms are similar to inert small firms, reflecting a dispersed pattern of family ownership, and heavy involvement of family members in the executive-control process. The difference between inert and divesting firms relates to the managerial response to environmental illiberality. Managers of inert small firms attempt to reduce the impact of environmental illiberality by defensive or collusive policies, whereas the managers of divesting firms seek to incorporate product and/or process innovations into the product range they offer customers by factoring the goods of market leaders. This strategy is often necessitated by the need to maintain family control and involvement in management processes, but inability of the firm to finance investments necessary for the manufacture or products for growth sectors of the market. The evidence of our study suggests that this strategy is becoming an increasingly popular strategy for owners of inert small soft drinks manufacturers.

E. THE QUITTING SMALL COMPANY

A quitting small company may be defined as a small firm in which company owners intend to pursue capital disinvestment through the realisation of company assets. Again, the market profile of quitting firms is similar
to inert and divesting small firms. However, quitting firms differ from divesting firms in several important facets of the management process. All quitting firms in the case study sample (SDM 6, 13 and PF 0) have effective unity of ownership-control. Consequently, the owner-managers of these firms are able to direct company affairs to be consistent with the satisfaction of personal goals. Management motivation in SDM 6 and 13 is centred on parental concern for their children's future welfare. Since these owner-managers perceive little long-term future for their businesses, the socialisation of family heirs tends to stress the efficacy of academic success and professional qualifications as a means of obtaining employment outside the family business. This process allows the current owner-manager to realise company assets at a time he considers to be most appropriate. Consequently, owner-managers of inert small firms who are nearing the age at which they intend to retire, and who have ensured that family heirs are not dependent on the family business for their future employment, are likely to seek to realise company assets at that time when they retire from the family business.

These configurations of the five ideal types of small company may be summarised as in Table 11.2, overleaf.
### TABLE 11.2. A Summary of Economic and Social Characteristics which Distinguish the Five Ideal Types of Small Company

<table>
<thead>
<tr>
<th>TYPE OF SMALL COMPANY</th>
<th>QUITTING</th>
<th>DIVESTING</th>
<th>INERT</th>
<th>REACTIVE</th>
<th>ADAPTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEVELOPMENT STRATEGY</td>
<td>Realisation of Company assets</td>
<td>Cease manufacturing, continue trading in other capacity</td>
<td>Commitment to the status quo</td>
<td>Maintain present market position</td>
<td>Company Expansion</td>
</tr>
<tr>
<td>MARKET BEHAVIOUR</td>
<td>Market follower</td>
<td>Market follower</td>
<td>Market follower</td>
<td>Lag in the adoption of product and process innovations</td>
<td>Early adoption of product and process innovations</td>
</tr>
<tr>
<td>PRODUCT RANGE (a)</td>
<td>Traditional/ rigid</td>
<td>Traditional/ rigid</td>
<td>Traditional/ rigid</td>
<td>Generally adaptive</td>
<td>Adaptive</td>
</tr>
<tr>
<td>CUSTOMER-MIX (b)</td>
<td>Residual</td>
<td>Residual</td>
<td>Residual</td>
<td>Residual and premium</td>
<td>Premium</td>
</tr>
<tr>
<td>AGE OF PLANT</td>
<td>Old (10 years +)</td>
<td>Old (10 years +)</td>
<td>Old (10 years +)</td>
<td>Modern (Less than 10 years old)</td>
<td>Modern (Less than 10 years old)</td>
</tr>
<tr>
<td>PROFITABILITY (c)</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
<td>Average for industry</td>
<td>Higher than average</td>
</tr>
<tr>
<td>GROWTH RATE OF SALES (c)</td>
<td>Low/Decline</td>
<td>Low/Decline</td>
<td>Low/Decline</td>
<td>Low</td>
<td>High</td>
</tr>
</tbody>
</table>
Table 11.2 (contd.)

<table>
<thead>
<tr>
<th>TYPE OF SMALL COMPANY</th>
<th>QUITTING</th>
<th>DIVESTING</th>
<th>INERT</th>
<th>REACTIVE</th>
<th>ADAPTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PATTERN OF OWNERSHIP-CONTROL</td>
<td>Unified</td>
<td>Dispersed family ownership</td>
<td>Dispersed family ownership</td>
<td>Dispersed family, or non-family</td>
<td>Ownership pattern not significant</td>
</tr>
<tr>
<td>PATTERN OF EXECUTIVE-CONTROL</td>
<td>Owner-controlled</td>
<td>Family</td>
<td>Family</td>
<td>Non-family, (d)</td>
<td>Non-family, (d)</td>
</tr>
<tr>
<td>LEVEL OF MANAGEMENT EXPERTISE</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
<td>Relatively high</td>
<td>Relatively high</td>
</tr>
<tr>
<td>MANAGEMENT MOTIVATION</td>
<td>Personal security, facilitate employment of family heirs outside family business</td>
<td>&quot;Class&quot; objectives</td>
<td>&quot;Class&quot; objectives</td>
<td>Personal security, family succession</td>
<td>&quot;Status&quot; objectives</td>
</tr>
</tbody>
</table>

For Notes: see p.
Notes to Table 11.2:

(a) The product range of firms has been classified as either "traditional/rigid" or "adaptive". "Traditional/rigid" refers to products which are not associated with recent product or process innovations, while "adaptive" products incorporate recent technological advances. "Adaptive" products in the soft drinks industry include large-sized and non-returnable products, whilst the capacity for colour and lithographic processes are taken to indicate an "adaptive" product range for small general printers.

(b) "Premium" customers refer to customers in growth sectors of the market. This refers to the multiples sector and cash and carry markets in the soft drinks industry. In the printing industry, "premium" customers include the demand for specialist printing processes, and book and booklet printers. "Residual" customers are the traditional, but declining, market sectors - for example, independent grocers and CTNs in the soft drinks industry, and small jobbing sectors (tickets, pamphlets, etc.) in the printing industry.

(c) Profitability and growth rates refer to the average for a particular industry. In the current sample, the average net profitability (1973–1976) of soft drinks manufacturers was 20.4%, while the average growth rate of sales was 25.4% (at current prices). The average net profitability of general printers was 12.4%, while the average growth rate of sales was 12.4% (at current prices).

(d) Executive-control was non-family insofar as a number of command positions were filled by qualified or experienced staff unrelated to the company owners. In family businesses however, the position of managing director and/or company chairman was usually reserved for members of the owning-family, despite the pattern of non-family executive-control in other command positions.

11.3. THE IDEAL TYPES OF SMALL COMPANY AND LIFE CYCLE THEORY

A life cycle curve shows diagrammatically the development, growth and decline of any product or company in an industry(3). The only variation from product to
product, or company to company, is the time taken from development to decline. The universality of life cycle theory has been totally rejected by Penrose (1959)\(^{(4)}\), while Galbraith (1967), Bannock (1973) and Prais (1976) have traced the emergence of giant corporations which appear to defy the life cycle concept. Nevertheless, life cycle theory appears to provide a useful tool with which to illustrate the development of small companies. Whilst accepting the criticisms of life cycle theory with respect to the development of giant corporations, our research notes that only a small minority of small firms develop into giant corporations. Our evidence of small company development in the printing and soft drinks industries suggests that there is a tendency for small firms to develop a pattern of family ownership and executive-control. This may arise through either the shedding of partners, or concentration of control processes by managing directors in response to perceived environmental illiberality. This suggests that the social dynamics of small business management are associated with a drift towards inertia and relative inefficiency among older, small family businesses.

The relationship between the ideal types of company suggested by our research and the company life cycle may be represented as in Figure 11.1 overleaf.

Figure 11.1 illustrates that adaptive small firms are able to achieve effective company growth and development, whereas reactive small firms are associated with
FIGURE 11.1. Company Life Cycle and the Type of Small Company

DEMAND

Early adoption of product or process innovations

Later adoption of innovations. Derivative strategies

Decline and failure to adapt to environmental change

AGE OF SMALL COMPANY

ADAPTIVE SMALL FIRM

REACTIVE SMALL FIRM

INERT OR DIVESTMENT SMALL FIRM

QUITTING SMALL FIRM SEEKS REALISATION OF ASSETS
a relative stagnation of company activities. Our evidence also suggests that inert or divesting small firms are relatively inefficient and located in declining market sectors - this drift towards inertia being a function of the interactive nature of economic and social processes of small business management.

The speed with which small firms become inert appears to be related to both the social processes of small business management and the environmental constraints to small company activities. Evidence presented in the previous chapter suggests that management motivations relating to the need to maintain family control, and the low level of management expertise fostered by nepotistic management succession, are related to the failure of managers to adapt their firm's activities in line with changes in the market and technological environment. This suggests that older family-managed small firms will tend to become inert and inefficient in environments characterised by rapid change. Frequent market and technological changes will tend to hasten the decline of inert small firms through the entry of new firms to take advantage of product or process innovations (as witnessed in the printing industry), or increased market penetration by market leaders in oligopolistic markets (observed in the soft drinks industry). Evidence of small company decline in the soft drinks industry also suggests that the drift towards inertia will be more rapid in markets characterised by a relative standardisation of product
markets and production process (with consequent economies of scale). Where markets are more variegated and there is a relative lack of standardisation in the production process (typified by the printing industry), then the drift towards inertia is likely to be a lengthier process. These relationships may be represented as in Figure 11.2, below.

FIGURE 11.2. The Type of Environment and Life Cycle of Small Firms

DEMAND FOR PRODUCTS, COMPANY GROWTH POTENTIAL

Rapid Environmental change, standard product market, economies of scale in production process.

Low level of environmental change, variegated product market. Diverse production process.

The general conclusion that family firms are likely to become inert and inefficient must be made with the caveat that several older family businesses in the sample were relatively successful. Indeed, Appendix C2, Table 5 indicates that there is no significant relationship between the control type of firms (measured in terms of the number of directors who are related) and the size of firms. However, this statistic appears to mask the
social processes of small business management. Evidence from the case studies suggests that large family businesses have evolved a pattern of non-family executive-control by technically competent personnel who are not necessarily related to company owners (see for example, SDM 1, 2, 8, 12 and PF F). Firms which have failed to incorporate functional expertise into their management structure have tended to remain small and inert (see for example, SDM 5, 6, 7, 13 and PF A, M and 0). Although it is not possible to determine with certainty the direction of causality of this relationship, evidence from the case history of SDM 12 suggests that the introduction of higher levels of management expertise is necessary to achieve effective growth and development. This suggests that the life cycle of small firms may be extended through the introduction of higher levels of management expertise and effective policies of management development.

Resort to collusion or other defensive strategies by small business managers may be viewed as an attempt to extend the life cycle of small firms. However, the long-term effectiveness of these policies appears to be limited. Continued environmental illiberality appears to prompt several managers to break collusive agreements as markets are penetrated by market leaders which are not necessarily a part to such informal action. Extension of small company life cycles through the introduction of management expertise, or attempts by managers inert firms to extend the life cycle through collusive agree-
ment to restrict the diffusion of product or process innovations may be diagrammatically represented as in Figure 11.3, below.

**FIGURE 11.3.** The Extended Life Cycle of Small Companies

Our model accepts that firms which develop into large corporations are likely to continue to aggrandize. Indeed, characteristics of the "adaptive" small company suggest managerial and economic processes necessary for continued company development. However, the tendency for small firms to develop family ownership and executive-control, with its consequent shortcomings in terms of management expertise, is consistent with the long-term decline of firms which remain small, as predicted by
life cycle theory.

11.4. SUMMARY AND CONCLUSIONS

The theoretical model of small company dynamics presented in Chapter 4.1 placed particular emphasis on the essentially political processes inherent in the development of small firms, via its recognition of the strategic choice available to company controllers. This led to the hypothesis that the social processes of small business management influence the strategies adopted by small business managers. Our research has noted a variety of management strategies in small firms from the printing and soft drinks industries. These strategies and consequent mode of company development have been synthesised through the identification of five ideal types of small company. The relationship between social processes of management and the type of small company is summarised in Table 11.3, overleaf.

Our evidence from the printing and soft drinks industries suggests that family domination of the management process, and low level of management expertise which is fostered by nepotistic succession processes, results in a drift towards inertia and inefficiency, and is related to the adoption of defensive or passive management strategies. This lack of growth-orientation in development strategies appears to be reinforced by the desirability of maintaining family control over managerial processes.
### TABLE 11.3. A Summary of the Social Processes of Management for Each of the Ideal Types of Small Company

<table>
<thead>
<tr>
<th>IDEAL TYPE OF SMALL COMPANY</th>
<th>SOCIAL PROCESS OF MANAGEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ADAPTIVE</strong>&lt;br&gt;(strategy of growth through early adoption of innovations)</td>
<td><strong>OWNERSHIP</strong> .... Unified, family or non-family.&lt;br&gt;<strong>CONTROL</strong> ...... Non-family expertise in company command positions.&lt;br&gt;<strong>SUCCESION</strong> ... Both family and according to functional expertise&lt;br&gt;<strong>MOTIVATION</strong> ... Status objectives</td>
</tr>
<tr>
<td><strong>REACTIVE</strong>&lt;br&gt;(strategy to maintain firms present position, later adoption of innovations)</td>
<td><strong>OWNERSHIP</strong> .... Usually, family&lt;br&gt;<strong>CONTROL</strong> ...... Coalition of both family and non-family expertise&lt;br&gt;<strong>SUCCESION</strong> ... Both family and according to functional expertise&lt;br&gt;<strong>MOTIVATION</strong> ... Personal security, Family succession of command.</td>
</tr>
<tr>
<td><strong>INERT</strong>&lt;br&gt;(defensive strategies and non-immitative market behaviour)</td>
<td><strong>OWNERSHIP</strong> .... Family&lt;br&gt;<strong>CONTROL</strong> ...... Family&lt;br&gt;<strong>SUCCESION</strong> ... Family&lt;br&gt;<strong>MOTIVATION</strong> ... Class objectives</td>
</tr>
<tr>
<td><strong>DIVESTMENT</strong>&lt;br&gt;(cessation of manufacturing activities, but continued trading in some other capacity)</td>
<td><strong>OWNERSHIP</strong> .... Family&lt;br&gt;<strong>CONTROL</strong> ...... Family&lt;br&gt;<strong>SUCCESION</strong> ... Family&lt;br&gt;<strong>MOTIVATION</strong> ... Class objectives</td>
</tr>
</tbody>
</table>
| **QUITTING**<br>(realisation of company assets) | **OWNERSHIP** .... Unified Owner<br>**SUCCESION** ... No future succession, past succession usually family.<br>**MOTIVATION** ... Where family heirs, to ensure that they will not depend on family business for employment. Otherwise, class objectives.
The second hypothesis generated by our model of small company dynamics concerns the impact of the business environment on management strategies and company performance. The conclusion suggested by the present research is that rapid environmental change will hasten the process by which small family firms become inefficient, unless they introduce adequate levels of management expertise.

The business environment also appears to be related to the mode of defensive or negative strategies adopted by small businessmen. Perceived environmental illiberality appears to stimulate a defensive or collusive response from managers of inert small businesses. Alternatively, managers may seek divestment or quitting policies. However, the adoption of either a divestment or quitting strategy appears to depend on the process of management. Small firms with unified ownership and executive-control appear to be more likely to adopt a quitting strategy in response to environmental illiberality, whereas firms with dispersed family ownership and family executive-control are more likely to adopt collusive or divestment strategies, since a number of family members are dependent on the business for their future livelihood. The significance of these processes is illustrated by the relatively high incidence of voluntary liquidations and cessation of manufacturing activities (but continued trading as wholesalers) observed in the soft drinks industry during the 1970s(5).
Environmental illiberality for small firms does not appear to be as intense in industries with fragmented and variegated markets (such as the printing industry). Market and technological change is not necessarily uniform across the industry, and small firms are often protected in niches of the market for specialist products or products with limited demand. This was observed in the many printing sectors which did not require the use of lithographic or colour processes. Management strategies in older, family-dominated small firms tended to be passive rather than collusive in these cases. This is partially related to the impracticality of collusive action because of low entry barriers and/or the variegated nature of markets and production technologies.

Perceived environmental illiberality was also observed to form the basis of two distinct management strategies with respect to company development. Increased environmental illiberality for small firms may threaten the desired life-style of inheritor managers. One response to this marginality of their role as a small businessman is to seek company expansion. This response appears to be most likely among relatively young managers in firms in which there is relative unity of ownership and executive-control. An alternative managerial response is to seek capital disinvestment through the realisation of company assets. This strategy appears to be more likely among owner-managers who are approaching the age at which they intend to retire, and who have ensured...
that their heirs are not dependent on the family business for their future employment.

The third hypothesis generated by our model of small company dynamics concerns the impact of organisational context on management strategies. The conclusion of our research is that management strategy and organisational context are dynamically interactive. Although a firm's present context (its product range, customer-mix, size, type of plant, and so on) is the result of previous management strategies, this general conclusion masks several important facets of the process of small company development. Our analysis of the printing and soft drinks industries has noted that firms currently located in growth sectors of their industry and manufacturing technologically advanced products (within the context of the particular industry), are better placed to respond effectively to market and technological change. Inert small firms, on the other hand, are dependent on traditional sector of the industry, and their distance from growth markets means that they can only react to the action of market leaders. This process reinforces the social processes which are associated with the conservative market behaviour of inert small firms, and their failure to penetrate market growth sectors. This supports the hypothesis that the process of company growth and the context of a firm within its particular industrial environment are dynamically interactive.
The relationship between management strategies and intra-industry company performance may be represented by a continuum of the extent to which company processes are adapted to market and technological change - see Figure 11.4, below.

**FIGURE 11.4.** The Ideal Type of Company, Mode of Management Strategy, and Level of Intra-Industry Performance

<table>
<thead>
<tr>
<th>TYPE OF SMALL COMPANY</th>
<th>Divestment → Reactive → Inert → Quitting</th>
</tr>
</thead>
<tbody>
<tr>
<td>MODE OF MANAGEMENT STRATEGY</td>
<td>Adaptive → Reactive ≡ Collusive ≡ Passive</td>
</tr>
<tr>
<td>COMPANY PERFORMANCE (within context of an industry)</td>
<td>High → Low</td>
</tr>
</tbody>
</table>

Our research suggests that adaptive management strategies result in higher levels of profitability and growth rate of sales than achieved by the adoption of defensive or passive strategies typical of inert small firms.

**REFERENCE NOTES**

(1) This refers to managers who do not have ownership rights in the firm which they manage.

(2) These firms have non-family executive-control insofar as a number of command positions are the prerogative of qualified or experienced personnel unrelated to the company's owners. However, the positions of managing director and/or company chairman are often the prerogative of family members in family businesses, despite other command positions being filled according to functional expertise.
(3) See Ansoff (1969, pp. 24-30) or Bruce (1976, pp. 26-29) for a description of the product or company life cycle theory.

(4) See Bannock (1973, p. 11) for a brief analysis of Penrose's rejection of life cycle theory.

(5) See Table 6.6.
PART FIVE

A DISCUSSION OF THE RESULTS AND CONCLUSIONS
12.1. **INTRODUCTION**

Our analysis suggests that there is a tendency for small firms to become "inert" and inefficient. Although market and technological environments influence the ability of small firms to compete effectively with larger firms in a particular industry\(^1\), the social process of management appears to determine the mode of response to particular environmental conditions. A greater degree of family involvement in the management process of small firms appears to be related to inertia in adapting to environmental changes. This inertia appears to be partially fostered by nepotistic succession processes which result in low levels of management expertise. Similarly, first generation owner/managers may not wish to surrender personal authority of the management process, thereby restricting the introduction of complementary management expertise\(^2\), and resulting in an ossification of company activities. The challenge from our research is that to understand the interrelationship between contextual variables of small businesses (their size, age, diversity of products, customer-mix, and so on) and performance variables (profitability, growth), it is necessary to take account of the social processes of management in a particular company.
But to what extent do the conclusions presented in Chapters 10 and 11 concur with the general body of knowledge relating to small company dynamics? The purpose of this chapter is to examine the social processes identified in the study of small company behaviour in the printing and soft drinks industries in relation to previous studies of the business enterprise. In particular, the examination distinguishes three dimensions of the management process: the impact of different patterns of control, succession processes of small businesses, and the motivation of small business managers.

12.2. THE CONTROL OF SMALL FIRMS

By control we mean the exercise of power over the strategic decisions of small firms. A critical aspect in the model of small company dynamics is the strategic choice available to company controllers. The current research suggests that an understanding of small company dynamics necessitates an understanding of the social processes of control in small businesses. Because of the limited dispersion of ownership in small firms (vis-a-vis large corporations\(^3\)), this is usually associated with the political processes of decision-making within a controlling family or small number of business partners.

To discover how power is distributed among decision-makers is immensely difficult, and as yet there is no adequate sociology of the distribution of power
over strategic decisions (Francis, 1980, p.11). Previous studies of small businesses have usually assumed a synonymity of control and stewardship, typical of owner-managed small businesses. Alternatively, control of family businesses is usually associated with the pursuit of "family objectives", without specifying the political processes involved in the determination of these family goals (see for example: Miller and Rice, 1967; Sadler and Barry, 1970). The present research has noted that in certain circumstances of perceived environmental illiberality, inheritor-managers in family businesses may seek to gain effective control of their business through the purchase of shares(4). This concentration of ownership was seen as an integral part in the process of capital disinvestment strategies of small firms in the current sample.

Alternatively, the process of family control observed in the present study suggests the need to distinguish firms in which family control is equivalent to a relatively high degree of family involvement in the day-to-day management process, and family firms which have evolved a pattern of family ownership, but which have developed a management structure which incorporates non-family expertise. The social implications of the former case are that there is a tendency to restrict the incorporation of management expertise because of the need to reserve managerial positions for family members. (This process is reinforced by the socialisation
of family members which fosters interest in the family business, with the result that family members seek employment in the family business as a natural course of action). In these circumstances, the political and social processes of the family appear to be related to family members being unwilling to surrender autonomy and authority to non-family, professional managers. However, the maintenance of family ownership does not, of itself, appear to determine a drift towards inertia. Rather, the critical distinction appears to be the manner in which ownership is translated into the management process. This process must be made explicit if we are to understand the process of small company development.

Studies of the control process, and its translation into business behaviour, have usually concerned an analysis of the control of large organisations (see for example, Francis (1980); Nyman and Silberston (1978); Scott and Hughes (1976)). Nevertheless, these studies have several implications for a discussion of our results.

There are several well-canvassed views on who controls firms. Galbraith (1967) argues that modern technology is so complex that strategic decisions can only be understood and taken by committees of expert technocrats. Consequently, control is exercised no longer by shareholders or the Board of Directors, but by what he terms the "technostructure" - these technical
experts at a lower level in an organisation's hierarchy. However, small firms are typically controlled by a single or small number of individuals within a simple organisational hierarchy (Connellan, 1970; Drucker, 1970). Consequently, his/their attitudes and abilities are critical to the growth process of small firms. Galbraith's analysis implies the necessity of incorporating management expertise into organisational structures as industrial technology becomes more complex. In this respect, his analysis supports the current conclusion that firms which fail to introduce technical expertise into their structure are likely to be unable to adapt to technological change, and consequently drift towards inertia. This drift towards inertia appears to be particularly prominent in small firms which have maintained a pattern of family *executive-control* (as distinct from ownership), at the expense of accommodating technical expertise.

A second view of company control suggests that the pattern of ownership has little or no effect on business behaviour. One strand of this argument focusses on the prevailing dominant ideology, and suggests that even where managers are free to choose between, say, profit-maximisation and other objectives they will choose the former because of their ideology and class position (see for example, Nichols, 1969). Stanworth and Curran (1973) refine this view to suggest that profit-maximisation objectives are likely to be prominent among small
businessmen who seek a maximisation of economic returns or who seek managerial recognition. However, they suggest that profit-maximisation will not be prominent for business founders who seek intrinsic job gratifications. A second strand of thought suggests that the pressures of product and capital markets are so tight that managers effectively have no choice but to take profit-maximising strategic decisions (see for example, Blackburn, 1972). Evidence from the present study questions the universality of these views. The adoption of defensive or collusive strategies in response to perceived environmental illiberality suggests that profit maximisation (or indeed, any other form of maximisation) is not the only response to product market pressures. The adoption of defensive or collusive behaviour appears to be influenced by a firm's pattern of ownership and control. Firms which are characterised by a heavy involvement of family personnel in the management process appear to be more conservative in their strategic decisions. Moreover, evidence from the present study suggests that even where managers of family-dominated firms seek growth or profit maximisation as a response to market pressures, low levels of management expertise which are fostered by nepotistic succession processes appear to impede the implementation of effective growth strategies.

The present research suggests that conservative management strategies in family-dominated firms are
manifest in comparatively inferior levels of performance for family-dominated firms. This conclusion may appear to contradict the earlier findings of Radice (1971), who found that owner-controlled firms have higher profit and growth rates than manager-controlled firms; and Holl (1975) who found no significant difference between the economic performance of owner-controlled and manager-controlled firms. Holl went on to suggest that the separation of ownership and control has no behavioural implications for the theory of the firm. However, these two studies were undertaken on samples of relatively large firms which are likely to have evolved a management structure incorporating technical expertise. Indeed, the present study notes that several family businesses have developed into relatively large and profitable organisations (5). Furthermore, Nyman and Silberston (1978) indicate that some 30% of the largest 250 UK companies are family-controlled, in the sense that positions such as Company Chairman are family-inherited (6). The important distinction of these firms is that they have evolved non-family executive-control which accommodates the necessary expertise. The implication from the current study is that the majority of small family businesses are unlikely to reach this stage of development, primarily because nepotistic succession processes inhibit the introduction of management expertise. However, there is no reason to expect that family businesses which have incorporated technical expertise will be more or less profitable than manager-controlled
medium and large-sized firms.

A general conclusion suggested by the present research is that the most successful small companies tend to be early in the adoption of product or process innovations. This conclusion is similar to Paine and Anderson's (1977) findings. Their study was based on the analysis of large organisations, but they were able to conclude that:

"... successful organisations ... were significantly more innovative than unsuccessful organisations. This was the only variable which consistently predicted success regardless of the environment or internal conditions." (p.154)

Evidence of the diffusion of innovations in the printing and soft drinks industries suggests that older family businesses lag in the adoption of innovations from external sources. A similar aversion to risk in family businesses is reported in a collection of case histories compiled by Birley (1979)(7). However, this conclusion appears to conflict with the evidence presented by Normann (1971) who suggests that the most innovative firms are either family-owned or otherwise have a high degree of power centralisation. The diffusion of power is viewed as a process by which administrative behaviour becomes problem-oriented, with the emphasis on safety rather than aggressive or innovative behaviour. The weakness of Normann's analysis is that he equates power diffusion with non-family control, whereas the current research suggests that control may become dis-
persed within the context of a family business. The relationship between ownership and control, and the adoption of innovations observed in the printing and soft drinks industries may be summarised as in Figure 12.1 below.

**FIGURE 12.1.** The Adoption of Product or Process Innovations, and the Pattern of Ownership and Control in Small Firms

<table>
<thead>
<tr>
<th>OWNERSHIP-CONTROL</th>
<th>EXECUTIVE-CONTROL (b)</th>
<th>MANAGEMENT STRATEGY TOWARDS INNOVATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unified (a)</td>
<td>Non-family</td>
<td>Adaptive: early adoption of innovations.</td>
</tr>
<tr>
<td>Dispersed within one family</td>
<td>Family</td>
<td>Passive or defensive: late adoption of innovations, or even failure to adapt to market or production process changes.</td>
</tr>
<tr>
<td>Non-family</td>
<td>Non-family</td>
<td>Generally adaptive: early adoption of innovations.</td>
</tr>
</tbody>
</table>

Notes: (a) Unified ownership means effective ownership-control within the managing director's immediate family (self, wife and children). (b) Control here refers to the familial relationship of senior executives within small firms.

The present model is compatible with Normann's analysis insofar as a dispersed pattern of family ownership and control is equivalent to a diffusion of power, and is associated with less innovative activity. However, family firms which are early to adopt innovations from
external sources tend to have a pattern on non-family executive-control, as measured by the employment of technically qualified personnel in command positions within the small firm. The important distinction here is the pattern of family ownership, rather than family ownership per se. The conclusion suggested from this analysis is that a simple delineation of ownership type (measured in terms of family ownership) and innovatory activity is too simplistic since it fails to take account of the social processes underlying management behaviour in small firms. Any analysis must distinguish between the pattern of ownership and the pattern of control.

12.3. THE SUCCESSION PROCESS IN SMALL BUSINESSES

Processes in the evolution of control in small businesses are inexorably linked to the process of management succession. Stanworth and Curran (1973) identify five patterns of succession in small firms. Particularistic succession occurs where management positions are filled by individuals previously known to the small business manager, usually because of their personal compatibility. Universalistic or professional succession refers to the selection of individuals almost solely on the basis of functional expertise. Succession by dilution of ownership occurs when a firm, or a share of it, is sold, and roles in the command structure are filled by new partners (or nominees of the new owners or partners). Succession by concentration of ownership
refers to the above process in reverse. Finally, they distinguish family succession in which command positions are filled by members of the controlling family. The best known example of this kind of succession is from father to son.

Evidence of succession processes in the printing and soft drinks industries suggests that small firms tend to evolve a pattern of family ownership. This was traced to a concentration of ownership and subsequent family succession. The impact of this process is to render older family-dominated firms relatively inefficient compared to younger or less family-dominated small firms. Roberts (1969) and Scott (1976) support the present study by suggesting that a dilution of ownership and/or universalistic succession are necessary for effective small company performance.

The evolution of family domination of command positions in small businesses appears to be related to social processes within a controlling family. Evidence from the printing and soft drinks industries suggest that family heirs are introduced to the family business at an early age, and that their fathers encouraged successor interest in the business. This observation is well supported in the literature of succession processes. Barnett and Tagiuri (1973) and Crites (1962) imply the usefulness of the father-son or familial relationship in promoting a successor's interest and knowledge of the family business during his childhood and adolescent years, often
culminating in career choice to enter the organisation. Similarly, the importance of father-son relationships to the development of successors after they formally join the business have been suggested by the writings of Becker and Strauss (1956) and Cogswell (1968). The long-term nature of father-son succession processes is highlighted by Levinson (1971), Calder (1961) and Donnelley (1964) who describe managers who began to indoctrinate and train their sons at an early age to replace them as head of the family business. The impact of these socialisation processes appears to depend on the nature of family succession. Where command positions are concentrated in the hands of family successors, there appears to be an ossification of company activities because of reduced management expertise. On the other hand, where command positions are not the sole prerogative of family heirs, management expertise may be accommodated through universalistic succession (in addition to family succession).

Whilst past research highlights the usefulness of socialisation processes in promoting successor interest in a family business, the present study notes that this process may be used to discourage family heirs from seeking employment in the family business. Evidence from the "quitting" firms in the present study (8) suggests that owner/managers attempted to disuade their children from entering the family business in order to facilitate the realisation of company assets at a time they considered most appropriate. This process was highlighted by stressing
the desirability of formal education and achievement of professional qualifications as a means of securing employment outside the family business.

The importance of motivations to maintain family ownership into the next generation of management is suggested by Boswell (1972), who examined the extent to which small business managers believed it was desirable to maintain family ownership, which he termed the "dynastic motive". The replies to his survey are summarised in Table 12.1, below.

**TABLE 12.1.** The Desirability of Firms Staying in Family Control - A Summary of Boswell's Findings

<table>
<thead>
<tr>
<th>Number of Respondents</th>
<th>Total Chief Executives</th>
<th>Business Founders</th>
<th>Inheritor-Managers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Not applicable (a)</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>2. Neutral, indefinite</td>
<td>5</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>3. Yes, but no chance</td>
<td>5</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. No, unqualified</td>
<td>9</td>
<td>9</td>
<td>-</td>
</tr>
<tr>
<td>5. Yes, qualified</td>
<td>21</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>6. Yes, unqualified</td>
<td>11</td>
<td>3</td>
<td>8</td>
</tr>
</tbody>
</table>

**Source:** Boswell (1972), Table 7, p.91.

**Note:** (a) Not applicable because chief executives had already decided to sell their business.

It can be seen from Boswell's data that a clear majority of small business managers accept the desirability of family succession, although Boswell suggests that this motivation is tinged with realism, that it is moderate rather than enthusiastic. Moreover, the above figures tend to overstate the process of family succession. Of his 55 respondents 20 had no sons anyway, 7 had sons but were neutral or against family succession, while 28 had
sons and were in favour of family succession, but in greatly varying degrees. Therefore, about half the executives in Boswell's survey appeared to actively encourage the process of family succession. This is similar to the frequency observed in the analysis of the soft drinks industry. Discounting the observations in which managers indicated that there will be no change in the pattern of control, 14 of the 31 replies suggest that control will be passed to the next generation of family members (Table 7.1).

Boswell did not examine the social processes of the dynastic motive nor the situations in which small business managers were hostile to the concept of family succession. In addition, he failed to differentiate the relative success of small businesses and the perceived desirability of family succession. The present study suggests, not surprisingly, that the dynastic motive will be strongest in firms which operate in relatively secure environments and/or are relatively successful. The socialisation of family heirs in these firms appears to actively encourage successor participation in company processes. Our research also suggests that the dynastic motive will be strong in family-dominated firms in which the family social system dictates a desirability of maintaining family control into the next generation of family management. This may explain why the majority of executives in Boswell's survey who were unqualified in their acceptance of family succession, were inheritor-managers in family
businesses.

The present research also suggests that where managers perceive an increasingly illiberal environment and/or their firm has become relatively inefficient, family pressures encourage heirs to seek employment outside the family business. In these circumstances, employment in the family business may be viewed as a "next" best alternative where family members are unable to obtain suitable "outside" employment\(^9\). Although Boswell illustrates instances where managers are hostile to the concept of family succession with quotes such as "It's not the best job for a young man with qualifications", and "I don't think it's desirable for sons to take over from their fathers", he fails to examine the environment within which particular firms operate. Moreover, he fails to specify the stage of a manager's career, despite the fact that motivations tend to be transient, with the dynastic motive becoming more prominent as managers approach the age at which control is to change hand\(^{10}\). Consequently, Boswell's analysis is limited in its ability to explain the succession process of small firms, although it does highlight the importance of family succession and the "dynastic motive" in small company dynamics.

The trend towards family ownership and low level of management expertise fostered by nepotistic succession processes appears to be consistent with the relatively low level of qualifications (both academic and professional)
achieved by managers of small family businesses in the soft drinks industry. From the questionnaire replies, of the 34 cases where managers had succeeded their father as head of the family business, only 1 had a University degree, and a further 6 a professional or post-school qualification (Appendix C3, Table 3). This observation is in marked contrast to the findings of Clements (1958) whereby 9 out of 28 "crown princes" (managers making a career in their family business) attended a University, and that a higher proportion of his crown princes had attended a University than all managers.

It is possible to reconcile these different results using the succession processes identified in our research. The socialisation of family heirs to relatively successful family businesses appears to foster successor interest in the family business, with the result that family heirs seek employment therein as a natural course of action. Evidence from SDM 3, 7 and 12 suggests that family heirs did not even consider an alternative course of action. Consequently, where parents offer no qualifications to family succession, family heirs may seek to join the family business upon leaving school.

Evidence from several studies have suggested that middle-class values tend to place academic achievement and the gaining of professional qualifications as desirable goals (see for example, Lipset and Bendix, 1964; Hyman, 1953). Indeed, this hypothesis formed the basis of
Clements' explanation for the higher academic achievement of crown princes compared to managers in general. However, socialisation processes which stress these values also appear to be associated with the disinvestment process of small firms. Managers who intend to realise company assets in the future appear to attempt to ensure that family heirs do not seek employment in the family business by stressing the value of academic and professional qualifications as a means of achieving employment outside the family business, especially in circumstances where there is environmental illiberality for small firms. Given the relatively large number of voluntary liquidations or change of ownership (sale of company) in the soft drinks industry in recent years, this process may account for the low number of graduates managing small family businesses. Where family heirs do not achieve academic success, employment in the family business may be viewed as a "next best" alternative.

Clements does not distinguish the type of family business in his sample, nor the environment faced by small business managers. The present research suggests that the pattern of successor characteristics observed by Clements may be expected in a sample of relatively large family businesses which conform to the "adaptive" ideal type. However, where managers of inert small firms perceive little future for their business because of increased environmental illiberality, the socialisation of family heirs may result in better-qualified heirs seeking employ-
ment outside the family business.

An additional process facilitating a realisation of company assets is the concentration of ownership (in terms of ownership rights). The managing directors of SDM 6 and 13 both acquired ownership-control after they assumed stewardship positions within their family business, either through an issue or purchase of shares. This process we consider to be distinct from the concentration of ownership described by Stanworth and Curran (1973). The concentration of ownership is viewed as a concentration of executive-control by Stanworth and Curran, whereas our study suggests the desirability of distinguishing executive-control and ownership-control. A concentration of ownership-control does not necessarily involve a concentration of executive-control. There was no change of personnel in command position in SDM 6 and 13, but rather a concentration of ownership-control which enabled managing directors to direct company affairs in order to satisfy personal goals, as opposed to the dictates of a wider family circle.

Miller and Rice (1967) suggest that:

"... a modern industrial enterprise can survive as a family business only with the most exceptional of families." (pp.125-126)

The current research suggests that the maintenance of family control is central to the drift towards inertia among older small firms. This may be traced to two sources. First, the right of family members to inherit
managerial posts seems to be an unreliable mechanism of ensuring adequate managerial skills for the small firm. This will be all the more important since as Drucker (1970) has pointed out:

"... Most small businesses believe they need management less; they need management more. A larger business can hire a lot of specialists; a small business cannot and, therefore, has to be better at what it is doing." (p.88)

Secondly, the present research has shown that the family social system tends to restrict the ability of the family firm to react to environmental changes. Barry (1976) has suggested that changes in the industrial environment will require related adjustments within the family circle. However, evidence from older family firms in the present study suggests that such changes are unlikely to take place, with the dominance of the family social system (over the needs of the business organisation) leading to a greater risk-aversion and regression to "tried and true" defensive strategies to protect the firm from the effects of market and technological change.

12.4. MANAGEMENT MOTIVATION IN THE SMALL BUSINESS

A. Management Motivation and Behaviour

The framework adopted to categorise management motivations is based heavily on the model presented by Stanworth and Curran (1973). They postulate that motivations are transient and relate to the production of marginality-free situations for the manager in various areas of society (11). Moreover, they link the transience of moti-
vations to several factors, including a firm's internal development - see Figure 12.2 below.

**FIGURE 12.2.** Managerial "Latent Social Identities" as Postulated by Stanworth and Curran, and their Relationship to Company Growth

<table>
<thead>
<tr>
<th>LATENT SOCIAL IDENTITY</th>
<th>CHARACTERISTICS</th>
<th>DIRECTION OF COMPANY GROWTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTISAN</td>
<td>Period of firm's formation. Managerial goals centre around intrinsic job gratifications such as gaining personal autonomy and independence in the work sphere, satisfactions related to craft, etc.</td>
<td></td>
</tr>
<tr>
<td>CLASSICAL ENTREPRENEUR</td>
<td>Attainment of sustained profitability. Chief managerial goals centre around maximisation of economic returns at a level consistent with survival of Company.</td>
<td></td>
</tr>
<tr>
<td>MANAGER</td>
<td>Achievement of managerial recognition by firm in its field. In addition to &quot;managerial recognition&quot; motivations centre around goals stressing security for himself and his family.</td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Adapted from Stanworth and Curran (1973), Figure 6.1, p.99.

First generation firms in the present sample conform closely to Stanworth and Curran's model. Company founders appear to place particular value on intrinsic job gratifications, and failure to transcend other latent social identities may be related to motivations stressing the desirability of little or no growth. However, their analysis appears to be limited in its ability to explain social processes of older small firms. Stanworth and Curran suggest second- or subsequent-generation inheritor-managers are likely to conform to the "manager" identity since they are unlikely to be socially marginal. But
this tells us little of why management motivations vary quite markedly between managers in older small firms, or the processes underlying these differences.

The present study offers several tentative refinements to the model of motivation in small businesses. Firstly, it is possible to identify situations in which managers become marginal within their role as small business manager. Evidence from SDM 6 and 13 suggests that where employment in the family business is undertaken out of family loyalty, rather than a freely chosen career, managers may experience a certain hostility towards their business, particularly where there is a relatively illiberal market or technological environment. The impact of environmental illiberality is to threaten the firm’s future viability, and thereby the manager’s desired life-style and role in society. The response to environmental illiberality appears to depend on the age of the manager and pattern of ownership and control. Where there is a relative unity of ownership and control, managers at an early stage in their career may seek company expansion through universalistic succession processes, whereas managers at a later stage in their career may seek to realise company assets (provided family heirs do not depend on the business for their future employment). This latter aspect may explain the relatively high incidence of voluntary liquidations in the soft drinks industry in recent years(13). On the other hand, where there is a dispersed pattern of family ownership and executive-
control by family members, management strategies appear to be more passive or defensive. This is partially related to the low level of management expertise typical of these firms, which appears to hinder the adoption of effective growth strategies.

A second refinement to the model of management motivation concerns the identification of "status" and "class" objectives. "Status" objectives refer to the manager's desired role in society, and are typified by a desire to be recognised for managerial excellence. This categorisation conforms closely to the "manager" identity developed by Stanworth and Curran - see Figure 12.2. Alternatively, managerial motivations may stress the importance of security and maintaining family control over company processes. These motivations may be distinguished as "class" objectives since they are centred on control of the means of production and authority.

The two types of social objectives appear to be associated with different management strategies and modes of company behaviour. A primacy of status objectives appears to be consistent with the introduction of non-family management expertise, and the adoption of growth strategies centred on the early adoption of product or process innovations. Class objectives, on the other hand, appear to be more common in family-dominated firms. The desire to maintain personal or family control over company processes appears to be consistent with strategies which attempt to minimise the impact of environmental change. In this
sense, defensive or passive strategies in older small firms may be likened to strategies in which business founders desire to maintain intrinsic job gratifications which were at the heart of the decision to found their own business. The present study has noted cases in which printers have preferred to maintain the small size of their firm and their personal involvement in the production process, rather than seek rapid growth for company markets. These observations follow the argument proposed by Stanworth and Curran (1973) who suggest that small firms may fail to grow because business founders do not shift from the "artisan" latent social identity (see Figure 12.2). A tentative refinement to this argument is that second or subsequent-generation family businesses may stagnate because inheritor-managers may not wish to surrender intrinsic gratifications of their role within the family business, namely control of the means of production and authority.

An alternative attempt to specify different types of managerial behaviour in small firms is presented by Smith (1967), who suggests the identification of two types of entrepreneur: the craftsman-entrepreneur and the opportunistic-entrepreneur. He describes the craftsman-entrepreneur as an individual narrow in education and training, low in social awareness and involvement, with a lack of competence in dealing with the social environment, and a limited or circumscribed time orientation (14). In contrast, the opportunistic-entrepreneur exhibits
breadth in education and training, a high social awareness and involvement, a high confidence in dealing with the social environment, and an awareness and orientation towards the future. Smith then relates these two ideal types of individual to the type of firm he is likely to build - defined as either adaptive or rigid (15). He postulates that craftsman-entrepreneurs will tend to build rigid firms, whereas opportunistic-entrepreneurs will tend to create an adaptive firm. Within this framework there appears to be a similarity between the type of company created by a craftsman-entrepreneur and the inert small company distinguished in the present study, and between the type of firm created by an opportunistic-entrepreneur and the adaptive small firm identified in the current research.

Smith examines the relationship between the "entrepreneurial types" and the development phases of a firm in terms of the decision-making necessary for effective development. He uses Cole's (1959) categorisation of decisions according to their economic character. Decisions are classified as to whether they are management, adjustment to external conditions, or innovations. Management consists of the routine decisions which keep a business going. Decisions concerning adjustments to external conditions are not usually routine and include decisions such as price changes to meet competition, imitation of others' technical processes, and so on. Cole conceives the third type of decision, innovation,
as being the most important because it is related to the economic process and to the business cycle where judgement of the highest order is required. Smith then relates the type of entrepreneur and his firm to the various phases of development. This suggests that the more parochial orientations of craftsmen-entrepreneurs are associated with their firms remaining relatively small - see Figure 12.3 below.

FIGURE 12.3. The Level of Judgement in Economic Decisions Related to the Development Phases of a Firm, as Postulated by Smith (1967)

Amount of Judgement Required for Decisions

LEVEL 3 - Innovations

LEVEL 2 - Adjustment to external conditions

LEVEL 1 - Routine Management Decisions

Source: Smith (1967), Table 11, p.101.
Although Smith's model was designed to explain the process of company formation and development of entrepreneurial firms, it provides certain import to the process of small company decay in later years. The parochial orientations of craftsmen-entrepreneurs are similar to the cases where business founders prefer the maintenance of intrinsic job gratifications rather than company growth. Similarly, we have argued that managerial "class" objectives fit into this category insofar as they tend to be parochial. Consequently, there are similarities of process in the low growth rates achieved by family-dominated firms in the present study and firms formed by craftsmen-entrepreneurs in Smith's study. However, Smith does not distinguish clearly the processes by which managerial orientations are translated into management strategies, nor does his model permit an analysis of management succession processes. Evidence from the present study suggests that adaptive company behaviour is consistent with the introduction of management expertise through universalistic succession processes, rather than simply a function of a manager's personality or personal abilities. Furthermore, Smith's model is limited in its ability to explain the process of rejuvenation in small firms or decay in later generations of a small business. A more in-depth analysis of personal history and pattern of ownership and control is necessary to explain variations in the observed behaviour patterns. The advantage of the present model is that these behaviour patterns are incorporated in the
identification of the five ideal types of company, and drift towards inertia among small firms.

A further attempt to distinguish different types of entrepreneur and relate these types to objective criteria such as company size, type of control, and personal net worth is presented by Bruce (1976). He distinguishes entrepreneurs from two backgrounds. An independent entrepreneur is an individual who sets up or acquires his own business. His decisions directly determine the fate of the commercial enterprise over which he exerts control by reason of shareholding and in which he operates as an executive policy-maker. Within this categorisation of entrepreneur-type, Bruce distinguishes two ideal types of entrepreneur: the elite and ubiquitous entrepreneur. An elite entrepreneur is defined as a businessman running his own company successfully and with growth potential. Examples of this ideal type include Rowland of Lonrho and until recently, Slater of Slater Walker (Bruce, 1976, p.8). The ubiquitous entrepreneur runs a stable, small company with little potential for growth. Desirous of independence, he achieves it through private enterprise. His firm starts small and remains small. An example of this type of individual is the green-grocer at the corner shop. Conceptually distinct from the independent entrepreneur is the modal entrepreneur, who is employed by a company to whose shareholders he is responsible. This type of individual is likely to be at the head of a large industrial corporation, and consequently
his identification provides little import for the present study.

The advantage of Bruce's ideal types of entrepreneur is that they recognise extremes of entrepreneurial behaviour. In this respect, identification of elite entrepreneurs suggests that the ideal types of small company constructed from analysis of management strategies in the printing and soft drinks industries should be extended to include "enterprising", technologically-progressive, small firms run by elite entrepreneurs. Although the present study did not survey any technologically-progressive small firms, evidence of such firms reported by Roberts (1969) and Wainer and Rubin (1969) suggests the desirability of recognising this category within the general framework of small company ideal types.

Although the strength of Bruce's analysis lies in the identification of extremes of individual and company behaviour, therein lies its weakness with respect to the present study, since it cannot explain the dynamics of small firms. What are the processes of the ubiquitous entrepreneur's firm remaining small? Bruce appears to suggest that this fact can be explained by reference to the entrepreneur's personality. The present study, however, suggests that this form of analysis is too simplistic since it fails to take account of the environment of small firms, or the transience of management motivations in response to stimuli both endogenous and exogenous to the firm.
B. Tests of Managerial Behaviour Patterns in Small Businesses

Our analysis of organisational literature argued that psychological testing of individuals was limited in its ability to analyse social processes of management (16). Empirical studies of the managerial personality tend to lack conceptual clarity either because they have tended to focus exclusively on specific sub-groups such as high technology entrepreneurs, or have concentrated on specific personality characteristics which might contribute to successful performance. Moreover, there have been a great diversity of test instruments, thereby hindering the possibility of presenting more general conclusions. Despite these seemingly formidable handicaps, it is possible to suggest several analogies between the present conclusions and the results of these earlier empirical studies.

The majority of empirical studies of management behaviour patterns in small businesses have been concerned with personality characteristics of individuals who form their own business. The major contributor to the empirical study of entrepreneurship has been McClelland (1975, 1961). He discovered that entrepreneurs scored high on need for achievement, which he defined as the desire to do well in competitive situations where the results of one's efforts could be measured objectively. More recent studies have focussed on factors associated with successful entrepreneurs in high technology firms.
Although studies by Schrage (1965), Roberts (1969) and Wainer and Rubin (1969) produce conflicting evidence for the degree of nPow and nAff(17) associated with successful technical entrepreneurship, all these studies suggest that high need for achievement is an ingredient for success. But how is high nAch manifest in the management process of these firms?

French (1958) has shown that entrepreneurs with high nAch tend to select experts rather than friends when selecting work associates for a problem-solving situation. Similarly Roberts (1969) has shown that high performance new technology enterprises are quick to create a marketing department, and that chief executives have a high degree of nAch. Since founders of new technology based firms tend to be technically-oriented, the inception of a marketing department appears to be synonymous with the introduction of complementary management expertise. These conclusions are compatible with the present study insofar as the most successful (adaptive) small firms appear to have higher levels of management expertise than inert (relatively inefficient) small firms.

A further analogy between psychological tests of entrepreneurs and the present study concerns the measurement of need for affiliation (nAff). Individuals with high nAff are typically more concerned with interpersonal friendship within their work environment than with achieving growth and profitability. This situation appears to
typify small business managers in the present study who preferred to maintain their business at its present level of operations, rather than seek further company growth (for example, Printing Firms E, J and L). These firms are typified as being either reactive or inert, with profitability rates generally lower than the industry average. Similarly, McClelland (1975) has shown that entrepreneurs with high nAff tend to be associated with low performance firms - high performance being associated with either moderate or low nAff.

Although the present study is not directly comparable with these empirical tests of managerial personality traits, the behaviour patterns observed to be consistent with particular traits tend to support the present conclusions. In particular they stress the need to introduce higher levels of management expertise as a firm grows through universalistic succession processes of executive control. In addition, motivations which stress the maintenance of intrinsic job gratifications tend to result in the adoption of strategies which are associated with relatively poor financial performance.

12.5. SUMMARY

The advantage of the present model of small company dynamics is its identification of processes of small company development and performance. The model does not present a radically new grounded theory of company development, but extends the analysis of previous studies to
suggest processes underlying the adoption of particular development strategies, and their impact on the level of company performance. Although previous studies appear to be limited in their ability to explain the social and economic processes of more mature small companies, the ideal types of behaviour observed in these studies are, to a certain extent, compatible with the ideal types constructed by the present study - see Figure 12.4 overleaf.

The characteristics of managers of "adaptive" small companies conform closely to the "manager" identity described by Stanworth and Curran, and to the opportunistic-entrepreneur described by Smith. Similarly, the manager of inert small firms appears to resemble the "artisan" identity distinguished by Stanworth and Curran, the craftsman-entrepreneur described by Smith, and the ubiquitous entrepreneur identified by Bruce.

It can be seen from Figure 12.4 however, that none of these previous studies distinguish the processes of small company demise, nor do they explain the processes by which small firms tend to become inefficient as they grow older. The present study suggests that ubiquitous or craftsman-entrepreneurs are likely to adopt passive strategies towards environmental change and company development. These strategies tend to result in slow adaption to change, and consequent drift towards inefficiency. This process appears to be supported by the evolution
FIGURE 12.4. The Compatibility of Ideal Types of Small Company and Management Behaviour Constructed by the Present and Previous Studies of Small Companies

<table>
<thead>
<tr>
<th>RESEARCH</th>
<th>BASIS OF IDEAL TYPE</th>
<th>IDEAL TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRESENT RESEARCH</td>
<td>TYPE OF COMPANY</td>
<td>ENTERPRISING&lt;sup&gt;(a)&lt;/sup&gt; ADAPTIVE REACTIVE INERT DISINVESTMENT&lt;sup&gt;(b)&lt;/sup&gt;</td>
</tr>
<tr>
<td>BRUCE (1976)</td>
<td>TYPE OF INDIVIDUAL</td>
<td>ELITE ENTREPRENEUR UBQUITOUS ENTREPRENEUR</td>
</tr>
<tr>
<td>STANWORTH &amp; CURRAN (1973)</td>
<td>MANAGEMENT MOTIVATION</td>
<td>MANAGER ARTISAN</td>
</tr>
<tr>
<td>SMITH (1967)</td>
<td>TYPE OF INDIVIDUAL</td>
<td>OPPORTUNISTIC ENTREPRENEUR CRAFTSMAN ENTREPRENEUR</td>
</tr>
<tr>
<td>COMPANY GROWTH POTENTIAL</td>
<td>HIGH ← LOW</td>
<td></td>
</tr>
</tbody>
</table>

Notes: (a) Although this type of company was not identified by the current fieldwork, the existence of small, technologically-progressive firms suggests the addition of this ideal type of company to the general framework of small company types.

(b) This covers both disinvestment and quitting ideal types identified by the present research.
of family ownership and control, or particularistic succession in command positions. Both these succession processes appear to restrict the expertise necessary for the implementation of effective strategies of small company development.

The present research also accounts for situations in which small company demise results from causes other than financial failure. The relatively high proportion of voluntary liquidations in the soft drinks industry (without loss to principals), suggests that small business managers may take a strategic decision to seek capital disinvestment. Neither Smith nor Bruce is able to offer insights into this process, whereas Stanworth and Curran suggest that capital disinvestment may result from increased marginality for small business managers because of increased bureaucratisation consistent with company growth. However, this process does not explain capital disinvestment strategies in relatively small-sized manufacturers, nor does it explain the processes which facilitate the adoption of this strategy. The present research suggests that marginality may result from perceived threats to the maintenance of a desired life-style based on long-term company survival. Responses to environmental illiberality include the concentration of ownership, the "socialisation" of family heirs which stresses the importance of academic and professional qualifications as a means of securing employment outside the family business, and the adoption of defensive or collusive strategies to protect market
positions. These processes appear to support the process by which small firms drift towards inertia and/or the adoption of capital disinvestment strategies by owner-managers.

The adoption of defensive or passive market strategies which result in inertia with respect to a firm's response to market and technological change is related to the pattern of ownership and control of small firms. "Inert" small firms tend to be family businesses, although family ownership, per se, is not the critical variable explaining the drift towards inefficiency among small firms. This process is more readily explained by the extent to which executive-control is the prerogative of family members. There appears to be a tendency for small firms to evolve a pattern of family ownership and executive-control, although this process is by no means universal. Our research suggests that family ownership and control may evolve through an initial concentration of ownership, and later process of family succession. This process may be represented as in Figure 12.5, overleaf.

The process described in Figure 12.5 typifies the drift towards inertia among small firms. It is clear however, that not all small firms conform to this pattern of ownership and control. Rapid growth in the early stage of a firm's development may necessitate the introduction of non-family personnel in to command positions. Entrepreneurs characterised by high need for achievement tend
FIGURE 12.5. Diagrammatic Representation of the Process by which Small Firms Evolve a Pattern of Family Ownership and Executive-Control

Founding: Partnership or Single entrepreneurship

Concentration of ownership (and perhaps control)

Increased prominence of dynastic motivations

Family Succession Process

Prominence of management "class" objectives - desire to maintain family control

Family succession:
Dispersed pattern of family ownership, and family executive-control through grand-children of founder.

TIME

DRIFT TOWARDS INERTIA
to recruit experts to managerial positions rather than personal friends. Alternatively, a small business manager may not have heirs to whom he can transfer control, thus resulting in a pattern of non-family control. The possible sources of non-family executive-control are many. The important characteristic to emerge from our research is that the implementation of effective strategies for company development usually necessitates breaking the rigidities fostered by family-dominated executive control, through universalistic succession of executive-control.

REFERENCE NOTES

(1) For example, significant economies of scale in a production process may determine that small firms cannot compete effectively with larger firms producing the same product.

(2) For example, Roberts (1969) found that the most successful new technology-based small firms (founded by technically-oriented entrepreneurs) had introduced a marketing department staffed by experienced marketing personnel. This expertise may be seen to compliment the technical expertise of the company founder.

(3) The majority of small firms (60%) reporting to the questionnaire survey for the Bolton Committee - Tamari (1971) - were not incorporated, but were either a partnership or sole trader. Of the incorporated companies, 90% of the small firms were "close" companies - a company controlled by five or fewer persons.

(4) The managing director of SDM 6 purchased part of his aunts shareholding in the family business in order to achieve effective control. The managing director of SDM 13 gained effective control of his company through a rights issue of shares which was not subscribed to by members of his distant family who were shareholders in the company.
For example, SDM 1, 2, 3 employ 110, 90 and 65 people respectively. Moreover, A.G. Barr Ltd. employ over 1000 people, but have maintained a pattern of effective family ownership (as distinct from control).

Francis (1980) notes that in 1977, Associated Biscuit Manufacturers (ABM), J. Lyons, and W.H. Smith, all had descendants of company founders as their Chairman. In addition, Dixons Photographic, Mothercare, Tesco, and Sears Holdings all had founders as Company Chairman.

See especially the case study of Company 1, 'Eaves and Washbourne Ltd.', pp. 4-31.

In the case of SDM 5, this was considered to be a profession such as lawyer or accountant. Indeed, the managing director's younger son had taken-up a career in law. Similarly, the managing directors of SDM 6 and 13 both stressed careers such as lawyer or accountant as "suitable" employment for family heirs to follow.

In their longitudinal study of one particular entrepreneur, Stanworth and Curran (1973, Chapter 7, pp.129-148) tested the entrepreneur's goals and aspirations over time (10 year period). At the outset of their study, the dynastic motive did not appear to exist, whereas it gradually rose to second place in the hierarchy of goals over a ten year period. This time period is consistent with his two sons moving closer to the time when they should seek employment. Neither son achieved a great deal of academic success, and so the dynastic motive may be seen to be associated with ensuring that his sons achieve a "suitable" life-style.

See Stanworth and Curran (1973, pp.120-125) where they discuss an entrepreneur's relationship with three areas of society: his firm, the local community and wider society.

A latent social identity refers to the individually introduced elements of an entrepreneur's role. It is made up of a cluster of beliefs, values and goals which are derived from sources outside the role. For a review of the literature on this concept see Cotgave and Box (1970).

See Tables 6.6 and 6.7 for an analysis of the proportion of voluntary liquidations in the soft drinks industry during the 1970s.
This refers to the fact that the craftsman-entrepreneur tends to apply a short-term horizon to strategic and operating decisions.

These categorisations are similar to the distinctions made by the present research. Rigid firms were identified as having a stable product-mix and customer-mix over time, whereas an adaptive firm changed its customer-mix, product-mix and production system to meet various market trends and opportunities for growth.

See Chapter 3.6 of this thesis.

nPow refers to the need for power, while nAff refers to the need for affiliation.
CHAPTER 13

THE ROLE OF SMALL FIRMS IN THE UK ECONOMY:
A RE-EXAMINATION

13.1. INTRODUCTION

The purpose of this chapter is to present an analysis of the "role" of small firms in the UK economy, and a re-examination of these roles in the light of the present study. The Bolton Committee (1971) cited eight important functions performed by small firms "which may collectively be termed their 'role' in the economy". These are:

i) The small firm provides a production outlet for the energies of that large group of enterprising and independent people who set great store by economic independence and many of whom are antipathetic or less-suited to employment in a large organisation but who have much to contribute to the vitality of the economy.

ii) In industries where the optimum size of the production unit or the sales outlet is small, often the most efficient form of business organisation is a small firm. For this reason many important trades and industries consist mainly of small firms.

iii) Small firms add greatly to the variety of products and services offered to the consumer because they can flourish in a limited or specialised market which it would not be worthwhile or economic for a large firm to enter.

iv) Many small firms act as specialist suppliers to large companies of parts, sub-assemblies, or components, produced at lower cost than the large companies could achieve.

v) In an economy in which ever larger multi-product firms are emerging, small firms provide competition, both actual and potential, and provide some check on monopoly profits and on the inefficiency which monopoly breeds. In this way they contribute to the efficient working of the economic system as a whole.

vi) Small firms, in spite of relatively low expenditure on research and development by the
sector as a whole, are an important source of innovation in products, techniques and services. vii) The small firm sector is the traditional breeding ground for new industries— that is for innovation writ large.

viii) Perhaps most important, small firms provide the means of entry into business for new entrepreneurial talent and the seedbed from which new large companies will grow to challenge and stimulate the established leaders of industry." (pp.83-84)

These functions of small firms may be synthesised into three broad categories: maintaining competitive markets and a wide variety of products, providing an effective source of inventions and innovations, and providing an outlet for individual talents. Additional functions for small firms have been suggested more recently, such as rejuvenating the inner cities (Falk, 1978; Harrison and Whitehead, 1978) and providing an effective tool with which to stimulate economic activity and reduce unemployment (see for example, CBI, 1977; Brown et al, 1976).

Although the present study was not designed with the intention of examining these "roles" of small companies, the behaviour patterns of small firms observed in the current study have implications for the future role of small firms in the UK economy.

13.2. MAINTAINING COMPETITIVE MARKETS

Increased aggregate and market concentration has led several commentators to argue the case for actively encouraging the small business sector in order to preserve competitive markets (see, for example: "A Review of Monopolies and Merger Policy", 1978; Bannock, 1976).
Such propositions appear to be based on the assumption that increased concentration is akin to less domestic competition. However, such assertions may be criticised on two fronts: they fail to take account of the international aspects of competition, and assume a link between competition and efficiency.

a) International Competition and the Small Firm

Since the Second World War, imports have accounted for an ever-increasing percentage of home sales of manufactured goods — see Table 13.1.

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</thead>
<tbody>
<tr>
<td>%</td>
<td>3.3</td>
<td>4.5</td>
<td>5.4</td>
<td>6.4</td>
<td>9.0</td>
<td>13.3</td>
<td>15.9</td>
</tr>
</tbody>
</table>


Note: The absolute levels of import penetration given above are subject to certain definitional qualifications; they are intended only to give a guide to the rate of increase over the period.

This change in the balance of trade is synonymous with increased competition from foreign manufacturers. It has been argued that in order to compete effectively in international markets, increased firm size may be necessary to reap the desirable economies of scale in certain industries.

"In a few industries like cars, turbo-generators and small electric motors, the size of the largest UK plant is below the level required to reap the full benefits of scale economies or learning effects ..." (A Review of Monopolies and Merger Policy", 1978, p.13)
The recent review of monopolies and merger policy (1978) notes that the rise to prominence of Japanese manufacturers in industries such as motor vehicles and TV appliances is partially due to the Japanese Government promoting competitive oligopolistic market structures to gain economies of scale associated with learning effects and experience curves (1). This suggests that where international competition is an important characteristic of particular markets, the promotion of small firm activity (of itself) will not necessarily help domestic manufacturers compete effectively in both domestic and international markets.

This proposition is supported by evidence from the present study. Although the soft drinks industry is associated with only a limited amount of international trade, firms which have established international markets tend to be medium-large sized companies within the context of the industry (for example, Sodastream Ltd., Solent Canners Ltd. (and its new parent J.N. Nichols (Vimto) Ltd.)) (2). In addition, firms which have responded to market penetration by foreign bottlers of natural or spa waters tend to be market leaders such as Schweppes (Malvern Water). Small printing firms appear to be at a similar disadvantage in terms of competing effectively in international markets. Their lack of know-how in international markets and the relatively high initial cost of establishing an international network, has led to calls for the adoption of joint-marketing techniques by small firms in order to
compete effectively in international markets (3). The
drift towards inertia among older family businesses in
the present study, and the tendency for small firms to
evolve a pattern of family ownership and executive-con-
trol, suggests that the majority of small firms will not
be able or willing to compete effectively in international
markets. Even where economies of scale are not particu-
larly significant, such as in the printing industry,
many small business managers do not appear to desire
further growth, preferring to maintain intrinsic job
gratifications which are centred upon the production
process.

b) **Competition, Efficiency and the Small Firm**

The link between competition and efficiency is
rather tenuous and open to much academic debate. In
the majority of studies, the degree of competition in a
particular market (and the behaviour of firms therein)
has been measured by the share of total sales, net output,
or employment, of the largest "n" firms in that market.
This assumption appears to be based on the belief that
market behaviour such as price leadership and collusion
is more likely to be practised in highly concentrated
markets. Most studies of this topic have been cross-
sectional multiple regression analysis of the relation-
ship between concentration and a limited number of
structural variables and industry profitability, measured
either by the average return on capital (from published
accounts) or by price-cost margins (from Census of Pro-
duction data). Studies by Shepherd (1972), Holtermann (1973) and Khalilzadeh-Shirazi(1974) were primarily concerned to test the proposition that market power results in a misallocation of resources, as evidenced by persistent, above-average profitability in less competitive markets - average profitability being rather heroically assumed to approximate to the equilibrium competitive rate of profit (Howe, 1977). Each of these studies reach rather different conclusions. Shepherd found a statistically significant positive, if weak, association between concentration and price-cost margins when measures of capital intensity, industry size and growth were also included as independent variables. Khalilzadeh-Shirazi found a significant positive relationship when concentration was correlated with price-cost margins, but no relationship when other independent variables were added(4). Holtermann, on the other hand, found no association between concentration and price-cost margins (except in a subsample of consumer goods industries where the association was negative).

These contradictory conclusions may be partially explained by the inclusion of different variables and inconsistent fineness of industry classification used by the studies. In addition, the concentration ratio is a rather crude summary statistic of the size distribution of firms in an industry or market since it does not take account of size inequalities of firms within a particular industry or market. Moreover, using a purely production-
oriented view of markets overlooks certain aspects of inter- and intra-industry competition. This criticism may be levelled at studies which use Census of Production industry classifications, where markets are defined in terms of firms producing goods from technologically similar processes. A "technological" market may be highly concentrated but still face extreme competition from other industries. For example, the glass industry faces much competition from the plastics industry in the supply of packaging materials for drinks and food industries.

The present research also notes that small firms may attempt collusive action to restrict the diffusion of product or process innovations as a strategic response to environmental illiberality. Asch and Seneca (1975) suggest that collusive firms tend to be less profitable than average. The current research suggests that low profitability and perceived threat to company survival induces small firms to collude. While the number of manufacturers and diversity of product markets appear to determine the ability of firms to collude, Shepherd (1970) draws attention to the role of informal structures (such as interlocking directorships, membership of common associations and societies, similarity of social background, and so on) as factors influencing the behaviour of firms in an industry. The present research suggests that employers associations (particularly at a regional level) may become the agency for the adoption of collusive behaviour. Consequently, any analysis of the relationship between
competition and efficiency must take account of the extent to which products are standardised, and the extent to which manufacturers are organised. Since small firms appear to indulge in collusive behaviour to protect their own self-interest, simply ensuring the existence of a certain proportion of small firms in a particular market does not appear to guarantee the maintenance of competition in the public interest.

An alternative method of analysing the "efficiency" role of small firms is through a comparison of efficiency by company size. In an effort to compare the relative efficiencies of small and large firms, Todd (1971) constructed Farrell-type efficiency frontiers for samples of small and large firms for six broad industry groups. The frontiers were constructed from observations of labour and capital inputs per unit of value added. The efficiency frontier may be identified as the innermost convex set of observations in the labour and capital input plane, and the technical or X-efficiency of any firm can be measured assuming constant returns to scale according to its position on the input plane relative to the frontier. From this study Todd concluded that the degree of X-efficiency was independent of firm size.

The relative efficiency of industrial enterprises has also been measured by comparisons of the rate of return on capital. Samuels and Smyth (1968) suggested that smaller firms tended to exhibit higher than average rates of profit for the years 1954-1963, with the differences
in profit becoming more marked over time. These findings are supported by Singh and Whittington (1968), although more recently Whittington (1980) has concluded from a larger sample size that average profitability is independent of size. However, these studies are based on samples of relatively large firms - Whittington's sample comprising quoted British companies - and consequently they offer few insights into the relative performance of small non-quoted firms.

Samuels and Smyth (1968) also found that firms operating in highly concentrated industries had less variable profit rates than firms operating in less highly concentrated markets. This led to the hypothesis that profit rates will vary more in the small firm sector than in the rest of industry. This hypothesis is supported by Whittington (1980) who concluded that inter-company dispersion of profitability tends to decrease with firm size, although the relationship was not strong. Moreover, Hart and Mellors (1971) have shown that when loss-making firms are included in the analysis, profitability and firm size are independent. Marcus (1969) examined Baumol's (1959) hypothesis that the rate of return increases with firm size, and concluded that:

"... since profitability is ultimately determined by several complex factors - product prices, factor costs, and production function - whose relationship to size of firm might vary among industries in a manner which cannot be readily identified, it is perhaps not surprising that when offered with no qualifications, the hypothesis cannot be supported." (p.107)
Similarly, the present analysis suggests that generalised studies of the relationship between profitability and size are likely to be inconclusive because of the heterogeneous nature of product markets and production functions. Evidence from the soft drinks industry suggests a positive relationship between profitability and size, whereas no such relationship appears to exist in the printing industry. These differences may be partially explained by differences in the age distribution of firms in each industry, and differences in the pattern of ownership and control of firms. The small business sector of the soft drinks industry is characterised by relatively aged, family-dominated businesses, whereas the printing industry comprises firms of all age groupings. Family-domination of firms appears to be prevalent among older small firms in an industry. The drift towards inertia among small firms which was identified by the present research suggests that analysis of the relative efficiency of firms of different sizes must take account of the age and pattern of ownership and control of firms.

In conclusion, the case for actively encouraging small firms as a means of preserving competitive and efficient markets appears to be relatively neutral. The present study has shown that small firms are equally likely to collude when environmental conditions permit such actions to be effective. Similarly, the relationship between company size and efficiency is by no means clear. However, the ideal types of small firm constructed
during the present study permit several generalisations to be offered. Where an industry is characterised by a relatively high entry of new firms, there is no reason to suspect that small firms will be any more or less profitable than larger firms in the industry.

"If large firms tended to be more efficient, then any really significant and continuing difference would have resulted in a much more rapid concentration of business activity in the hands of large businesses than we have witnessed. Small firms still do account for a considerable proportion of the nation's output." (Todd, 1971, pp.1-2)

On the other hand, where there are relatively high entry barriers to an industry and/or relatively low entry of new firms, the drift towards inertia of small firms (stimulated by the evolution of family ownership and nepotistic succession processes) will result in small firms becoming relatively inefficient compared to larger firms in that industry.

13.3. INVENTION AND INNOVATION: THE ROLE OF SMALL FIRMS

Interrelated with the subject of competition, but conceptually distinct, is the process of invention and innovation. Invention is generally accepted to be something rather exceptional in technical development.

Schmookler (1966) defines invention as:

"... a prescription for a productive product or operable process so new as not to be obvious to one skilled in the art at the time the idea was put forward." (p.11)

Innovation on the other hand may be defined as:

"the commercial application of invention for the first time." (Kennedy and Thirlwall, 1972, p.56)
On the question of invention, as distinct from innovation, the Bolton Committee (1971) concluded that:

"... the evidence suggests that individuals working either by themselves or in small firms make a disproportionate large contribution, particularly in relation to their expenditure on Research and Development." (p. 50)

In Research Report No. 6 for the Bolton Committee, Freeman (1971) recalls that:

"... such key innovations as bakelite, the ball-point pen, radio, the pill and insulin were the result of the initiative of individual inventors establishing small innovatory firms." (p. 9)

But how effective are small firms in terms of innovatory activity?

Galbraith (1952) and Schumpeter (1934) have argued that large firms are responsible for a more than proportional share of inventions in a particular sector than is exhibited by their market share. Tests of Schumpeter's hypothesis regarding the advantages of the "monopoly firm" in terms of both the demand and supply of innovations (Schumpeter, 1942, p. 101) have been tested typically by reference to the size of firms. The relationship between R & D, innovation and firm size has received quite extensive treatment in academic research (6), with conflicting evidence produced for the role of small firms in the diffusion of technical change.

Scherer (1980) has generalised that small firms play a prominent role in creating new technologies, and although R & D is associated with high investment cost,
this does not necessarily prohibit small and medium-sized firms.

"No single firm size is uniquely conducive to technical progress." (Scherer, 1980, pp. 417-418)

The empirical evidence in support of this proposition is mixed. Absolute levels of R & D expenditure are highly correlated with the size of firm, but the share of resources within a firm devoted to R & D is not so strongly correlated with firm size (Villard, 1958; Hamberg, 1964). It appears that once some threshold size is reached large firms do not spend relatively more on R & D than smaller firms (Scherer, 1965a, 1965b).

Despite the evidence of concentration of R & D expenditure in large firms it is nevertheless not necessarily true that these firms account for the dominant share of inventions and innovations. Rothwell (1978) and Oakey et al (1980) have shown that innovation per unit of expenditure on R & D is much higher in small firms. According to Freeman's (1971) research for the Bolton Committee, small firms accounted for about 10% of all industrial innovations made in the UK between 1945 and 1970; though in some industries - notably scientific instruments, carpets, textiles, textile machinery, machine tools, mining and general machinery, paper and board, leather and footwear, timber and furniture, and construction - the percentage was about 17%. These figures however, are well below the net output attributed to small firms in the UK as a whole (7). Since small firms tend to be
more effective innovators per unit of expenditure on R & D, this suggests that only a minority of small firms are effective innovators.

The reasons for higher productivity of R & D in small firms has been suggested by Abernathy and Utterbach (1976). They argue that large firms specialise in mature products where competition is primarily on the basis of incremental cost saving innovations and minor product improvements. Small and new technology-based firms on the other hand compete on the basis of entirely new products. Performance and quality are more important than price in this form of competition. This behaviour is apparent in the US electronics industry where radical innovations have been introduced by small technologically progressive firms before being introduced later to large firms both in the US and abroad (Schott, 1981).

A study for the Anglo-German Foundation (Arthur D. Little Ltd., 1976) concludes that the number of new technology-based firms (NTBF) in the UK is rather small. The study was able to identify only 93 NTBFs still in existence which had been formed between 1950 and 1973. This low level of truly innovative activity is similar to Scott's (1976) findings whereby innovative activity in Scotland usually follows only when a firm is reasonably well established; the basis of a firm's founding being to fill a market gap, as opposed to taking advantage of an innovatory product or process.
Thus empirical evidence for the influence of firm size on innovations appears to be mixed. Large firms do undertake relatively more R & D, but they do not appear to be as productive at producing innovations as small technically progressive firms. However, the UK does not appear to be particularly well-endowed with small technically progressive firms (Arthur D. Little Ltd., 1976; Rothwell and Zegveld, 1979, Schott, 1981). Both Freeman (1971) and Jewkes et al (1969) have been careful to point out that the contribution of independent inventors and small innovatory firms does not cover all sectors of industry. These latter points are supportive to the present study's conclusions.

None of the small firms visited during the course of the present research were actively involved in innovatory activity measured in terms of their own R & D efforts. Instead, the present analysis was concerned with measuring the extent to which small firms adapted their product range or production process to accommodate product or process innovations which emanated from either materials or machine supplies industries.

This observation raises several important implications for analysis of the role of small firms in the diffusion of technical change. It is necessary to distinguish between innovation per se, and the adoption of innovations from external sources. For the most part, analysis of small company dynamics appears to be concerned with the
latter - particularly bearing in mind the low level of innovations from small firms as a whole. It is also important to distinguish the stage of the production process and market for goods. Industries in which small firms appear to play a prominent role in innovation, such as electronics, scientific instruments, machine tools, textile and mining machinery (Freeman, 1971; Schott, 1981), tend to be at a pre-assembly stage of production. A more important process for manufacturers at the assembly stage of production (such as soft drinks manufacturers) appears to be the speed with which they adopt product or process innovations from these pre-assembly industries.

The drift towards inertia distinguished by the present study appears to have further import for understanding the diffusion of innovations among small firms. Inertia is characterised by a lag or failure to adopt product or process innovations consistent with market trends. The process of inertia appears to be fostered by family-domination and nepotistic succession processes of small firms. The general conclusion suggested by our research is that older, family-dominated small firms react more slowly to product or process innovations in a particular industry. This suggests that it is necessary to incorporate both the age of small firms and their pattern of ownership and control in an analysis of the effectiveness of small firms in the diffusion of innovations. Extrapolating the present model of small company
dynamics in terms of small company innovativeness suggests that this factor will be low in industries characterised by a low entry of new firms and domination by relatively ageing family businesses. On the other hand, small firms in pre-assembly industries with a relatively high entry of new firms will tend to play a more prominent role in the diffusion of innovations.

This latter hypothesis is given tentative support by an extension of Freeman's (1971) research for the Bolton Committee\(^8\). Merrett Cyriax Associates (1971) reveal that the median age of small firms in manufacturing is in the order of 22 years. The median age of all innovating firms surveyed by Freeman is 11 years at the date of the claimed innovation. The average (median) age of firms in industries in which small firms make a relatively high contribution to innovations is as follows: general machinery 11 years; radio, radar and electronic capital goods 9 years; and scientific instruments only 7 years (see Table 13.2, below).

**TABLE 13.2. The Average Age of Small Firms**

<table>
<thead>
<tr>
<th>Category</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>All manufacturing firms (Median)</td>
<td>22</td>
</tr>
<tr>
<td>All manufacturing firms (Upper Quartile)</td>
<td>51</td>
</tr>
<tr>
<td>All manufacturing firms (Lower Quartile)</td>
<td>10</td>
</tr>
<tr>
<td>All innovating firms</td>
<td>11</td>
</tr>
<tr>
<td>General Machinery (SIC 339)</td>
<td>11</td>
</tr>
<tr>
<td>Radio, Radar and Electronic Capital Goods (SIC 367)</td>
<td>9</td>
</tr>
<tr>
<td>Scientific Instruments (SIC 354)</td>
<td>7</td>
</tr>
</tbody>
</table>

**Source:** Freeman (1971); Watkins (1973) p.69.

Consequently, industries in which small firms play an
important role as innovators tend to be characterised by a relatively large population of young small firms. Conversely, industries in which the average age of small firms is higher than the all-industry average age tend to be typified by low levels of innovativeness among the small firm population. The significance of the present research is its identification of a process by which older small firms become less innovative and/or slow to adopt innovations from external sources. The tendency for small firms to evolve a pattern of family ownership and executive-control through nepotistic succession processes results in relatively low levels of management expertise, which is manifest in the adoption of defensive or passive market behaviour in response to environmental change. Consequently, older small firms tend to become less innovative and relatively inefficient.

13.4. THE STIMULATION OF ECONOMIC ACTIVITY: THE ROLE OF SMALL FIRMS

The maintenance of a full employment economy was not a pressing problem at the time of the Bolton Report (1971). Since the early 1970s there has been a marked increase in the level of UK unemployment, while UK economic growth has lagged that of other developed industrial economies (9). Furthermore, there have been predictions that the level of unemployment will continue to rise in the foreseeable future (10). Since small firms tend to be more labour-intensive than larger firms (Bolton, 1971, p.42), stimulation of the small business
sector is seen as one method of alleviating high unemployment in the UK, whilst simultaneously providing a more effective stimulus to economic growth (Brown et al, 1976). But are small firms likely to be effective in this role?

Expansion of employment opportunities may come from several sources: increased survival rate of existing small firms; the growth of firms that currently cannot keep pace with demand; and an increase in the birth rate of new firms catering primarily for unmet needs. The first of these options would not appear to be a recipe for economic efficiency, bearing in mind the tendency for small firms to become inert and inefficient. Wholesale discrimination in favour of the small business sector would simply ensure that inefficient "inert" small companies are subsidised to stay in business. If small firms are to play an active role in the stimulation of economic activity and reduction of unemployment, this must come through an increase in the birth of new firms to challenge the entrenched position of older small companies in addition to industry leaders as suggested by Bolton (1971). Hamilton et al (1981) however, suggest that small manufacturing firms have been only minor contributors to net job creation in Scotland in recent years, while Fothergill and Gudgin (1979) found that small and new firms in the East Midlands are an important, but not overwhelming source of job creation.

Yet this conclusion is to be expected from our
analysis of small company dynamics. Boswell (1972) suggests that younger firms show a greater propensity for failure than established firms (p.154), while Mayer and Goldstein (1961) found that 50% of their sample of new firms failed within the first two years of trading. Moreover, the present research suggests that owner/managers of first generation firms may prefer to maintain their business at a small size in order to maintain their personal autonomy and authority over all management processes.

Small firms in industries characterised by a low entry rate of new firms are also likely to be in relative decline vis-a-vis larger firms, and are unlikely to contribute to job creation in these circumstances. In addition, simply encouraging small firm activity fails to take account of the direction of trade in particular industries. For example, successful small firms in the printing industry tend to provide intermediary and specialist printing processes for larger contractors (printers). Consequently, they are highly dependent upon the economic health of larger printing firms which sub-contract these specialist functions. Similarly, McRae (1978) suggests that small firms will develop in the service sector to meet the specialist needs and provide ancillary services for larger firms - in both the manufacturing and service sectors. The tentative conclusion suggested here is that the small business sector will perform its function of job creation in
response to a healthy economic environment which promotes growth in both the larger firm and small business sectors of manufacturing industry. It appears to be over optimistic to expect small firms to lead the way in creating new jobs.

13.5. SUMMARY

The present study was not designed to be an economic analysis of the changing role of small firms within the UK economy. Nevertheless, the interactive nature of economic and social processes of small firms identified by the present study provides certain import to the current debate on this subject.

In broad terms, the present study suggests a relatively neutral or laissez-faire stance to the small business sector. Small firms appear to be equally prone to collusive behaviour or the adoption of restrictive trade practices in order to protect market positions as larger "monopolistic" firms. The conclusion suggested by our analysis of social processes of management in small firms is that company age and pattern of ownership and control are more important variables in connection with economic efficiency than the size of firms. Small firms which evolve a pattern of family ownership and executive-control appear to be less innovative, and slow to adopt product and process innovations from external sources. Their contribution towards stimulating competitive markets through challenging the position of
industry-leaders appears to be limited. Indeed, the present research suggests that these firms will tend to resort to defensive market strategies in response to increased competition.

This neutral stance towards small firms does not deny that where they contribute towards research and development, they are probably more effective in producing innovations from a given research expenditure. However, only a small minority of small firms appear to be involved in research and development. This may be partially explained by the drift towards inertia among small firms and their failure to introduce technical expertise. In addition, our research of the printing industry supports Stanworth and Curran's (1973) analysis insofar as the majority of small firms were formed in response to some social impasse or marginality experienced by founders, rather than a desire to pioneer technological innovations within the industry.

The current vogue for seeing small firms as the panacea to the majority of contemporary economic ills cannot be supported by the present research. Evidence of the interactive nature of economic and social processes of small firms casts doubts on whether small firms can provide the stimulus to economic activity suggested by their supporters. Nevertheless, small firms are likely to continue to play a vital role in the economy through the provision of specialist or ancillary services to manufacturing processes. The "chicken and egg" question
posed by the present research is: does rejuvenation of the small firm sector create a favourable economic climate or is it that small firms successfully respond to a favourable economic climate and increased demand for their services and specialist production processes? The qualitative data of our study tends to favour the latter of these processes.

REFERENCE NOTES

(1) These processes are examined in greater detail in Annex C of "A Review of Monopolies and Merger Policy" (1978, pp.77-96). Briefly, learning or experience curves refer to a process whereby managers and operators learn from experience how to operate particular technologies and facilities more effectively.

(2) Subsequent to the fieldwork, J.N. Nichol (Vimto) Ltd. acquired Solent Canners Ltd. These firms are distinguished in Chapter 6.4A as being located in "specialist" areas of the soft drinks industry, and more profitable than firms of similar sizes.

(3) Footnote (6) to Chapter 8 reports a speech made by Mr. N. Tebbitt, Secretary of State for Industry, in which he urges small printing firms to adopt joint-marketing techniques as a means of fighting increased printing imports by increasing their exports. In addition, a colleague at the University of Edinburgh, Gregory (forthcoming) has shown that small firms in the offshore supplies industry face particular problems in exporting because they do not have the agency network necessary for exporting effectively to many foreign countries. The cost of establishing these networks is likely to be beyond the resources of many small manufacturers.

(4) The independent variables added by Khalilzadeh-Shirazi were: a proxy for the minimum efficient scale of plant as a measure of entry barriers, the capital output ratio, growth of sales, dummy variables on the degree of product differentiation and the share of foreign owned firms, imports and exports.
Farrell (1957) described the set of firms in a given industry by plotting them according to inputs per unit of output for each of the various inputs. To obtain a standard for measuring the efficiency of a firm, Farrell fitted a frontier function to the industry observations. The efficiency frontier is identified as the innermost convex set of observations in the labour and capital input plane. Assuming constant returns to scale, the technical or X-efficiency of any firm can be measured according to its position relative to the efficiency frontier.

The study of innovative activity and firm size has been so extensive as to stimulate articles summarising the research results. See for example, Kamien and Schwartz (1975); Thomas and LeHeron (1975); Freeman (1977).

Table 2.3 indicates that small firms accounted for 20% of UK net output in 1958, and 18% of net output in 1970.

This analysis is adopted by Watkins (1973).

The index of real gross domestic product per employee in 1978 (1967 = 100) was UK - 128; USA - 113; West Germany - 152; Japan - 195; France - 148. (Schott, 1981, Table 14, p.27).

For example, the Central Policy Review Staff (Think Tank) received a report from Prof. T. Stonier, Head of the School of Science and Society at Bradford University, in which it was estimated that Britain will need less than 10% of its present labour force to supply its material needs within 30 years - this largely being the result of the economic impact of micro-electronics. Although the paper estimated a massive decline in the required workforce, it noted that this need not necessarily cause 90% unemployment provided the right policies to expand the social services and education were followed. A report of the paper is given in "The Guardian", 14/11/78, p.6.
CHAPTER 14

REFLECTIONS

14.1. POLICY IMPLICATIONS

The principal findings of our study are centred around the process of drift towards "inertia" and inefficiency among small firms. Inertia emerges over time as a result of the interactive nature of economic and social processes of small business management. The conclusion to be drawn from the past few chapters - that different modes of small company development result in widely varying performances and problems - must now seem self-evident. There are many divisions within the small business sector, divisions which are clear and pronounced. The most important of these divisions do not follow the size of firms, but rather are related to the process of management. Our evidence suggests that small firms tend to evolve a pattern of family ownership and executive-control. Linked with this factor are the succession process of small firms and "dynastic" motive of managers which encourage family succession in command positions, and thereby lower the management expertise relative to small firms which develop through universalistic management succession of executive-control.

Of course, the samples on which our conclusions are based do not cover the capacity of the small business sector for failure and success. The objective of the study
has been to analyse small company dynamics within particular industrial environments through an in-depth analysis of management strategy formation. Allowing for this and other limitations in the sample, our analysis suggests several areas in which Government and institutional policy may be made more effective in sustaining an efficient small business sector.

A. COMPETITION POLICY

The United Kingdom has had a competition policy since the inception of the Monopolies Commission in 1948. Its preliminary survey of the field was, to a large extent, responsible for the Restrictive Trade Practices Act (1956) which made collusion between firms illegal, unless such actions had been sanctioned by the Restrictive Practices Court, which would determine whether such actions were in the public interest. The 1956 Act was followed by the Resale Prices Act 1964, the Monopolies and Mergers Act 1965, the Restrictive Trade Practices Act 1968, and the Fair Trading Acts of 1973 and 1976 which consolidated Acts covering restrictive trade practices and the law regarding resale prices. The policy of successive governments has taken a pro-competition line, although the Monopolies and Merger Commission is left to carry out a cost-benefit analysis on those cases referred to it by either Ministers or the Director General of Fair Trading. In the case of mergers, reference may be made for those which involve the transfer of assets of at least £5m or which enhance or create a monopoly (25% share of the
Market). Monopoly investigations generally take place where either one company (or group) has a 25% market share, or two or more companies together having such a share are acting in a way which restricts competition.

Sutherland (1969) suggests that the investigations of the Monopolies and Mergers Commission have been largely ineffective because the Commission has attempted to influence the behaviour of individual firms rather than the structural conditions which determine company behaviour. The Bolton Committee (1971) recommended that:

"... in making future references to the Monopolies Commission greater emphasis should be placed on the effect of the monopoly or merger in question on the maintenance of a balanced industrial structure." (Paragraph 16.7, p.285)

This recommendation was accepted and extensions were made to the scope of legislation on monopolies and mergers and the Office of Fair Trading was created. However, it is not clear that these measures have had, or are likely to have, any significant effect on industrial concentration (Bannock, 1976, p.13), and O'Brien (1978) has recommended that the Government needs to go much further in relation to its policy on mergers if competitive markets are to be maintained. But this ineffectiveness of Government policy is not to be unexpected since the Bolton Committee was unable to define "a balanced industrial structure" (paragraph 19.3, p.342). Is the process of increased concentration necessarily equivalent to less competition and against the public interest?
The present study challenges the conventional wisdom that size of firm is the critical variable determining competitive behaviour, and suggests that the age of firms and pattern of ownership and control are more important variables affecting the market behaviour of small firms. Evidence from the soft drinks industry suggests that older, family-dominated small firms may attempt collusive action to restrict the diffusion of innovations. This observation expands the evidence presented by the Monopolies Commission (1970) which noted that both small and large firms may refuse to supply new firms in order to protect their own entrenched position. However, small firms appear to initiate restrictive practices where change emanates from the action of large manufacturers (for example, introducing product or process innovations, or more aggressive price competition). This suggests that size of company is not the sole criterion determining whether firms collude. Asch and Seneca (1975) found that lower profitability for firms in concentrated industries with low entry barriers induces collusion between firms. The present research suggests that collusion is equally likely among small firms than between larger firms in these circumstances. Simply ensuring the existence of a certain proportion of small firms in a particular industry does not appear to guarantee competitive behaviour in the public interest, nor an efficient use of resources.

That small firms have a special role in increasing competition is not self-evident. There are small local
firms with a large degree of local monopoly. In wider markets, a large disparity in size prevents the most dynamic of small firms from having enough volume to charge the terms on which larger firms trade. Small firms may well complement larger firms in these circumstances, picking up the small orders which are unattractive to large firms. This suggests that small companies will thrive where there is a market for their specialist goods and services. However, the drift towards inertia and capital disinvestment by small business managers in response to environmental illiberality suggests that the exercise of increased market power by larger manufacturers may, in fact, hasten the demise of inefficient small firms, thereby precipitating a more efficient structuring of industry activities. The basis of competition policy should not be to protect small companies per se, but to ensure that the exercise of market power does not restrict the formation of new firms to challenge the decayed, old family firms.

B. FISCAL POLICY

Bannock (1976) has suggested that the most effective and least disruptive means of influencing industrial structure is via a modification of the taxation system, so as to shift investment resources away from large firms. He claimed that:

"... the complexity of the tax system places a heavy burden on owner-managed businesses with limited management resources and diverts entrepreneurial skill towards tax avoidance and away from commercial development." (p.77)
A similar tenet was proposed by Arthur D. Little Ltd. (1976) in their study of new technology-based companies. Their report concluded that one of the major drawbacks to new company formation in the UK was the lack of incentive for many engineers and technologists to develop their ideas on a commercial basis because of the "punitive" individual taxation system\(^{(2)}\). However, the idea that small businessmen are motivated purely by economic rewards appears to be naive and unfounded. Our model of small company dynamics indicates that managerial motivations and management strategies are related to the pattern of ownership and control, in addition to the personally-introduced elements from the small business manager's socio-psychological background. Management motivations in small firms with family ownership are often centred upon the desire to maintain family control over management processes. This motivation appears to be related to the relatively high incidence of family executive-control among older family businesses. Our research also notes that decisions to set up on one's own account can usually be traced to some facet of the entrepreneur's social background rather than motivations towards economic gain. Our evidence of company founding in the printing industry has noted the desire to achieve intrinsic job gratifications associated with performing a craft function as a determinant of entrepreneurial activity. This pattern of managerial motivation is similar to that outlined by Stanworth and Curran (1973) in their study of
small business managers in the electronics and printing industries. Taken together, the evidence casts doubts as to the efficacy of reducing personal taxation as a means of stimulating entrepreneurial behaviour.

There are arguments that the opposite effect may be the case. Stothard (1980) has suggested that reduced personal taxation may tempt individuals to stay in their "incubator" company (3) rather than accept the risks inherent in entrepreneurial activity. Goffee and Scase (1979) suggest that high levels of personal tax, particularly on overtime, have led many individuals to supplement their earnings by "moonlighting" and doing jobs in their spare time. In a similar vein Scott (1976) noted that the majority of small businesses started with founders working part-time in their business until the volume of business was sufficient to sustain full-time employment. This suggests that the growing significance of the "black economy" (4), partially created by higher levels of personal taxation, may result in an increased incidence of small businesses - particularly in the service sectors (car maintenance, plumbing, electrical repairs, decorating, and so on), where initiation costs are relatively low.

The impact of fiscal policy on established small firms is via the incidence of Corporation Tax and the taxation of capital and estates. The lower band of Corporation Tax on profits less than £70,000 (5) suggests
that there is little discrimination against small firms in this respect. The taxation of capital and estates, on the other hand, has been said to adversely affect the ability of families to pass a company to the next generation of family members.

"Of all taxes, estate duty has been said by most of our witnesses to be the most inimical to the health of the small private business." (Bolton, 1971, paragraph 13.68, p.224)

Estate Duties were replaced by Capital Transfer Tax (CTT) from March, 1974 with respect to the transfer of capital as gifts, and from March, 1975 with respect to the transfer of capital upon death. CTT is charged on chargeable transfers of which the transfer/disposal of a business/company is classified. However, where a business is transferred, 50% of the value (calculated on a net asset basis) is relieved, plus certain other minor exemptions. Nevertheless, the implementation of an inheritance tax often necessitates the sale of company assets to repay the required duties, or at least starves family firms of funds which would otherwise have been invested in the company. By this argument, older, family-dominated firms are under-capitalised and inefficient due to bias created by inheritance taxation. The opposite view has been proposed by Boswell (1972). He advances the case for a more punitive inheritance tax to weed-out the old, inefficient family firms as a means of encouraging a more efficient structuring of industries.
The present study takes a different stance to these polar views of the impact and desirability of inheritance taxes as a means of maintaining an efficient small business sector. Capital Transfer Tax is effectively a tax on the transfer of ownership. Yet the pattern of ownership, of itself, does not appear to be the primary cause of inefficiency among small firms. Several family businesses in the present study have achieved above-average levels of financial efficiency(9), while Nyman and Silberston (1978) have illustrated that some 30% of the largest 250 UK companies have maintained a system of effective family ownership(10). Our evidence suggests that the pattern of executive-control is a more important determinant of small company performance. Older firms with a pattern of family ownership and executive-control tend to be the least efficient firms in an industry. The root of inefficiency in these firms appears to be their pattern of nepotistic management succession in command positions and concomitant low levels of management expertise. Thus, while more punitive inheritance duties will certainly weed-out many of these inefficient, family-dominated, small firms, they will probably create an unacceptable burden to family businesses which have evolved a pattern of non-family executive-control through the incorporation of non-family management expertise. However, the present study cannot support the alternative approach favouring a reduction of inheritance duties, particularly as there appears to be a tendency for small
firms to evolve a pattern of family ownership and executive-control. Moreover, astute management can reduce the impact of Capital Transfer Tax (see for example, Whitehurst, 1978), and the greatest burden of Capital Transfer Tax is likely to fall on inefficient firms with low levels of management expertise which have failed to plan for the transfer of ownership-control.

So what are the implications of the present research for fiscal policy with respect to small firms? Without entering a debate concerning the efficacy of inheritance taxes as part of a policy for a more equitable distribution of wealth, our study maintains the desirability of inheritance taxes as a process by which inefficient family businesses may be forced to quit, thereby facilitating a more efficient structuring of economic resources. But the burden of such taxes should not discriminate against or prohibit the development of small firms which have evolved non-family executive-control. Whether more punitive inheritance taxes adversely affect the planned growth of small firms because small business managers are dissuaded from building a more secure base for the company in order to pass it into the next generation of family ownership, remains a matter of speculation. However, since the "dynastic motive" tends to become prominent only as managers approach their age of retirement, it is unlikely to influence the pattern of small company development during other stages of the manager's career. This suggests that the imposition of inheritance
taxes are unlikely to influence the direction of company development to any great extent.

Irrespective of the arguments for and against the imposition of more punitive taxes, the problem will remain as to how to ensure that growing companies are not hindered by the imposition of taxation. Indeed, the previous Labour Government (which was committed to more punitive inheritance taxes) allowed concessions with respect to the proposed implementation of Capital Transfer Tax concerning gifts of "relevant business property", and increased the thresholds for the full implementation of the tax\(^{(11)}\). The purpose of increasing these thresholds was to make "going public" a more attractive proposition for medium-sized firms in order to avoid the problems associated with inheritance taxes.

The effectiveness of fiscal policy in structuring an efficient small business sector appears to have certain limitations. Fiscal policy cannot legislate against the process of family executive-control (as distinct from ownership-control) without creating an unacceptable burden for efficient family businesses. Boswell (1972) suggests the creation of a Small Firm Transition Trust which would have the function of assessing the future of small businesses as a prerequisite for providing financial assistance to small and medium-sized firms troubled by the imposition of more punitive inheritance taxes. But how will bureaucrats judge the future viability of small firms? The

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present study suggests that the key to understanding small company dynamics is via an understanding of the social process of management. Moreover, the process of small company rejuvenation appears to have its basis in social stimuli. Can such a Transition Trust take account of the many nuances of company dynamics? The answer to this question must remain doubtful.

Evidence from the present study suggests that competitive processes may be a more effective means of terminating inefficient small firms. This may come from several sources. New firms may be encouraged to challenge the entrenched position of older, family-dominated small firms. But as we have seen, the basis of entrepreneurial activity is usually related to social rather than economic factors, and therefore largely beyond the scope of fiscal stimuli. An alternative measure is to permit a greater use of market power than has hitherto been considered politically or socially acceptable. The process of capital disinvestment observed in the present survey tends to reinforce the view that competitive pressures may encourage small business managers to take a strategic decision to terminate a business while it is still solvent. Indeed, this process may account for much of the recent trend towards increased concentration. The problem for Governments in these circumstances is to ensure that market power is not used against the public interest. But as we saw in the previous section, the mere existence of small firms does not guarantee this form of behaviour.
C. FINANCIAL POLICY

Financial policy is in many ways inexorably linked with fiscal policy. The sources of finance for small companies have been documented more than adequately in recent times (see for example, Bank of England, 1978; "A Small Business Guardian Extra", 1977). This section provides a critical examination of the effectiveness of public and institutional policy towards small firms, and suggests possible sources of improving assistance to small firms, based on the evidence of the current research.

Overall, the average small firm is less dependent on external sources of finance than the average large company. Bank lending, along with trade credit and owners' funds, account for a larger proportion of the balance sheet total for small firms than for quoted companies (12). The Association of Independent Businesses (1978) suggest that these differences result from particular difficulties encountered by small firms in raising external finance. However, the Bolton Committee (1971) and Wilson Committee (1980) reject the idea that there is a deliberate bias in the capital markets against the financing of small companies. Differences in the financial facilities available to large and small firms were found to be more a function of the inherent cost and scale differences of different classes of business. Contemporary opinion is that the major problem in providing finance for small businesses is managerial ignorance of the various forms and sources available to small firms.
This often results in small business managers seeking an inappropriate source of finance for his particular needs.

"The consensus of opinion is that smaller companies fail to acquire the appropriate finance (a) because certain forms of finance are not available to them, (b) because they do not know just what is available and (c) they fail to present their case properly to the provider of the facility." (Financial Times Special Survey, 1975)

These factors are likely to be prominent in older, family-dominated small firms. Ignorance of the various sources of finance and poor presentation of their case to potential lenders are likely to reflect lack of management expertise, and our research suggests that older, family-managed small firms have relatively low levels of management expertise. In addition, our research has noted that managers of family-managed small firms tend to be relatively hostile to the idea of external involvement in the family business. Golby and Johns (1971) also found that small businessmen simply disliked or mistrusted institutions - whether private or public - on the grounds that their independence was threatened. Concern over this unwillingness of small businessmen to accept outside help and control in their firms has been expressed in a recent UNICE report.

"If the small and medium enterprise sector is to realise its potential for growth there must be a greater willingness by many existing owners of small and medium-sized enterprises to accept a measure of involvement in the running of their enterprise by the outside providers of risk capital." (Turner, 1978)

After all, it is only sound economic practice for the
provider of risk capital to monitor the uses to which his capital is applied.

Our research suggests that managers who are most hostile towards external involvement in company affairs tend to be associated with firms of lower than average financial efficiency. The process by which small firms evolve a pattern of family ownership and executive-control is co-existent with managerial "class" objectives which stress the maintenance of family control over managerial processes. This process is reinforced in circumstances of increased environmental illiberality through the concentration of ownership and/or executive-control, and is interactive with the drift towards relative inefficiency. This suggests that any perceived bias in capital markets against small companies is merely a reflection of the poor performance of many small firms which is fostered by nepotistic management succession, and social processes which are manifest in hostility towards external influence in a firm's management processes.

The clearing banks are the most common source of finance for small firms. Osborn (1978) has shown that firms employing less than 50 persons are less dependent on bank loans than firms employing more than 50 persons, while the Economists Advisory Group (1971) have shown that fast growing companies are more dependent on bank borrowing than firms with relatively slow growth rates. However, calculations undertaken by the Association of
Independent Businesses (1978) suggest that total lending to small companies is only 13% of the total advances made by clearing banks. This figure is considerably less than the share of employment or net output attributed to small companies (13), and suggests that clearing banks may be over-cautious in their attitude towards small firms.

The financial performance of small firms is highly variable (14), and Hutchinson et al (1975) have shown that many fast growing and infant enterprises which later achieve success, have balance sheets which would not make them good business risks from the conventional banking standpoint. However, it is not possible to say whether by lowering standards of credit-worthiness to finance a higher proportion of small firms, additional successes would pay for the higher incidence of failures brought about by financing more risky ventures. Portfolio risk analysis based on existing experience should help to reduce the losses of clearing banks, and after the recovery of collateral or personal guarantees, the actual loss to the banks will be only a fraction of the expected loss (15). Since the clearing banks were prepared to accept high levels of risk in their financing of North Sea oil explorations (16), there appear to be several lessons to be learned in terms of their financing of small company operations. The clearing banks incorporated geological expertise into their management structure to enable a technical assessment of potential explorations in addition to the financial assessment of particular applications.
It may be argued that similar technical assessments should be applied to financing decisions in relation to loan applications from small firms in new technology-based markets.

The clearing banks appear to be particularly well-suited to assessing the financial needs of small companies. Locational proximity and frequent contact between bank manager and the small business manager means that the bank manager is well placed to understand the social process of management in particular firms. The present study suggests that this understanding is essential to any assessment of small company dynamics and the prospects for company growth.

Government-sponsored financial assistance to small firms is formally through institutions such as Industrial and Commercial Finance Corporation Ltd. (ICFC) and the National Research Development Corporation (NRDC). These bodies are concerned primarily with helping to finance new technology-based firms, and do not appear to heavily involve themselves in the financing of small firms in general. More general Government aid schemes for small businesses fall into three main categories: i) schemes of assistance which are available under regional, industry and counter-unemployment policies. This category has recently included the initiation of enterprise zones(17); ii) schemes specially designed for small and medium-sized companies; iii) the provision of equity and loan finance.
through the aegis of the National Enterprise Board, and the Scottish and Welsh Development Agencies.

The first of these categories is by far the largest source of Government assistance for small firms (Jones, 1978), although Johnson (1978) suggests that the qualifying limit for such schemes often means that small firms are ineligible for such assistance(18). He also argues that the balance of favour in Government schemes designed specifically for small and medium-sized firms is with larger small firms - especially because much time and resources are required to prepare and pursue a case for obtaining such assistance. But are these schemes the most effective means of helping the small business sector? Since these schemes of assistance are open to all small firms, they do not discriminate between "adaptive" small firms with growth potential and "inert" small firms which are in the throes of decline. Financial assistance to the latter merely prolongs an inefficient use of economic resources. The marked differences in growth potential and financial efficiency among small firms, partially determined by the social process of small business management, suggests the need for a more discriminating scheme of Government assistance.

Government-sponsored agencies such as the Scottish and Welsh Development Agencies, and the Council for Small Industries in Rural Areas (CoSIRA) appear to perform a useful function in terms of aiding small company develop-
ment. Since these agencies are involved more directly in the commercial viability of firms under their charge, it may be argued that the Development Agencies are the most appropriate vehicle for Government assistance to the small business sector. This stance may be supported from several standpoints.

The tenet of the present study is that poor management, fostered by nepotistic succession of management command positions, is a major cause of small company decline and inefficiency. This suggests that management development rather than financial assistance is more important for small companies. This tenet is given credence by the Wilson Committee's (1980) recommendations, which focussed heavily on the need for advice and management development as opposed to financial bias in the capital markets(19). Assistance in the field of management development is more practical through the Development Agencies, perhaps in conjunction with educational establishments, than through the private banking sector.

One of the major problems associated with the initiation and growth of small businesses appears to be the provision of an appropriate infrastructure to small businesses, in particular factory space. The Development Agencies and CoSIRA have initiated policies of providing new factory space for potential entrepreneurs, in addition to the other assistance provided by these agencies. By providing an effective infrastructure for new firms, the
Development Agencies are better placed to sponsor the process by which new manufacturing enterprises can challenge the position of decaying small companies. This suggests that the Government should consider setting up regional Development Agencies for the regions of England in order to provide a more effective infrastructure for small company formations, and effective management development to overcome the dangers of ossification fostered by a tendency to develop family ownership and executive-control. This recommendation is similar to one of the recommendations of the Wilson Committee (1980)(20), although its basis of formulation comes from a different perspective of analysis. Our recommendation is based on the premise that regional Development Agencies are better placed to help small businesses with effective management development, and are better able to discriminate in favour of "adaptive" small firms at the expense of "inert" small firms.

14.2. THE NEED FOR FUTURE RESEARCH

The significance of the present study may be highlighted through a restatement of the limitations of previous studies of small businesses in their ability to explain the dynamics of small companies. The pioneering work of Collins, Moore and Unwalla (1964) was concerned with determining the social and psychological characteristics of individuals who formed their own business. Smith (1967) extended their analysis to suggest a link between the type of individual and the type of business he formed -
its product range, growth potential and relative success. However, neither of these studies provided an assessment of the process by which individual characteristics are related to modes of company behaviour. The present study has analysed the social process of small business management, and suggests that small company behaviour can be understood through an examination of the pattern of ownership and control, and motivation of small business managers. The ideal types of small company identified by our research ("adaptive", "reactive", "inert", "divestment" and "quitting") are based on the interactive nature of economic and social processes of small business management. Small company dynamics are not simply a function of the type of individual, but also a function of the essentially political processes of small company management and the environment of small firms.

The relationship between individual motivation and management strategies was highlighted by Stanworth and Curran (1973). They suggested that management strategies were adopted for the achievement of goals and values based on the manager's self-image in society, and that these goals change in response to environmental stimuli. However, their framework appears to be limited in its ability to explain management strategies in older small firms. Succession processes tend to result in a more dispersed pattern of ownership-control, and executive-control by family members. Consequently, an analysis of small company dynamics and management strategy formation
in older small firms necessitates an examination of the essentially political processes of family control. Our research has noted that collective goals of maintaining family control of management processes often outweigh individually-determined goals in terms of management strategy. A desire to maintain family control is often manifest in defensive or passive market behaviour, and results in relatively inferior levels of company performance. By identifying social processes of small company growth and decline, the present study provides a valuable revision to the work of Stanworth and Curran.

The economic characteristics of small firms have been analysed by Boswell (1972). The present study supports his more generalised analysis in suggesting that company age, rather than size, is a more powerful predictor of small company performance. However, Boswell's analysis does not permit an examination of the social processes of small company decline. These insights are available only through a case study approach. Our study extends Boswell's analysis by suggesting the importance of the pattern of ownership and executive-control as factors explaining the decline of small firms. In particular, our evidence suggests that there is a tendency for small firms to develop a pattern of family control in response to managerial motivations which stress the desirability of family succession to command positions.

The findings and conclusions of the present study must be appreciated within the limitations imposed by the
scope and methodology of the survey. These limitations may be used to suggest fruitful areas for future research.

The desire to study social processes of management in individual firms necessitated the adoption of a case study approach. The data from this approach is qualitative, and consequently the conclusions are tentative rather than definitive. The generality of our conclusions can only be assessed through replication studies of small company dynamics in firms from industrial environments which differ from the printing and soft drinks industries.

The impact of environment was observed in terms of determining the speed with which firms drift towards inefficiency, and the adoption of defensive or collusive strategies in response to environmental illiberality. However, the scope of our study did not permit a thorough analysis of the impact of different forms of competition on the strategies adopted by small business managers. Competitive processes differ markedly between the printing and soft drinks industries. Printing is characterised by the specialisation of process and fragmentation of markets, whereas the production process and markets are relatively standard throughout the soft drinks industry. Printing involves a high degree of sub-contract work to firms which specialise in a particular printing process, whereas soft drinks manufacturers are generally own-product firms. The interaction of management strategies
and the type of market environment has highlighted differences in small company dynamics between the printing and soft drinks industries. In particular, the printing industry (and modes of competition therein) provides an environment conducive to small company development, whereas small soft drinks manufacturers experience high levels of environmental illiberality which is chiefly related to the competitive action of industry leaders. Nevertheless, the observations of our study are only a microcosm of the overall process of competition. A more detailed study of competitive processes on small company dynamics is suggested as a means of achieving valuable insights into the dynamics of the small business sector.

The drift towards inertia among small firms, and our identification of situations in which small business managers may seek capital disinvestment while their firms are still solvent suggests that the social processes of small business management should be incorporated into econometric models of changing market structures. Stochastic growth models are able to explain only about one-half of the concentration in British industry since the 1950s (Prais, 1975), while the evidence from our study suggests that social processes of small business management reinforce economic processes of industrial concentration. Firms which have evolved a pattern of family ownership and executive-control appear to be least able or willing to adapt to market or technological change. The defensive or collusive market strategies which they tend to adopt
in response to environmental illiberality only serve to reinforce the process by which they become inefficient and unprofitable.

The present, and indeed the majority of research of small companies, has been based on the manufacturing sector of industry. A fruitful area for future study appears to be the service industries and professions. Although the manufacturing sectors have witnessed a marked trend towards concentration since the Second World War, it is not clear whether such trends have been mirrored in the service industries or professions. However, recent amalgamations between leading accountancy firms suggest that these structural changes are beginning to emerge in non-manufacturing sectors (21). Has concentration in the manufacturing sector had a "knock-on" effect in the service sectors? Do the social processes of management identified as influencing management behaviour in small manufacturing firms account for trends within the service sectors? These are areas of analysis which should prove fruitful towards gaining a more thorough understanding of the dynamics of small businesses.

REFERENCE NOTES

(1) A thorough review of Public policy towards competition in the UK is presented in "A Review of Monopolies and Merger Policy" (1978, Chapter 4, pp.23-27).

(2) Analysis of personal taxation rates seems to indicate that the UK has a higher level of personal taxation than other EEC countries. Arthur D. Little (1976) compare the position of the UK and
West Germany (pp.186-188), and reference to the USA is made on p.203. However, their analysis is incomplete insofar as they fail to analyse the imposition of other taxes imposed by foreign Governments, and its relationship to the total tax levy on individuals and companies.

(3) This refers to the company in which entrepreneurs or potential entrepreneurs work prior to forming their own business.

(4) Smith (1981) suggests that the black economy (undeclared earnings for tax purposes) accounts for between 2% and 7.5% of UK Gross Domestic Product, with estimates favouring the higher of these figures - see Table 2, p.48.

(5) Corporation Tax is charged at 40% on profits which do not exceed £70,000. Marginal relief (7/50ths) applies to profits between £70,000 and £130,000. Profits which exceed £130,000 are taxed at 52%.

(6) The rate of duty for CTT is on a sliding scale, and varies according to whether the transfer is upon death, or whether it is a lifetime transfer. The transfer tax rates are too voluminous to reproduce in detail. However, examples of the rate of tax on transfers after 25th March, 1980 are:

<table>
<thead>
<tr>
<th>Amount of Transfer (£'000)</th>
<th>Rate of Duty (%)</th>
<th>Cumulative CTT at maximum of each slice (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 50</td>
<td>Nil</td>
<td>Nil</td>
</tr>
<tr>
<td>70 - 90</td>
<td>40</td>
<td>14,500</td>
</tr>
<tr>
<td>130 - 160</td>
<td>55</td>
<td>50,000</td>
</tr>
<tr>
<td>1010 - 2010</td>
<td>70</td>
<td>1285,000</td>
</tr>
<tr>
<td>Over 2010</td>
<td>75</td>
<td>-</td>
</tr>
</tbody>
</table>

(7) This argument is advanced by both the CBI and Conservative Party, see for example, Brown et al (1976) and CBI (1977). The line of reasoning is consistent with the maintenance of a private enterprise system which has the accumulation of capital in private hands as an essential characteristic.
See especially Chapter 11, pp. 179-198.

See for example, SDM 1, 2, 3, 8 and 12, and PF B, F and N.

It is important to note that this is not equivalent to ownership-control as distinguished in the sample of small firms in the present study. For example, Larner (1966) suggests that a minimum of 10% of the shareholding held by one group or individual is sufficient for the exercise of effective control in large organisations.

See for example, Kellner (1978) for an analysis of the effects of concessions proposed by the then Labour Government.

See for example Economists Advisory Group (1971) or ICFC (1977) which compare the balance sheets of small and quoted companies.

Table 2.3 of this thesis indicates that small firms accounted for 18.7% of UK net output in 1977, while Table 2.4 shows that small firms accounted for 22.5% of employment.

See Chapter 13.3 (b) for a brief analysis of the relationship between company size and performance.

Brough (1970) notes that "... in at least 20% of companies studied, the legal protection given to shareholders was to some extent nullified, where bank overdrafts were secured through personal guarantees given by directors. Clearly the banks are much more careful about covering themselves against loss than the vast majority of trade creditors".

For a review of some of the financing deals undertaken by several clearing banks see Hall (1978).

The enterprise zones are areas in which planning regulations are either abolished or vastly simplified. See "Financial Times" 8/9/81 for a review of the progress in their implementation.

For example, Johnson (1978) cites figures quoted to the Wilson Committee. The minimum cut-off point in the clothing industry is £10,000 expenditure. This was clearly regarded as low by the Department of Industry. In 1976, however, the average net capital expenditure of firms employing less than 100 people in this industry was £2404.

See Wilson (1980, Appendix 2, pp. 388-391) for a summary of their conclusions with respect to the financing of small companies.
Examples of recent mergers among relatively large accountancy firms include: Turquand, Barton, Mayhew with Whinney Murray; Mann Judd with Touche Ross; Baker Sutton with Shinney Murray; while Transley Watt was dissolved between Price Waterhouse and Arthur Anderson.
APPENDIX A

RESEARCH CORRESPONDENCE, INTERVIEW SCHEDULE AND QUESTIONNAIRE (USED TO SAMPLE SMALL SOFT DRINKS MANUFACTURERS)

This appendix presents a transcript of correspondence and the questionnaire adopted for the survey. A transcript is necessary because the questionnaire was printed on gold paper - this being unacceptable for presentation within the thesis. The appendix also includes the interview schedule used to analyse management strategies in the case studies of small soft drinks manufacturers and printing firms.
To: The Managing Director...

Dear Sir/Madam,

I am writing to seek the co-operation of your Company in a research project I am undertaking towards a Ph.D. degree at the University of Edinburgh. The aim of the project is to examine factors which influence strategies for future development in small businesses. For this purpose, I propose to carry out in-depth studies of individual companies and the strategies adopted by small business managers in relation to recent trends within an industry. Consequently, the research is concentrated on an analysis of small company functioning within specific industrial environments.

The soft drinks industry has been chosen for analysis because of my previous experience within the industry, and because I have previously undertaken research into the planning function of a small family-owned business in the soft drinks industry. The insights I have gained from this previous experience should provide a more complete understanding of small company dynamics in this industry.

Your co-operation in the project will involve either 2 or 3 interviews (to be arranged at a convenient time). The first interview will enable me to explain my research proposals more fully, and enable you to highlight some of the problems that you see facing your firm. The second interview will be more formal, and designed to examine the strategies adopted by your Company. Finally, there will be a feedback meeting in which I will present the findings of my research, and seek your comments regarding the findings.

I must add that all information will be treated in the strictest confidence, and complete anonymity is assured for your Company.

I will contact you within the next fortnight to determine whether you are willing to co-operate in my research project, and hopefully, to arrange a mutually agreeable date for me to visit your Company.

Yours faithfully,

Christopher Allen, B.Com.
APPENDIX A2. Interview Schedule Used for the Interviews of Managing Directors in the Case Studies

Note: The interview schedule was used to guide the format of interviews, although subject areas were often examined through an open-ended approach. The schedule was used to ensure comparability between the case studies. This is particularly important since Moser and Kalton (1971) indicate that bias may be created by a different ordering of questions.

SECTION 1: PARTICULARS OF THE COMPANY

Size: sales, number of employees.

Age: history of company, and changes in ownership.

Management Type: Extent of family control. Number of family members involved in the firm's management.

Legal status: whether "close" company, limited liability.

Product Range: both manufactured (own-label) and factored.

Customer-mix: size (geographical) of markets, type of customer.

Company Structure: persons in charge of different managerial functions, type of control system (accounting, production control, monitoring of sales, and so on).

Type of Plant: age of plant, its physical capacity (relative to recent technological innovations in the printing and soft drinks industries).

SECTION 2: BACKGROUND OF MANAGER

Age.

Educational Achievements: Type of secondary education qualifications gained; whether managing director possesses professional qualifications or qualifications gained in higher education. Qualifications held by other members of the firm's management team.

Work experience: Time spent in present job and within present company. Type of managerial (or other) experience gained in other companies.

Experience in Present Company: Problems encountered in taking over present position. How were these problems overcome?
SECTION 3: MANAGEMENT STRATEGIES (Soft Drinks Industry)

Attitudes towards recent product innovations: Does managing director intend his company to manufacture products in any of the following packaging innovations - merolite pack, plastishield bottle, lin pac plastic bottle, non-returnable glass bottles, cans? What is managing director's assessment of likely market penetration of these innovations? Has the managing director sought technical details of any of the innovations mentioned? If yes - what is the source of this information?

Pricing Policy: Whether cost plus, same as competitors, undercut competitors, and so on? Are price increases independent of competitor actions or implemented in collusion with other companies?

Management strategies with respect to company development: What are corporate objectives vis-a-vis growth and profitability? Does the company have a system of formal company planning? What are the company development intentions vis-a-vis the firm's future ownership and executive-control? How does the managing director intend achieving the stated company objectives relating to growth and ownership and control?

Management problems: What problems does the company face in the following areas - competition, production, labour, Government legislation, finance, management succession? How does the managing director intend to overcome these problems?

SECTION 4: MANAGEMENT MOTIVATION

Managers were asked to order and score the following motivations which have been suggested as being important by previous studies of management motivation in smaller businesses (for example, Stanworth and Curran, 1973; Sadler and Barry, 1970; Smith, 1967; Collins, Moore and Unwalla, 1964).

To maintain position of independence in business management (to remain own boss);
To build-up firm for son(s) to take over;
To make as much money as possible out of business;
To pick and choose individuals you wish to work with;
To be accepted by others as a good businessman;
To obtain position of security within the company;
To obtain position of security for family (and self);
To increase your social status;
To use personal abilities to their fullest.
Scoring was not by a validated scaled questionnaire, although the ascribed score (1 = not important - 5 = very important) was used to estimate the strength of different motivating factors.

A similar interview schedule was used for analysis of management strategies in the case studies of printing firms. In this case, strategies were examined in relation to recent process innovations concerned with the increased demand for colour and increased use of lithography at the expense of letterpress.

The replies to sections 3 and 4 were used to form the basis of more detailed questions of management strategy in the second interview. This part of the project was designed to determine the relationship between the manager's personal background (and attitudes/motives) and management strategies with respect to company development and response to change in the soft drinks or printing industry.
To the Managing Director

Dear Sir/Madam,

I am investigating how the role of small and medium sized companies affects the strategies adopted by the managers of these firms. This is being undertaken through the study of selected industries, one of these being the soft drinks industry.

Enclosed you will find a questionnaire which I would like you to complete. The questionnaire is designed to test the validity of certain findings suggested during interviews with soft drinks managers in Scotland. I have made the questionnaire as brief as possible, and it should take no more than 5-10 minutes to complete. Complete confidentiality is assured and there is no need to identify the name of the company. Also please find enclosed a stamped addressed envelope for the return of the questionnaire.

The questionnaire has been divided into three sections. The first of these relates to your own personal background. This has been found to be an important factor in explaining certain industrial strategies adopted by small firms, and it allows comparisons to be made with other industrial studies. The second section concerns information relating to the ownership and size of the company, together with a description of the activities undertaken by the firm. This will be used to assess the role of the firm within the soft drinks industry. Finally, I am interested in analysing the strategies adopted by firms to cope with problems faced by companies of different sizes. If there are any additional comments you would like to make regarding the reasons for your future plans, I would be very pleased to hear them.

I have been in contact with Mr C. Emmins of the National Association of Soft Drinks Manufacturers, and it is hoped to publish the results of the survey in the "Soft Drinks Trade Journal" in the near future.

I look forward to your co-operation in this survey.

Yours faithfully,

Christopher Allen, B.Com.
SECTION 1: PERSONAL BACKGROUND OF THE MANAGING DIRECTOR

1. How old are you? ..............................................

2. What academic and professional qualifications do you possess? (please tick appropriate qualifications)
   a) O-levels ..............................................
   b) A-levels ..............................................
   c) University degree .................................
   d) HND Diploma ........................................
   e) Professional qualifications
      (please state qualifications)
      ......................................................
      ......................................................
      ......................................................
   f) No qualifications .................................

3. A. Have you ever been employed by another company? ..............................................
    B. If YES, what was the nature of this employment? ..............................................
    C. How many people did this company employ? .......

4. What was your father's occupation? .................

SECTION 2: BACKGROUND OF THE COMPANY

5. What is the number of full-time employees? ............

6. How many part-time employees do you have in the summer period? ..............................................

7. What was the company founded? ............................

8. How many directors are there in the company? ........

9. Which of the following best describes your company?
   (please tick choice)
   a) None of the directors are related ..............
   b) A minority of the directors are related ....
   c) A majority of the directors are related ....
   d) All of the directors are related ..............

10. How many of your family (up to, and including first cousins, in-laws, etc.) actually work in the company? ..............................................
11. Which of the following activities are undertaken by your company? (please tick appropriate boxes)

<table>
<thead>
<tr>
<th>OWN LEVEL PRODUCTS</th>
<th>BOTTLED UNDER LICENCE</th>
<th>FACTORED GOODS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbonated 40 oz/Litre</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soft Drinks 25 fl.oz.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canned Soft Drinks 7 fl.oz.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-returnable &quot;=&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Squashes/Cordials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fruit Juices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beers/Cider</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wines/Spirits</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12. Are there any other activities undertaken by your company? Please specify the nature of these activities

13. Which of the following outlets do you supply?

<table>
<thead>
<tr>
<th>Outlet</th>
<th>TICK IF YOU SUPPLY</th>
<th>APPROX % OF YOUR SALES (If possible)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Houses/Clubs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confectioners/Grocers etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supermarkets/Chain Stores</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Soft Drinks Firms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct to final customer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breweries etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others (specify)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION 3: COMPANY STRATEGIES

14. When a new product comes onto the market (e.g. the ICI "Merolite" pack), do you:

   a) Wait and see whether the new product affects your market before seeking production details?                      
   b) Seek details immediately and assess the appropriateness of the product to your own company? 
   c) Another strategy? (please specify) 

/...
15. Which of the following pricing strategies do you adopt? (please tick)

a) Cost plus a certain percentage? ................................

b) Price the same as your competitors? ............

c) Undercut the price of your competitors? ..

d) Another policy (specify) .................................................................

16. When you wish to change the price of your products, do you:

a) Change the price as cost conditions dictate, irrespective of other producers? .................................................................

b) Wait for other producers to change price, and follow suit? .................................

c) Another policy? (please specify) .................................

17. Are your chief competitors: (please tick)

a) Larger than yourself? .................................

b) About the same size as yourself? ............

18. With regard to the competition you face, would you rank the following in terms of the difficulty they pose to your company? (1 = biggest problem, 2 = next most difficult, etc.)

a) Larger companies encroaching on your traditional markets ................................

b) An inability to use large-scale advertising .................................

c) An inability to undercut the prices of your competitors .................................

d) Having your price undercut by competitors .................................

e) Inability to afford (or use) new production techniques .................................

f) Inability to supply new types of products .................................

g) Other problems (specify) .................................

19. How do you see your firm developing in the next 10 years or so?

a) The firm will be sold .................................

b) The firm will be put into voluntary liquidation .................................

c) Control will be passed on to another member of the family .................................

d) The present ownership will be maintained, but the firm will be managed by someone not related to the present M/D .................................
19. (contd.)

e) Little change in the control of the company is envisaged

f) The firm will develop in another direction (please specify)

20. In terms of the problems you envisage your company facing in the next five years, how would you rank the following? (1 = most pressing problem, 2 = next most pressing problem, etc.)

a) The effects of competition

b) Government legislation

c) Trade Union problems

d) Financial problems

e) Production problems

f) Management succession problems

g) Others (please specify)

Thank you for your co-operation.
This appendix presents scatter diagrams of the relationship between company performance and size (sales and number of employees). The strength of the relationship between variables is measured by the simple linear regression coefficient.
B.1. RELATIONSHIP BETWEEN NET PROFITABILITY (1976) AND SIZE
OF SMALL SOFT DRINKS MANUFACTURERS (NUMBER OF EMPLOYEES)
- ALL FIRM SAMPLE.

\[ R^2 = 0.31 \]
\[ n = 60 \]

\[ Y = 10.59 + 0.28X \]
B2. RELATIONSHIP BETWEEN NET PROFITABILITY (1976) AND SIZE OF SMALL SOFT DRINKS MANUFACTURERS (NUMBER OF EMPLOYEES) - ENGLISH AND WELSH FIRMS.

\[ y = 11.50 + 0.26x \]

\[ R^2 = 0.32 \]

\[ n = 43 \]
B3. Relationship between net profitability (1976) and size of small soft drinks manufacturers (number of employees).

\[ R^2 = 0.27 \]
\[ n = 84 \]
\[ Y_i = 15.27X_i - 21.3 \]
8.5. RELATIONSHIP BETWEEN AVERAGE NET PROFITABILITY (1973-76) AND
SIZE OF SOFT DRINKS MANUFACTURERS (LOG. SALE, 1976).

\[ y = 12.4x_i - 17.08 \]

\[ R^2 = 0.33 \]

\[ p = 0.75 \]
B.6. Relationship between the number of employees and sales of soft drinks manufacturers.
B.7. Relationship between the growth rate and size of small soft drinks manufacturers (number of employees)
8.10. Relationship between the number of employees and sales of small printing firms.

\[ y = 16.88 + 0.03x \]

\[ R^2 = 0.90 \]

\[ n = 25 \]
This appendix presents the important crosstabulations of management and company characteristics which were obtained from the questionnaire and case study samples of small soft drinks manufacturers. Inconsistencies in the total number of observations in the various tables is the result of either information not being declared in the questionnaire or a number of replies being outside the major classifications of the tables. Levels of significance refer to acceptance or rejection of the null hypothesis of no relationship between the two variables being analysed.

### TABLE 1.
**Age of Managing Director**

<table>
<thead>
<tr>
<th></th>
<th>Negative</th>
<th>10.1% -</th>
<th>+ 10%</th>
<th>30%</th>
<th>+ 30%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 40</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40-49</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50-59</td>
<td>9</td>
<td>5</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>60+</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

χ² = 6.75, df = 6; Not Significant

### TABLE 2.
**Managerial Qualifications**

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Negative</th>
<th>10.1% -</th>
<th>+ 10%</th>
<th>30%</th>
<th>+ 30%</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>8</td>
<td>3</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O &amp; A Levels</td>
<td>9</td>
<td>7</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional, Degree</td>
<td>0</td>
<td>7</td>
<td>6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

χ² = 15.02, df = 4; Significant 1% level

### TABLE 3.
**Experience in Another Company**

<table>
<thead>
<tr>
<th></th>
<th>Negative</th>
<th>10.1% -</th>
<th>+ 10%</th>
<th>30%</th>
<th>+ 30%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>5</td>
<td>10</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>12</td>
<td>8</td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

χ² = 3.75, df = 2; Not Significant

### TABLE 4.
**Father's Occupation**

<table>
<thead>
<tr>
<th></th>
<th>Professional/Business Manager</th>
<th>Manual/Supervisory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional/Business Manager</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Manual/Supervisory</td>
<td>5</td>
<td>7</td>
</tr>
</tbody>
</table>

χ² = 0.27, df = 2; Not Significant

### TABLE 5.
**Size of Company (Employees)**

<table>
<thead>
<tr>
<th></th>
<th>Negative</th>
<th>10.1% -</th>
<th>+ 10%</th>
<th>30%</th>
<th>+ 30%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 10</td>
<td>8</td>
<td>3</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 - 25</td>
<td>10</td>
<td>6</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26 - 50</td>
<td>2</td>
<td>7</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>51 - 199</td>
<td>0</td>
<td>8</td>
<td>9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

χ² = 25.51, df = 6; Significant 1% level
Appendix C1 (contd.)

TABLE 6.
Age of Company

<table>
<thead>
<tr>
<th>Formed</th>
<th>Pre-1900</th>
<th>1900 - 1919</th>
<th>1920 - 1939</th>
<th>After 1940</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6</td>
<td>5</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>8</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

$\chi^2 = 7.43$, df = 6; Not Significant

TABLE 7.
Extent of Family Control

<table>
<thead>
<tr>
<th></th>
<th>All directors related</th>
<th>Majority of directors related</th>
<th>Minority or no directors related</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>18</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>4</td>
<td>8</td>
</tr>
</tbody>
</table>

$\chi^2 = 10.16$, df = 4; Significant 5% level

TABLE 8.
Strategy with respect to Innovations

<table>
<thead>
<tr>
<th></th>
<th>Wait to see effect of innovation on market</th>
<th>Seek production details immediately</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>10</td>
</tr>
</tbody>
</table>

$\chi^2 = 10.22$, df = 2; Significant at 1% level

TABLE 9.
Pricing Strategy

<table>
<thead>
<tr>
<th></th>
<th>Cost plus profit margin of own determination</th>
<th>Same as Competitors</th>
<th>Undercut Competitors</th>
<th>Charge higher than Competitors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4</td>
<td>12</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

$\chi^2 = 10.79$, df = 4; Significant at 5% level

TABLE 10.
Strategy for Changing Price

<table>
<thead>
<tr>
<th></th>
<th>As Cost Conditions Dictate</th>
<th>Wait for Competitors to change price</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

$\chi^2 = 6.07$, df = 2; Significant at 5% level
Appendix C1 (contd.)

<table>
<thead>
<tr>
<th>Desired Direction of Company Development</th>
<th>Negative</th>
<th>+10%</th>
<th>+30%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm will be sold or voluntary liquidation</td>
<td>6</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Control will be passed to another member of family</td>
<td>2</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>No change in ownership or control</td>
<td>8</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>Non-family executive-control</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

$\chi^2 = 10.01$, df = 4; Significant at 5% level
APPENDIX C2. Crosstabulations of Company Size Against Managerial and Company Characteristics

<table>
<thead>
<tr>
<th>COMPANY SIZE (No. EMPLOYEES)</th>
<th>1-10</th>
<th>11-25</th>
<th>26-50</th>
<th>51-199</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TABLE 1.</strong> Age of Manager</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below 40</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>40-49</td>
<td>5</td>
<td>8</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>50-59</td>
<td>9</td>
<td>6</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Over 60</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 6.04, \text{ df} = 9; \text{ Not Significant} \]

**TABLE 2. Managerial Qualifications**

<table>
<thead>
<tr>
<th></th>
<th>None</th>
<th>3</th>
<th>3</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>A &amp; O Levels</td>
<td>3</td>
<td>6</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Professional, Degree, Diploma</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>8</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 19.67, \text{ df} = 6; \text{ Significant at 1\% level} \]

**TABLE 3. Has Managing Director Experience in Another Company**

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>8</th>
<th>11</th>
<th>3</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>9</td>
<td>8</td>
<td>8</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

\[ \chi^2 = 6.36, \text{ df} = 3; \text{ Not Significant} \]

**TABLE 4. Age of Company**

<table>
<thead>
<tr>
<th>Formed:</th>
<th>Pre 1900</th>
<th>1900 - 1919</th>
<th>1920 - 1939</th>
<th>Post 1940</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9</td>
<td>7</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>6</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 5.41, \text{ df} = 9; \text{ Not Significant} \]

**TABLE 5. Extent of Family Control**

<table>
<thead>
<tr>
<th>All Directors related</th>
<th>13</th>
<th>13</th>
<th>9</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Majority of Directors related</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Minority or No Directors related</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 10.92, \text{ df} = 6; \text{ Not Significant} \]
Appendix C2 (contd.)

TABLE 6.
Number of Owning-Family Employed in Company

<table>
<thead>
<tr>
<th>None</th>
<th>1-10</th>
<th>11-25</th>
<th>26-50</th>
<th>51-199</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>7</td>
<td>1</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>5</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

$\chi^2 = 9.76$, df 9; Not Significant

TABLE 7.
Strategy With Respect to Innovations

| Wait to see effect of innovation on market | 1 | 10 | 2 | 1 |
| Seek production details immediately | 4 | 8 | 7 | 13 |

$\chi^2 = 15.74$, df 3; Significant 1% level

TABLE 8.
Pricing Policy

| Cost plus profit margin of own determination | 6 | 5 | 6 | 10 |
| Same as Competitors | 10 | 9 | 3 | 1 |
| Undercut Competitors | 2 | 3 | 0 | 0 |

$\chi^2 = 14.49$, df 6; Significant 5% level

TABLE 9.
Policy with respect to Changing Price

| As cost conditions dictate | 7 | 9 | 6 | 9 |
| Follow Competitors | 10 | 9 | 3 | 1 |

$\chi^2 = 6.89$, df 3; Not Significant

TABLE 10.
Desired Direction of Company Development

| Firm will be sold or voluntary liquidation | 9 | 3 | 0 | 0 |
| Family succession of control | 1 | 5 | 4 | 3 |
| No change in ownership or control | 7 | 11 | 7 | 10 |
| Non-family executive-control | 0 | 0 | 2 | 3 |

$\chi^2 = 25.82$, df 9; Significant 1% level
APPENDIX C3. Crosstabulation of Managerial Qualifications Against Other Managerial and Company Characteristics

<table>
<thead>
<tr>
<th>TABLE 1.</th>
<th>Age of Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>O &amp; A Level</td>
</tr>
<tr>
<td>Below 40</td>
<td>3</td>
</tr>
<tr>
<td>40-49</td>
<td>2</td>
</tr>
<tr>
<td>50-59</td>
<td>10</td>
</tr>
<tr>
<td>Over 60</td>
<td>2</td>
</tr>
</tbody>
</table>

$\chi^2 = 9.95$, df = 6; Not Significant

<table>
<thead>
<tr>
<th>TABLE 2.</th>
<th>Has Managing Director had Experience in Another Organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>8</td>
</tr>
<tr>
<td>No</td>
<td>10</td>
</tr>
</tbody>
</table>

$\chi^2 = 6.45$, df = 2; Significant at 5% level

<table>
<thead>
<tr>
<th>TABLE 3.</th>
<th>Father's Occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional/Business Manager</td>
<td>11</td>
</tr>
<tr>
<td>Manual/Supervisory</td>
<td>7</td>
</tr>
</tbody>
</table>

$\chi^2 = 1.18$, df = 2; Not Significant

<table>
<thead>
<tr>
<th>TABLE 4.</th>
<th>Age of Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formed</td>
<td>Pre 1900</td>
</tr>
<tr>
<td></td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>1900 - 1919</td>
</tr>
<tr>
<td></td>
<td>1920 - 1939</td>
</tr>
<tr>
<td></td>
<td>Post 1940</td>
</tr>
</tbody>
</table>

$\chi^2 = 4.08$, df = 6; Not Significant

<table>
<thead>
<tr>
<th>TABLE 5.</th>
<th>Extent of Family Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Directors Related</td>
<td>15</td>
</tr>
<tr>
<td>Majority of Directors Related</td>
<td>1</td>
</tr>
<tr>
<td>Minority/No Directors Related</td>
<td>1</td>
</tr>
</tbody>
</table>

$\chi^2 = 11.40$, df = 4; Significant at 5% level
### TABLE 6.

**Policy With Respect to the Adoption of Innovations**

<table>
<thead>
<tr>
<th>None</th>
<th>O &amp; A Level</th>
<th>Professional Diploma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wait to see effect of innovation on market</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>Seek production details immediately</td>
<td>5</td>
<td>15</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 6.49, \text{ df } = 2; \text{ Significant at } 5\% \text{ level} \]

### TABLE 7.

**Pricing Policy**

| Cost plus margin of own determination | 6 | 9 | 14 |
| Same as Competitors | 8 | 13 | 3 |
| Undercut Competitors | 3 | 2 | 0 |

\[ \chi^2 = 6.27, \text{ df } = 2; \text{ Significant at } 5\% \text{ level} \]

### TABLE 8.

**Policy With Respect to Changing Price of Products**

| As Cost Conditions Dictate | 5 | 13 | 12 |
| Follow Competitors | 13 | 8 | 3 |

\[ \chi^2 = 9.61, \text{ df } = 2; \text{ Significant at } 1\% \text{ level} \]

### TABLE 9.

**Desired Direction of Company Development**

| Company will be sold or voluntary liquidation | 8 | 3 | 1 |
| Family succession of Control | 3 | 5 | 2 |
| No change in ownership and control | 8 | 13 | 11 |
| Non-family executive-control | 0 | 2 | 2 |

\[ \chi^2 = 12.32, \text{ df } = 6; \text{ Not Significant} \]

### TABLE 10.

**Company Growth Rate (Current Prices)**

| Turnover growth rate: | 3 | 3 | 2 |
| less than 20% | 1 | 6 | 5 |
| 20.1% - 30% | 2 | 2 | 2 |

\[ \chi^2 = 2.82, \text{ df } = 4; \text{ Not Significant} \]

<table>
<thead>
<tr>
<th>COMPANY DEVELOPMENT</th>
<th>SALE OR VOLUNARY LIQUIDATION</th>
<th>FAMILY SUCCESION</th>
<th>NO CHANGE</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TABLE 1.**
Age of Managing Director

<table>
<thead>
<tr>
<th>Below 40</th>
<th>40-49</th>
<th>50-59</th>
<th>Over 60</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>10</td>
<td>2</td>
</tr>
</tbody>
</table>

*χ² = 40.83, df = 9; Significant 1% level*

**TABLE 2.**
Has Managing Director had Experience in another Company?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>8</td>
</tr>
</tbody>
</table>

*χ² = 10.78, df = 3; Significant 5% level*

**TABLE 3.**
Father's Occupation

<table>
<thead>
<tr>
<th>Professional/Business Manager</th>
<th>Manual/Supervisory</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>1</td>
</tr>
</tbody>
</table>

*χ² = 5.03, df = 3; Not Significant*

**TABLE 4.**
Age of Company

<table>
<thead>
<tr>
<th>Formed: Pre 1900</th>
<th>1900 - 1919</th>
<th>1920 - 1939</th>
<th>After 1940</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>6</td>
<td>1</td>
</tr>
</tbody>
</table>

*χ² = 14.31, df 9; Not Significant*

**TABLE 5.**
Extent of Family Control

<table>
<thead>
<tr>
<th>All Directors Related</th>
<th>Majority of Directors Related</th>
<th>Minority or No Directors Related</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>9</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>19</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

*χ² = 10.8, df 6; Not Significant*
Appendix C4 (contd.)

<table>
<thead>
<tr>
<th>COMPANY DEVELOPMENT</th>
<th>SALE OR VOLUNTARY LIQUIDATION</th>
<th>FAMILY SUCCESSION</th>
<th>NO CHANGE</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Family-members Working in Company</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 or more</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[ \chi^2 = 11.11, \text{ df } = 6; \text{ Not Significant} ]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| TABLE 7. Policy with Respect to Adopting Innovations |
| Wait to see effect of innovation on market |
| Seek production details immediately |
| \[ \chi^2 = 15.86, \text{ df } = 3; \text{ Significant 1% level} \] |

| TABLE 8. Pricing Policy |
| Cost Plus profit margin of own determination |
| Same as Competitors |
| Undercut Competitors |
| \[ \chi^2 = 12.16, \text{ df } = 6; \text{ Not Significant} \] |

| TABLE 9. Policy with Respect to Changing Price |
| As cost conditions dictate |
| Follow major Competitors |
| \[ \chi^2 = 15.16, \text{ df } = 3; \text{ Significant 1% level} \] |
APPENDIX C5. Crosstabulations of the Extent of Family Control Against Other Managerial and Company Characteristics

<table>
<thead>
<tr>
<th>EXTENT OF FAMILY-CONTROL</th>
<th>All Directors Related</th>
<th>Majority of Directors Related</th>
<th>Minority or No Directors Related</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TABLE 1.**
**Age of Manager**

<table>
<thead>
<tr>
<th></th>
<th>All Directors Related</th>
<th>Majority of Directors Related</th>
<th>Minority or No Directors Related</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 40</td>
<td>7</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>40-49</td>
<td>11</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>50-59</td>
<td>14</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Over 60</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

$\chi^2 = 2.75$, df = 6; Not Significant

**TABLE 2.**
**Has Managing Director had Experience in Another Company?**

<table>
<thead>
<tr>
<th></th>
<th>All Directors Related</th>
<th>Majority of Directors Related</th>
<th>Minority or No Directors Related</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>14</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>No</td>
<td>23</td>
<td>4</td>
<td>0</td>
</tr>
</tbody>
</table>

$\chi^2 = 11.53$, df = 2; Significant 1% level

**TABLE 3.**
**Age of Company**

<table>
<thead>
<tr>
<th></th>
<th>All Directors Related</th>
<th>Majority of Directors Related</th>
<th>Minority or No Directors Related</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formed: Pre 1900</td>
<td>15</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>1900 - 1919</td>
<td>12</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>1920 - 1939</td>
<td>10</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>After 1939</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

$\chi^2 = 16.49$, df = 6; Significant 5% level

**TABLE 4.**
**Policy with Respect to Adopting Innovations**

<table>
<thead>
<tr>
<th></th>
<th>All Directors Related</th>
<th>Majority of Directors Related</th>
<th>Minority or No Directors Related</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wait to see effect of innovation on market</td>
<td>20</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Seek production details immediately</td>
<td>15</td>
<td>6</td>
<td>10</td>
</tr>
</tbody>
</table>

$\chi^2 = 10.37$, df = 2; Significant 1% level

**TABLE 5.**
**Pricing Strategy**

<table>
<thead>
<tr>
<th></th>
<th>All Directors Related</th>
<th>Majority of Directors Related</th>
<th>Minority or No Directors Related</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost plus (profit margin of own determination)</td>
<td>13</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Same as Competitors</td>
<td>19</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Other policy</td>
<td>5</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

$\chi^2 = 6.47$, df = 4; Not Significant

/...
Appendix C5 (contd.)

TABLE 6.
Policy with respect to changing price

<table>
<thead>
<tr>
<th>As cost conditions dictate</th>
<th>All Directors Related</th>
<th>Majority of Directors Related</th>
<th>Minority or No Directors Related</th>
</tr>
</thead>
<tbody>
<tr>
<td>Follow major Competitors</td>
<td>17</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

\( \chi^2 = 2.37, \text{ df } = 2; \text{ Not Significant} \)
This appendix presents a short description of the twenty-eight case studies of the present research. The case studies highlight important economic and social processes of management strategy and company performance in the soft drinks and printing industries. The financial performance of the case studies related to the financial year 1976/1977 (to include the summer of 1976). The section concerned with "managerial background" refers to the personal background of the managing director, unless stated otherwise.
SOFT DRINKS MANUFACTURER 1

BACKGROUND OF COMPANY

Size: Turnover 1976 - £1,350,000
Number of Employees - 110

Age: The Company was formed prior to 1900, although the exact date of formation was not known by the present managing director. However, the Company has been controlled (ownership-control) by the same family for three generations.

Ownership and Control: Ownership is still held within the founder's extended family - the present managing director's immediate family owning approximately 30% of the firm's shareholding. All directors in the Company are members of the controlling-family. Executive-control is by qualified personnel who are not members of the controlling family. The exceptions to this rule are the position of managing director, which has been inherited by members of the controlling family, while the managing director's son has recently taken up a position within the firm's sales department after receiving management training by Scottish & Newcastle Breweries Ltd.

Product Range: The firm manufactures its own label soft drinks, and is a contract bottler of beers and ciders. The firm's own products are bottled solely in returnable glass containers. The firm bottles two sizes of product - 25 fl.oz and 7 fl.oz - and offers a wide range of product flavours. The Company also wholesales a range of "branded" fruit juices and mixers.

Customer-mix: Approximately 90% of the firm's market is located in the licenced trades - public houses, clubs and off-licences. The firm's markets are in the West of Scotland.

Company Performance: Net profitability 1976 - 18.0%
Gross profitability 1976 - 20.9%
Growth rate (sales) - 19.0%
Profitability is variable, with the average net profitability (1973-1976) being only 9.3%.

Directors Remuneration: The three directors of SDM 1 received a total of £33,000 in remuneration (management charges and salary).

MANAGERIAL BACKGROUND

Age: The Managing Director was aged 61 in 1977.
Education: The present Managing Director left school at the age of 14, without any formal qualifications, and entered the family business immediately after leaving school. He succeeded his father as Managing Director in 1950. His management training was confined to a familiarisation with all facets of the Company's activities. His son, the "Managing Director-elect", left school after gaining 4 Highers. His father managed to secure a position in Scottish and Newcastle Breweries Ltd. for his son. He considered this to be important since the breadth of training he could receive within the brewery was greater than that possible in SDM 1.

MANAGEMENT STRATEGIES

Company Development: In terms of ownership and control, the Managing Director intends to transfer control to his son when he retires, although he was not prepared to state when this time would be most appropriate. In terms of corporate objectives, the Managing Director did not seek further marked growth, but preferred to maintain the firm's present market position.

Market Strategy: The Managing Director did not believe it was necessary to change the firm's current product range or customer-mix. Because of the firm's relative prominence as a bottler of beers and cider, its position within the licenced trades appears to be relatively secure. The Managing Director suggested that recent trends concerning increased penetration by non-returnable and large-sized products were not appropriate to supply of the licenced trades.

Management Problems: The major problem facing the company concerned limitations to the financing of investment in new plant to maintain its bottling capacity. The Managing Director appeared to be hostile to the use of "outside" sources of finance, preferring to finance investments from ploughed-back profits. This appeared to be the result of management attitudes which equated "outside" involvement in company affairs with a dilution of family control.

MANAGEMENT MOTIVATION

The present Managing Director appeared to be chiefly concerned with maintaining family control over company activities. This appears to be related to his intention to transfer control to his son in the near future. Although the Managing Director is an active member of SASDM and the
Scottish Association of Beer and Cider Bottlers, his motivations tend to be directed towards his role within the Company rather than within the industry or other areas of society. This is illustrated by the high ranking and scoring of motives relating to personal security and the desire to transfer control to his son.
SOFT DRINKS MANUFACTURER 2

Size: Turnover 1976 - £2,100,000
Number of Employees - 90

Age: The Company was formed in 1905, and has been controlled by the same family since that date. The firm is now in its third generation of family ownership-control.

Ownership and Control: Ownership is concentrated within the Managing Director's immediate family. Executive-control is by experienced personnel who are not related to the present Managing Director.

Product Range: The Company manufacturers its own label soft drinks - carbonates, mixers and fruit juices. The Company also wholesales beers, wines and spirits.

Customer-mix: Approximately 90% of the firm's market is in the licenced trades. The firm is located in the South of Scotland (Borders Region). Its markets are concentrated in the Borders, although the firm has extended its market to both Glasgow and Edinburgh.

Company Performance: Net profitability 1976 - 19.6%
Gross profitability 1976 - 15.8%
Growth rate (sales) - 28.7%

Profitability is highly variable. The Company made a loss in the financial year 1975/1976, and the average net profitability (1973-1976) was 11.5%.

Directors' Remuneration: Total remunerations to the firm's three Directors totalled £19,500 in 1976.

MANAGERIAL BACKGROUND

Age: 44

Education: The Managing Director has a University degree in economics and is a qualified accountant.

Employment Experience: After qualifying as a chartered accountant, the Managing Director remained with the accountancy firm for a further three years. He then returned to take up a position within the family business in 1962. In 1965 he succeeded his father as Managing Director.

MANAGEMENT STRATEGIES

Company Development: No change was envisaged in the ownership or control of the firm. In terms of corporate objectives, the Managing Director sought to expand the firm's markets.
Market Strategy: The Company had recently re-equipped (in 1974) to enable the bottling of fruit juices in addition to the range of carbonates formerly bottled by the Company. The Company had previously wholesaled the fruit juices of "nationally branded" firms such as Britvic and Schweppes. This strategy was believed to be the most effective in terms of facilitating increased penetration of the licensed trades since it would enable the firm to undercut the price of national fruit juices which were "imported" from the North of England.

Operating Policies: The re-equipping of the firm's production system has required finance from a variety of sources, including leasing, hire purchase and bank loans. The willingness to use a wide source of finance appears to be related to the Managing Director's financial expertise which was acquired during his employment as a chartered accountant. The loss incurred during 1975/1976 was said to be caused by the development costs associated with introducing their own range of fruit juices.

Unlike the majority of case studies in the soft drinks industry, Company 2 operates a system of corporate planning and budgetary control. This is facilitated by a computerised accounts/stock control system which provides weekly analyses of market and financial performance.

MANAGEMENT MOTIVATION

The growth-orientation of development strategies appears to be related to management motivations which relate to the Managing Director's status within the industry. He was an active participant in SASDM, and continued Company growth was perceived to be a means of increasing his personal status within the framework of the Scottish soft drinks industry. The interviews highlighted the importance attached to "managerial excellence". This appears to be partially related to the pride the Managing Director ascribed to his role within the family business. This may be linked to the fact that he was introduced to the business at an early age, and the vacation employment in the business whilst he was at school and university.
BACKGROUND TO COMPANY

Size: Turnover 1976 - £820,000  
Number of Employees - 65

Age: The Company was formed circa 1890.

Ownership and Control: The Company is now in its third generation of family ownership and control. Ownership is dispersed among some 15 members of the founder's extended family. Executive-control is by members of the owning-family, there being five working Directors who are all related.

Product Range: The Company manufacturers its own-label soft drinks and squashes. The product range is limited to 25 fl.oz and 7 fl.oz containers, although the company produces a wide range of flavoured drinks.

Customer-mix: The Company is located in the West of Scotland, and the majority of its markets are in the grocery sector, and the CTN sector in particular.

Company Performance: Net profitability 1976 - 24.3%  
Gross profitability 1976 - 36.9%  
Growth rate (sales) - 20.3%.

This Company has traded consistently at above-average levels of profitability, the average net profitability (1973-1976) being 25.3%.

Directors Remuneration: The five Directors of the firm received a total of some £30,000 remuneration in 1976.

MANAGERIAL BACKGROUND

Age: The Managing Director is the oldest of four sons, and is aged 48.

Educational Background: None of the Directors have acquired professional or higher education qualifications. All the working Directors (four brothers and one cousin) joined the family business after finishing their secondary education - to "higher" standard. Management training has been limited to "on the job" familiarisation with all facets of the firm's activities.
MANAGEMENT STRATEGIES

Company Development: Little or no change in the firm's ownership/control structure was envisaged by the present Managing Director. The Company's corporate strategy was based upon maintaining the firm's present market position rather than seeking Company expansion.

Market Strategy: The Company operated a system of driver-salesmen to service the CTN and independent grocery sector. The Company also supplied a number of small grocery chains. These accounts were the responsibility of one of the Directors. At the time of the case study (1977), the Managing Director did not believe it necessary for his firm to introduce non-returnable or large-sized packaging for his firm's products, and the firm had still not introduced new products to its range when a limited market analysis was undertaken in 1980.

Operating Policies: The Company usually purchases new plant when replacing existing machinery. The Company still prefers to use a post-mix system, primarily because of the large number of flavours bottled by the Company - changing flavours on a pre-mix system being a much lengthier process.

MANAGEMENT MOTIVATION

The primary motivating factor governing managerial actions appears to be the desire to maintain family control over all management functions. The managers appeared to be particularly hostile to the idea of non-family expertise being introduced into the firm's management structure.
SOFT DRINKS MANUFACTURER 4

BACKGROUND TO COMPANY

Size: Turnover 1976 - £820,000
Number of Employees - 45

Age: The Company was formed in 1921, and became incorporated in 1933.

Ownership and Control: Ownership is dispersed between members of the founder's extended family, while executive-control is by members of the controlling family. Two brothers currently perform the majority of executive tasks.

Product Range: The Company manufactures its own-label carbonated soft drinks, and wholesales (and retails) other aerated waters, beers and spirits. The firm's range of own label products is limited to carbonated drinks bottled in 25 fl.oz and 7 fl.oz glass containers.

Customer-mix: The Company is located in Fife, and its market is predominantly in the licenced trades in the Dundee, Stirling and Fife regions.

Company Performance: Net profitability 1976 - 9.0%
Gross profitability 1976 - 14.9%
Growth rate (sales) - 18.5%

The Company has achieved highly variable profitability levels in recent years. The Company traded at a loss in the financial year 1973/1974, while it achieved a net profitability of 36% in the following financial year. Average net profitability in the period 1973-1976 was 24.7%.

Directors' Remuneration: The three Directors of the Company received a total of £11,300 in remunerations in 1976.

MANAGERIAL BACKGROUND

Age: The Managing Director was 56.

Educational Background: The Managing Director joined his family business after completing his secondary education.

Employment Experience: Management training for both the Managing Director and his younger brother has been confined to experience within the family business.
MANAGEMENT STRATEGY

Company Development: Neither Manager/Director was certain about the long-term development of the Company. Neither brother had a son to whom control could be transferred, and they doubted that their daughters would be interested in succeeding to stewardship positions within the Company.

Market Strategy: The Managing Director did not envisage any major review of Company products in the near future. He did not intend to introduce large-sized containers nor non-returnable bottles. The Managing Director believed that there was substantial customer-loyalty for his products, and that this would be sufficient to secure the firm's future.

Operating Policies: The Company usually purchases second-hand plant. The Company currently operates a post-mix production system. The major problem facing the Company is the need to acquire increased storage space, particularly for stocking an increased range of drinks products for its wholesaling activities. The Managing Director believed that this aspect of internal efficiency was at the root of the firm's variable levels of financial efficiency.

MANAGEMENT MOTIVATION

The chief motivating factor for the Managing Director and his brother appeared to be the need for personal security and personal control of the management process. All management functions were the prerogative of the two brothers, although a partner in the firm's auditors acted as "financial advisor" and assisted the brothers in the implementation of Company strategies.
BACKGROUND TO COMPANY

Size: Turnover 1976 - £380,000
Number of Employees - 33

Age: The Company was founded in 1936.

Ownership and Control: The Company is owned by the three sons of the Company founder, although ownership is currently being transferred to the children of these family members. Executive-control is currently by two of the founder's sons and two of their sons. Again executive-control is in the process of transfer to the next generation of family members.

Product Range: The Company manufactures its own-label carbonated soft drinks and cordials. The Company bottles both returnable and non-returnable products, the latter being packed in 7 fl. oz non-returnable glass.

Customer-mix: The bulk of the firm's sales relate to the supply of the ice cream trade. Driver-salesmen are also used to service the CTN, canteen, and direct to the consumer sectors.

Company Performance:

<table>
<thead>
<tr>
<th>Performance</th>
<th>1976</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net profitability</td>
<td>9.0%</td>
</tr>
<tr>
<td>Gross profitability</td>
<td>35.4%</td>
</tr>
<tr>
<td>Growth rate (sales)</td>
<td>16.1%</td>
</tr>
</tbody>
</table>

Net profitability is remarkably stable in this Company, varying between 9.0% and 10.1% in the past 5 years.

Directors' Remuneration: The Company's five Directors received a total of £50,200 in 1976.

MANAGERIAL BACKGROUND

Age: Present Managing Director aged 56.

Educational Background: The present Managing Director left school at the age of 15, with no formal qualifications. He entered the family business immediately, and his management experience involved a familiarisation with all facets of the firm's activities. He became Joint-Managing Director in 1949, and assumed sole control in 1974.

MANAGEMENT STRATEGIES

Company Development: Ownership and control were in the process of being transferred to the next generation of family members at the time this case study was examined.
Market Strategy: Although the Managing Director accepted the desirability of increasing market share, the firm's market strategy does not appear to be geared towards increased penetration of the grocery sector, and in particular the multiples sector. The Company does bottle non-returnable products, but these are primarily geared towards the canteen sector of its market.

Operating Policies: In terms of pricing policy, SDM 5 prices its products in relation to the market leader - Barrs Soft Drinks. The Managing Director suggested that plant efficiency was the key to his firm's survival. He indicated his interest in packaging innovations, but did not believe they were appropriate for his markets.

MANAGEMENT MOTIVATION

The Managing Director appeared to be pre-occupied with the transfer of ownership and control. His attitude towards family succession of control appeared to be ambivalent. On the one hand he stressed the desirability of his sons gaining a profession outside the family business. Indeed, his younger son had just completed a law degree and postgraduate business course, and had recently started a career in law. On the other hand, his elder son had not achieved academic success at school, and had sought employment in the business after leaving school. The Managing Director suggested that this latter process may be disadvantageous to the firm's future since there was a narrowness of experience applied to management. Nevertheless, because of his son's disadvantage in obtaining a profession outside the family business, he seemed content to transfer control to the next generation of family members, and his elder son in particular.
SOFT DRINKS MANUFACTURER 6

BACKGROUND TO COMPANY

Size: Turnover 1976 - £135,000  
Number of Employees - 11

Age: The Company was formed circa 1883.

Ownership and Control: Ownership-control is shared by three individuals, although the present Managing Director now controls over 50% of the firm's shareholding. This was acquired through the purchase of part of his aunt's shareholding in the Company. Executive-control is solely by the Managing Director.

Product Range: The Company manufactures its own-label soft drinks and wholesales branded soft drinks, crisps, cider and wines. The firm's product range is limited to 25 fl.oz and 7 fl.oz containers.

Customer-mix: The bulk of the firm's market is the licenced trades in the South-East of Scotland.

Company Performance: The Company traded with a net loss of 8.7% in 1976. Gross profitability was 4.0%, while it was not possible to determine the average growth rate of sales during the period covered by our analysis. The profitability of the firm has been low throughout the 1970s - the highest level of profitability being 5.6% in 1973.

Director's Remuneration: The Managing Director received £2,250 in the form of remunerations in 1976.

MANAGERIAL BACKGROUND

Age: 40

Educational Background: Secondary education up to highers standard.

Employment Experience: After leaving school, joined Coca Cola Inc., and was transferred to Malaysia and Singapore. His management functions included sales administration. His uncle, the former Managing Director of SDM 6, died in 1971, and the present Managing Director was asked to take over control of the family business. He decided to accept his present position because of family loyalty and also to ensure that his children received a higher standard of education than he believed was possible in Singapore.
Management Strategies

Company Development: The Managing Director intended to realise the firm's assets after he had ensured that his children did not depend on the business for their employment. He suggested that there was little future for his Company, and that he would attempt to dissuade his children from taking an interest in Company affairs. He suggested that he would prefer to work for a larger company again, rather than maintain his position within the family business.

Market Strategy: The Company followed market leaders with respect to price and product strategies. In reply to questions concerning the reasons why his Company had not adopted large-sized products, the Managing Director indicated that there was an "informal gentleman's agreement" between members of SASDM not to supply the public house sectors with drinks packed in large-sized containers. This policy was considered to be necessary because of the costs necessary to re-equip in order to bottle these products, the reduced profit-margin for manufacturers who bottle large-sized products, but primarily because several smaller manufacturers did not have the physical capacity within their plant to manufacture these products. This was the case in SDM 6, whose plant was relatively aged (approximately 11 years old) and did not have the height tolerance to accommodate large-sized containers. The firm's inability to afford new production technologies has prompted the Managing Director to consider the cessation of manufacturing activities, and wholesaling of products presently manufactured. The Company currently wholesales a number of soft drinks products, including the merolite pack.

Management Motivation

The Manager's primary aim was to ensure that his children received "the best education possible". This was deemed necessary so that they could follow professional careers - the Managing Director suggesting the desirability of being either a lawyer or accountant. The purpose of stressing these goals for his children appeared to be to enable him to realise company assets at a time he considered to be most appropriate.
SOFT DRINKS MANUFACTURER 7

BACKGROUND TO COMPANY

Size: Turnover 1976 - £90,000
Number of Employees - 12

Age: Company formed in 1923.

Ownership and Control: The Company is a private partnership between two brothers and a brother-in-law. All executive functions are the prerogative of the three partners.

Product Range: Manufacturer of own-label soft drinks, and wholesaler of branded fruit juices, mixers and cider. The firm's product range is limited to 25 fl.oz and 7 fl.oz returnable glass bottles.

Customer-mix: 60% of the Company's market is direct to the final consumer, while 40% of its market is in the licenced trades in the Perth and Fife regions.

Company Performance: Because of the firm's legal status, it was not possible to verify its financial performance. Figures given by the Managing Director estimate net profitability to be 1.5% in 1976.

MANAGERIAL BACKGROUND

Age: The Managing Director was aged 39. His younger brother (in charge of production) was 28, while his brother-in-law (in charge of sales) was 33.

Educational Background: None of the managers had formal qualifications from his secondary education.

Work Experience: All the partners joined the family business upon leaving school. Training involved familiarisation with all facets of Company activities - "on the job training".

MANAGEMENT STRATEGIES

Company Development: Little thought appeared to be directed towards the ultimate direction of Company development. The partners appeared to be content to "muddle through" provided the Company could support them in employment into the future.

Market Strategy: The Managing Director indicated that his share of the licenced trade market was under threat, particularly from larger manufacturers who could offer a range of products beyond the scope of SDM 7. For this reason, the Managing Director had decided to increase the firm's
Soft Drinks Manufacturer 7 (contd.)

canvassing of the direct supply market. This was seen to hold further advantage insofar as it did not require the Company to introduce new packaging technologies associated with penetration of the multiples and cash and carry sectors.

Operating Policies: Control systems in the Company were relatively rudimentary. The Company charged prices similar to other manufacturers, and followed market leaders in changing prices. The plant operated by this firm was relatively dated (approximately 15 years old), and it did not have the height tolerance to permit the manufacture of large-sized products. The Managing Director suggested that he would like to manufacture recent product innovations, but indicated that the firm's poor financial position precluded the purchase of plant which would enable the firm to manufacture recent product innovations such as the plastishield bottle.

MANAGEMENT MOTIVATION

The initial interview suggested the primacy of economic gain as a motivating factor for the partners in SDM 7. However, more detailed analysis of management attitudes in the second interview suggested the importance of maintaining personal control over management processes as the factor determining management strategies in the Company. The partners were unwilling to introduce non-family expertise in order to initiate growth strategies. The emphasis on economic gain in the initial interview appears to be related to the poor financial performance of the company, which threatened the maintenance of a life style to which they had become accustomed.
SOFT DRINKS MANUFACTURER 8

BACKGROUND TO COMPANY

Size: Turnover 1976 - £593,000
     Number of Employees - 40

Age: The Company was originally founded in the 1920s, but there was a change of ownership in 1969.

Ownership and Control: The Managing Director of Company 8 owns all-but-one of the firm's shares. The other share is held by his son. Executive-control is the prerogative of the Managing Director, together with two managers who are not related to the owner-Managing Director. These two managers are responsible for production and sales administration.

Product Range: Manufacturer of soft drinks and cordials. At the time of the case study (April 1977) the Company's product range was limited to 25 fl.oz and 7 fl.oz containers. A limited market analysis undertaken in October 1980 revealed that Company 8 had recently introduced products packed in 1¼ litre lin-pac plastic bottles. The firm had also introduced a limited range of drinks in ½ litre "wide-mouth" bottles.

Customer-mix: The firm's markets are predominantly in the CTN and independent grocery sectors in East Scotland. The firm also supplies the licenced trades, and its own subsidiary which wholesales drinks products to the licenced trades.

Company Performance: Net profitability 1976 - 20.8%
                   Gross profitability 1976 - 11.1%
                   Growth rate (sales) - 23.5%

Net profitability has gradually declined through recent years. In 1973, the Company achieved a net profitability of 53%, and average net profitability in the period 1973-1976 was 32.7%.

MANAGERIAL BACKGROUND

Age: 61

Education: The Managing Director completed his secondary education, achieving only "moderate" school grades.

Employment Experience: After leaving school, the Managing Director joined the staff of a department store in Edinburgh. He worked his way up to Department Manager with the store. After the Second World War he decided to set up his own off-licence business. This expanded into the wholesaling
of drinks products. However, he began to have moral objections to selling alcoholic drinks, and in 1969 he acquired a small soft drinks manufacturing Company. His son has remained in charge of the wholesaling Company, while he has full control of the soft drinks manufacturing operations.

MANAGEMENT STRATEGIES

Company Development: The Company will be transferred to his son when the Managing Director decides to retire. The activities of the two Companies are likely to be merged at this point in time.

Market Strategy: Market strategies have been directed towards consolidating the firm's market position in the East of Scotland. The strategy adopted to achieve this objective was to increase sales-point service to the CTN and grocery sectors. For example, the Company offers to repaint a customer's premises to include the firm's logo in exchange for the outlet selling the firm's products.

Operating Policies: The Managing Director suggested that the firm's pricing tariff was independent of the major soft drinks manufacturers in Scotland. Indeed, he suggested that he should be considered as a market leader within the geographical limitations of his market. The Company operates new plant, and had recently re-equipped in 1973 with a pre-mix filling unit.

MANAGEMENT MOTIVATION

Several points of interest emerge from this case study. The Managing Director's motivation towards entrepreneurship after the Second World War appears to be related to a desire to utilise more fully his perceived personal abilities. However, his decision to purchase the small soft drinks manufacturing company in 1969 appears to be related to a desire to cease trading in alcoholic drinks, whilst utilising his expertise within the soft drinks markets.

Current motivations appear to be related to maintaining personal control over Company development strategies until he decides to retire or "... more likely, till I drop dead" (quote from Managing Director).
BACKGROUND TO COMPANY

Size: Turnover 1976 - £665,000
Number of Employees - 33

Age: The date of formation is unknown. The present owners acquired the Company in 1969.

Ownership and Control: The Company is, in effect, a subsidiary of the current owners' former Company (which is engaged in the transport business). Executive control of the soft drinks company is by personnel unrelated to the Company owners.

Product Range: Manufacturer of own-label soft drinks and cordials. At the time of the fieldwork (May 1977), the Company was in the process of introducing a range of products packaged in 1½ litre lin-pac plastic bottles. This product was aimed at the cash and carry sector.

Customer-mix: The Company is traditionally dependent upon the CTN and independent grocery sectors, although it has targeted the cash and carry sector for its expansion policy. This sector was perceived to be important because an increasing number of CTNs and grocers obtain their supplies from the cash and carry sector.

Company Performance: Net profitability 1976 - 14.3%
Gross profitability 1976 - 29.2%
Growth rate (sales) - 27.8%

The Company's profitability has been variable throughout the 1970s, the Company achieving a net profit of 24.8% in the financial year 1975/1976. The average net profitability 1973-1976 was 17%. The reduced profitability in the year 1976/1977 was attributed to development costs associated with the introduction of the lin-pac plastic range of products.

Directors' Remuneration: The average remuneration to each of the three directors was £11,200 in 1976.

MANAGERIAL BACKGROUND

Age: The Managing Director was aged 49.

Educational Background: The Managing Director completed his full secondary education, and then entered the army. After completing his National Service, he entered his father's transport (haulage) business. The opportunity to buy into the soft drinks industry arose out of an acquaintance with
the former owner-manager of the Company through the Freight Transport Association. The former owner-manager wished to sell his Company, and the present owners were looking for areas in which to expand their operations. The relatively high profitability of the soft drinks industry encouraged the present owners to buy the Company.

MANAGEMENT STRATEGIES

Company Development: Little change in ownership and control is sought by the Company's owners.

Management Strategy: The Managing Director indicated that marked expansion was sought for the Company. This was to be achieved through penetration of the cash and carry sector, and other expanding markets within the grocery sector.

Operating Policies: The Company had re-equipped in 1975 to enable the bottling of large-sized non-returnable products. The Company was involved in severe price competition in its attempt to secure outlets in the cash and carry sector. Its pricing strategy is to undercut the market leaders.

MANAGEMENT MOTIVATION

The initial interview suggested a primacy of motivations relating to the desire for economic gain. However, more detailed discussion of factors associated with recent management strategies suggests the importance of Company growth as a means of managerial recognition, and also the satisfaction associated with success. The high rewards (remunerations) appear to be a by-product of the success achieved by the Company in recent years rather than an end in themselves. The need for management recognition appears to emanate from the Managing Director perceiving himself to be an "outsider" in the industry, with the desire to show his ability to his peers in the industry.
SOFT DRINKS MANUFACTURER 10

BACKGROUND TO COMPANY

Size: Turnover 1976 - £1,002,000
      Number of Employees - 55

Age: Company formed in 1910.

Ownership and Control: Ownership is dispersed among
members of the one family. Executive-control is
by personnel unrelated to the controlling-family,
with the exception that the post of Managing
Director has been the prerogative of members of
the controlling family.

Product Range: Manufacturer of own-label soft drinks,
bottler of cider, and wholesaler of certain
branded soft drinks. The range of own label
products is restricted to 25 fl.oz and 7 fl.oz
containers.

Customer-mix: The Company is located primarily in the
CTN and independent grocery sector, although
about 25% of its sales are in the licenced trades.

Company Performance: Net profitability 1976 - 12.8%
      Gross profitiability 1976 - 13.4%
      Growth rate (sales) - 25.6%

Net profitability has remained relatively stable
throughout the 1970s, although later financial
analysis has shown that net profitability fell
to 3.4% in 1977 and 0.9% in 1978.

Directors' Remuneration: Each of the three Directors
received an average of £5,400 in 1976.

MANAGERIAL BACKGROUND

Age: The Managing Director was 54 in 1976.

Educational Background: The Managing Director completed
his secondary education gaining four subjects of
highers standard. He joined the Air Force upon
leaving school.

Employment Experience: After completing his national
service, the present Managing Director joined
his family business. He was groomed specifically
to succeed his father, particularly since his
younger brother was training to be a doctor and
showed little enthusiasm for a career in the
family business. He succeeded his father as
Managing Director in 1955.
Soft Drinks Manufacturer 10 (contd.)

MANAGEMENT STRATEGIES

Company Development: The future ownership and control of the firm was uncertain at the time of the fieldwork. None of the Managing Director's children appeared to show an interest in the family business, preferring to study for a profession outside the soft drinks industry.

Market Strategy: The Managing Director did not believe it was necessary to introduce new forms of packaging into the range of products bottled by his Company. This was partially related to the relatively high proportion of sales accounted for by the bottling of ciders under licence. This figure was approximately 30% of turnover in 1976.

Operating Policies: The Company has always purchased second-hand plant, although it is often relatively new when purchased. The Company operates a pre-mix filling system, thus enabling contact bottling of ciders. The Managing Director suggested that his firm's prices were set in relation to industry leaders such as Barrs, and that he usually waited for Barrs to change price before changing his prices. However, the Managing Director suggested the importance of SASDM as a medium by which this form of information was discussed. Scottish soft drinks manufacturers appear to collude on many facets of the industry's functioning. The Managing Director suggested that members of SASDM usually tried to operate collective action with respect to change within the industry. Change in this instance also included the pricing of soft drinks.

MANAGEMENT MOTIVATION

The Managing Director appeared to be motivated towards maintaining the relatively comfortable routine to which he had become accustomed. He was in favour of actions by SASDM which minimised the impact of market and technological change on smaller manufacturers. Personal security, both within the Company and for his family in society, were the highest ranked motivating factors on the interview schedule.
SOFT DRINKS MANUFACTURER

BACKGROUND TO COMPANY

Size: Turnover 1976 - £655,000
Number of Employees - 30

Age: The Company was founded circa 1890. The present Company was formed by the merger of two small independent companies in 1959.

Ownership and Control: Ownership is dispersed among descendants of the founders of the two formerly independent companies, although members of the present Managing Director's family hold a majority of shares. Executive-control is the prerogative of both family members and personnel unrelated to the controlling families. Two of the four Directors are related. The Company has two branches in the North East of Scotland, the branches being run by the two brothers who are also Directors of the Company.

Product Range: Soft drinks manufacturer, and wholesaler of branded soft drinks.

Customer-mix: The Company serves both the licenced trades and grocery sectors in the North Eastern region of Scotland.

Company Performance: Net profitability - 20.5%
Gross profitability - 20.2%
Growth rate (sales) - 21.6%

Net profitability is relatively stable, with the average net profitability (1973-1976) being 24.1%.

Directors' Remuneration: The average remuneration was £2,000 in 1976.

MANAGERIAL BACKGROUND

Age: The Managing Director is 53, while his younger brother is 49.

Educational Background: Both managers left school without formal qualifications.

Employment Experience: The Managing Director joined the Army after leaving school. After serving his National Service (as an engineer) he joined his family business, and specialised in the production function. His brother concentrated on the sales function when he joined the family business. The family business was merged with another small business in 1959. The owner of the latter Company
wished to retire, and had no heirs to whom he could transfer executive-control. The merger was enacted to enable Company 11 to increase its production efficiency, and use the second Company as a depot from which to distribute soft drinks to the more remote northerly regions of Scotland. The Managing Director is currently in charge of the production plant and distribution from this factory, while his brother is in charge of the Northern depot.

MANAGEMENT STRATEGIES

Company Development: Development strategies do not include major changes in the ownership and control of Company activities.

Market Strategies: The Company has a localised monopoly in several areas, particularly from the northern depot. Consequently, the Managing Director did not see any reason to make radical changes in the product range offered to customers. Market leaders are not interested in many of the more remote market areas, and there is little market pressure on the manufacturer to adopt recent packaging technologies.

Operating Policies: Pricing policies are usually bounded by the need to incorporate increased costs of distribution. Consequently, soft drinks prices are usually higher than in the Central region of Scotland.

When the Company last re-equipped, in 1972, it did so with new plant.

MANAGEMENT MOTIVATION

The need (or desire) to maintain personal control over management processes appears to dominate management strategies. The Company appeared to be particularly production-oriented in its policies, this probably related to the Managing Director's engineering background. Nevertheless, the local monopoly enjoyed by the Company in several areas creates a relatively liberal environment for company activities. Not surprisingly, the Managing Director is keen to introduce his children to the Company, and he hoped that they would enter the family business, although he also suggested the desirability of obtaining expertise and/or professional qualifications prior to succession to the Company.
SOFT DRINKS MANUFACTURER 12

BACKGROUND TO COMPANY

Size: Turnover 1976 - £1,540,000
Number of Employees 65

Age: The Company was formed circa 1900, although the Managing Director was not certain of the exact date.

Ownership and Control: There is effective unity of ownership-control, the Managing Director and his wife together holding more than 50% of the firm's shareholding. Executive-control is by individuals unrelated to the Managing Director, with the financial director sitting on the Board of Directors.

Product Range: Manufacturer of own-label soft drinks, bottler of beers and cider, and wholesaler of branded soft drinks and beers. The firm's range of own label drinks includes 25 fl.oz and 7 fl.oz returnable glass bottles, and litre non-returnable glass bottles.

Customer-mix: The firm is predominantly located in the licenced trades sectors, while its non-returnable range of drinks is produced for the multiples sectors, including the ASDA chain in Scotland. The firm's penetration of the licenced markets is partially related to its bottling of beers under licence from major breweries in England and Ireland (Guinness). At the time of the field-work, Company 12 supplied the Victoria Wine chain of off-licences with its beer requirements.

Company Performance: Net profitability 1976 - 22.5%
Gross profitability 1976 - 20.9%.

MANAGERIAL BACKGROUND

Age: 41

Educational Background: The Managing Director left school at the age of 14, with no formal qualifications.

Employment Experience: The Managing Director entered his family business upon leaving school. His management training was to involve familiarisation with all facets of the firm's activities. However, before this was completed, his father (then Managing Director) died. In 1964, the present Managing Director assumed control of the family business.
MANAGEMENT STRATEGIES

Company Development: The Managing Director intended to expand Company markets. To this end, he had started to produce non-returnable products for the multiples sector of the market. Development has been quite marked since the present Managing Director assumed control. The Company moved into a purpose built factory in 1975, being located previously in three small sites.

Operating Policies: The Company is now the fourth largest bottler in Scotland, and its product and pricing policies appear to be independent of the other major manufacturers. The Company operates a computerised invoice/accounts/stock control system. This provides the management with a detailed breakdown of the firm's market performance, which is used as the basis for formal corporate planning.

MANAGEMENT MOTIVATION

Management motivations appear to relate to the manager's desire to increase his personal status within the industry's structure. He has become an active member of both SASDM and the Scottish Association of Beer and Cider Bottlers. This desire to be recognised for managerial excellence by his fellow managers appears to be related to the time at which he assumed control of the family business. "Professional" advice at the time was to sell the business. This advice appeared to pose a threat to his desired lifestyle, particularly because of his lack of qualifications and limited managerial expertise. Operating policies initiated at that time included the introduction of technically competent personnel to replace members of the family in command positions.
Latin maxim is: *Quid pro quid*. It means: *You get what you give*.

The English equivalent of *Quid pro quid* is: *You get what you give*.
MANAGEMENT STRATEGIES

Company Development: The Managing Director intends to realise the firm's assets within the next 10 years.

Market Strategy: The Managing Director did not intend introducing large-sized or non-returnable products into the range manufactured by his Company. The Managing Director believed there to be a strong brand of loyalty for his products in the localised market which his firm served. He believed this was sufficient to enable him to achieve a satisfactory standard of living until he decided to retire.

Operating Policies: The Company charged similar prices to market leaders, and waited for these leaders to change price before following suit. The Company operated second-hand plant which did not permit the bottling of litre or 40 fl.oz products. The Managing Director suggested that it was not worth buying more modern plant since he intended to sell the Company within the next 5 - 10 years. He indicated that he would wholesale these products if the outlets served by his Company demanded products associated with recent packaging innovations.

MANAGEMENT MOTIVATION

Management motivations appear to be directed towards ensuring that his children do not seek employment in the family business. The Managing Director believed this could be best achieved by his children gaining academic success, and thereafter a profession. This attitude appears to be related to his provision of private education to his two sons. Management motivations relating to the Manager's role within the Company appear to be based on maintaining his personal control of management processes. This was considered necessary in order to facilitate the realisation of Company assets at a time he considered to be most appropriate. The fact that he (together with his wife) were able to gain ownership-control of the Company appears to reinforce this motivation.
PRINTING FIRM A

BACKGROUND TO COMPANY

Size: Turnover 1976 - approximately £200,000
     Number of Employees - 20

Age: The Company was formed in 1903, and was engaged in the manufacture of paper bags. General printing activities were commenced when control was passed from the founder to his son in 1938.

Ownership and Control: The Company is in its third generation of ownership and executive-control by members of the same family.

Product Range: General jobbing printer. The chief printing activities undertaken by the Company include business forms (invoices and so on) and other printing requirements of business enterprises such as name cards, circulars, and so on.

Customer-mix: Customers are primarily other business enterprises not related to the printing industry.

Production Technology: PF A uses both letterpress and lithographic processes, although it does not have the capacity for colour printing.

Company Performance: The Company traded with a net loss of 5.4% in 1976. Gross profitability 1976 - 18.7%. The profitability of Company A is variable. The Company traded at a loss in three of the previous six years. Average net profitability (1973-1976) was 6.3%.

Directors' Remuneration: The average remuneration per Director was £3,500 in 1976.

MANAGERIAL BACKGROUND

Age: The Managing Director was aged 37, and his younger brother (also a working director) was 34.

Educational Background: Both brothers completed their secondary education, each obtaining three "highers". Both brothers joined their family business after leaving school, and their management training has been limited to familiarisation with different facets of the Company's operations.
Printing Firm A (contd.)

MANAGEMENT STRATEGIES

Company Development: The Managing Director did not envisage any major change in Company activities or in the ownership and control of the firm. He suggested that marked growth was not sought, and that he preferred to maintain the small scale of operations of the Company.

Market Strategy: The managers prided themselves on the personal nature of the service they offered their clients. Both the Managing Director and his brother canvassed for orders, and were in frequent contact with customers. The Managing Director suggested that the quality of service and proximity to their market was sufficient to make the future reasonably secure, despite the firm's failure to introduce capacity for colour printing.

Operating Policies: Control systems within the Company are of an informal nature, and there is no formal corporate planning.

MANAGEMENT MOTIVATION

The Managing Director indicated that he did not seek rapid growth in Company markets because he preferred to maintain his (and his brother's) personal control over Company activities. Furthermore, he believed that rapid expansion would necessitate a more formalised management structure, thereby reducing his personal contact with customers - the basis of the firm's market strategy.
PRINTING FIRM B

BACKGROUND TO COMPANY

Size: Turnover 1976 - approximately £400,000
Number of Employees - 30

Age: The Company was formed in 1949, and became incorporated in 1955.

Ownership and Control: The Company has four shareholders, the Managing Director and his wife holding a majority of the shares. Executive-control is by the Managing Director and a minority shareholder (who is not related to the Managing Director). This minority shareholder is now sales director of the firm.

Product Range: The Company is a general printer and stationer. Printing activities are chiefly concerned with letterheadings for Company stationery, and other jobbing activities relating to advertising material.

Customer-mix: Usually non-printing business enterprises.

Production Technologies: The Company operates both letterpress and lithographic processes. The Company also has capacity for colour printing.

Company Performance: Net profitability 1976 - 24%
Gross Profitability 1976 - 30.1%
Profitability is variable in Company B, ranging from 6% in 1972 to 34% in 1975. The average net profitability (1973-1976) was 25.7%.

Directors' Remuneration: The average remuneration per Director was £3,150 in 1976.

MANAGERIAL BACKGROUND

Age: 58

Educational Background: Completed secondary education achieving quite good grades in his school certificates.

Employment Experience: He joined a local newspaper as a trainee journalist after leaving school. During his period as a journalist he started to type circulars for several clients in order to supplement his earnings. This "hobby" grew to the point where he had sufficient work to consider setting up on his own account. This he did in 1949. As the business grew the activities of the Company were extended. The Company moved to a new factory in 1965, and the management team was supplemented in 1970 by the introduction of a sales manager, who previously worked for a large publishing company.
Company Development: The Managing Director intends to realise his shareholding in the Company within the next 10 years, primarily because he has no children to whom he can transfer his stake in the Company. However, the Director who was introduced into the Company in 1970 is expected to increase his personal stake in the Company by buying some of the Managing Director's shareholding.

Market Strategy: Colour processes were introduced in 1970, and the market has expanded quite rapidly from that point. The introduction of a new partner has facilitated the adoption of more growth-oriented strategies because of the new partner's previous experience selling printed products.

Operating Strategies: Management control systems are relatively rudimentary, and there is no formal corporate planning.

MANAGEMENT MOTIVATION

The chief aim of the Managing Director is to maintain his independence until the time he decides to retire and sell his shareholding in the Company. He suggested that he could not revert to working for somebody else. However, he was not averse to introducing non-family expertise into the Company, particularly if this would secure the firm's future viability.
PRINTING FIRM C

BACKGROUND TO COMPANY

Size: Turnover 1976 - approximately £400,000
Number of Employees - 40

Age: The Company was founded in 1931.

Ownership and Control: The majority of shares are held by the founder's two daughters. Although the majority shareholders are Directors of the Company, they are not involved in the day-to-day management of the firm. Executive-control is by qualified or experienced personnel who do not hold shares in the Company.

Product Range: Assembly of materials and lithographic plate-making. The Company has the capacity for colour printing.

Customer-mix: The majority of the firm's customers are printers and publishers. PF C prepares the printing plates used by printers and publishers. The majority of work is associated with the book and brochure market sectors.

Production Technology: The Company prepares lithographic printing plates. A colour scanner was installed recently, thus enabling a more accurate and quicker colour reproduction than is possible by the traditional manual process.

Company Performance: Net profitability 1976 - 24.5%
Gross profitability 1976 - 31.4%

The growth rate of sales (1973-1976) could not be verified from the firm's published accounts since this data was not declared. However, figures given by the Managing Director during the interviews estimate a 20% increase in sales between 1975 and 1976 (at current prices). Since the price of general printing products rose by some 14% in the same period, this represents a real growth of approximately 6%.
Average net profitability 1973-1976 was 27%.

MANAGERIAL BACKGROUND

Age: The Managing Director was aged 40.

Educational Background: The Managing Director gained a degree in Geography, and is a qualified chartered accountant.

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Printing Firm C (contd.)

Employment Experience: The Managing Director joined a large publishing company soon after qualifying as a chartered accountant. He quickly rose to positions of responsibility within the finance department, but saw little chance of further advancement in the near future. He applied for the post of Managing Director of PF C in 1970. He joined the firm in 1970, and worked in tandem with the founder until the latter retired in 1972. He has been in charge of the Company since that time.

MANAGEMENT STRATEGIES

Company Development: Little change in ownership and control is perceived for the near future. Company development policies are based on expansion of the Company's markets.

Market Strategy: The Company has a sales force which is in frequent contact with printers and publishers. Market strategy is based on maintaining Company technologies in line with recent process innovations which permit increased productivity (and therefore competitiveness in price) and better quality colour reproduction. The latter was considered particularly important for increased penetration of the book and brochure market sectors.

MANAGEMENT MOTIVATION

The Managing Director was motivated towards seeking employment in PF C for career advancement. He thought that his prospects for career advancement were remote in his former employment, particularly as that company was characterised by nepotistic succession in positions of top management. Current policies appear to be related to the Managing Director's desire to increase his personal status as a "good manager". This was viewed to be important, particularly if the opportunity arose for career advancement as the manager of a larger company. The Managing Director suggested that he was not committed to a life-long involvement in PF C, particularly because he did not have a personal stake in the Company.
BACKGROUND TO COMPANY

Size:  Turnover 1976 - approximately £80,000
Number of Employees - 4

Age:  The Company was founded in 1968, and became incorporated in 1970.

Ownership and Control:  The Company is owned and run by two partners.

Product Range:  The Company is engaged in process engraving, photo-engraving and commercial photography.

Customer-mix:  The Company has a wide customer-mix, varying from members of the public to other printing companies who require special artwork performing to photographs and negatives.

Production Technology:  The equipment operated in PF D is specially designed for process engraving and photo-engraving. The Company also has the facilities for the developing of colour and black and white photographs.

Company Performance:  Net profitability 1976 - 49.8%
Gross profitability 1976 - 57.8%

The profitability of PF D is highly variable. The Company recorded a loss in two of the previous four financial years. The average net profitability (1973-1976) was 19.1%. Sales data was not available from this Company.

Directors' Remuneration:  The average remuneration to each of the Directors was £4,800 in 1976.

MANAGERIAL BACKGROUND

Age:  One partner was aged 32, the other partner was aged 31.

Educational Background:  Both partners completed their secondary education, gaining several "highers". After secondary school they attended art college where they both specialised in photography and engraving. After completing their course at art college they decided to go into business together. They were primarily engaged in commercial photography during the firm's formation, expanding their activities once they had become established.
Market Strategy: The partners suggested that the quality of product was the most important facet of Company activities in being able to maintain the firm's markets. However, the partners did not direct specific energies towards canvassing for orders, relying on repeat orders or recommendations from previous customers.

**MANAGEMENT MOTIVATION**

The partners appeared to be primarily motivated towards maintaining their personal control of Company activities, and personal involvement in their craft - photography and engraving. Expansion was viewed in terms of increasing the type of artwork undertaken by the Company.
PRINTING FIRM E

BACKGROUND TO COMPANY

Size: Turnover 1976 - approximately £35,000
Number of Employees - 3

Age: The Company was founded in 1969, and became incorporated in 1972.

Ownership and Control: The Managing Director owns all (but one) of the Company's shares. The remaining share is held by his wife. Executive-control is by the Managing Director.

Product Range: General printing - the products being circulars, advertising materials and other products required by commercial enterprises.

Customer-mix: Chiefly commercial enterprises in the Glenrothes area.

Production Technology: The Company operates a lithographic press, and has the capacity for colour printing.

Company Performance: Net profitability 1976 - 4%
Gross profitability 1976 - 13.5%

Sales data was not available from the Company, although the Managing Director estimated that sales had risen by approximately 10% between 1975 and 1976. This represents a decline in real terms of approximately 4%.
Net profitability is variable: the Company incurred a loss in 1973, while net profitability was 17% in 1974.

Directors' Remuneration: The Managing Director received £3,333 in the form of Directors' Remuneration in 1976.

MANAGERIAL BACKGROUND

Age: 38

Educational Background: The Managing Director completed his secondary education up to "higher" standard.

Employment Experience: After leaving school, the Managing Director joined a large printing company as a trainee designer. His apprenticeship was served with the company, and he remained in their employment for a further eight years. He had started to do some freelance work to supplement his earnings, and found the greater involvement of working on his own account more satisfying than working on a small part of the printing process in the large printing firm. Eventually he decided to set up on his own account in 1969.
MANAGEMENT STRATEGIES

Company Development: The Managing Director appeared to be chiefly concerned with maintaining his personal independence and involvement in the craft function of printing. The Company had now reached a position where it could support him in a standard of living which he considered as "satisfactory". He did not foresee major changes in the Company's operations in the near future.

Market Strategy: Little managerial energy is directed towards the sales function. The Managing Director is primarily involved in the production process, and the Company does not employ an individual specifically for the purpose of soliciting orders. Market strategy appears to be based on the quality of product and timeliness of service.

MANAGEMENT MOTIVATION

The Managing Director's motivation towards entrepreneurship appears to be related to frustrations felt by the demarcation of printing activities in his former employment. This frustration appears to have been highlighted by his experience of the printing process during his "moonlighting" prior to setting up his own business. Current motivations appear to be related to preserving his independence and personal involvement in the printing process. Rapid expansion was perceived to threaten this personal involvement in the production process.
PRINTING FIRM F

BACKGROUND TO COMPANY

Size: Turnover 1976 - £1,215,000
Number of Employees - approximately 180.

Age: The Company was founded in the nineteenth century, and became incorporated in 1919.

Ownership and Control: 3 of the 6 Directors in the Company are related and hold a majority of the firm's shares. The Company is in its third generation of family management, insofar as the positions of Managing Director and Company Chairman are the subject of family succession. However, a number of managerial activities (for example, financial and sales directors) are the prerogative of personnel who are not related to the controlling (ownership) family.

Product Range: Company activities include the printing and publishing of maps, atlases, theological and other books.

Customer-mix: The general public (via bookshops, and so on).

Production Technology: The Company uses web-offset litho presses, and other equipment relating to the collating and binding of books and other printing matter. The Company sub-contracts activities such as plate-making and the assembling of book materials, although it assembles its own material for the printing of maps and atlases.

Company Performance: Net profitability 1976 - 22.4%
Gross profitability 1976 - 18.3%
Growth rate (sales) - 22.9%

Net profitability is relatively stable, with the average net profitability (1973-1976) being 20.2%.

Directors' Remuneration: The 6 Directors in the Company received an average remuneration of £6,400 in 1976.

MANAGERIAL BACKGROUND

Age: The current Managing Director was aged 58 in 1978.

Educational Background: The present Managing Director joined his family business after gaining a University degree in English. His son (the Managing Director-elect) also joined the family business after gaining a degree in English Literature.
Printing Firm F (contd.)

Employment Experience: The managerial experience of the Managing Director and his son is limited to the family business.

MANAGEMENT STRATEGIES

Company Development: The Company will be passed into the next generation of family management. The Managing Director's elder son currently works in the Company, and is being groomed to succeed his father. His younger son is currently employed as an accountant in Edinburgh. It was not certain whether he would join the family business in an executive capacity or merely hold a position of non-executive director.

Market Strategy: The market strategy is determined by the firm's expertise in specialist areas of the printing/publishing industry, namely maps and theological books. Much of the Company's effort is directed towards the source of materials — writers, agents, and so on. Their production technology appears to be relatively modern - a new printing press was installed in 1972. This assures a good quality final product in terms of printed quality. The success of publishing activities is related to the raw material — the author/subject matter.

MANAGEMENT MOTIVATION

The current Managing Director appears to be chiefly interested in his (and the Company's) status within the printing and publishing industry. The Company has a fine tradition within the industry relating to its publishing of theological books and the printing of maps. The Managing Director is an active member of SMPS and several other employers organisations within the printing and publishing industries. The importance of the firm's status appears to be related to the nature of family ownership. The present Managing Director was groomed specifically to succeed his father. He recalled that his father instilled a certain degree of pride in the family business's success. This process appears to be repeated in the current transfer of control.
BACKGROUND TO COMPANY

Size: Turnover 1976 - £380,000
Number of Employees - 50

Age: The Company was formed in 1938, and became incorporated in 1949.

Ownership and Control: Ownership is dispersed between three members of the controlling family. Executive control is performed by the Company's founder and his son.

Product Range: The Company was founded as a general jobbing printer, but after the Second World War it started to specialise in numerical printing. These activities were expanded to include cheque-book printing. The market for this service grew quite rapidly throughout the 1950s and 1960s.

Customer-mix: The Company was heavily dependent on one commercial bank for whom it printed cheque-books. However, this customer started to perform its own printing activities. The Company is now dependent on other forms of numerical printing - particular sub-contract work on mathematical books, and so on.

Production Technology: The Company was geared to the manufacture of cheque-books, although the printing plant can be used for other forms of printing. The plant was relatively dated (10 years old) at the time of the research.

Gross profitability - loss of 3.9%
Growth rate (sales) - 3.8% (at current prices).
This represents a decline of approximately 10% in real terms.

Directors' Remuneration: There were 7 Directors in the Company receiving a total of £18,464 between them in 1976.

MANAGERIAL BACKGROUND

Age: The Managing Director was 63 in 1978. His son was 35.

Educational Background: The Managing Director left school with only "moderate" academic qualifications, while his son completed his secondary education up to "highers" standard.
Printing Firm G (contd.)

Employment Experience: The Managing Director joined a medium-sized printing firm after he left school, and took a printing apprenticeship. Soon after completing his apprenticeship he started his own company as a general printer. His son entered the family business after leaving school, and his management/craft training has been limited to experience within the family business.

MANAGEMENT STRATEGIES

Company Development: Executive-control will be passed to the Managing Director’s son within the next five years. Corporate strategies accept the need for diversification of markets, although Company policies do not appear to be geared towards achieving this aim.

Market Strategy: The Company does not appear to direct its managerial energies towards a determination of market opportunities into which the Company can diversify its activities. The "crown prince" suggested that the Company's current problems could be traced to his father's failure to diversify away from the firm's dependence on one particular customer. However, he could not suggest areas of the market into which the firm could diversify.

MANAGEMENT MOTIVATION

The managers are currently not prepared to introduce non-family personnel into the management structure of the Company. This suggests a desire to maintain executive-control within the controlling family. However, the "crown prince" suggested that such an appointment may be necessary when his father retired since the managerial work-load would be too much for him alone.
PRINTING FIRM H

BACKGROUND TO COMPANY

Size: Turnover 1976 - approximately £400,000
Number of Employees - 35

Age: The Company was founded in the 1890s, and became incorporated in 1910.

Ownership and Control: Ownership is by members of the same family. Executive-control is by members of the controlling family.

Product Range: General printers, with products usually in the form of small jobbing orders for advertising materials, programmes and booklets.

Customer-mix: Generally commercial companies, clubs and societies.

Production Technology: The Company uses lithographic processes, and introduced capacity for colour printing in 1972.

Company Performance: Net profitability 1976 - 5.6%
Gross profitability 1976 - 16.6%

The sales data could not be verified from published accounts. The data provided by the managers estimated that sales grew by approximately 15% between 1975 and 1976. This represents a marginal growth in real terms.
Net profitability is highly variable, the average net profitability (1973-1976) being 12.9%.

Directors' Remuneration: The 3 Directors received an average remuneration of £4,600 in 1976.

MANAGERIAL BACKGROUND

Age: The Joint-Managing Directors were 40 and 37 in 1978.

Educational Background: Both Managing Directors completed their secondary education to "highers" standard.

Employment Background: Both Managing Directors joined the family business after leaving school. Part of their training involved a sandwich course to gain qualifications relating to the printing industry. They succeeded their father as executive controller in 1969.
MANAGEMENT STRATEGIES

Company Development: The Managing Directors suggested that they sought growth as a corporate objective. Little change was sought in the ownership and control of the firm.

Market Strategy: The Company has introduced colour printing in an attempt to expand Company markets. However, the data provided by the managers suggests that this has had only limited success. The managers are particularly aware of the changing technologies of printing, and are interested in introducing as many improvements to the printing process as possible. These improvements were viewed as holding the key to Company expansion. However, the Company did not appear to direct much attention towards soliciting orders, or other aspects of the sales function. The manager's personal background and market behaviour of the Company suggests that the firm is production-oriented in terms of its development.

MANAGEMENT MOTIVATION

Managerial motivations appear to relate to the managers' security, both within the Company and for their family in society. Company expansion appears to be seen as being consistent with increased security for the firm within its markets.
BACKGROUND TO COMPANY

Size: Turnover 1976 - £60,000
      Number of Employees - 5

Age: The Company was founded in 1954, and became incorporated in 1964.

Ownership and Control: A majority of shares are owned by the founder (Managing Director) and his younger brother. Executive-control is by the two brothers.

Product Range: General (jobbing) printing activities. The Company is primarily involved in the printing of pamphlets, tickets, and so on.

Customer-mix: The bulk of the firm's customers are clubs, societies and commercial enterprises.

Production Technology: The Company uses only letter-press processes. It does not have the capacity for colour printing.

Company Performance: Net profitability 1976 - 15.6%
                        Gross profitability 1976 - 17.4%
                        Growth rate of sales - 11.4%

This represents a decline in real terms. The net profitability has gradually fallen throughout the 1970s. Average net profitability (1973-1976) was 30%.

MANAGERIAL BACKGROUND

Age: The Managing Director was 50, and his younger brother 46.

Educational Background: The Managing Director left school without any formal qualifications.

Employment Experience: The Managing Director joined the Army after leaving school. When his national service was completed, he joined a large printing firm. He worked for this firm for six years, but became disillusioned in this employment since his opportunity to advance in the Company's structure was limited by the pre-entry closed shop for certain craft functions. He had become friendly with another printer in the same company, and they decided there was sufficient scope for them to set up their own business. The partnership was dissolved after three years because the partners could not agree on the type of expansion which was desirable in the Company. The present Managing Director did not wish to incur significant debt in order to equip the Company with new
Printing Firm J (contd.)

machinery at that time. A year after the partnership was dissolved, the founder's younger brother joined him in the business. He too was a trained printer.

MANAGEMENT STRATEGIES

Company Development: The Managing Director's elder son had recently joined the family business, and the Managing Director was hopeful that his son would continue his employment in the family business, and ultimately assume control of the business.

Market Strategy: The Company is almost totally dependent on repeat orders and recommendations from previous customers. Little effort is directed towards the sales function - both managers being involved in the production process.

MANAGEMENT MOTIVATION

Although the Managing Director appears to support the idea of family succession of control, his attitude towards the Company appears to reflect the idea that the Company is simply an effective means of earning a living. Neither brother appeared to be particularly motivated towards Company growth, preferring to maintain their personal involvement in the production process.
BACKGROUND TO COMPANY

Size: Turnover 1976 - approximately £75,000
Number of Employees - 7

Age: The Company was formed in 1974.

Ownership and Control: The Company is a private partnership of the two founders, who both perform the executive tasks of the firm.

Product Range: The Company is chiefly engaged in the manufacture of lithographic printing plates.

Customer-mix: Other printers and publishers who subcontract this work to specialist plate-makers.

Production Technology: The firm introduced colour printing in 1976. It also introduced a colour scanner in 1977 to enable more accurate and productive colour reproduction.

Company Performance: Company performance levels could not be verified because the Company was a private partnership.

MANAGERIAL BACKGROUND

Age: The partners were aged 32 and 29.

Educational Background: Both partners completed their secondary education, gaining several highers.

Employment Experience: One of the partners is a trained camera-operator, working previously for a relatively large printing firm. The other partner was a rep for a company which supplies the printing trades with inks, and other colouring materials. The former partner had become disillusioned working for the large company, believing that he could utilise his craft training more fully if he were self-employed. He had become friendly with the rep, and they decided there was sufficient scope in the market if they set up on their own - particularly because the rep had made several acquaintances/contacts in printing and publishing companies. These were used to establish their market, which has grown quite rapidly since the introduction of colour printing.

MANAGEMENT STRATEGIES

Company Development: The partner in charge of sales and administration indicated that he sought continued growth for the Company. The success achieved by
the Company was said to provide immense satisfaction in its own right. Neither partner envisaged any problems in the form of the partnership, although they accepted that if the Company continued to grow, it would be desirable to seek limited liability status.

Market Strategy: The partner in charge of sales and administration was actively engaged in canvassing for orders, and was in frequent contact with printers and publishers. The Company appears to have been extremely successful in its growth strategy, particularly as the Company had more work than it could usually handle. The employees had an average of 15 hours overtime per week in order to meet order deadlines. The Company was the first firm within the geographical limitations of its market to introduce a colour scanner. This appears to have provided a marked advantage for the Company in terms of the quality of printing plates and the timeliness of orders vis-à-vis printing firms which use a more labour-intensive process of colour plate-making.

MANAGEMENT MOTIVATION

The partner in charge of production was chiefly motivated towards increasing the craft content of his work at the time of founding his business. However, he accepts that the firm's success has provided a standard of living which would not have been possible in his former employment. This aspect provided a source of immense satisfaction. The other partner appeared to be motivated towards success as an end in itself. The importance of running his own Company was that he received the fruits of his efforts rather than the owners of a company for whom he worked.
PRINTING FIRM L

BACKGROUND TO COMPANY

Sales: Turnover 1976 - approximately £18,000
Number of Employees - the two partners in the business.

Age: The Company was formed in 1972.

Ownership and Control: The Company is a private partnership of two individuals. The Company has no structure insofar as the two partners are the sole employees of the Company.

Product Range: Design, film setting, and illustrative artwork.

Customer-mix: Most of their work is in the promotional area or designing signs for commercial enterprises.

Production Technology: The majority of their work does not require printing plant.

Company Performance: The firm's performance could not be verified since published accounts were not produced by the Company.

MANAGERIAL BACKGROUND

Age: Both partners were aged 29.

Educational Background: Both partners gained a number of "highers", and attended art college after their secondary education.

Employment Experience: Both partners joined the same advertising agency after leaving art college. After doing some "moonlighting" to supplement their earnings, they decided to set up their own business. At first they undertook a variety of tasks, including sign-writing. However, they have been able to expand their market into design and illustrative artwork. This work is often undertaken in conjunction with printers and plate-makers, printers often preferring to sub-contract to specialist firms with "artistic" expertise.

MANAGEMENT STRATEGIES

Company Development: The partners hope to concentrate their activities in the illustrative artwork sector.

Market Strategy: The partners believed that they had just become established in their field of activity, particularly as several printers had started to come to them for a number of jobs. At the time
of the fieldwork, the partners did not have to canvass for particular jobs as there was a steady stream of work into the Company.

**MANAGEMENT MOTIVATION**

The primary motivation of the partners was to maintain their independence and personal involvement in the artistic work of their Company. This attitude appears to have become more prominent as the Company has become more firmly established.
PRINTING FIRM M

BACKGROUND TO COMPANY

Size: Turnover 1976 - £84,000
Number of Employees - 11

Age: The Company was formed in 1910, and became incorporated in 1928.

Ownership and Control: The firm is a "close" Company of 5 shareholders who are descendants of the founder. Executive-control is by two brothers (grand-children of the founder) who are also Directors of the Company.

Product Range: Engraving and Copperplate printing.

Customer-mix: Both the general public and printing firms.

Production Technology: Specialist equipment for specialist process.

Company Performance: Net profitability 1976 - 6.2%
Gross profitability 1976 - 17.1%
Growth rate (sales) - a decline at current prices of 5.4%.

Net profitability is highly variable, with a loss being declared in two of the last five years, and net profitability of over 50% in another two years. Average net profitability of the previous five years was -0.3%.

Directors' Remuneration: The two Directors received £3,100 in the form of remuneration in 1976.

MANAGERIAL BACKGROUND

Age: 40

Educational Background: The Managing Director completed his secondary education, gaining several "highers".

Employment Experience: The Managing Director joined his family business after leaving school. His training included a course at a polytechnic college in copperplate printing and engraving. This course was completed on a part-time basis while he worked for his father. He succeeded his father in 1968.

MANAGEMENT STRATEGIES

Company Development: The Managing Director appeared to be content to "muddle through". Little thought appeared to have been directed to the future development of Company activities.
Market Strategy: The Company appeared to be production-oriented, with both brothers (Directors) engaged in the production (craft) process. Little effort was directed towards the sales function, and Company control systems appeared to be of a rudimentary nature.

MANAGEMENT MOTIVATION

The Company appeared to be in relative decline at the time of the fieldwork, but little effort appeared to be directed towards diversifying into new markets or expanding current markets. This appeared to be related to the Managing Director's (and his brother's) unwillingness to introduce management expertise in order to penetrate new markets. The need to maintain family control over management processes appeared to be dictated by the constraints imposed by family ownership.
PRINTING FIRM N

BACKGROUND TO COMPANY

Size: Turnover 1976 - approximately £400,000
Number of Employees - 30

Age: The Company was formed in 1935, and became incorporated in 1951.

Ownership and Control: There is effective unity of ownership, insofar as the Managing Director and his wife own over 50% of the firm's shares. Executive control is shared between the Managing Director and the sales manager (who is not related to the Managing Director).

Product Range: The majority of the firm's business now relates to the printing of tee shirts and printing on other fabrics.

Customer-mix: Sports shops, and textile companies.

Production Technology: Screen process printing.

Company Performance: Net profitability 1976 - 44.4%
Gross profitability 1976 - 44.4%
Detailed sales data was not available for the previous three years, but turnover rose by 21% between 1975 and 1976, that is a rise of 7% in real terms.
Net profitability has risen steadily throughout the 1970s.
Average net profitability (1973-1976) was 34.4%.

Directors' Remuneration: The total remuneration to the 3 Directors in the Company was £21,800 in 1976.

MANAGERIAL BACKGROUND

Age: 41

Educational Background: The Managing Director completed his secondary education by gaining five "highers".

Employment Experience: The Managing Director took up an apprenticeship in a relatively large company after leaving school. Here he became skilled in the screen printing process. This process was in contrast to the letterpress operated by his father. However, he wanted to work on his own account, and although the activities of his father's firm and his skill were not necessarily equivalent, the prospect of running the family business in the future acted as the motivation to enter the family business. He joined his father in 1963, and assumed control in 1968 when his father died. He had started screen printing within the family business prior to his father's death, but this activity has now almost completely replaced the former jobbing activities of PF N.
MANAGEMENT STRATEGIES

Company Development: The Managing Director sought to expand the Company's markets into the printing on other fabrics (in addition to tee shirts). The Company's sales director was previously employed in the textiles industry, and his expertise with fabrics has enabled the Company to enter markets which would have been impossible without the additional expertise of the sales manager.

Market Strategy: The Company has both specialised in the screen printing process, and yet diversified into a number of markets - some of which are quite remote from activities traditionally considered as "printing".

MANAGEMENT MOTIVATION

The Managing Director's decision to enter his family business appears to have been motivated by a desire for independence. However, he had become an active member of SMPS and other employers organisations such as the Chamber of Commerce at the time of the fieldwork. This suggests that his motivations related to his status within the business community. Recent expansion of Company markets was viewed as a means of increasing his firm's status (and thereby his personal status) in the local community.
PRINTING FIRM 0

BACKGROUND TO COMPANY

Size: Turnover 1976 - approximately £20,000
Number of Employees - 3

Age: The Company was formed in 1926.

Ownership: The Company is a private business owned by the Managing Director, who also performs all executive-tasks.

Product Range: General (jobbing) activities, such as price lists, programmes, tickets, and so on.

Customer-mix: Generally commercial enterprises, social clubs and societies.

Production Technology: The plant is relatively dated (at least 15 years old) and is restricted to letterpress operations. The business does not have the capacity for colour printing.

Company Performance: Performance could not be verified by published accounts.

MANAGERIAL BACKGROUND

Age: 61

Educational Background: The Managing Director left school with few formal qualifications.

Employment Experience: The Managing Director entered his father's business after leaving school. His management experience and training has been limited to the family business.

MANAGEMENT STRATEGIES

Company Development: The owner-manager intended to realise the Company's assets at a time when he is able to retire. He suggested that it was unlikely that anyone would be willing to buy the business as a going concern, particularly because significant investment was necessary in order to re-equip the business to meet the changing needs of customers (particularly for colour printing).

Market Strategy: The Managing Director did not actively canvass for additional work, and the Company was heavily dependent on repeat orders for their work-load. The Managing Director simply required the business to present him with a living for a further 4-5 years, until he was able to retire.
Operating Policies: The Company's control system was of a rudimentary nature, designed to conform to the requirements of fiscal authorities rather than the efficient functioning of the business.

MANAGEMENT MOTIVATION

Management motivations with respect to Company development were limited to continued employment in the business until he is able to retire. The Managing Director had no children, and therefore there was no question of family succession.
PRINTING FIRM P

BACKGROUND TO COMPANY

Size: Turnover 1976 - £751,000
Number of Employees - 40

Age: The Company was formed in 1961.

Ownership and Control: The Company was taken over in 1969, and is now a subsidiary of a major printing company. Executive control is performed by a management team who do not have a stake in the firm's ownership.

Product Range: Complex mathematical typesetting.

Customer-mix: The majority of the firm's work comes from its parent Company in England, although it exports about 40% of its produce to West Germany and the USA.

Production Technology: Specialist machinery for specialist function.

Company Performance: Net profitability 1976 - 34.8%
Gross profitability 1976 - 32.2%
Growth rate (sales) - 30.7%

Profitability has been high throughout the 1970s. The average net profitability (1973-1976) was 36.6%.

MANAGERIAL BACKGROUND

Age: 35

Educational Background: The Managing Director has a University degree in Economics.

Employment Experience: The Managing Director joined Reed International after leaving university. After four years with that company he joined the management team of PF P's parent Company. He advanced to sales manager of the parent Company in 1973, and was appointed Managing Director of PF P in 1975.

MANAGEMENT STRATEGIES

Company Development: Financial and market targets are set by the parent Company. At the time of the fieldwork, these were based on maintaining real growth of approximately 4% per annum. However, the Company had exceeded its targets in the previous two years (the time of the present Managing Director's tenure).
Market Strategy: The Company has specialised in a sector of the market for which there is increased demand for its services of a specialised nature. The Company does little printing as such and is mainly concerned with complicated mathematical typesetting. This development involved the Company in purchasing new plant, building a new factory (in 1974) and recruiting more personnel.

Operating Strategies: Unlike other firms included in our study, the financial objectives of this business were quite specific, that is, "to achieve rapid growth and at the same time to obtain a return on capital as the most profitable firm in the industry". Departmental managers were set budgets, and were given considerable autonomy in running their departments.

MANAGEMENT MOTIVATION

The Managing Director suggested that his ultimate aim was higher management in the parent Company. To this end, he felt he had to more than better the financial targets set by the parent Company. Consequently his ambition for self-fulfilment and personal security appeared to be related to the adoption of growth strategies within its specialised market. This meant that the Company had to extend greater effort in export markets.
The bibliography consists of works cited in the thesis. It is not a comprehensive list of works relating to the study of small businesses.

Readers who require a more comprehensive bibliography of small businesses are advised to refer to 'Bibliography of Small Business Research', published by the London Business School in 1980.


Bruce, R., (1976), The Entrepreneurs: Strategies, Motivations, Successes and Failures, (Wharley End: Libertarian Books Ltd.).


Collins, J. and Roberts, J., (1975), "Reasons Why Small Businesses Have Gone Into Liquidation or Bankruptcy", (Mimeograph: South-West Regional Management Centre, Bristol Polytechnic, June).


Fayol, H., (1949), General and Industrial Administration, (London: Sir Isaac Pitman & Sons Ltd.).


Hall, W., (1978), "Banks and the Perils of the Equity Gap", Financial Times, 9th June, p.27.


Lipset, S.M. and Bendix, R., (1964), Social Mobility In Industrial Society, (Berkeley: University of California Press).


Michels, R., (1949), Political Parties, (Glencoe Ill: Free Press).


Smith, N.R., (1967), *The Entrepreneur and His Firm*, (East Lansing: Michigan State University, Graduate School of Business Administration).


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IF (ENG=1 AND CHPC = 11)GRPC=9
IF (ENG=1 AND CHPC = 12)GRPC=1
IF (ENG=1 AND GRPC = 21)GRPC=8
IF (ENG=1 AND GRPC = 22)GRPC=2
IF (ENG=1 AND CHPC = 23)GRPC=12
IF (ENG=1 AND CHPC = 31)GRPC=11
IF (ENG=1 AND CHPC = 32)GRPC=10
IF (ENG=1 AND GRPC = 33)GRPC=6
IF (ENG=1 AND CHPC = 40)GRPC=3
IF (ENG=1 AND GRPC = 50)GRPC=4
IF (ENG=1 AND CHPC = 50)GRPC=9
IF (ENG=3 AND GRPC = 0)GRPC=11
IF (ENG=3 AND GRPC = 11)GRPC=8
IF (ENG=3 AND GRPC = 12)GRPC=13
IF (ENG=3 AND GRPC = 21)GRPC=7
IF (ENG=3 AND GRPC = 22)GRPC=5
IF (ENG=3 AND CHPC = 23)GRPC=2
IF (ENG=3 AND CHPC = 31)GRPC=10
IF (ENG=3 AND GRPC = 32)GRPC=12