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A Strategic View of Export Performance:
A New Zealand Perspective

Valerie Jean Lindsay

A thesis submitted in fulfilment of the requirements for the degree of
Doctor of Philosophy,
Marketing and Strategic Management Group,
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Above all, my thanks go to my family, John, Anthony and Rebecca and my mother, who have stood by me all this time and provided the practical and moral support needed on this long journey.
DECLARATION

This declaration outlines the incorporation of work already submitted for other purposes.

The data used for Stages 1 and 2 of this thesis were collected for use in a project in part fulfillment of the requirements for an MBA degree at Victoria University of Wellington, New Zealand. Analytical approaches to the data in this thesis have not been repeated elsewhere.

The data for Stage 3, Phase 1, was collected and used by the researcher to write and publish a report for the New Zealand Trade Development Board, entitled: “Manufacturing Exporters: Framework for Success”, 1990. This research thesis utilises different and more sophisticated analytical techniques, and considerably extends the earlier work.

Ten of the 148 case studies from Stage 3 have been used to provide data for a publication in a related area. The publication is: Lindsay, V. J. and Arthur, M. B., (1998), Bridging the gap between exporters and their markets: A conceptual model, In M. A. Rahim, R. T. Golembiewski, and C. C. Lundberg (Eds.), Current Topics in Management, 3: 365-382, JAI Press, Greenwich, CT.
Investigations into export performance have generated considerable knowledge about the construct, but they continue to identify research issues. These include the identification, and interaction, of the antecedents of export performance; understanding of the process and dynamics involved in export performance; the need for explanatory models; and the need for consistent and relevant research approaches.

In an investigation of New Zealand export firms, the study addresses these concerns by utilising a two-stage, case study based research approach that results in the development of a conceptual model of export sales performance. The model is tested qualitatively and quantitatively, in a longitudinal study spanning six years. The conceptual model differs from existing models of export performance in a number of important respects, and thus contributes to theory relating to export performance in the following ways.

The model highlights the central role of strategy process, extending current views of the role of strategy in export performance. This is reflected by two key predictor variables, export strategy implementation and competency management, not prominent in existing export performance models. Firm-level strategy determined firms’ relative emphasis on domestic versus export sales, suggesting a contingency dimension, associated mainly with changing external environments. Complex multivariate relationships were identified, through the use of the qualitative research software programmes, Nudist and Decision Explorer, not previously used together in export performance research. Implications for management, policy-makers and further research were identified from the results of the study.
This research was undertaken for four principle reasons. First, it was intended to address the research gaps and criticisms associated with export performance noted in the literature, through the development and investigation of specific research questions. Specifically, the research objectives were:

To identify the variables that relate to export sales performance of New Zealand exporters, and distinguish between successful and unsuccessful exporters.

To conceptualise these export sales performance variables and their interrelationships in a model of export performance.

To investigate the changes in these variables and their interrelationships in exporting firms over a six-year period.

Second, the research aimed to provide insights into export performance for managers of exporting firms. Managers’ requirements identified in the literature include an understanding of the factors leading to successful and sustainable export performance, and perspectives on the ways in which these may be influenced. Third, the research was directed at resolving some of the questions on exporting and exporting firms raised by government policy-makers and implementers of government policy. Fourth,
the research aimed to identify new areas for research, arising from study and from new insights on existing research.

Research into exporting, and particularly export performance and success, is plentiful, but much of the literature concludes that it is poorly developed. For example, Katsikeas (1994) claims that “there is a dearth of empirical research concerned with the systematic examination of those elements that mark a firm’s export competitive profile” (p35). In an extensive review of the exporting literature, Aaby and Slater (1989) concluded that very few solid conclusions could be drawn from the published research. A variety of causes have been attributed to these deficiencies, with most being based on inadequate conceptualisation and methodologies employed (Leonidou, 1995b). A number of researchers now argue for more conceptual input into the design of export research and for more in-depth, focused research methods (e.g. Cavusgil and Zou, 1994; Matthyssens and Pauwels, 1996). These approaches would enable a greater understanding of export performance and the ways in which the variables are involved (Aaby and Slater, 1989). The study was limited in utilising only measures relating directly, or indirectly, to export sales performance, rather than export performance per se. Reasons for this are discussed in Chapter 3. Export performance measures are the subject of considerable debate in the literature (e.g. Kirpalani and Balcombe, 1989), and this issue is discussed further in Chapter 2.

One of the two main areas on which the study concentrated related to the limited involvement of strategy, particularly firm-level strategy, in research on export performance (Katsikeas, 1994; Leonidou and Katsikeas, 1996). This is notion is developed further by others who call for researchers to consider the dynamics of export process (e.g. Chetty and Hamilton, 1996) and the influence of time, captured
by longitudinal studies (Aaby and Slater, 1989). These, and other, authors note that existing models of export performance are static and linear and lack explanation. This lack of dynamic process-orientation of research is compounded by the simplistic and often unidimensional analyses of variables associated with export performance (Leonidou 1995b), and the claim that variables are often chosen randomly, rather than relying on a theory-building approach (Andersen, 1993). This reported treatment of variables led to the second main thrust of the research, which links directly to the first; this is the attempt at theory-building through the development of a conceptual model which captures the complex relationships between export performance variables and provides some tentative explanation for the construct. More specifically, the research uses a theory-building case study approach, since this enabled the research issues and questions to be addressed. This approach is also what the export literature has determined as necessary (e.g. Andersen, 1993; Katsikeas, 1994). The rationale for the approach is discussed further in Chapters 2 and 3. The study draws heavily on the export performance literature. In particular, it uses those studies, which highlight the limitations of current knowledge in this area in order to develop the research objectives and to guide the research methodology.

However, while the study recognises the call for more conceptually-based qualitative approaches to assist in-depth understanding of the topic, consideration was also given to the potential weaknesses of these approaches, particularly when used alone (Miles and Huberman, 1994). These weaknesses relate to various forms of bias, often small sample size, and differences in situational contexts between first and last case studies.
Quantitatively based studies constitute the majority of research articles on exporting (Aaby and Slater, 1989). Reasons for this include the relatively low cost and time involved and the statistical replication possible from such approaches (Aaby and Slater, 1989; Miles and Huberman, 1994). In addition, because of the multidimensional nature of export performance, the need to understand the relationships between variables, by the use of multivariate analyses has been promoted (Diamantopoulos and Cadogan, 1996; Souchon and Diamantopoulos, 1996; Matthyssens and Pauwels, 1996). The key weaknesses relate to the limitations on understanding and conceptualisation outlined above. A detailed discussion of the relative strengths and weaknesses of the two main approaches applied to export research, those which are quantitatively based, and those which are qualitatively based, is presented in Chapter 2.

In order to capture the strengths of both quantitative and qualitative approaches and to minimise the weaknesses, a number of researchers suggest that optimal outcomes are obtained using both quantitative and qualitative methods (e.g. Miles and Huberman, 1994; Souchon and Diamantopoulos, 1997). This is a logical conclusion, given the general agreement among researchers that export performance measures should include a combination of quantitative and qualitative measure (e.g. Matthyssens and Pauwels, 1996) (see Chapter 2). Use of the two approaches in the same study offers a more rigorous and meaningful outcome than could be achieved by using either alone. For example, preliminary exploratory qualitative research can be followed by more systematic, quantitatively-based research, as illustrated by Kerlinger (1964) p. 388 (quoted from Winklhofer and Diamantopoulos, 1996), who suggests that an objective might be to “discover significant variables in the field situation, to discover
relations among variables, and to lay a groundwork for later, more systematic and rigorous testing of hypotheses.”

Following this philosophy, this study incorporated both qualitative and quantitative research approaches, utilising case study method. Qualitative methods were used to develop a deep understanding of export performance and associated variables, resulting in conceptualisation and theory-building. From this qualitative base, quantitative approaches were then applied over a longitudinal dimension, in order to enhance the understanding of relationships between variables and to both test and further develop the theoretical assumptions. The longitudinal study enabled three time points to be analysed over a six-year period, from a sample of exporters.

Published research has involved three main designs, each seeking to provide particular perspectives of the export performance. It appears from the literature, that few of these designs have been used together to produce a comprehensive single-study result. Because they offer complimentary perspectives of the research problem, it was considered beneficial to the study outcomes to incorporate these three research designs in the study. These designs are: the proposal of conceptual models (Cavusgil and Zou, 1994), the association of success characteristics with firms from a predetermined sample judged to be successful (Baker and Abou-Zeid, 1982; Ughanwa and Baker, 1989), and the differentiation of successful from unsuccessful firms from a cross-sectional sample (Hooley and Lynch, 1985). In summary, the study used a two-stage approach, based on conceptual model building and longitudinal testing of the model, and incorporated all three design elements discussed above, aiming to provide a fully integrated, in-depth investigation into export sales performance. A key
factor, which facilitated the operationalisation of this research approach, was the use of two computer software programmes, NUD-IST and Decision Explorer. NUD-IST is a computer-assisted qualitative data analysis software (CAQDAS) programme designed to assist in the organisation of data and the exploration of the relationships between data and ideas (Richards, 1995). It is well suited to the analysis of qualitative studies with large amounts of data and for longitudinal projects. Richards (1995) asserts that the use of CAQDAS changes the balance between organisation and creativity, enabling the exploration and creative processes to become freer and enhanced because the data organisation is made easier. It also provides a measure of internal validity, not easily achieved with manual methods. The potential for data to be combined and viewed in new ways through the use of CAQDAS provides a versatility that can create opportunities for ongoing investigation of existing and additional qualitative information, by the researcher and others.

While relatively new to the field of qualitative research, CAQDAS have both proponents and those who report shortcomings (e.g. reviewed by Burgess, 1995). This debate is covered in more detail in Chapter 3, while Chapter 6 includes a discussion of the advantages and disadvantages of using both CAQDAS and Decision Explorer in the context of the study of export sales performance. The main shortcomings of NUD-IST and other CAQDAS noted in the literature are: the length of time involved in preparing the data and entering them into the system, and the concern that a computer-based process may detract from creative researcher input (Burgess, 1995). On balance, it was felt that the use of NUD-IST provided considerably more opportunity for interpreting and understanding the data than would
have been possible using a manual system and thus, formed a central part of the research approach.

Use of the other software programme, Decision Explorer, built on the NUD-IST analyses. It provided an additional level of data organisation that facilitated the building of a conceptual model of export sales performance. Decision Explorer is a conceptual mapping tool that enables concepts (or variables) to be arranged in a spatial way that shows the linkages and interrelationships between them. This starts to address one of the major criticisms of research methodology associated with export performance research; that is, that, while numerous variables have been identified and related to export performance or success, they have seldom been integrated or considered as combined influences (Leonidou and Katsikeas, 1996). Notable exceptions are the studies of Cavusgil and Zou (1994), which used path analysis to try to determine the relationships between export marketing strategy variables, Diamantopoulos and Schlegelmilch (1994), which investigated combined manpower variables, and Axinn et al (1996) which looked at the joint impact of product and market variables on export performance. In this study, conceptual mapping of the variables enabled these relationships to be determined and analysed in the context of the organisation and analysis of data in NUD-IST, as well as the original qualitative material. The mapping process also enabled changes occurring over time to be noted and spatially represented. The research was triangulated by this three-way utilisation of the data.

As with NUD-IST, and other CAQDAS, the use of Decision Explorer (or its earlier version, COPE) in business research is relatively limited, being confined mainly to
cognitive mapping contexts e.g. Jenkins and Johnson (1997) used COPE to study managerial cognition. It appears that the combined use of NUD-IST and Decision Explorer in the field of export research has not been demonstrated before. This study provides experience of this dual approach and an opportunity to note associated advantages and disadvantages, which may assist other researchers in the field.

Particular merits and disadvantages associated with the use of Decision Explorer in the context of the study are discussed in detail in Chapter 3. The key issues are: the mapping process is subjective and results, therefore, need to be interpreted in this light; for this reason, there needs to be strong data supporting the mapping decisions; the analyses resulting from Decision Explorer have a relatively limited contextual component, and, thus, need to be interpreted in the light of an in-depth understanding of the subject and situation; the resulting maps may be quite complex, with many linkages and spatial relationships represented (an advantage of Decision Explorer, however, is that the maps can be disaggregated to allow more ‘manageable’ viewing and analysis). Notwithstanding these limitations, the value that Decision Explorer was able to add to the NUD-IST analysis, in terms of defining multidimensional aspects of the export sales performance construct, and the relationships between variables, fully supported the use of this software package. The combined use of NUD-IST and Decision Explorer was thought to provide more rigorous and meaningful outcomes than using either software package alone. Discussion of the experiences gained and lessons learnt from this approach are presented in Chapter 6.

One of the notable features about research on exporting and export performance is that it is mostly centred on the US and Europe. Many researchers have studied exporting from a country perspective (e.g. Moon & Lee, 1990; Caughey and Chetty,
1994) and the exporting country has been claimed to be a significant factor in export performance (Das, 1994). However, it could be argued that exporting country might not be relevant to export performance since many factors involved are common across countries at one time or another. In order to ascertain the importance of home country properly, research would have to incorporate detailed cross-country comparisons, and be controlled for confounding variables and various factors, such as economic development levels, levels of government assistance etc. Diamantopoulos and Schlegelmilch (1994) reported a study of cross-country comparisons in relation to export manpower, controlling for variables such as industry and size and using a specific controlling variables, in this case, export experience.

Because of the uncertainties concerning confounding variables and factors, and the fact that this was not a cross-country comparative study, the New Zealand context was not considered as a country-specific factor. However, an important part of the study was the investigation of the role of firms’ external environments, particularly the national (New Zealand) environment, on export sales performance. This was considered importance because external environment has been noted as a relevant export performance variable in the literature, although studied little relative to internal factors (Aaby and Slater, 1989; Bijmolt and Zwart, 1994; Cavusgil and Zou, 1994). In addition, analysis of the external environment also plays an important part in a firm’s overall strategy development (Johnson and Scholes, 1993), and, by implication, to a firm’s export strategy development.

Very little research has been conducted on exporting by New Zealand firms, and the influence of the New Zealand (national) environment (with the recent exception of
work by Chetty et al (e.g. Caughey and Chetty, 1994; Chetty and Hamilton, 1996). At the time when the study commenced (late 1988), New Zealand was into its fourth year of economic reform (Birks and Chatterjee, 1997, pp104-107). The economic policy was based on monetarist principles and the notion of the free market. In practice, this led to major restructuring, not only of the public sector, but also the private sector.

Key changes included: the removal of subsidies to firms, including export incentives; the removal (gradual, in some cases) of tariff protection resulting in import deregulation; the application of 'user pays' for government services, including export-related services, such as market information; and some labour market reform, which generally favoured employers, and also had implications for the type and availability of labour for export firms. As a result of efforts to reduce inflation, interest rates rose sharply (>20% lending rate), along with exchange rates. All of these changes occurred over a relatively short period of time and the extent of change for many firms, particularly small- and medium-sized (SME) manufacturing exporters, was substantial.

It was in this context that the study commenced, with an investigation targeted at this population of firms - SME manufacturing exporters. The first part of the study was inspired by the interest of a government-supported agency, the Market Development Board, charged with administering the only export development programme still operating. The nature of the economic changes, their rapidity and their likely long-term impact on exporters extended the initial scope of the study to include a longitudinal investigation of a sample of exporters. The concurrent investigation of this longitudinal behaviour and performance of exporters with changes (rapid and
unusual, at that time) in their economic environment provided a unique research opportunity.

The study contributes to the literature in three main ways. First, it provides an in-depth, qualitative and longitudinal approach to export performance research that is widely called for by other researchers (e.g. Aaby and Slater, 1989; Cavusgil and Zou, 1994; Leonidou and Katsikeas, 1996). It should be noted, however, that the construct, export performance, is limited in this study to export sales performance, for reasons discussed elsewhere in this report. Second, and most important, the study contributes to theory on export performance, through the development of a conceptual model of export sales performance, which has strategy process as its core. The model determines the interrelationships between variables and provides a tentative explanation for export sales performance. These, and other, aspects build on existing models of export performance in a number of ways, as discussed in detail in Chapters 4 and 6. Third, the study contributes to the understanding of export sales performance in the context of time, and of changing external influences.

The study was designed to build a logical chain of evidence (Yin, 1994) from existing perspectives of export performance, though a theory building process to the development and application of a conceptual model of export sales performance, which encapsulates the impact of time. The broad structure of the report is as follows. Chapter 2 is review of the literature, undertaken to gain an understanding of the key issues and processes associated with exporting, and, in particular, with export performance. A critical assessment of the literature forms the concluding section of this chapter; this discusses the main research issues arising from the literature, and the
implications for theory building. This chapter also forms the basis for the research questions and objectives that are described in Chapter 3. The research approach, design and method used for the study are discussed in detail in Chapter 3. In Chapters 4 and 5 the results are presented and discussed. Chapter 4 deals with Stage 1 the conceptual model-building component and Chapter 5 presents the Stage 2 results (application of the conceptual model and longitudinal study). Chapter 6 draws conclusions from the preceding chapters and discusses the contribution of the study to the literature on export performance. Chapter 6 also presents a discussion of the limitations of the study, and highlights the implications of the research and its findings for managers, government policy-makers and for further research.
The review of the literature covers three areas. First, the context of exporting is briefly discussed, in relation to the global and New Zealand environment; the role of small- and medium-sized (SME) exporters is also discussed. Second, and forming the main body of this chapter, the literature on export performance is reviewed. Export performance cannot be viewed in isolation, and so the scope of the review includes other related aspects of export behaviour and internationalisation. Part of this section includes a discussion on the different methodological approaches used by researchers in the study of exporting and export performance, since the literature draws attention to the methodologies applied. The large literature on internationalisation has not been covered in any depth. This is not because it is irrelevant to the topic; on the contrary, there are potentially important, but minimally researched, relationships between export performance and internationalisation. These are discussed briefly in the third part of the chapter. However, limitations on the length of this study have precluded a separate discussion of internationalisation. Similarly, while non-exporters are not involved in the study, parts of the literature on non-exporters are relevant; this literature is included in the review as it relates to export performance of firms, rather than being reviewed as a separate topic. Third, the chapter concludes with a section on research issues and theoretical implications arising from the review. This last section provides the main critical assessment of the literature, as it summarises and

Footnote:
1 Export performance and export success are often used interchangeably in the literature, although they are not equivalent. Export performance relates to performance of exporters, both positive and negative. Export success refers specifically to successful performance. These distinctions are made explicit in this study.
classifies the key issues discussed in the earlier parts of the chapter. Where particularly pertinent, critical discussion and theoretical implications of the literature are also included elsewhere in the chapter.

2.1 Section A. Context of Exporting

This section briefly examines the context of exporting within changing global and national environments, and takes particular note of the role of SMEs in exporting and international business.

2.1.1 Importance of Exporting for Nations

The contribution of exports to total world economic activity has increased considerably over the last two decades, and, according to World Bank (1995) estimates, accounts for approximately 20% of world gross domestic product (Leonidou and Katsikeas, 1996).

Research interest in exporting has been driven by a number of factors over this period. For example, trade deficit pressures of many countries have resulted in governments’ encouragement of firms to export. Exporting has become an important mechanism for growth and long-term viability for individual firms (Webster and Deshpande, 1990), particularly as economies have become more open and imports have increased. Exporting also has lower requirements for firm resources, as compared with alternative types of international business, such as joint ventures or overseas manufacturing, therefore offering a more attractive method of foreign market entry and expansion (Katsikeas, 1994; Leonidou, 1995c).
Another factor promoting the increasing importance of exporting is the need for countries in both the developed and developing world to become more outward looking in business orientation, as the forces of globalisation gain greater force (Albaum and Peterson, 1984; Barrett and Wilkinson, 1985; Douglas and Craig, 1992; Yeoh and Jeong, 1995). Factors that have contributed to the gradual dismantling of national borders include: advances in transportation and communications, economic integration, liberal trade policies, growing domestic economies, and a state of relative world peace (Leonidou, 1995b). Douglas and Craig (1992) maintain that global changes have been responsible for the increasing engagement of firms in exporting activities.

In macro-economic terms, exporting enables countries to increase and diversify their foreign exchange reserves, provide employment, create forward and backward linkages, and, ultimately, gain a higher standard of living (Czinkota, Rivoli and Ronkainen, 1992). From a micro-economic perspective, exporting can help individual firms develop a competitive advantage, improve their financial position, increase capacity utilisation, and raise technological standards (Terpstra and Sarathy, 1994).

In a number of developed countries, especially the USA, as well as developing countries, such as Mexico (Jaffe and Pasternak, 1994) and Israel (Jaffe et al, 1988), the vast majority of exports of manufactured goods is accounted for by large firms. But, given that exporting is the least resource-intensive method of foreign market entry, it is surprising that smaller firms do not export more. Thus, many governments (Reid and Rosson, 1987; Yang, Leone and Alden, 1992) have highlighted the
importance of exporting for small- and medium-sized firms, from the perspective of both export volume growth and employment. One of the countries that is looked to as a model for small- and medium-sized exporting is Germany, whose economic miracle was apparently built on the success of small exporters (The Economist, 1993). Definition of firm size, however, is an issue. For example, small in German terms may represent large in other countries such as New Zealand, Ireland (Birley and Bridge, 1987) or Finland. In addition, small firms tend to grow by shifting, or expanding operations offshore, rather than increasing export activities (Holstein et al, 1988), so growth in exports becomes reliant on smaller firms.

2.1.2 Importance of Exporting to New Zealand

The contribution of exports to New Zealand's gross domestic product has increased over the last two decades (Statistics New Zealand, 1997). Export contribution has been found to be associated with size of country (Czinkota, Rivoli and Ronkainen, 1992). According to these authors, small nations are more likely to have higher export contributions to GDP than larger countries, as a result of both limited domestic market availability and, in many cases, relative geographic proximity to other countries.

New Zealand policy-makers suggest that the relatively small size of the domestic market is a stimulus to exporting, which is thus seen as an important mechanism for national economic and business growth (Tradenz, 1994). New Zealand has had a long history of exporting high volumes of primary products to a limited number of psychologically close countries, in particular the United Kingdom. However, over the last twenty-five years, there has been a major adjustment in this situation, and the
country has seen a significant diversification in both products and markets, with growth in exports particularly to the Asian region (Statistics New Zealand, 1997).

In accordance with observations in other countries, it is the larger firms in New Zealand that tend to export the greatest volumes of products and services, but the potential of small firms is well recognised. This is evidenced by an increasing involvement of small- and medium-sized firms in exporting, particularly in the secondary and tertiary sectors (personal communication, Tradenz - New Zealand Trade Development Board).

2.1.3 Exporting and Small and Medium-Sized Enterprises

There is no single agreed criterion for defining the size of small- and medium-sized enterprises; different criteria are used in different countries. In the UK, a maximum of 200 personnel is consistent with Department of Industry criteria (Crick and Katsikeas, 1995). In the US, firms of 500 employees may be regarded as small, and of 1000 as medium-sized. In New Zealand, small firms are defined as those employing no more than 50 people (Ministry of Commerce, 1997). Not only do different governments have different criteria for the size of SMEs, but the perceptions of firms themselves often differ; for example, in the UK knitwear industry, firms in excess of 100 employees were considered by the participating firms to be large (Crick and Katsikeas, 1995).

The growth trend of SMEs, evident since the early 1970s (Sengenberger, 1990), occurred mainly because of macro-level changes in areas such as consumer preferences, manufacturing and information technology, and competitive conditions
(Rennie, 1993). SMEs are expected to assume a major role in both trade and employment in the western world in the next two decades (Rennie, 1993).

2.2 Section B. Review of the Literature

The first part of this section deals with principle research approaches used in research on exporting and export performance. The remainder of the chapter reviews the literature on export performance, including other aspects of exporting as they relate to the topic. Table 2.1 summarises the research topics and the main studies discussed in the literature review.

<table>
<thead>
<tr>
<th>Broad Research Area</th>
<th>Specific Research Area</th>
<th>Main Studies (Year)</th>
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<tbody>
<tr>
<td>Export Marketing Strategy</td>
<td></td>
<td>Cavusgil &amp; Zou (1994); Axinn et al (1966)</td>
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<tr>
<td>Export strategy vs firm strategy</td>
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<td>Aaby &amp; Slater (1989); Bijmolt &amp; Zwart (1994); Cavusgil &amp; Zou, 1994</td>
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<td>Importance of domestic market</td>
<td>Aaby &amp; Slater (1989); Porter (1990); Bonaccorsi (1992); Cartwright (1993); Rennie (1993); Rugman &amp; Verbeke (1993); Calof (1994); Oviatt &amp; McDougall (1994); Leonidou (1995b); Chetty &amp; Hamilton (1996) Knight &amp; Cavusgil (1996)</td>
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<td>Marketing Strategies</td>
<td>Kirpalani &amp; Maclntosh (1980); Tesar &amp; Tarleton, 1982 Cooper &amp; Kleinschmidt (1983); Aaby &amp; Slater (1989); Douglas &amp; Craig (1989); Bijmolt &amp; Zwart (1994);</td>
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<td><strong>Market Development</strong></td>
<td>Kirpalani &amp; MacIntosh (1980); Piercy (1981); Burton &amp; Schlegelmilch (1987); Kaynak &amp; Erol (1989); Bourandas &amp; Halikias (1991); Leonidou &amp; Katsikeas (1996); Cavusgil &amp; Zou (1994); Katsikeas (1994)</td>
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<td><strong>Export Performance</strong></td>
<td>Bilkey (1978); Miesenbock (1988); Aaby &amp; Slater (1989); Diamantopoulos &amp; Schlegelmilch (1994); Axinn et al (1996); MatthysSENS &amp; Pauwels (1996); Aaby &amp; Slater (1989); Cavusgil &amp; Zou (1994); Styles &amp; Ambler (1994); Yeoh &amp; Jeong (1995); Axinn et al (1996)</td>
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<td><strong>Export Performance Measures</strong></td>
<td>Cooper &amp; Kleinschmidt (1985); Aaby &amp; Slater (1989); Kirpalani &amp; Balcombe (1989); Lee &amp; Yang (1991); Cavusgil &amp; Zou (1994); Diamantopoulos &amp; Schlegelmilch (1994); Thach &amp; Axinn (1994); MatthysSENS &amp; Pauwels (1996); Souchon &amp; Diamantopoulos (1997); Aaby &amp; Slater (1989); Cavusgil &amp; Zou (1994); Bijmolt &amp; Zwart (1994);</td>
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<td><strong>Firm Characteristics</strong></td>
<td>Aaby &amp; Slater (1989); Cavusgil &amp; Zou (1994); Bijmolt &amp; Zwart (1994);</td>
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<td><strong>Firm Size</strong></td>
<td>(Katsikeas &amp; Morgan, 1994); Bonaccorsi (1992); Calof (1994); Calof &amp; Viviers (1995);</td>
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<tr>
<td><strong>Investment</strong></td>
<td>Chetty &amp; Hamilton (1996)</td>
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<td><strong>Export Experience</strong></td>
<td>Kirpalani &amp; MacIntosh (1980); Tesar &amp; Tarleton (1982); Aaby &amp; Slater (1989); Cavusgil &amp; Zou (1994); Ogbuehi &amp; Longfellow (1994); Katsikeas &amp; Morgan (1994);</td>
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<td><strong>Age of Firm</strong></td>
<td>Czinkota (1984); Das (1994); Leonidou (1995b)</td>
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<td><strong>Export Intensity or Involvement</strong></td>
<td>Kirpalani &amp; MacIntosh (1980); Diamantopoulos &amp; Inglis (1988); Kleinschmidt &amp; Cooper (1988); Katsikeas (1994);</td>
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<td><strong>Firm Resources</strong></td>
<td>Forsgen (1989); Calof (1994); Cavusgil &amp; Zou (1994); Diamantopoulos &amp; Schlegelmilch (1994)</td>
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<td><strong>Export Stimuli &amp; Motivation to Export</strong></td>
<td>BIlkey &amp; Tesar (1977); Cavusgil (1980); Johnston &amp; Czinkota (1982); Samiee, Walters &amp; DuBois (1993); Caughey &amp; Chetty (1994); Leonidou (1995a);</td>
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<td><strong>Organisational Structure &amp; Context</strong></td>
<td>Piercy (1983, 1985); Bijmolt &amp; Zwart (1994);</td>
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<td><strong>Firm Ownership</strong></td>
<td>Das (1994); Frost &amp; Jones (1994); Hart et al (1994)</td>
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<td><strong>Agent &amp; Distributor Support</strong></td>
<td>Rosson &amp; Ford, 1982; Bello &amp; Williamson, 1985; Cavusgil &amp; Zou (1994);</td>
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<td><strong>Links with Export Markets</strong></td>
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<td><strong>Firm Competencies</strong></td>
<td>Abdel-Malek (1978); Kaynak &amp; Kothari (1984); Denis &amp; Depelteau (1985); Hedlund &amp; Kverneland (1985); Aaby &amp; Slater (1989); Klein &amp; Roth (1990); Cavusgil &amp; Zou (1994); Katsikeas (1996);</td>
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<td><strong>Quality</strong></td>
<td>Cunningham &amp; Spigel (1971); Daniels &amp; Robles (1982) Joynt (1982); Burton &amp; Schlegelmilch (1987); Christensen, da Rocha &amp; Gertner (1987); Ughanwa &amp; Baker (1989);</td>
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<tr>
<td><strong>Technology &amp; R&amp;D, Product Uniqueness &amp; Intellectual Property Protection</strong></td>
<td>Pavord &amp; Bogart (1975); Cavusgil &amp; Nevin (1981); McGuiness &amp; Little (1981); Garnier (1982); Cooper &amp; Kleinschmidt (1985); Reid (1986); Sriram, Neelankavil &amp; Moore (1989); Rennie, 1993; Oviatt &amp; McDougall (1994); Moini (1995); Chetty &amp; Hamilton (1996); Knight &amp; Cavusgil, 1996;</td>
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<tr>
<td><strong>Market Knowledge</strong></td>
<td>Souchon &amp; Diamantopoulos (1996, 1997) – see also Market Research / Information</td>
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<td><strong>Readiness to Export</strong></td>
<td>Cavusgil (1990); Jaffe &amp; Pasternak (1994)</td>
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<td>Export Planning</td>
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<td></td>
<td>Cavusgil (1984); Daniels &amp; Robles (1985); Denis &amp; Depelteau (1985); Malekzadeh &amp; Nahavandi (1985);</td>
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<td>Managerial Factors</td>
<td>Aaby &amp; Slater (1989); Das (1995); Chetty &amp; Hamilton (1996); Diamantopoulos &amp; Schlegelmilch (1994)</td>
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<td>Managerial Characteristics</td>
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<td>Management Style</td>
<td>Cavusgil &amp; Godiwalla (1982); Barrett &amp; Wilkinson (1986); Leonidou &amp; Katsikeas (1996)</td>
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<td>Personal Contact with Buyers</td>
<td>Cunningham &amp; Spigel (1971); Kirpalani &amp; MacInnosh (1980); Rosson &amp; Ford (1980, 1982); Tesar &amp; Tarleton (1982); Leonidou (1989); Katsikeas &amp; Piercy (1990); Hart et al (1994); Katsikeas (1994); Crick &amp; Katsikeas (1995); Moini (1995)</td>
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<td>Bilkey &amp; Tesar (1977); Bilkey (1978); Cavusgil &amp; Nevin (1981); Cavusgil (1982); Garnier (1982); Cavusgil (1984); Barrett &amp; Wilkinson (1986); Miesenbock (1988); Aaby &amp; Slater (1989); Seifert &amp; Ford (1989); Moon &amp; Lee (1990); Buckley &amp; Brooke (1992); Katsikeas &amp; Piercy (1993); Leonidou (1995a, 1995b, 1995c)</td>
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<td>External Barriers</td>
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<td>Internal Barriers</td>
<td>Johanson &amp; Vahlne (1977); Rabino (1980); Cavusgil &amp; Nevin (1981); Reid (1981); Bauerschmidt, Sullivan &amp; Gillespie (1985); Culpan (1989); Diamantopoulos, Schlegelmilch &amp; Alipress (1989); Ghauri &amp; Kumar (1989); Sullivans &amp; Bauerschmidt (1989); Samiee &amp; Walters &amp; Samiee (1990); Bonaccorsi (1992); Jaffe &amp; Pasternak (1994); Katsikeas &amp; Morgan (1994)</td>
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</table>
2.2.1 Research Approaches in Exporting and Export Performance

A number of researchers claim that the research approaches of export performance studies have been dominated by positivist, quantitatively based methods (e.g. Aaby and Slater, 1989; Cavusgil and Zou, 1994). These have been helpful in addressing the ‘what’ and ‘how many’ associated with commonly investigated research issues, and have enabled significant results based on statistical sampling methods to be reported. It is largely from these types of studies that the majority of variables associated with export performance have been identified (Aaby and Slater, 1989).

However, it has been argued, particularly with the increasing evidence of inconsistencies in the results of such studies (e.g. Leonidou and Katsikeas, 1996), that when used alone these quantitatively based studies fail to provide insights into the processes and dynamics, or the context (the ‘how and ‘why’) of the subject. In other words, they fail to adequately explain export performance, or the role of its antecedents (Miesenbock, 1988; Aaby and Slater, 1989; Cavusgil and Zou, 1994). This has led to recognition of the need to incorporate more qualitatively based methods into export research. For example, Leonidou (1995b) notes that personal interviews in export research offer more insight into the subject than mail surveys, as the principle data collection method, because there is insufficient in-depth understanding of the subject; personal interviews allow deeper exploration of the issues concerned. Katsikeas (1994) suggests that data-reduction techniques should be used for data analysis since these involve the researcher in identifying patterns of possible explanation and in creative assessment of the data in a more holistic way than is possible with quantitative techniques (Miles and Huberman, 1994, p6).
There have been relatively few published qualitative studies of export performance, with recent exceptions from Winklhofer and Diamantopoulos (1996) and Diamantopoulos and Cadogan (1996), and even fewer longitudinal studies (an example is the study by Gomez-Mejia (1988), on human resource strategy in relation to export performance). Furthermore, only limited incorporation of the environmental context in which exporting takes place has been made in the literature (Bijmolt and Zwart, 1994). Two studies that have investigated external influences on export performance, are those of Cavusgil and Zou (1994) and Yeoh and Jeong (1995). The former authors have incorporated the notion of export strategy being aligned with the firms’ external environments in their ‘coalignment’ principle. Yeoh and Jeong (1995) have developed a contingency approach to exporting that incorporates external factors. Both of these studies present arguments for pursuing the achievement of a better understanding of the external context, using qualitative research methods.

Weaknesses associated with qualitative research methods and the use of interviews have also been reported (Miles and Huberman, 1994). In exporting, qualitative studies have tended be exploratory in nature, largely because there is a limited qualitative research base on which to draw and from which to develop more explanatory studies. While these contribute significantly to understandings and insights, they also call for the need for further empirical verification (Diamantopoulos and Cadogan, 1996).
An additional issue relating to the limited experience in qualitative export research is the lack of guiding principles and materials, such as interview techniques, questionnaire designs, and general in-field ‘familiarisation’ with the subject (Miles and Huberman, 1994). Qualitative export research therefore draws mainly from general qualitative research principles and techniques, which also have recognised weaknesses. Key among these are: the limited number of cases that can be studied; difficulty in achieving statistical replication, because of different contexts and approaches used in different studies; various types of bias, including interviewer bias, during questioning and reporting; inconsistencies in approach between interviews; researcher bias in interpretation of transcripts and results; differences in situational settings between first and last interviews; and the time and cost involved in conducting this type of research.

The need for longitudinal studies is one of two key areas requiring further research according to Aaby and Slater (1989) in their review of export performance literature. It is an area of export performance research widely called for also by other researchers (e.g. Cavusgil and Zou, 1994; Leonidou and Katsikeas, 1996; Matthyssens and Pauwels, 1996). Axinn et al (1996) used a two-time-point longitudinal study to examine the issue of export performance stability over time. They found that organisational learning took place, with a significant carryover effect to export performance of the firm. Further, Axinn et al (1996) found that macroeconomic changes occurred over the time of the study, highlighting the importance of the longitudinal nature of the study. Prior to this study was research undertaken by Gomez-Mejia (1988), on human resource strategy in relation to export performance, but little else has been evident in the literature (Axinn et al, 1996).
2.2.2 Export Strategy

The term, 'export strategy', has been used somewhat indiscriminately in the export literature, and has, along with the term, 'export marketing strategy', come to represent a range of perceptions about its component variables and its role in exporting. A number of elements thus constitute the topic of export strategy, as discussed in this section. The research issues and theoretical implications arising from these differences in perception of export strategy, and in relation to the overall construct, are discussed in detail in section C of this chapter.

2.2.2.1 Strategic Context

The key role of strategy in export behaviour and performance, while generally accepted, is somewhat neglected in the export literature (Dalli, 1994; Leonidou and Katsikeas, 1996). Strategy impacts on exporting, and vice versa, at several levels in a firm. Depending on the size of the firm, there may be corporate, or business level strategy, relating to the entire business of the firm, export strategy, relating just to the export activities of the firm and product/market strategy, which relates to specific products and markets in which the firm operates, both domestically and internationally. Underlying and supporting these strategic levels are functional and operational strategies (Johnson and Scholes, 1993).

Cavusgil and Zou (1994) state that: “Exporting can be conceptualised as a strategic response by management to the interplay of internal and external forces” (p.3). They also highlight that most research that deals with the strategies and strategic issues of exporters addresses strategy at the second level of the strategy hierarchy - that is, the export strategy itself. Only infrequently are the wider strategic aspects or the place of exporting in a firm’s overall business strategy incorporated into research on export
strategy (Bijmolt and Zwart, 1994). It is in the context of export strategy per se that the main research findings relating to export strategy are discussed in this section.

### 2.2.2.2 Export Strategy and Performance Models

Export strategy (or policy) has been shown to have a direct influence on export performance (Aaby and Slater, 1989; Bijmolt and Zwart, 1994; Cavusgil and Zou, 1994; Moini, 1995). While many of these models of export performance include strategy with a number of other internal variables of export performance, Bijmolt and Zwart (1994) position export policy at the centre of their model of export success. They suggest that export policy comprises three factors that directly influence export performance: organisational structure, attitudes towards export and export planning. In their model, the indirect influence of the construct, firm characteristics, results from its influence on the export policy instruments. Export performance models are discussed in detail in a later part of this chapter, along with research issues and associated theoretical implications.

### 2.2.2.3 Aspects of Strategy

Key aspects of export strategy discussed in the literature include:

- generic export strategy options
- importance of the domestic market
- market research
- market selection
- market entry modes and strategies
- marketing strategies (product, pricing, promotion, distribution and service strategies)
- market development strategies
These are discussed below. Other strategic aspects of exporting, such as human resources and information technology, which are generally not included under the strategy heading in the literature, are incorporated in other parts of this chapter.

**Generic Export Strategy Options**

Aspects of Porter's (1980) generic strategy model are relevant in exporting, notwithstanding that the model and its business relevance have been questioned (Hill, 1988). A cost-price-volume driven export strategy involves considerable risk for small-country exporters, who may not be able to achieve scale economies necessary to support this type of strategy, especially against larger international competitors (Katsikeas, 1994). Furthermore, when this type of strategy becomes ineffective, for instance, with adverse currency changes, firms are unable to easily switch to a more sustainable differentiation strategy (Dominguez and Sequeira, 1991); for example, attitudes of managers to adaptation of the marketing mix is often an obstacle (Crick and Katsikeas, 1995). Thus, small-country exporters are more likely to adopt strategies involving niche markets and premium-priced products (Birley and Bridge, 1987). These findings suggest that, in the development of models or theory relating to export behaviour or performance, the product adaptation and market selection variables should be considered in relation to country size.

**Importance of the Domestic Market**

In his diamond model of national competitive advantage, Porter (1990) asserts that firms must develop their domestic markets before entering the international arena. Reasons for this revolve around the need for firms to first become innovative and competent in their domestic market, in the face of discerning and demanding
customers, and competitive rivalry, in order to compete effectively in foreign markets.

This idea has been empirically challenged by some authors, such as Rugman and Verbeke (1993) and Cartwright (1993), who maintain that the model is not consistent with practices of certain industries in their countries (Canada and New Zealand, respectively). These industries are internationally competitive despite having a low, or zero domestic market presence. The researchers suggest a double diamond model, in which the demand conditions from international markets can also influence the development of competencies in international business.

There is also a new set of research emerging which describes export companies as 'born global' (e.g. Rennie, 1993; Knight and Cavusgil, 1996), or as international new ventures (INVs) (Oviatt and McDougall, 1994). These firms decide, strategically, to enter into exporting before doing business in their domestic market. The success of many of these firms is attributed to the changing global environment, particularly technological. This phenomenon is discussed elsewhere in this chapter.

Many other empirical studies continue to support the importance of the domestic market for firms before exporting (e.g. Bonaccorsi, 1992; Leonidou, 1995b; Chetty & Hamilton, 1996). Calof (1994) notes, however, that market saturation will occur at some stage and firms will move into exporting, having most likely achieved some degree of growth in the domestic market, and maybe a dominant market share. Calof (1994) implies that this domestic market growth prior to exporting is important: "... smaller firms will grow in the domestic market first." (p. 368).
In some situations, for example in less developed countries, exporters may face high demands from their domestic market which inhibits the development of their export business (Das, 1994). Export intensity of these firms may therefore be low, despite the firms’ commitment to, and possibly competencies in, exporting. For small countries, however, the opportunity for domestic market expansion and the associated organisational growth and competence acquisition by firms is limited. In a New Zealand study by Caughey and Chetty (1994) the small size of the domestic market was found to be one of two major factors that motivated firms to export.

Managerial perceptions about domestic market potential also predict export success: firms perceiving few domestic opportunities and having capacity available to grow are more likely to export than those firms that perceive large opportunities in the domestic market (Aaby and Slater, 1989). A small domestic market may also encourage firms to diversify their market base, simply to reduce risk (Leonidou, 1995b; Chetty & Hamilton, 1996).

The issue of the importance of a firm’s domestic market in terms of firm-level and national-level international competitiveness continues to be debated. This has important implications for research on export behaviour and performance, particularly in relation to the strategic role played by exporting in the firm’s overall business portfolio. This may be operationalised as export commitment (e.g. Kirpalani and MacIntosh, 1980), or international marketing primacy (Axinn et al, 1996). Changing export commitment over a firm’s internationalisation process has been well documented in the internationalisation literature (e.g. Johanson and Wiedersheim-Paul, 1975), but recent work on born global firm (Rennie, 1993; Knight and Cavusgil,
1996) and international new ventures (Oviatt and McDougall, 1994) casts doubt on the early importance of a firm's domestic markets. In terms of theory development, therefore, the issue of the relationship between, and relative importance of, a firm's domestic and export business, especially during a firm's evolution, has yet to be fully understood. Further, the impact of this question on export strategy and export performance remains to be resolved.

**Export Market Research and Information**

The importance of market information to support domestic and international business decisions is widely recognised (e.g. Johanson & Vahlne, 1977; Desphande & Zaltman, 1982; Cavusgil, 1984; 1985; Diamantopoulos et al, 1989; Hart et al, 1994). International market research differs from domestic market research in the consideration of aspects such as culture, language, and economic, political and legal factors (Adler, 1976).

The body of literature on international market research suggests that its main functions are to help assess the suitability of a market for entry, and the various means of entry (Hart et al, 1994), and to provide information about marketing mix adaptations (Crick and Katsikeas, 1995). Although the role of information in decision-making as part of the internationalisation process has been studied (Johanson and Vahlne, 1977; Wiedersheim-Paul et al, 1976), Hart et al (1994) state that there is little work published on a firm's market research after it has entered a foreign market.

Management and marketing theorists concur that, while 'gut reaction' may be associated in some cases with successful management, it is objective information that used by management to reduce risk and uncertainty (Stoner, 1978; Kast and
Rosenzweig, 1979; Deshpande and Zaltman, 1982). Even if information is informally derived, Johanson and Vahlne (1977) suggest that management decisions are still based on knowledge of opportunities and threats and the evaluation of alternative responses. These authors also conclude that a lack of market knowledge is an important obstacle to the development of international operations, but note that it is mainly through international operations that such knowledge is gained. Export market knowledge is an important contributor to an exporter’s experiential knowledge, especially if the market knowledge is gained principally from operating in the export market (Johanson and Vahlne, 1977). Diamantopoulos et al (1989) postulate that greater experience in exporting results in greater involvement and thus greater knowledge.

The scope of market research is also important in determining the type of information available to an exporter. For example, Kohli and Jaworski (1990) include research concerned with environmental scanning, as well as more specific marketing related research, such as the market characteristics, sales, products, pricing, promotion and customers. Conversion of marketing information into useful knowledge, specifically, competitive intelligence (Babbar and Rai, 1993), depends on other factors, such as the organisational culture, the personnel concerned with the collection and utilisation of information, management skills, and available resources.

Souchon and Diamantopoulos (1996) define more explicitly the field of export market research and information. They distinguish between three major modes of information acquisition in an exporting context: export marketing research, export assistance and export market intelligence. Export marketing research is concerned
with research activities in the home market or foreign markets in order to reduce uncertainty in decision-making (Cavusgil, 1984a). It is more formal, systematic and objective than other modes of information acquisition (Douglas and Craig, 1983).

Export assistance derives from direct or indirect government export promotion, usually in the form of information, which may be either standardised or customised (Diamantopoulos et al, 1993), and is usually aimed at SMEs. Export market intelligence is defined as "an informal approach to information acquisition through contact with customer, distributors, and competitors, attendance at international trade fairs and shows, or more directly through foreign visits." (Souchon and Diamantopoulos, 1996, p. 51-52). Firms may use these modes alone, or simultaneously.

The formality of market research is an issue for exporters. Formal research is generally found to be a necessary basis for management decisions aiming to reduce risk and uncertainty (Stoner, 1978; Deshpande and Zaltman, 1982). However, Liang (1995), in studying channel selection decisions, notes that small and medium-sized firms rarely have the time or resources to undertake systematic searches. Johanson and Vahlne (1977) suggest that management decisions are usually made on the basis of informally gained knowledge.

Despite the perceived complexity of exporting compared to domestic business, a study by Cavusgil (1985) found that export marketing research was more subjective and less precise than domestic marketing research. The firm's executives in this study attributed this to lack of experience in export marketing research and difficulty in
acquiring the necessary information. Hart et al (1994) support this in noting that the information needs of exporters differs with different export markets.

The lack of sophistication and the informality in international marketing research has been attributed by Cavusgil (1984a) to a number of factors: the experiential acquisition of knowledge (Sood, 1981), a perception that less is at stake in international marketing research than domestic marketing research; and the cost and unavailability of information.

Hart et al (1994) suggest that it is important to understand the process of marketing research. Process issues include the types and sources of information collected, the way it is disseminated through the firm, the way it is used, and its impact on export marketing decisions. More recent work by Diamantopoulos and Cadogan (1996) examined the generation, dissemination and responses to market intelligence by UK exporters, as part of a market orientation construct applied to exporting. There have also been a number of studies investigating the issue of information use in exporting, since this, it is claimed, is a particularly poorly researched area (Souchon and Diamantopoulos, 1996, 1997). "Export information use refers to how and how much export marketing research findings, export market intelligence results, and export assistance information are actually taken into account by decision makers." (Souchon and Diamantopoulos, 1996, p. 58). These researchers found no direct link between export information use and export performance; rather, export decision-making acted as an intervening variable, with export information use affecting this variable, i.e. by facilitating decision-making. Crick et al (1994) suggest that exporters who put export knowledge to use are the better performing exporters. Distinguishing between the
three modes of export information acquisition in an exploratory study which used multiple export performance measures, Souchon and Diamantopoulos (1997) found a positive relationship between immediate and future use of export marketing research information, but a negative relationship between export performance and export assistance and export market intelligence.

Some studies have indicated that export market information acquisition modes are likely to change as a firm develops its exporting business. For example, in a study of UK industrial SME exporters, Hart et al (1994) found that, once in a foreign market, exporters relied on personal contact with distributors, agents, customers and competitors for the gathering of information. Exporters appear to rely more on primary sources of information, rather than secondary sources, such as government departments and publications, chambers of commerce and industry associations etc. (Crick and Katsikeas, 1995). Secondary sources may be most useful in providing background information and macro-level knowledge, and primary sources may be the main providers of specific marketing and marketing mix information.

A study by Diamantopoulos et al (1989) reported a surprising finding that 50% of their sample of exporters achieved the same proportion of sales and profitability from their export activities without using any export market research information, compared with firms which used export marketing research. Users of market research information in this study tended to be larger and perceived themselves as being more competitive. This study also found that the large firms tended to export to a larger number of countries than did smaller firms and they used more marketing research information than firms exporting to a smaller number of countries. The involvement
of information and knowledge, size and experience are consistent with findings relating to market development spread strategies (Piercy, 1983). It is also likely, given the link between knowledge of foreign markets and the concept of psychic distance (Wiedersheim-Paul et al, 1976; Cavusgil and Godiwalla, 1982) that acquired foreign market knowledge may reduce perceptions of psychic distance.

Aspects of export marketing research, or more correctly, using the approach of Souchon and Diamantopoulos (1996), export information, for example, type, acquisition source, use and impact on decision-making, which relate to other export variables, such as export firm experience, firm size and the extent of its resources are discussed elsewhere in this chapter.

Souchon and Diamantopoulos (1996, 1997) have discussed theoretical implications associated with export market information. With regard to export performance, the focus of this study, the key issue relates to the need to consider all aspects of the process of export market information (acquisition, dissemination and use) in determining its role in export performance. Analysis of the relationships between variables in this context is necessary, to differentiate between direct and indirect (intervening variable) effects on export performance.

**Market Selection**

In a formalised process, market selection would follow a period of market research to identify market and product opportunities. The export market selection construct is, therefore, closely related to the export marketing research / export market information constructs, discussed above. Export firms, which undertake market research and adopt a systematic market search process demonstrate export success (Tesar and
Tarleton, 1982; Moini, 1995). Moini (1995) found that a process for systematically exploring export possibilities was a very powerful discriminator among three groups of exporters: successful exporters, growing exporters and partially interested exporters; the successful firms adopted a more systematic search processes than the other two groups.

Firms which do not develop new markets are usually ignorant of the associated opportunities, because of lack of efforts or search opportunity (Korth, 1991). This notion is supported by the findings of Souchon and Diamantopoulos (1997) that the ignoring by firms of export information was consistently related to poor export performance. Some exporters enter export markets by a ‘passive’ process, such as unsolicited orders or an inquiry from abroad, usually at the start of their export experience (Christensen et al, 1987; Bell, 1995). In these cases, export market choice is determined by their overseas client, and appears to have little to do with geographical or psychical distance (Bell, 1995).

Key interrelated elements of the market selection decision are the process of market selection, market specifics and market type, proximity of markets; and the first market decision.

**Market Selection Process**

It appears that a systematic approach is the most important correlate of success in the context of market selection, though Bell (1995) found a number of factors that assisted or complemented the systematic search process for computer software exporters. These were named: client followership, sectoral targeting and (computer) industry trends, and they appeared to be more important than proximity factors.
Markets and Market Type

The state of development of an export market has been shown to have some influence on export market selection. In studying export success in LDCs, Das (1994) found that the country of origin of the buyer was one of seven significantly discriminating variables of success, using export intensity as a success measure. This may be related to perceptions of, and previous experience with, LDC products by the buyers. In developed countries, slow growth exporters place greater emphasis on LDC markets and higher growth exporters emphasise industrialised markets (Dennis and Depelteau, 1985).

Proximity

One of most widely reported influences on export market selection is the proximity of the market to the exporter; that is, psychic distance and geographic proximity. Psychic distance has been defined as the sum of factors preventing or disturbing the flow of information between the firm and a specific foreign market (Johanson and Wiedersheim-Paul, 1975). However, definitions of psychic distance differ greatly, depending on the way in which the concept is operationalised (O’Grady and Lane, 1996). The concept of psychic distance is based on observations by Burenstam-Linder (1961) that trade is favoured between countries with approximately the same level of economic activity and cultural similarity.

While there are many examples of the phenomenon of psychic distance influencing market selection and export development processes (e.g. Vahlne and Wiedersheim-Paul, 1973; Carlson, 1975; Johanson and Wiedersheim-Paul, 1975; Bilkey and Tesar, 1977; Johanson and Vahlne, 1977; Welch and Luostarinen, 1993; Chetty and Hamilton, 1996), researchers have more recently questioned the importance of
psychic distance as an influence in market selection. For example, some authors believe that psychic distance has become less relevant as global communications and transportation infrastructures improve, and as the heterogeneity of markets diminishes (Czinkota and Ursic, 1987; Nordstrom, 1990). Bell (1995) found that for 30-50% of software exporters, psychic distance did not appear to provide an adequate explanation for their initial choice of markets. O'Grady and Lane (1996) describe a situation that they call “the psychic distance paradox”. Their empirical study concludes that export operations to psychically close countries are not necessarily as easy to manage as previously thought, because assumptions about similarity prevent exporters from learning about differences that are critical.

Relationship and network approaches (Johanson and Mattsson, 1988; Kogut, 1990; Nordstrom, 1990; Blankenberg, 1992) are thought to provide an alternative approach to explain market selection in the internationalisation process, although psychic distance may still be an influencing factor (Bell, 1995).

Geographic proximity issues, while closely linked to psychic distance in the literature, present some specific considerations for exporters. Logistical problems in the transportation and cost of exporting to geographically distant countries may override psychic distance in the export market selection decision (Thorelli, 1980; Davidson, 1982; Terpstra, 1987; Keegan, 1984).

Both psychic distance and geographic proximity are thought to be the reasons for exporters choosing their nearest neighbour as their first export market. This is evidenced in research work highlighting the phenomenon between Canada and the US.
(Calof and Viviers, 1995), Finland and other Nordic countries, and Ireland and the
UK (Bell, 1995); and New Zealand and Australia (Chetty and Hamilton, 1996),
although not all exporters follow this pattern. After the initial export entry into the
'nearest neighbour' country, it has been shown that the development of a world
orientation is necessary for an export firm to realise a more rapid growth rate in
export sales (Cooper and Kleinschmidt, 1985). Similarly, Diamantopoulos and Inglis
(1988) showed higher-involvement exporters to have a much broader world market
coverage than low-involvement exporters.

**Market Entry Modes and Strategies**

Export market research should include a previous investigation of whether the firms
should enter the market and suggestions as to how the firm should enter the market
(Terpstra, 1967). There has been an abundant literature on market entry strategies
(for example, Terpstra, 1967; Young et al, 1989). The stages models of
internationalisation have supported market entry modes that are gradual and slow and
which build on an experiential base (e.g. Wiedersheim-Paul et al, 1976; Johanson and
Vahlne, 1977).

Where exporting is a firm's preferred foreign market entry mode, firms may
undertake indirect exporting through agents or other third parties based in the
domestic market (Czinkota, Rivoli and Ronkainen, 1992), or, as a more advanced step
in the stages models, direct exporting, through their own export sales staff, or via
agents and distributors based in the foreign market (Brady, and Bearden, 1979). The
importance of the adoption of overseas distributors as a foreign market entry method
has been shown by many authors (Rosson, 1984). This may represent a transitional
phase in the internationalisation process (Cavusgil, 1980; Johanson and Vahlne, 1990; Bello et al, 1991), as outlined above, or as a more permanent approach to foreign market involvement (Reid, 1983; Turnbull and Valla, 1986; Bello et al, 1991).

Young (1987) suggests that the latter is more likely to occur in high-tech industries, where product life cycles are short. Bell (1995) argues that exporting may not always be the preferred initial entry mode, concurring with evidence from Hedlund and Kverneland (1985), who suggest that entry modes are becoming more direct and rapid than those implied by incremental models of internationalisation.

**Marketing Strategies**

Much of the research on export marketing strategies has related to the traditional transaction-cost based (Williamson, 1979), or neo-classical (Carman, 1980) paradigm in which the focus is on micro-economic analysis and the optimal use of marketing mix elements. This fails to recognise newer paradigms of marketing, particularly relational and network-based perspectives (e.g. Johanson and Mattsson, 1988).

Because it represents the majority of the published work on export marketing, the traditional perspective will form the majority of this section. However, part of this section and elsewhere in the literature review the newer paradigms are discussed.

Export marketing and marketing strategy have been researched widely in the context of the basic four elements of the marketing mix (product, price, promotion and distribution) and, more recently, service. Much of this work has been related to particular firm characteristics, most notably, firm size. For example, Hart et al (1994) showed that larger firms were relatively rigid in their attitudes to undertaking extensive product adaptations in their export marketing activities. In contrast, smaller
firms were shown to be more flexible and adaptable. However, the smaller firms were disadvantaged with regard to marketing capability and willingness to invest in marketing activities, such as promotion, personal visits to markets and market research. The role of firm size in export development and performance is discussed elsewhere in this chapter.

Findings on export marketing strategy have also been related to the constructs, export performance and export development (or internationalisation). Export marketing strategy or policy has been shown to play a crucial role in the competitiveness of firms in their export markets. Katsikeas (1994) summarises the key components of competitive advantage of export competitive firms: the range and features of company products (Cavusgil and Naor, 1987; Madsen, 1989; Edmunds and Khoury, 1986); competitive pricing (Kirpalani and MacIntosh, 1980; Piercy, 1981; Moon and Lee, 1990); new product development (Ogram, 1982; Namiki, 1988; Bourandas and Halikias, 1991); knowledge about foreign markets and operations (Cavusgil and Naor, 1987; Walters and Samiee, 1990); customer service (Dess and Davis, 1984; Namiki, 1988); personal contacts with foreign customers (Cavusgil and Naor, 1987; Bourandas and Halikias, 1991); and promotional activities (Daniels and Robles, 1982; Burton and Schlegelmilch, 1987; Keng and Jiuan, 1989).

Cooper and Kleinschmidt (1985) and Aaby and Slater (1989) suggest that an export venture's performance is determined by export marketing strategies and management's ability to implement the strategies. Cavusgil and Zou (1994) conclude that export marketing strategy, a firm's international competence and managerial commitment are key determinants of export performance. Kirpalani and MacIntosh
(1980) relate several marketing variables to export success, in particular, pricing and promotions. Significant differences have also been shown between aggressive and passive exporters with regard to the efficiency of their marketing techniques (Tesar and Tarleton, 1982), which Moini (1995) maintains should be a top priority for export firms once they are in the export market.

The importance of export marketing in the export development process has been studied, with high involvement smaller exporters placing a higher emphasis on marketing (Sriram and Sapienza, 1991), and a shift in emphasis to marketing being noted as a firm gains export experience (Barker and Kaynak, 1992). However, Katsikeas (1994) reports a surprising result, showing a negative relationship between the degree of firms’ export involvement and the competitive advantage dimension of marketing capability, a dimension of competitive advantage. This suggests that higher involvement exporters have a lower marketing capability than lower involvement exporters, despite the reported increase in emphasis on marketing as export involvement increases.

A key issue in export marketing strategy is the decision concerning adaptation or standardisation of the marketing mix (Douglas and Craig, 1989). Standardisation and adaptation can be viewed as two extremes along a continuum, with options in between. It is possible for different decisions to apply to different parts of the marketing mix, for example, a firm may adapt product features, but maintain a standardised promotional theme. Factors that influence the standardisation or adaptation decision include product, industry, market, organisational and environmental characteristics. Size and export experience have also been shown to
influence the decision, with larger, more experience exporters, having a high export intensity adjusting their marketing mix to the foreign market concerned (Bijmolt and Zwart, 1994). Aspects relating specifically to product adaptation will be discussed in more detail later in this section.

**Product**

The importance of product quality and product uniqueness has been widely documented in the export success literature (Cavusgil and Nevin, 1981; Burton and Schlegelmilch, 1987, Madsen, 1989). Product quality was recognised as an important strategic issue by Australian firms in a study by Frost and Jones (1994). In a New Zealand study, Caughey and Chetty (1994) noted that product characteristics and the small domestic market size were the two major factors that stimulated firms to export. The export stimulation effect of product characteristics was also noted by Leonidou (1995a). Product advantages have also been shown to be highly associated with export intensity (McGuiness and Little, 1981).

Cavusgil and Zou (1994) make an important contribution to the export marketing literature in their recognition of an export venture as a unique product-market combination, rather than a firm-wide activity. They suggest that product and market characteristics influence a firm’s export marketing strategy in a way that is specific to each product/market venture. This conclusion extends the earlier work of Cavusgil, Zou and Naidu (1993), Cooper and Kleinschmidt (1985) and McGuiness and Little (1981). Product characteristics that influence export marketing strategy include culture-specificity, strength of patent, unit value, uniqueness, age, and service/maintenance requirements of the product (Cavusgil and Zou, 1994).
The influence of products on export marketing strategy may also be determined by specific product life-cycle characteristics. For example, software products, particularly for specialist applications, have a relatively short life cycle, and the window of opportunity in which to exploit the products is very small (Bell, 1995). The nature of the product may also influence the type of distribution channel used by an exporter. Where specific kinds of product knowledge are important for selling the product, exporters tend to use an integrated channel (Anderson, 1985). An integrated channel offers the exporter more control because distribution will be the responsibility of the exporter’s own sales force, through a company-owned distribution channel, or through middlemen in the foreign market. It is easier to disseminate product knowledge closer to the end user in an integrated channel than with a non-integrated channel, where distribution is contracted to distributors in the home country (Rameseshan and Patton, 1994).

Product Adaptation / Standardisation

Although Weinrauch and Rao (1974) recognise the need to consider modification of all, rather than single elements of the marketing mix, most studies tend to look at only one or two elements in any one context. Because product adaptation is the most obvious and widely researched of the adaptation/standardisation areas of the marketing mix, it is the one focused on in this review.

The decision by an exporter to standardise or adapt product is contingent on situational factors. Standardisation of product is appropriate when a product can meet universal needs (Levitt, 1983); but if a product meets only unique or specialised needs, a greater degree of adaptation will be required (Buzzell, 1968; Keegan, 1969;
Cavusgil, Zou and Naidu, 1993). Specific usage needs must be met, as well as education in using and maintaining the product, if appropriate. Export firms that undertake marketing mix and product adaptations tend to be more experienced and successful exporters (Kirpalani and MacIntosh, 1980; Kleinschmidt and Cooper, 1988; Sullivan and Bauerschmidt, 1990; Katsikeas and Piercy, 1993; Katsikeas, 1994).

In respect of firm size, Katsikeas (1994) found that larger firms were relatively rigid in undertaking extensive product adaptations for export. Smaller firms, on the other hand, were shown to be more flexible and adaptable, but limited in their marketing capability and resources. Smaller firms tend to perceive adaptation issues as more problematic than larger firms (Katsikeas and Morgan, 1994). While there remains some uncertainty about the relationship between product adaptation and firm size, it appears that smaller firms undertake fewer and more modest product adaptations (Katsikeas, 1994).

Cavusgil and Zou (1994) suggest that the following factors provide a positive influence on the degree of product adaptation: a firm’s international competence, product uniqueness, cultural specificity of product, and export market competitiveness; there is a negative influence of a firm’s experience with the product and the technology orientation of the industry. It is posited that technology-based products are less susceptible to the more changeable consumer needs such as tastes, habits and customs (Levitt, 1983), and thus require less adaptation. Increasing competition in an export market may also stimulate a company to seek a higher
degree of product adaptation to gain or maintain a competitive advantage over its rivals (Jain, 1989; Cavusgil, Zou, and Naidu, 1993).

The reported extent to which product adaptation strategies are used varies amongst different research reports. In a study of the UK knitwear industry, Crick and Katsikeas (1995) found that only 45% of firms used product adaptation as its principal export strategy. Firms that did not adapt their products to foreign markets claimed either that their product was of a standard nature, or that they perceived the foreign market to be similar to the domestic market.

**Pricing**

Export pricing behaviour of firms has been widely studied, with many authors finding that pricing was associated with export success (e.g. Hirsch, 1971; Kirpalani and MacIntosh, 1980; Koh, 1991). On the other hand, Madsen (1989) found only a weak relationship between pricing and export performance. Effective exporters have been shown to be committed to the export venture and to have competitive pricing (Kirpalani and MacIntosh, 1980; Christensen, da Rocha, and Gertner, 1987). However, in their study of US exporters, Cavusgil and Zou (1994) found that competitive pricing was not necessarily associated with high commitment to the export venture.

Although their sample of UK knitwear exporters was relatively small, Crick and Katsikeas (1995) found that the majority set their prices at a level that the market could stand, with the exporters perceiving their pricing to be similar to competitors'. In addition, many firms in their study priced their products in a cost-plus fashion and did not achieve price premiums for competitive features like design and quality.
sophistication. Brazilian exporters reported using international competitive prices as a benchmark and did not seek risk-related premiums (Christensen et al, 1987).

Price elements play a major role in influencing import decision-making (Tookey, 1970; Ghymn, 1983), so it is not surprising that export pricing has been shown to be the most highly rated dimension of competitive advantage (Katsikeas, 1994). While competitive price levels have been shown to be positively related to export growth (Cooper and Kleinschmidt, 1985; Madsen, 1989), export stage development (Moon and Lee, 1990) or attitudes towards future exports (Gripsrud, 1990). Katsikeas (1994) speculates on the extent to which export survival and success can be maintained by firms adopting export strategies based largely on price considerations. Threats to the maintenance of price competitiveness include technological advances (Haug, 1991; Seringhaus, 1993), exchange rate fluctuations (Cavusgil, 1984a; Sullivan and Bauerschmidt, 1989), and increases in transportation costs (Sullivan and Bauerschmidt, 1989; Katsikeas, 1994).

**Promotion**

Key issues associated with promotion strategy are: the degree of promotion adaptation required, the promotional methods used and the design and execution of the promotion strategy.

There is a reasonable amount of evidence to support the notion that promotion adaptation is associated with export success (for example, Kirpalani and MacIntosh, 1980; Karafakioglu, 1986). However, Cavusgil and Zou (1994), found only a modest and inverse relationship between promotion adaptation and export performance. While an unexpected finding, they suggest a number of possible explanations: a desire
to maintain a wide appeal for certain export products; inappropriate or costly adaptation reducing performance; poor judgement on the type of promotional adaptation and its execution, or on the timing of the adaptation; and in sensitivity of promotional efforts to cross-cultural variables.

As with product adaptation, exporters may be forced to adapt promotion in response to competition in the market (Keegan, 1969; Cavusgil, Zou, and Naidu, 1993). The influence of market pressures was confirmed by Cavusgil and Zou (1994), and extended to include external environmental factors such as media availability in the market. Organisational inertia may occur with firms’ reluctance to make changes in the belief that successful past promotional strategies will continue to be effective (Cateora, 1990).

Technology intensity of the industry influences the promotion adaptation strategies of firms, in a similar way to the influence on product adaptation; that is, technology intensive industries favour a more standardised promotion (and product) approach (Cavusgil, Zou, and Naidu, 1993). A surprising result from Cavusgil and Zou’s (1994) research was that firms with an established product utilised higher levels of promotion adaptation. They suggest that this may be because experienced firms wish to apply their greater understanding of the promotional impacts in the market through higher levels of promotion adaptation.

Exporters have a choice of promotion methods in overseas markets, each with their own set of requirements, problems and strategic implications. In their sample of UK knitwear exporters, Crick and Katsikeas (1995) found that the main promotional
methods used were personal selling and advertising, with much less use being made of publicity and sales promotion. Exporters generally promote their products and/or services to their direct customers (usually agents and distributors), and they may not undertake downstream promotion because of time and other resource constraints.

**Distribution**

Ramaseshan and Patton (1994) assert that “Distribution constitutes one of the most vital aspects in international marketing.” (p.1). In accordance with this view, a lack of distribution networks and problems in the selection of reliable distributors are cited as major obstacles in exporting (Bilkey and Tesar, 1977).

The use of foreign market based distributors is a method of foreign market entry most commonly employed by exporters (Rosson, 1984) and represents either a stage in the internationalisation process of firms (Johanson and Vahlne, 1990), or a permanent approach to foreign market involvement (Reid, 1983; Turnbull and Valla, 1986; Bello et al, 1991). The choice and performance of foreign based distributors and the nature of the distributor relationship underlie many of the outcomes of the foreign market entry decision and associated international strategies of exporters (Lindsay and Arthur, 1998). For most exporters, once a distribution channel choice has been made, it becomes very difficult to change. Channel choice and management are particularly important when exporting firms are geographically and/or culturally/psychically from their markets.

Effective management of international channels by SMEs appears to be one of the main factors associated with superior export performance (Anderson and Coughlan, 1987; Munro and Beamish, 1987; Bello, Urban and Verhage, 1991). A positive
relationship has been found between export success and distribution strategy (Rabino, 1980; Bilkey, 1982; Gronhaug and Lorenzen, 1982; Rosson and Ford, 1982; Bello and Williamson, 1985; Yapprak, 1985) as well as an efficient distribution network (Pavord and Bogart, 1975; Beamish, Craig and McLellan, 1993; Moini, 1995). In a review of fifteen studies that related management perceptions of the importance of distribution to the propensity to export, Aaby and Slater (1989) reported that distribution, delivery and service were perceived as important export success factors.

Ramasehan and Patton (1994) distinguish between international channel types: non-integrated channels are those involving home-based agents and distributors; foreign-market based agents and distributors are classified as integrated, along with firm salesforce and foreign subsidiaries. Bello et al (1996) on the other hand, classify channels differently.

Export channel structure has been examined in relation to export performance in a number of contexts, including the “functionalist” perspective, which examines the various structural modes and their influence on export performance (Reid, 1983), and the “behaviourist” perspective, which deals with the dyadic relationships between exporters and distributors in relation to export performance (Rosson & Ford, 1982). Yeoh and Jeong (1995) and Munro and Beamish (1987) maintain that it is the management of the relationship with a foreign intermediary (behaviourist perspective) that influences performance, rather than the type of distribution method per se (functionalist perspective). Long-term relationships between exporters and importers depend on two main conditions: information and market knowledge, and a trusting
relationship that provides the assurance of stability and a willingness to share information (Yeoh and Jeong, 1995).

A number of researchers have studied the relationship between exporters and importers in the distribution process (e.g. Rosson and Ford, 1980; Katsikeas and Piercy, 1990). Cavusgil and Zou (1994) note that exporter support of a distributor in the export market can lead to a co-operative relationship; this, in turn, will lead to effective implementation of exporter’s marketing strategy and thus better performance (Rosson and Ford, 1982). Crick and Katsikeas (1995) found that export managers regularly visited their overseas markets to establish good relationships with customers, identify market needs and select, motivate and control agents or distributors. They also note that since personal selling was the main promotion method used by the exporters, regular visits and a good distributor relationship were important.

Liang (1995) notes that SME exporters have limited resources and skills available to conduct a formal, systematic search process. Liang (1995) also points out that partner selection is an important issue for importers as well as exporters and suggests that personal relationships both enhance social network development and protect against unhelpful opportunistic activities of either party.

**Service**

Service quality is increasingly important in organisational success (Prokesch, 1995). Service has also been shown to influence export performance outcomes; for example, software exporters need to provide extensive client support in such areas as consultancy, systems design, customisation, installation, training, upgrading and after-
sales service - attention to these areas lead to a closer interaction between buyer and seller (Bell, 1995). According to Cavusgil (1980), firms are more concerned with communication and customer service (which they see as a critical performance variable) in the earlier stages of the internationalisation process, rather than at later stages.

Service requirements may affect channel selection (Ramaseshan and Patton, 1994). For example, where a marketing strategy requires a high level of before- or after-sales service, direct, or integrated, export channels are more likely than indirect, non-integrated, channels to provide that service (Etgar, 1978; Keegan, 1984; Terpstra, 1989; Ramaseshan and Patton, 1994). Even though service may be contractually required in indirect channels, monitoring the performance of the channel against the contract can be difficult and costly (Jensen and Meckling, 1976). Contrary to the above findings, Anderson and Coughlan (1987) found that service requirements were not important in the channel choice of US semiconductor firms.

**Market Development**

Once a firm has selected and entered a foreign market as an exporter, it will generally undertake market development activities as part of its overall export development, or internationalisation, process (Leonidou and Katsikeas, 1996). Many antecedents of successful export market development have been identified in the literature. These include factors such as the importer's distribution network, export market and marketing knowledge, company reputation, promotional efforts, assessment of export market developments, personal contacts with overseas distributors and proximity to the export market (e.g. Kirpalani and MacIntosh, 1980; Burton and Schlegelmilch, 1987; Kaynak and Erol, 1989; Bourandas and Halikias, 1991).
In general, a firm’s expansion into foreign markets can take two alternate approaches, market concentration and market spread (Piercy, 1981). Market concentration strategies involve a focus on a small number of markets, in which the firm attempts to grow market share. In contrast, market spread strategies involve the firm diversifying to a larger number of markets, either in a deliberate process of diversification, as a way to achieve growth, or to spread risk. Empirical evidence shows that a market concentration strategy is chosen by firms in the early stages of the export development process, while firms with a greater export involvement adopt a spread strategy and diversify to a larger number of markets (Piercy, 1981; Dalli, 1994; Naidu and Prasad, 1994). There are three main reasons why the tendency towards a market spread strategy increases in more experienced exporters: resources are generally greater (Naidu and Prasad, 1994); it minimises risk and exploits opportunities better than a market concentration strategy (Dalli, 1994); and export-related management problems reduce (Dalli, 1994).

The number of countries to which a firm exports is an indication of the firm’s market development strategy with a large number of countries implying a spread strategy. Larger firms have been shown to export to more countries than smaller firms (Calof, 1994), indicating that larger and/or more experience firms are more likely to adopt a market spread strategy, consistent with the findings of Piercy, 1981, Dalli, 1994; and Naidu and Prasad, 1994).

2.2.3 Export Theory

The development of an agreed or integrated theory of export has been hindered largely by the nature of the research that has been undertaken and reported on
exporting (Aaby and Slater, 1989). In general, the research has shown little consistency, has been focused on levels of detail that are not integrated, and has used a wide range of methodologies and methods of analysis, making comparability of conclusions difficult (Leonidou, 1995b).

The most durable of theories that relate to exporting is internationalisation theory, of which exporting is a major part. This theory has been modified and various models of internationalisation and export development have emerged in the literature. However, the theory and associated models have not, or only poorly, integrated the construct, export performance. The two strands of research have tended to remain separate (Leonidou and Katsikeas, 1996). A brief description of internationalisation theory is presented below, in order to provide a context for ongoing discussion.

2.2.3.1 Internationalisation Theory

Internationalisation of the firm, in particular small firms, has been a significant area of research for over three decades (Bilkey, 1978; Miesenbock, 1988; Chetty and Hamilton, 1993). The internationalisation process has been described as the transfer of goods or services across national boundaries using indirect or direct methods (Young, Hamill, Wheeler and Davies, 1989). The first step in the process is exporting, and this is thought to be crucial to a firm’s advancement to other forms of international business, such as licensing, joint ventures, or wholly owned production abroad (Buckley, 1979) - that is, towards greater internalisation of resources (Buckley and Casson, 1985; Rugman, 1981). Exporting is considered to be the most common foreign market entry mode, particularly for small-and medium-sized firms, because of the minimal business risks, low resource commitment and high flexibility of action that it offers (Young et al, 1989).
A number of models have developed around the theory of internationalisation, many concerned with the exporting phase of the process. While the predominant model of internationalisation, the stages model (Johanson and Wiedersheim-Paul, 1975) has been the most widely used and substantially followed by researchers and practitioners, significant criticism of the concept has emerged over recent years, with some empirical studies challenging the basic proposition underlying the "stage" approach (Turnbull, 1987; Diamantopoulos and Inglis, 1988; Millington and Bayliss, 1990; Sullivan and Bauerschmidt, 1990; Andersen, 1993). Central to the criticisms is the view that changing national and global environments no longer demand an incremental process of international development, but one that is responsive to international drivers of competition.

In response to criticisms of stages theory of internationalisation, two main alternative approaches have been offered in recent years. These approaches incorporate the wider aspects of export behaviour and performance, as well as the international development process. One increasingly accepted alternative is network theory, as it relates to internationalisation (Johanson and Mattsson, 1988; others), and the other is the concept of 'born global' companies, or international new ventures (INVs).

**Relational and Network Approaches to Internationalisation**

Much of the current thinking on relationships has developed from exchange theory, based on Alderson's (1965) 'law of exchange' (Juttner & Wehrli, 1994). While most exchange theory approaches assume classic micro-economic theory, there is an argument for assuming that people do not necessarily proceed from rules and motives of self advantage, and that it is necessary to understand when people act selfishly and
when they act virtuously (Reingen et al., 1994). Webster (1992) notes the importance of relationships as a key strategic resource. Dunning (1995) also notes the emergence of relational-based international transactions in the concept of ‘alliance capitalism’, a development of his milestone eclectic paradigm.

The Relational Paradigm was identified by Wilson and Moller (1991) and Ambler (1994), and, as noted in Styles and Ambler (1994), it represents the market as a network of “value laden relationships” (Kotler, 1990). Styles and Ambler (1994) have introduced the Relational Paradigm as an alternative framework for viewing export marketing, in particular, the role of relationships between exporters and their distributors and other network members. The authors also point out that the importance of relationships to export performance has not been well supported by academic literature.

The relationship between buyers and sellers and their impact on export performance has been studied by a number of authors (e.g. Cunningham, 1980; Rosson and Ford, 1980; Turnbull, 1981; Rosson, 1984; Leonidou, 1989). Variables examined in these studies include the degree of uncertainty, perceived distance, conflict, co-operation, power dependence and the degree of adaptation.

One of the major features of relationships in export marketing is the role of information, which is discussed elsewhere in this section. Experiential information gathered via network members through relationships are primary methods of information gathering, and this is supplemented by objective data and analysis, rather than the reverse, which is what would be expected in the neo-classical paradigm of
marketing (Styles and Ambler, 1994). As a result of their findings relating to relational aspects of exporting, Styles and Ambler (1994) proposed an updated ‘hybrid’ model of export performance that combines key elements of the Aaby and Slater (1989) model (which they indicate represents neo-classical theory) with elements of the Relational Paradigm.

Bell (1995), in a study of software exporters notes that it is debatable whether exporting would have occurred without the relationships between the exporters and foreign suppliers who provided hardware, local software distribution rights or production licences. There is little doubt, according to Bell (1995) that the relationships at least accelerated the decision to export.

Most of the theories of networks arise from relational theory. The social interaction approach to networks (e.g. Hakansson, 1982; Mattsson, 1985) asserts that organisations have always been embedded in interfirrm relationships and that networks are formed through social interaction. This approach takes a contrasting view to transaction cost based economics in suggesting that networks do not tend toward optimal efficiency configurations and are driven by social interaction.

Johanson and Mattsson (1988) present one of the more comprehensive perspectives on network approaches to internationalisation. Johanson and Mattsson (1988) discuss explanations of internationalisation of industrial firms using a model that describes industrial markets as networks of relationships between firms. They state that “Through the activities in the network, the firm develops relationships which secure its access to important resources and the sale of its products and services.” (Johanson
and Mattsson, 1988, p. 292). They also assert that the networks are both stable and changing, and, as network positions change relationships also change. Johanson and Mattsson (1988) point out that, in both the internationalisation (stages) model and the network model, the cumulative nature of a firm’s activities are important. However, in the former case, the focus is on the internal development of a firm’s knowledge and other resources, while the later is concerned also with the market and a firm’s relations to that market.

**Internationalisation: Born Global Firms and International New Ventures**

The ‘born global’ phenomenon (Knight and Cavusgil, 1996) or international new ventures (INVs) (Oviatt and McDougall, 1994) represent a challenge to existing internationalisation theory. Born global firms and international new ventures appear to be much the same phenomenon, although they tend to have separate streams of research in the literature. There are some evident differences in the concepts, however; for example, the stage of formation of the firm when internationalisation begins, and the number of different types of newly internationalising new firm. Because of these differences, the following discussion deals with the two phenomena separately, but recognises that the basic characteristics are similar.

Born global firms are small, technology-oriented firms that operate in international markets from the beginning of their establishment (Knight and Cavusgil, 1996). Unlike other firms operating internationally, they do not build up domestic-based business before exporting. In a study of born global firms in Australia, Rennie (1993) identified these firms somewhat differently, as exporting, on average, two years after their foundation. These firms were also shown to export, on average, 76% of their
total sales (a high export intensity, using Diamantopoulos and Inglis' (1988) classification). They are high growth firms and very competitive against larger conglomerates.

Unlike Knight and Cavusgil (1996), who suggest that ‘born global’ firms are technology-oriented, Rennie (1993) noted their presence in all industries, including those sectors considered to be declining in global terms; however, 40% of Rennie’s sample of ‘born global’ firms ranked technology as their most critical lever.

Characteristics associated with ‘born global’ firms in Rennie’s (1993) Australian study included: exposure to international competition (not necessarily in export markets) from day one of their existence; the need to compete on quality and value, through innovative technology and product design; cost-competitiveness, though this was taken for granted; being close to customers, such that they perceived that they ‘owned’ customers, not products; and operation in niche markets, which are very flexible and fast-moving. Rennie (1993) found that the factors which hindered export growth were much the same for ‘born globals’ and for domestic-based firms; these were credibility, access to finance, market information, technology, and, most important, the lack of an innovative and international mindset. The Australian study concluded that the driving force behind the two successful types of exporters noted in the study - domestic-based and ‘born global’ - was management leadership.

The establishment of new ventures that are international from inception has been reported in the popular business press as a new and growing phenomenon since the 1980s (Gupta, 1989, Mamis, 1989; Brokaw, 1990). Oviatt and McDougall (1994) point out that these types of ventures have existed for centuries. Oviatt and
McDougall (1994) have used the term international new ventures (INV) to describe the formation of organisations that are international from inception, similar to Knight and Cavusgil's (1996) definition of born global firms. They point out that the phenomenon is incongruent with traditionally expected characteristics of multinational enterprises.

In their award-winning study, Oviatt and McDougall (1994) describe four necessary and sufficient elements for the existence of international new ventures: organisational formation through internalisation of some transactions; strong reliance on alternative governance structures to access resources; establishment of foreign location advantages; and control over unique resources. According to Oviatt and McDougall (1994), international new ventures have a significant commitment of resources in more than one nation, and, unlike organisations that evolve gradually from domestic firms to MNEs (as in stages theories of internationalisation), the ventures begin with a proactive international strategy. The ventures are concerned with value added, rather than assets owned (Casson, 1982). Oviatt and McDougall (1994) provide a typology of international new ventures, based on the number of value chain activities that are co-ordinated and the number of countries entered. From this, three types of international new ventures are identified: new international market makers; geographically focused start-ups; and global start-ups.

Oviatt and McDougall (1994) do not suggest, carte blanche, that 'stages' theory of internationalisation is 'wrong', as some firms undoubtedly continue to develop international operations that way; instead, they suggest that it is insufficient to explain the international activities of firms characterised as international new ventures. The
theoretical rationale for small, new international ventures (firms) may lie in firms' responses to global changes, leading to their dependence on unique assets for sustainable international advantage (Caves, 1982; Hamel and Prahalad, 1989; Barney, 1991; Stalk, Evans and Shulman, 1992). Small firms, with constrained resources, but possessing some unique asset/s are, theoretically, as able to enter the international arena, as larger, resource-rich, firms (Oviatt and McDougall, 1994). These same small firms may also, theoretically, be able to skip ‘stages’ of the internationalisation process as a result of shortened global communication times and transportation, and the homogeneity of markets. From their own empirical work and observations of others, Oviatt and McDougall (1994) believe that these alternative actions of firms in internationalisation contribute towards an explanation of the international new venture.

Oviatt and McDougall (1994) suggest that network structures (Aldrich and Zimmer, 1986; Larson, 1992) offer a more powerful resource-conserving alternative to internalisation for new ventures, because they focus on co-operation rather than opportunism. Alternative governance structures, in the form of networking constitute a major feature that distinguishes new ventures from established organisations.

The concepts of international new ventures or born global firms, and relational and network approaches provide an alternative perspective to internationalisation, particularly in relation to “stages” theory. In addition, they offer alternative perspectives on export performance of firms to those associated with traditional incremental models of export development. While these concepts are relatively new and considerably more empirical evidence is needed to validate a new theory of
internationalisation, they provide potential explanations for much of the export behaviour observed in today's global environment.

2.2.4 Export Performance

Export performance has formed a major strand of research into exporting over the last three decades, along with the internationalisation process. It has been noted that relatively few studies have attempted to bring these two strands together (Diamantopoulos and Inglis, 1988; Crick, 1995; Leonidou and Katsikeas, 1996), and so, export performance research appears in the literature as a largely independent topic.

The study of export performance is important from a number of perspectives. General models, which explain export performance more fully, are seen as an important contribution to future research in international marketing research (Axinn et al, 1996). The determinants of export marketing must also be viewed from the perspective of performance, and this should offer valid, reliable measures (Matthyssens and Pauwels, 1996). Knowledge of the determinants of export performance is beneficial to firms initiating and developing export business, particularly those firms becoming increasingly reliant on export business for survival and growth. In addition, government decision-makers strive to assist exporters in the improvement of their export business, and knowledge of export performance determinants is critical to these agencies. It is widely acknowledged that if the correlates of export performance or success can be identified, then government agencies may be able to target potential, or potentially high performing, exporters, as well as focus their assistance programmes more effectively (e.g. Crick, 1995).
While one of the main challenges of export research over the last two decades has been the identification and understanding of the antecedents of export performance, and the role of exogenous variables, one of the key issues is the measurement of export performance and identification of the particular indicators concerned. This is highlighted by Cavusgil and Zou (1994) who claim that there is no uniform definition of export performance in the export marketing literature. Diamantopoulos and Schlegelmilch (1994) state that: “As a result of the lack of uniformity and comprehensiveness in the definition of export performance, it is often difficult to obtain a clear picture of the factors impinging on performance. (p. 162). Souchon and Diamantopoulos (1996) raise an important issue in their study of information use in suggesting that “the absence of a relationship between information use and performance simply may reflect a poorly chosen performance criterion rather than a lack of influence of information use on export success.” (p. 65). The performance measurement problem is not unique to export business; it has been researched and debated for many years in the general management and strategy literature (e.g. Venkatraman and Ramanujam, 1986; Doyle, 1992). It is also important to recognise that an organisation’s performance is situation-specific, and export performance, therefore, must be considered in the context of the objectives of the firm (Shoham, 1991) and the external environment (Aaby and Slater, 1989).

This section discusses the main literature on export performance and export success, including perspectives on performance measures and performance outcomes. Also discussed are some of the main export performance models that have been developed. Specific correlates of export performance that have been identified in the literature are
then discussed in detail, under four headings: firm characteristics, firm competencies, managerial factors, and external factors. There are some inconsistencies among export performance models over the category membership of particular variables, but the discussion aims to provide a synthesis of the literature rather than any single perspective. Although a number of the export performance models (e.g. Cavusgil and Zou, 1994) and export studies (e.g. Axinn et al, 1996) have attempted to consider multivariable relationships and effects, most investigations of export performance have tended to focus on single, or unconnected groups, of variables (Leonidou and Katsikeas, 1996). A number of reviews of the literature on determinants of export performance have been presented (for example, Bilkey, 1978; Miesenbock, 1988; Aaby and Slater, 1989, Chetty and Hamilton, 1993; MatthysSENS and Pauwels, 1996). One of the main conclusions from the work of Aaby and Slater (1989) was that very few solid conclusions could be drawn from the published research. Part of the reason for this is the wide differences in approach of the studies. Bijmolt and Zwart (1994) suggest that these approaches may be determined in three ways: whether the study considers exporting and non-exporting firms, or only exporting firms; whether the purpose of the research is descriptive or explanatory; and whether external factors, internal factors, or both, are considered in the research. One common theme, however, is that export success is an outcome of the involvement of a number of variables (e.g. Reid, 1983; Axinn, 1988; Bijmolt and Zwart, 1994).

Many of the studies of export performance focus on success variables, in an attempt to isolate those variables that are critical for success, rather than merely influences on performance. While there are differences between the success and performance perspective in terms of level of performance, the criticality of the variables, and the
interpretation of ‘success’, the literature seldom makes any meaningful distinction between the two. Thus, export performance literature reviewed in this section includes research on export success, although where export success was an explicit focus of a study, this is stated.

While there have been differences noted from studies with different country and industry foci, most studies of export performance have involved exporters from developed countries and from the manufacturing sector (Aaby and Slater, 1989). Relatively few studies have considered the determinants of export performance or success in less developed countries. One such study, by Das (1994), differentiated between successful and unsuccessful exporters from a developing country (India), and found that three factors, which had not been associated with success in other studies were discriminators of success. These were the nature of the product (industrial/consumer), destination of exports, and nature of the environment. Aksoy and Kaynak (1994) note that the determinants of export behaviour and overall performance of fresh produce exporters differ from those relating to manufactured products; the former relate more strongly to external factors, while the latter tend to encompass the managerial aspects of exporting.

The performance differences between exporters and non-exporters has been studied by a number of authors (e.g. Cavusgil and Nevin, 1981; Burton and Schlegelmilch, 1987; Christensen, da Rocha and Gertner, 1987; Keng and Jiuan, 1989). Many other studies have measured export performance or success of exporting firms in relation to various influencing factors (e.g. Kirpalani and MacIntosh, 1980; McGuiness and Little, 1981; Cooper and Kleinschmidt, 1985; Madsen, 1988). The various correlates
of export performance that have been identified in these studies include:
organisational or firm characteristics, such as firm size, resource factors and
management expectations (Axinn, 1988; Bauerschmidt et al, 1985; Fenwick and
Amine, 1979; Gronhaug and Lorentzen, 1982); export marketing strategy (McGuiness
and Little, 1981; Bilkey, 1982; Rosson and Ford, 1982; Cooper and Kleinschmidt,
1985; Christensen, da Rocha and Gertner, 1987; Koh and Robicheaux, 1988; Gottko
and McMahon, 1989; Koh, 1990; Gottko et al, 1991; Cavusgil and Zou, 1994)
management’s capability to implement export market strategy (Cooper and
Kleinschmidt, 1985; Aaby and Slater, 1989); a firm’s international experience
(Kirpalani and MacIntosh, 1980; Aaby and Slater, 1989); management commitment
(Bilkey, 1982; Johnston and Czinkota, 1982; Rosson and Ford, 1982; Daniels and
Robles, 1985); support to distributor/subsidiary (Rosson and Ford, 1982; Bello and
Williamson, 1985); and external environmental factors, such as macro-economic,
social, political, physical, and cultural (e.g. Becker and Porter, 1983; DeNoble,

Aaby and Slater (1989) suggest, in their review of the export performance literature,
that export performance is directly influenced by a firm’s business strategy. Cavusgil
(1983) contends that marketing decision variables influence successful export
marketing; these variables are basic company offering, contractual link with foreign
distributors/agents, export promotion, and pricing.

Crick and Katsikeas (1995), in their study of UK clothing and knitwear exporters,
found that firms which had lower profits from exports, as compared to the domestic
market, tended to focus their efforts on the domestic market. This led the authors to
suggest, in concurrence with Buckley et al (1988, 1990), that the issues of future potential and the process of achieving success need to be considered alongside the performance itself.

Many of the key variables and influencing factors identified in the literature as relating to export performance are discussed in later parts of this section.

2.2.4.1 Export Performance Models

While many of the studies of export performance have examined its relationship with a range of variables, relatively few have considered the interaction of variables with each other and with other aspects of export activity (Leonidou and Katsikeas, 1996). Where studies have been explanatory, rather than descriptive, they have attempted to explain export performance by a set of variables (Kirpalani and MacIntosh, 1980; Reid, 1983; Cooper and Kleinschmidt, 1985; Axinn, 1988). In explanatory studies, the researchers have usually developed a framework of causal relationships between a number of explanatory variables and export success or performance as the dependent variables. Several models, or frameworks, of export performance or success have been developed, and the main contributions in this area are outlined below, in chronological order.

Aaby and Slater (1989)

From their review of the literature on export performance, Aaby and Slater (1989) developed a "strategic export model", a model of causal relationships (reproduced in Figure 2.1).
The model distinguishes an export performance factor, three internal factors, and one external factor. Aaby and Slater found that the literature on external factors was too large to enable an adequate review in their paper, and they focused on the internal factors, which were firm competence, firm characteristics and export strategy, all of which, they suggest, are within managerial control. Variables associated with these factors were firm competence - technology, market knowledge, planning, export policy, management control, and communication, firm characteristics - firm size, management commitment, management attitudes to export-related dimensions, and export strategy - market selection, product and product line, pricing, promotion and distribution.
Although Aaby and Slater's (1989) model failed to represent a "clear-cut formula for developing a successful programme" (p. 21), they were able to draw some general conclusions about export performance. Firstly, a firm is likely to become a successful exporter if its management has the following: an international vision, consistent export goals, favourable perceptions and attitudes towards exporting, is a willingness to take risks, and a capability for engaging positively in export activities. Secondly, technology may, or may not, be important for export success; success through technology depends on good management and the export markets the firm chooses to enter. Thirdly, a large number of non-exporters have misperceptions and erroneous beliefs about exporting; specifically that exporting is risky, and requires more resources, export assistance and tax incentives than may actually be the case.

A later meta-analysis of the literature by Chetty and Hamilton (1996) provided support for Aaby and Slater's (1989) model, although Chetty and Hamilton criticise the narrative style of the latter's review, as not being efficacious in identifying solid conclusions. Chetty and Hamilton's meta-analysis confirmed both the validity and relative importance of key variables in each part of the model. Bijmolt and Zwart (1994), however, have criticised the model and developed an alternative framework, discussed below.

**Bijmolt and Zwart (1994)**

Bijmolt and Zwart (1994) have modified the export performance model of Aaby and Slater (1989), in an attempt to overcome the aspects of which they are critical. These relate to the categorisation of variables into three factors and their relationship with one another. They maintain that internal variables must distinguish between those
that are constant starting points and those that are export policy instruments (for
example, the distinctions between competencies and strategy are unclear). They
believe that internal variables are those that can be used by a firm for stimulating
export. Regarding Aaby and Slater’s firm characteristics, they argue that there are a
number of unrelated variables in this category. Bijmolt and Zwart (1994), therefore,
suggest an alternative classification of internal variables and, contrary to Aaby and
 Slater (1989), claim that firm characteristics may influence all the export policy
instruments, rather than just export strategy.

The export performance model of Bijmolt and Zwart (1994) distinguishes four
internal factors, as opposed to Aaby and Slater’s (1989) three. They suggest that firm
characteristics will not generally be used as a decision tool to influence export, and so
these differ from other explanatory factors in having only an indirect effect on export
success. The basic tenet of their model is that export policy has a direct influence on
export success and thus forms the centre of their model. Export policy consists of
three latent factors: the adjustment of organisational structure, attitude towards export,
and export market planning.

Bijmolt and Zwart (1994) use the following four export success indicators: percentage
of sales realised abroad (export intensity), relative profitability of export, development
of export during the last five years, and satisfaction of the exporter. Bijmolt and
 Zwart (1994) conclude that these four performance indicators provide a very
satisfactory measure of export success, but note that export intensity is an especially
important indicator.
Cavusgil and Zou (1994)

Cavusgil and Zou (1994) developed a conceptual model of export marketing strategy and performance, based on the coalignment principle. They state that: “The framework postulates that marketing strategy in an export venture is determined by (or aligned with) internal forces such as firm and product characteristics and external forces such as industry and export market characteristics. The performance of an export venture, in turn, is determined by export marketing strategy and firm characteristics (e.g. a firm’s capability to implement the chosen strategy).” (p. 4)

Cavusgil and Zou’s (1994) model differs from others in that it highlights the central role of marketing strategy in determining export performance. In their model, marketing strategy acts as a mediator of the link between product, industry and export market characteristics and export performance, as postulated by other researchers (e.g. Cooper and Kleinschmidt, 1985; Madsen, 1989). Within an export venture, and within different contexts of these characteristics, the coalignment of strategy and environment and the resulting export performance is enabled by adjustment of the marketing strategy.

There are three key features of Cavusgil and Zou’s (1994) model: firstly, it is based on the individual product-market export venture, rather than the total export activity of the firm; secondly, it involves both strategic and economic considerations; and thirdly, each of the components represents a broad category of variables. The incorporation of these features attempts to address the deficiencies in the exporting literature in terms of specific constructs or measures in models of export performance.
Styles and Ambler (1994)

In introducing the concept of relationships into the export performance literature, Styles and Ambler (1994) developed an updated 'hybrid' model of export performance that combines key elements of the Aaby and Slater (1989) model (which Styles and Ambler suggest represents neo-classical theory) with elements of the Relational Paradigm. Details of this have been discussed elsewhere in this chapter.

Yeoh and Jeong (1995)

A recently reported export performance model has used a contingency approach, which suggests that export performance of firms is situation-specific (Zeithaml et al, 1988). Yeoh and Jeong (1995) developed a contingency framework, which integrates the literature on exporting, entrepreneurship and organisation theory. Export performance is conceptualised as a function of fit among firms' strategic orientation, environment and export channel structure. Yeoh and Jeong's (1995) framework addresses the point made by Walters and Samiee (1990) that the lack of consistency in empirical findings indicates the need to incorporate contextual factors into research on export performance. Walters (1993) notes that: "it is dangerous to assume that certain policies or characteristics of the firm, its managers, and the operating environment are always key to success...much depends upon the specific situation of the firm and the industry in which it is competing." (p. 46). A number of other export studies have emphasised the importance of the situational context (Kamath et al, 1987; Reid and Rosson, 1987), as well as the links between strategy, structure and environment (Reid, 1983; Reid, 1984; Turnbull, 1987; Cavusgil and Zou, 1994).
The proposed framework of Yeoh and Jeong (1995) is based on the structure-conduct-performance paradigm described by Burgelman (1984), and the three antecedents of performance in their model are export channel structure, strategic orientation, and external environment. Yeoh and Jeong (1995) argue that exporting firms need to match or align their strategic orientation with their export environment (supporting Cavusgil and Zou’s co-alignment principle), and their export channel structure, to achieve superior export performance. Their framework builds on two premises: first, that a firm’s strategic orientation is a key determinant of performance; and, second, because a firm may manifest different strategic orientations according to its internal and external contextual situation, a particular strategic orientation will be contingent on its “fit” with the external environment and the firm’s export channel (Madsen, 1994). Within the context of strategic orientation, Yeoh and Jeong (1995) suggest that entrepreneurial exporting firms are likely to have higher export performance levels than conservative exporting firms.

Axinn et al (1996)

While not a complete model of export performance, the export strategy framework of Axinn et al (1996) is an important contribution to the export performance debate. This framework considers the joint effects of product and market variables, and provides insights into the export strategy/performance link. The authors suggest that strategy models show the best promise in explaining export performance more fully. However, the concept of strategy in their study focused only on products and markets, and was based on rather traditional views of strategy, such as Ansoff’s product/market growth matrix (Ansoff 1957, 1965), Porter’s generic strategies (Porter, 1980), and the work of other researchers (e.g. Keegan, 1969; Kotler, 1990; Buzzell, 1968). Given
more contemporary thinking about strategy, such as the resource-based view (e.g. Prahalad and Bettis, 1986), it is unclear how relevant their framework's focus on products and markets would be to a contemporary understanding of export strategy. The issue probably revolves around scope and emphasis of the concept, in both cases moving from a purely marketing perspective towards a perspective encompassing the whole of the export business; this issue relates directly to the earlier discussion on the context of export strategy.

Notwithstanding this aspect of the research, the product / market framework provides some valuable insights into the role of standardisation vs adaptation, and broad vs focused market strategies in export performance, not least because these variables are analysed jointly, rather than independently.

**2.2.4.2 Export Performance Measures**

As discussed above, there is little agreement in the literature on how performance and success in exporting should be defined and measured (e.g. Cavusgil and Zou, 1994). This is one of the reasons suggested for the large variation in design and analysis of export studies and the inconsistencies in results, and is thus a major contributor to the lack of an underlying theoretical framework of export performance (Aaby and Slater, 1989; Lee and Yang, 1991). Furthermore, there has been little attempt by researchers to identify difficulties in measurement, sampling, validity or particular techniques (Madsen, 1987; Aaby and Slater, 1989). Thach and Axinn (1994) point out that no systematic research has been conducted on the performance measures themselves. It is not unusual, in studies using more than one export performance measure, to find disagreement between the results. For example, in Das' (1994) study of Indian exporters, export intensity yielded more significant and relevant discriminate
functions than export growth measures. Rather than attempt to ascertain why these differences occurred, most of the studies that have experienced this outcome merely report separate results for each dependent variable.

Comprehensive reviews of export performance measures are provided by Kirpalani and Balcombe (1989) and Matthyssens and Pauwels (1996). Other authors also provide detailed discussion of the problems associated with determining export performance or success measures (for example, Baker and Abou-Zeid, 1982; Hooley and Lynch, 1985; Buckley et al, 1988; 1990; Baker and Hart, 1989; Ughanwa and Baker, 1989; Diamantopoulos and Schlegelmilch, 1994). Three main problems are associated with the conceptualisation and operationalisation of export performance measures. First, there is a large variety of different approaches to measuring export performance (Diamantopoulos and Schlegelmilch, 1994); second, there is a need to use multidimensional measures; and third, there is a need for export performance indicators to be assessed in a dynamic way, i.e. long-term and with a future performance emphasis (Matthyssens and Pauwels, 1996).

In relation to the first issue, export performance measures can be broadly defined as either quantitative or qualitative. Typically, quantitative measures are used, and these include: profitability (sometimes relative to domestic sales, e.g. Bilkey, 1982), export intensity (exports as a percentage of total sales) e.g. Tookey, 1964, trend in export intensity (Dichtl, Kogelmayr and Muller, 1990), export sales and/or export sales growth (Madsen 1987), changes in export market share (Gomez-Mejia, 1988), and number of export countries (Samiee and Walters, 1991). The most widely used export performance indicator is export intensity, either alone or in combination with other
measurements (Diamantopoulos and Schlegelmilch, 1994). However, the use of this measure, especially when used alone, has been increasingly criticised (Cooper and Kleinschmidt, 1985) for a number of reasons. Export intensity may change as domestic business levels change, and a declining domestic business may result in an increased export intensity — the overall business result, however, would be questionable. Furthermore, the export intensity measure gives no indication of export profitability.

Also, export intensity cannot be used as a measure for individual export ventures, as it represents the performance of the entire export business. In some situations, exporters may self-impose a limit on the volume of business that they commit to exporting because of domestic demand (Das, 1994); their export business may, in other respects be deemed successful. Similar issues may arise with export growth, which may not consider other dimensions (e.g. meeting strategic goals); exporters may also self-impose a limit to overall or export growth. Caughey and Chetty (1994) suggest that the decision-maker's conception of an ideal size limits the firm's commitment to exporting; in their study, a number of firms felt that they did not want to grow their business beyond a certain point, for reasons largely associated with lifestyle.

More recently, attention has been given to the use of both qualitative and subjective measures of export performance, in order to capture the perspectives of both researchers and practitioners (Matthyssens and Pauwels, 1996), as well as to provide a more contextual understanding of the construct. Qualitative and subjective measures include comparisons with company objectives and competitors' performance (e.g. Louter et al, 1991; Cavusgil and Zou, 1994), degree of strategic goal achievement
(Cavusgil and Zou, 1994), subjective responder assessment (Evangelista, 1994), judgmental classification of case material by the researchers (Cavusgil and Kirpalani, 1993), and use of a scoring system (Craig and Hart, 1993). Chetty and Hamilton (1996) found that exporters' self-evaluation of export performance was less than objective. In their study, exporters increased their commitment to their exporting ventures, while, at the same time, the financial returns from exporting were diminishing - a situation which suggests that these exporters perceptions of export performance were different to the reality. Aksoy and Kaynak (1994) noted different export objectives with different types of fresh produce exporters (private and co-operative). They concurred with other researchers that a more meaningful assessment of export success is achieved when more than one success measure is used.

Qualitative measures of export performance have also been associated with studies of exporter-importer relationships, where the measure has been, for example, perceived satisfaction with the relationship (Ford and Djeflat, 1982; Leonidou, 1989). A number of researchers have found a strong association between levels of conflict and export performance in importer-exporter relationships (Rosson and Ford, 1980; Ford and Djeflat, 1982; Ford and Rosson, 1982; Frazier, 1984; Leonidou, 1989), although importer and exporter perceptions on the level of conflict in a relationship tend to differ (Katsikeas and Piercy, 1991). Qualitative measures have been criticised for their weakness associated with measuring perceptions of performance, rather than actual performance itself. Subjective measures have, however, been supported by the view that perceived performance is more important than actual performance (Matthyssens and Pauwels, 1996). Regardless of these issues, it is generally accepted that such studies offer greater insights into the exporting process, including export
performance, than purely quantitative studies using only quantitative measure. Use of both quantitative and qualitative measures in a research study has been agreed as providing the best research outcome, both generally (Miles and Huberman, 1994) and in export research (Matthyssens and Pauwels, 1996; Souchon and Diamantopoulos, 1996).

In their review of the export literature, Aaby and Slater (1989) suggest that export performance studies can also be grouped on the basis of exporter categories, particularly exporters and non-exporters (e.g. Cavusgil and Nevin, 1981; Malekzadeh and Nahavandi, 1985; Burton and Schlegelmilch, 1987; Cavusgil and Naor, 1987; Keng and Jiuan, 1989), where the implication is that exporting per se is sufficient to ascribe success to a firm. Some researchers have suggested using different measures for firms of different size, in order to take account of size-related performance measurement difficulties. For example, Diamantopoulos and Schlegelmilch (1994) use indicators in relative, rather than absolute terms. In addition, export market share is very difficult to measure, especially for smaller exporters (Chetty and Caughey, 1994).

The second issue relates to the use of single, or multiple, composite, measures of export performance. Use of single performance measures as the sole indicators of export performance has been substantially criticised (e.g. Fenwick and Amine, 1979; Reid, 1981; Rosson and Ford, 1982; Cooper and Kleinschmidt, 1985), as it is argued that the complexity of export success justifies the use of a set of variables (e.g. Madsen, 1989, Bijmolt and Zwart, 1994). Nevertheless, Aaby and Slater (1989) suggested that the use of single variable measures is an improvement over the use of
the categorical approach, which simply separates firms into exporters and non-exporters. However, multi-indicator measures tend to be more reliable and have less measurement error than single indicator measures (Churchill, 1979).

Notwithstanding these arguments, many studies have taken the single-variable approach (e.g. Tookey, 1964; Christensen, Da Rocha and Gertner, 1987). Many others which have taken a composite approach have focused on combining export sales-related variables, such as sales growth, export sales and export intensity (e.g. Kirpalani and Macintosh, 1980; Madsen, 1987), which limits the measurement of performance to economic indicators and provides a relatively narrow view of the construct. In utilising a multivariable approach to performance measurement, it has been stressed that financial or economic measures should be complemented by strategic measures, which are more future oriented (Matthyssens and Pauwels, 1996).

A number of studies have utilised such an approach (e.g. Cavusgil and Zou, 1994; Diamantopoulos and Schlegelmilch, 1994; Souchon and Diamantopoulos 1997). In studying the relationship between a firm’s strategy and its export performance, Cavusgil and Zou (1994) stated: “Previous studies have viewed exporting simply as a means of realising the economic goals of the firm. Performance has been measured in terms of sales or profits, with no deliberate attempt to relate it to a firm’s strategic and competitive goals, such as gaining a foothold in foreign markets or neutralising competitive pressure the firm faces in the domestic market.” (p. 2). These authors suggest that a proactive marketing strategy has a central role in determining export performance. Export performance measures used in their study of individual product-market export ventures incorporated economic and strategic dimensions involving both objective and subjective measures. These measures were: the extent to which the
initial strategic goals of management were achieved; the average annual growth rate of export sales over five years of the venture; the overall profitability of exporting over five years of the venture; and management’s perceived success of the venture.

Katsikeas (1994) prefers to use the concept of export competitive advantage as a measure of export performance. He suggests that this is derived from three major areas: firm-specific factors, marketing policy elements, and factors in the external environment. Moon and Lee (1990) analysed competitive advantages of exporters specifically in relation to their stage of export development, one of very few studies to make this connection between export performance and the internationalisation process.

According to Matthyssens and Pauwels (1996), two, largely unresolved, problems in using multiple measure have been identified from the new product development and strategy literature. First, it is difficult to differentiate effectively between success and failure, and second, it is difficult obtain one overall index from combined multiple measures. On the other hand, some researchers (e.g. Madsen, 1989; Lee and Yang, 1991, Kaynak and Kuan, 1993) suggest that performance measures should not be combined into one overall measure, but rather, they choose to “respect the multidimensionality of export performance.” (Matthyssens and Pauwels, 1996, p. 106). This is particularly relevant for the issue of inter-variable relationships and influences, mentioned earlier. Venkatraman and Ramanujam (1986, p. 807) state: “A unidimensional composite of a multidimensional concept such as business performance tends to mask the underlying relationships among different subdimensions.” (quoted in Matthyssens and Pauwels, 1996, p. 106).
The third issue relates to the dynamic perspective of export performance. This requires measures to represent the long-term, rather than, or as well as, the short term (Axinn et al, 1996) and to consider the future expected performance of the firm (Matthyssens and Pauwels, 1996), particularly in the context of the firm’s external environment (Axinn et al, 1996). Examples of the few studies, which have incorporated these elements, are Cavusgil and Zou (1994), Diamantopoulos and Schlegelmilch (1994), Schlegelmilch and Diamantopoulos (1995) and Axinn et al (1996).

Export performance studies have taken three basic approaches: the proposal of conceptual frameworks (Cavusgil and Zou, 1994); the association of success characteristics with firms from a predetermined sample judged to be successful (Baker and Abou-Zeid, 1982; Ughanwa and Baker, 1989); and the differentiation of successful from unsuccessful firms from a cross-sectional sample (Hooley and Lynch, 1985). Regardless of these attempts to determine export performance or success, Buckley et al (1988; 1990) point out that problems of measuring “success” still exist. They suggest that the potential of firms and the process by which the success was achieved should be taken into account with the performance itself. As mentioned above, it is difficult to differentiate effectively between export success and failure when performance involves multiple indicators. For example, Diamantopoulos and Schlegelmilch (1994) found that different subvariables of the manpower variable impacted differently on different performance indicators. Matthyssens and Pauwels (1996) argue that there may be a false dichotomy between success and failure in terms of export performance. They question whether or not success and failure are the
extremes of a unidimensional performance scale and suggest that they may not have
the same dimensions. This is an important question, with significant implications for
theory relating to export performance. 

Export research has identified several factors that influence export performance (Aaby
and Slater, 1989; others). These relate broadly to four areas: firm characteristics, firm
competencies, managerial factors, and external factors. The interaction between these
factors and their constituent variables has been highlighted by Chetty and Hamilton
(1996) as demonstrating the interactive and non-static nature of the exporting process.
For example, they cite evidence for direct links flowing from each element of firm
characteristics to competencies, in particular, planning and analysis capability
(O’Rourke, 1985; Walters, 1985; Walters and Samiee, 1990, Ali and Swiercz, 1991,
Koh, 1991). Chetty and Hamilton also note that the opposite causation, running from
investment in competencies (such as knowledge of markets, and advanced
technology) to firm characteristics (such as management commitment to exporting,
and perception of profit from exporting) has been reported in the literature (Cavusgil,
1980; Daniels and Robles, 1985; Gripsrud, 1990; Klein and Roth, 1990), suggesting
the involvement of complex multivariable interactions. In order to retain clarity of
presentation, the four key factors are discussed separately, although interrelationships
between them are noted as relevant.

2.2.4.3 Firm Characteristics

The most widely researched variables representing firm characteristics include firm
size (e.g. Reid, 1982; Czinkota and Johanson, 1983; Culpan, 1989; Ortiz-Buonafina,
1990; Bonaccorsi, 1992), level of export involvement (Cavusgil, 1984a;
Diamantopoulos and Inglis, 1988; Fraser and Hite, 1990), age of the firm (e.g. Lee
and Brasch, 1978; Ursic and Czinkota, 1984; Kammath et al, 1989; Reid, 1989), export experience (e.g. Douglas and Craig, 1989; Madsen, 1989; Moon and Lee, 1990; Erramilli, 1991); management export commitment and expectations, and management’s attitudes and perceptions towards exporting (Aaby and Slater, 1989), and resources available for export development (Terpstra, 1987, Diamantopoulos and Schlegelmilch, 1994). Management-related components are discussed in a separate part of this chapter (Managerial Factors), as many studies actually distinguish them from firm characteristics.

Conflicting results have been reported for most of these variables for reasons largely methodological (Aaby and Slater, 1989). These include the different indicators used for measuring export performance (Matthyssens and Pauwels, 1996), different data sources, data collection methods and analytical techniques (Aaby and Slater, 1989), and different interpretations of the variables concerned (Bijmolt and Zwart, 1994). An example of conflicting reports is with firm size; some researchers have found an association between firm size and interest in exporting and export activities (e.g. Cavusgil and Nevin, 1981; Bodur and Cavusgil, 1985; Denis and Depelteau, 1985, Gottko and McMahon, 1988), while others have found no significant relationship (e.g. Bilkey and Tesar, 1977; Fenwick and Amine, 1979; Kammath et al, 1989; Bell, 1995).

Firm characteristics, unlike other export variables, are relatively difficult for the firm to change and are unlikely to be used as a decision tool to influence export, or as an export policy instrument. Thus, according to Bijmolt and Zwart (1994), firm characteristics, especially those of a relatively ‘constant’ nature have only an indirect
effect on export success. Variables associated with firm characteristics are discussed briefly below.

**Firm Size**

The analysis of export problems on the basis of firm size and export experience can be helpful to public policy makers in formulating export marketing strategies and assistance programmes (Katsikeas and Morgan, 1994). Many studies have been conducted on the influence of firm size on export behaviour and performance. These include a study by Bonaccorsi (1992), who used the largest national database ever employed at that time (8,810 Italian firms) for a study on size and behaviour, and a subsequent study by Calof and Viviers (1995), which extended Bonaccorsi’s work with a sample base of 14,072 Canadian firms. However, as noted previously, many of the numerous studies of the impact of firm size on exporting are contradictory in their findings. Aaby and Slater (1989) have highlighted this problem in their comprehensive review of conflicting empirical evidence on the effect that firm size has on export behaviour.

One of the reasons why findings may conflict is the variety of indicators used to categorise the size of firms (Cavusgil, 1976, 1984). The most commonly used measures are number of employees (e.g. Bilkey and Tesar, 1977), or annual sales turnover (e.g. Czinkota and Johnston, 1983), but others have included total assets, equity and deposits and domestic market sales (Agarwal and Ramaswami, 1992). In addition, different countries have different perspectives on criteria for the size of firms, as noted in an earlier part of this chapter (Exporting and Small and Medium Sized Enterprises). Gupta (1980) suggests that most indicators of firm size are likely to be strongly correlated, at least within a single industry. In this regard, Cavusgil
(1976, 1984) and Calof (1994) agree that firm size is important as a discriminator only for smaller firms, and is not important beyond a certain size; comparability of size categories between research studies is therefore important.

Another reason why the association between firm size and exporting is inconclusive may be that studies have used too few observations, as suggested by Calof (1994), who found only few variables accounted for by firm size. In accordance with Bonaccorsi's (1992) results, Calof (1994) found that firm size has a very limited association with a firm's propensity to export, the number of countries served and export intensity. He maintains, therefore, that firm size should not be considered a major barrier to exporting; small firms may have fewer resources than larger firms may, but these are often adequate for internationalisation. Calof (1994) points out, however, that his study did not examine the issue of firm size and export performance, only export behaviour. In their extensive review of the literature, Aaby and Slater (1989) also concluded that firm size, by itself, is not an important factor, but needs to be considered in the context of other factors, such as financial strength or variables related to economies of scale.

It is not unusual for small firms to perform well in exporting, but seek to remain small in size; for example, some 'born global' firms (Rennie, 1993; Knight and Cavusgil, 1996) and international new ventures (Oviatt and McDougall, 1994) have very high export intensity (sometimes 100%), but are small for two reasons: they have no, or very little, domestic business, or they may prefer to remain small in size, at the same time as being actively engaged in exporting (Caughey and Chetty, 1994). Others, like
specialised high-tech firms internationalise rapidly, and have high export intensity, so they are still small while having an active export involvement (Bell (1995)).

What is agreed in the literature is that larger firms have more resources, greater scale economies and generally have lower levels of perceived risk in export market activities (Bonaccorsi, 1992) than do small firms. In a study by Hart et al (1994), the results suggested that larger companies might use more formal market research and use it in a more objective fashion than smaller firms. Smaller exporters have been shown to undertake less information-gathering activity than larger firms, and this relationship is expected to impact on performance potential in the export market (Katsikeas and Morgan, 1994). These authors suggested that smaller exporters might be less aware of information sources than larger exporters (Simpson and Kujawa, 1974; Reid, 1984; Yaprak, 1985), due, partly, to a limited communications budget available to smaller firms (Seifert and Ford, 1989). Some of these findings, however, may depend on the mode of information acquisition concerned; Souchon and Diamantopoulos (1996) found that smaller firms are more likely to use export market intelligence than formal market research. In tracking the growth in size of firms, Bonaccorsi (1992) suggested that most small firms undertake growth first in their domestic markets and then, with constraints of stagnation or saturation of the market, move into export markets - having attained some growth in size by that stage. Given the multidimensionality of many of the variables, such as export knowledge (Souchon and Diamantopoulos, 1996) and constructs, such as export performance (Matthyssens and Pauwels, 1996) in exporting, determination of the impact of firm size is difficult. This is compounded by the multidimensionality of the variable, firm size, with the key elements being number of employees and sales volume. Other
variations occur in the concept of firm size; for example, different criteria in different countries, and differences across industries in relation to different measures of firms size (e.g. high tech firms often have a higher sales volume/employee ratio than low-tech firms). These factors have implications for theory development for export performance, principally because of the issues of determining agreed criteria for the variables concerned.

**Investment**

Investment in modern plant and equipment and research and development has been shown to be critical in the building of export volume (Chetty and Hamilton, 1996). Investment in exporting activities has been covered in the literature mainly in the areas of commitment to exporting and resource utilisation. These are discussed elsewhere in this chapter.

**Export Experience**

An understanding of the role of international experience of firms (e.g. differences in perceptions to exporting between new and long-term exporters) may contribute to the design of public policy instruments to assist exporters in developing their international markets (Ogbuehi and Longfellow, 1994). The incremental, or stages, approach to internationalisation theory posits that knowledge gained from experience in overseas business is a driving force in the internationalisation of the firm, along with an increasing commitment of organisational resources (Jull and Walters, 1987; Johanson and Vahlne, 1990). Export market uncertainty will be increased when there are low levels of experiential knowledge (Davidson, 1982; Agarwal and Ramaswami, 1992). Building on others’ research, Katsikeas (1994) postulated that a firm’s competitive position in a foreign market would be influenced by the level of
experiential knowledge of that market. He found, however, that there was no significant difference in perceived competitive advantages between the groups of experienced and less experienced exporters, although it was possible that the latter still had sufficient experiential knowledge to effectively conduct their export business and cause this result.

The majority of studies support the view that firms with greater export experience achieve a better export performance (Kirpalani and MacIntosh, 1980; Tesar and Tarleton, 1982; Aaby and Slater, 1989; Madsen, 1989; Cavusgil and Zou, 1994), or adopt a more aggressive approach (da Rocha, Christensen and Eduardo, 1989) than those with less experience. However, some studies do not support these contentions; for example, Czinkota and Ursic (1991) noted that no-growth firms had significantly more experience than growth firms, and Denis and Depelteau (1985) found that export experience influenced export volume more than propensity to export. In terms of export sales forecasting, which Winklhofer and Diamantopoulos (1996) claim relies on the availability, access and quality of information relating to overseas markets, smaller firms with lower levels of export experience showed a fairly unsophisticated approach to sales forecasting.

Experience is usually operationalised as the length of time that a company has been involved in exporting (Ogbuehi and Longfellow, 1994), but it has also been related to the number of countries exported to, regardless of time involved (Erramilli, 1991). A number of studies have related export experience positively to firm size (e.g. Ogbuehi and Longfellow, 1994). In addition, motivational factors, managerial attitudes and abilities, perceived economic incentives and disincentives and the perceived risk of
exporting have been shown to vary among exporters with the length of time that they have been involved in exporting (Welch and Wiedersheim-Paul, 1980; Axinn, 1988; Samiee and Walters, 1991).

Relationships have been shown between export experience and aspects of market research (Hart et al 1994) and types of foreign market information sought (Ogbuehi and Longfellow, 1994). Ogbuehi and Longfellow (1994) found that, as export experience increases, a greater emphasis is placed on a growth strategy for the firm. In the same study, experience in exporting was also positively related to higher levels of export intensity, greater commitment of management time, higher export sales, higher profits from export, higher total assets, and a higher perception of the firm’s ability to export (Ogbuehi and Longfellow, 1994). In a study of manpower characteristics, which used multivariate analysis, Diamantopoulos and Schlegelmilch (1994) found no substantial influence of export experience on either manpower characteristics (a composite variable of various managerial characteristics), or on export performance, using multiple measures.

At the operational level, less-experienced exporters have been shown to perceive more exporting problems than experienced exporters (Katsikeas and Morgan, 1994). They have greater problems than experienced firms do in the mechanics of exporting (Madsen, 1989), such as export documentation and dealing with bureaucratic procedures of public agencies (Katsikeas and Morgan, 1994). This may be due to their lack of knowledge of the necessary procedures, or the lack of time available to deal with them (Rabino, 1980; Ogram, 1982; Tesar and Tarleton, 1982). In either
case, these issues may become a limitation on export development for the less experienced firms (Katsikeas and Morgan, 1994).

**Age of the Firm**

Some conflict in research findings relating to firm age and exporting is evident. For example, it has been shown that newer exporters perform better than older exporters (Czinkota, 1984); and that firm age affects the type of export adoption process used (Lee and Brasch, 1978). Other researchers (for example, Kammath et al, 1989; Reid, 1989) have found no relationship between age and export success. Das (1994) found in firms from a less developed country that export success was associated with younger firms (average years in business of 28.8 years, compared with 41.3 years for older firms). Bell (1994) found that age of the firm had no significant influence on the decision of software firms to internationalise, and Leonidou (1995a) reported no differentiating effect of age on managers’ perceptions of export stimulating factors.

**Export Intensity or Involvement**

Export intensity, also referred to as export involvement, is measured by the volume of export sales as a proportion of total sales, as this indicates the extent to which a firm is dependent on export activities (Diamantopoulos and Inglis, 1988). Export sales of >50% have been suggested to represent ‘high involvement’ exporters, while <50% export sales represent ‘low involvement’ exporters (Diamantopoulos and Inglis, 1988). The association between export involvement/intensity and exporting activities and outcomes has been widely researched.

Export intensity is also discussed as a measure of export performance earlier in this chapter. Discussion is included here as it relates particularly to the differences
between high and low involvement exporters and the influence of other variables.

Increasing levels of export intensity or involvement are implicit in the stages approaches to internationalisation e.g. Johanson and Vahlne, 1977), along with export market knowledge and experience. Katsikeas (1994) found a significant difference in perceived export competitive advantage between high and low involvement exporters, as well as higher levels of production capability in the former group, enabling them to meet volume requirements of their overseas customers. High-involvement exporters have also been shown to attach greater importance to the adaptation of products to their export market requirements (Katsikeas, 1994), in line with similar findings in relation to export development and success (Kirpalani and MacIntosh, 1980; Kleinschmidt and Cooper, 1988; Sullivan and Bauerschmidt, 1990; Katsikeas and Piercy, 1993). They also adopt a competitive pricing approach, but have lower marketing capability than low-involvement exporters (Katsikeas, 1994). In terms of channel selection, high volume exporters in Rameseshan and Patton's (1994) study tended to use independent, rather than integrated, channels, implying that these exporters were wary of managing direct channel operations in their foreign markets.

**Firm Resources**

A number of other firm characteristics, in particular, size of firms, export experience and export intensity, as well as stage of export development influence resource availability. Firm resources include financial and capital resources, production equipment, employees and managerial personnel, or manpower (Diamantopoulos and Schlegelmilch, 1994), which are discussed with other managerial elements, later in this chapter. In relation to resources, however, it is interesting to note that Diamantopoulos and Schlegelmilch (1994) found that quantitative, resource-related
aspects of manpower (e.g. percentage of export managers) related to different measures of export performance than qualitative aspects of manpower (e.g. managerial attitudes). Specifically, the quantitative aspects related to productivity measures (e.g. export sales per export manager), while qualitative measures related more to non-productivity measures (e.g. export intensity and expected future export involvement).

When resources are scarce, for instance, in the early stages of export development, a firm will release resources gradually (Forgsen, 1989), but as a firm gains more export experience and resources, decisions of resource allocation become more contingent on specific market conditions and the strategic options available to the firm (Leonidou and Katsikeas, 1996). Where there is a strong managerial involvement in exporting activities, and resources are available, there is a stronger commitment to exporting than where these factors do not apply (Welch and Luostarinen, 1988; Beamish, Craig and McLellan, 1993).

Because smaller firms are generally at a resource disadvantage relative to larger firms, they are often unable to invest in the human capacity necessary to develop their export business (Calof, 1994). Cavusgil and Zou (1994) maintain that resources must be deliberately allocated in order for firms to obtain favourable export results; financial and managerial resources are most important.

**Export Stimuli and Motivation to Export**

Stimuli, also referred in the literature as motives, incentives, triggering cues, or attention evokers, constitute the forces that influence a firm to initiate, develop or sustain export activities (Leonidou 1995a). Understanding the variables that motivate
firms to export, and managers' attitudes to exporting are key to assistance planning by
government agencies, as well as to the firms themselves (Jaffe and Pasternak, 1994).
Most studies of export stimuli, although dating back to the 1960s, have focused on
factors stimulating existing exporters (Leonidou (1995a).

Motives which induce management to undertake internationalisation through
exporting have been categorised as “proactive” or “reactive” (Johnston and Czinkota,
1982; Samiee, Walters and DuBois, 1993). “Proactive” motives include positive
reasons for exporting, such as profit opportunity (Bilkey, 1978, 1982; Christensen et
al, 1987), growth through market expansion (Kirpalani and MacIntosh, 1980;
Edmunds and Khoury, 1986), and exploitation of differential advantage, while
“reactive” motives include aspects such as overproduction, declining domestic sales,
and competitive pressures. “Proactive” motives are usually associated with more
“aggressive” exporters and higher export intensity, and “reactive” motives with more
“passive” exporters and lower export intensity (Bilkey and Tesar, 1977; Cavusgil,
1980; Jaffe and Pasternak, 1994; Chetty and Hamilton, 1996). Research indicates that
most firms start exporting on the basis of unsolicited export orders (Bilkey, 1978;
Reid, 1981; Brooks and Rosson, 1982; Tesar and Tarleton, 1982; Beamish and
Munro, 1986; Karafakioglu, 1986; da Rocha, Christensen, and da Cunha, 1990;
Grondin, 1991; Aksoy and Kaynak, 1994; Liang, 1995), a motive which is reactive
and thus associated with passive exporting.

In a study of New Zealand exporters, Caughey and Chetty (1994) found that internal
stimuli (such as the goals of the firm and the expected fulfilment of these goals (Olson
et al, 1978)) were more likely to influence existing exporters, while external stimuli
(such as unsolicited export orders, market opportunities, competition, economic integration and government stimulation measures (Olsen et al, 1978)) were more likely to influence non-exporters.

**Organisational Structure and Context**

A firm’s organisational setting has been shown to influence exporting in various ways. Piercy (1983, 1985) suggests that the search for information and the way it is used in a firm is influenced by the organisational setting, suggesting that market information is a power source that may be used 'politically' in a firm for control and influence. Where firms make organisational adjustments to their exporting business (e.g. establishment of an export department), they may enjoy better export results (Bijmolt and Zwart, 1994). These authors showed that organisational structure was one of three export policy variables directly impacting on firms’ export success.

**Firm Ownership**

An exporting firm’s ownership type will impact on its export behaviour and performance, in areas such as motivation and commitment, available resources and organisational goals. Smaller export firms tend to be more often being privately owned, and larger exporters are more inclined to be publicly listed firms, and possibly multinational enterprises or their subsidiaries.

In studying successful and unsuccessful exporters from India, Das (1994) found that firms with higher export intensity were small, privately owned firms, while larger, publicly listed exporters had a lower export intensity (<20%). Ownership has an important influence on organisational culture. This will impact on attitudes and commitment to export, as well as approaches to international quality standards (Frost
and Jones, 1994), and the way in which export market research information is generated and used in the firm (Hart et al 1994).

**Agent and Distributor Support**

Empirical evidence shows a positive relationship between export performance and the support provided to distributors or subsidiaries (Bello and Williamson, 1985; Rosson and Ford, 1982; Cavusgil and Zou, 1994). This, in turn, is influenced by the amount of commitment made to the exporting venture, recognition of the link between the export firm and its foreign customers (Rosson and Ford, 1982), the nature of the product and export market forces (Bilkey, 1982; Rosson and Ford, 1982). The use of agents and distributors is discussed elsewhere in this chapter.

**Links With Export Markets**

As the importance of relationships and networks in export behaviour and performance is recognised (e.g. Johanson and Mattsson, 1988), so research on exporter-export market links has developed. These links, particularly historical and political, play an important part in the export success of firms, by easing the export initiation process, removing potential cultural and language barriers, reducing the ‘psychic’ distance between the exporter and overseas customers, or by creating an ‘importer pull’ opportunity, as noted by Aksoy and Kaynak (1994) in the fresh produce industry.

Caughey and Chetty (1994) noted that exporters who travelled overseas frequently established personal contacts to help them respond positively to various export stimuli. International family heritage may also influence a firm’s decision to export (Reid, 1981; Wiedersheim-Paul et al, 1978). In addition, experience in foreign
markets may also affect distribution channel choice (Gatignon and Anderson, 1986; Klein and Roth, 1990).

\subsection{2.2.4.4 Firm Competencies}

In their comprehensive review of export research, Aaby and Slater (1989) identified a number of studies that associate export strategy with firm competencies (e.g. Abdel-Malek, 1978; Kaynak and Kothari, 1984; Denis and Depelteau, 1985; Hedlund and Kverneland, 1985; Klein and Roth, 1990). Aaby and Slater (1989) concluded that: 
“Competencies are probably more important than firm characteristics” (p. 21). The competencies they identified were associated with management’s ability to: apply appropriate technology, establish necessary commitment, acquire international knowledge, institute consistent and realistic export objectives, develop export policy, and establish necessary control systems.

Firm competencies also include aspects such as production method/technology (Daniels and Robles, 1982; Cavusgil, 1984; Cooper and Kleinschmidt, 1985); quality control processes (Joynt, 1982; Burton and Schlegelmilch, 1987; Christensen et al, 1987; Frost and Jones, 1994); personnel experience and training (Kirpalani and MacIntosh, 1980; Beamish and Munro, 1987; Bourandas and Halikias, 1991); company reputation (Dess and Davis, 1984; Williams, 1992); operating efficiency (Dess and Davis, 1984; Parker and Helms, 1992); new product development capability and range of products offered (Katsikeas, 1994); planning/analysis capability (O’Rourke, 1985; Walters, 1985; Samiee and Walters, 1990; Ali and Swiercz, 1991; Koh, 1991; and knowledge of markets (Cavusgil, 1980, Klein and Roth, 1990).
Firms competencies have been suggested as important sources of a firm’s export competitive advantage (Katsikeas, 1996). Cavusgil and Zou (1994) demonstrated that the performance of an export venture is influenced positively and strongly by a firm’s international competence. In their study of New Zealand exporters, Chetty and Hamilton (1996) identified three minimum competencies for the initiation of exporting: market knowledge, quality standards and technical sophistication. A number of the important firm competencies identified in the literature are discussed below.

**Quality**

Quality has been well recognised for its strategic importance for some time (Frost and Jones, 1994), and design, as well as quality, is an important factor in international competitiveness (Ughanwa and Baker, 1989; Porter, 1990). In fact, design and quality have been designated the most important factors contributing to a firm’s efficient and successful exporting (Cunningham and Spigel, 1971; Joynt, 1982). A strong quality function (Burton and Schlegelmilch, 1987; Christensen, da Rocha and Gertner, 1987;) and quality of products (Daniels and Robles, 1982) have been associated with successful exporting. Frost and Jones (1994) note that quality standards have been viewed as a means of overcoming barriers to international success, and that compliance with quality standards often involves some degree of product adaptation, which is also associated with high export performance – (see elsewhere in this chapter).

**Technology and R & D, Product Uniqueness and Intellectual Property Protection**

The role of technology and R&D in export behaviour and performance has been
widely researched (e.g. Cavusgil and Nevin, 1981; Garnier, 1982; Sriram, Neelankavil and Moore, 1989). A firm's technological product advantage and R&D expenditure have been associated with export growth (Cooper and Kleinschmidt, 1985) and export intensity (McGuiness and Little, 1981). Sriram, Neelankavil and Moore (1989), however, found a positive relationship between technology and perceived success, but a negative relationship between technology and export intensity. Reid (1986) reported little relationship between technology and export performance, but noted that technology did provide a motivation for an early entry into exporting. Reid (1986) asserts that simply having technology is not sufficient to serve as a competitive advantage for a firm - other factors, such as the appropriateness of the technology, its management, and the markets in which is introduced, are as important (Reid, 1986; Aaby and Slater, 1989). Reid (1986) is critical of other research on technology and export performance because it has used industries that include significant intra-company trading (in Aaby and Slater, 1989).

In their study of New Zealand exporters, Chetty and Hamilton (1996) reported that the most successful exporters were distinguished by relative technological sophistication as well as by their size. Moreover, the firms became technologically advanced in order to export, and the increased volume from exporting facilitated their increase in size, which, in turn, enabled a larger R&D expenditure because it was allocated on a percent of sales basis. Thus, the adoption of technological sophistication created a self-continuation of R&D and technology improvement.

Having a technological edge enables firms to produce products that are speciality or niche products (Moini, 1995), which may be an important contribution to their overall
export strategy. Possession of patents has been associated with export initiation (Pavord and Bogart, 1975) and export success (Moini, 1995). In addition, born-global firms (Rennie, 1993; Knight and Cavusgil, 1996) and international new ventures (Oviatt and McDougall, 1994) highlight the role of technology and technology/product uniqueness in successful exporting.

**Market Knowledge**

There is considerable overlap in the literature in the areas of market knowledge, market information, market intelligence and market research. Much of the overlap depends on the different interpretations of the terms, and the distinctions between the types of knowledge and modes of export market intelligence acquisition (Souchon and Diamantopoulos, 1996, 1997). Market knowledge is often treated as a variable associated with the firm competencies factor, but, for the purposes of discussion of the literature on this variable, it has been included with the earlier discussion in this chapter on Market Research and Information.

**Readiness to Export**

Cavusgil (1990) asserts that organisational and product readiness are crucial components of export success. Such are the practical implications of this requirement that, in association with the University of Michigan, Cavusgil has developed a computer-based programme, CORE (Company Readiness to Export), which enables firms to self-assess their readiness to export on these dimensions.

Organisational readiness is the only one of three posited constructs that explains export intention in a study of Mexican small- and medium-sized manufacturers conducted by Jaffe and Pasternak (1994). From their findings, they suggest the
application of expert systems, like the CORE programme in the assessment of organisational readiness to export.

**Export Planning**

In their review of the exporting literature, Aaby and Slater (1989) identified a large number of studies that examined the role of planning on export behaviour and performance. The use of a formal approach to export market planning separates continuing exporters from those that have exported, but abandoned their efforts (Piercy, 1981; Reid, 1983; Cavusgil, 1984; Daniels and Robles, 1985; Malekzadeh and Nahavandi, 1985; Christensen et al, 1987). Firms that adopt formal export market planning have also been shown to have a higher propensity to export than firms that do not use such an approach (Cavusgil and Nevin, 1981; Cavusgil, 1984; Denis and Depelteau, 1985; Malekzadeh and Nahavandi, 1985; Burton and Schlegelmilch, 1987; Diamantopoulos and Inglis, 1988). Aaby and Slater (1989) conclude that planning for export is a powerful discriminator between successful exporters and non-exporters.

In a more recent study, Bijmolt and Zwart (1994) incorporated export planning into an export policy construct, along with organisational adjustment and attitudes towards export. Their results show that export success is associated with export policy - more strongly with the export planning and organisational adjustment components than with attitudes towards export. In his study of the software industry, Bell (1995) noted that, in most cases, export planning took place after firms had undergone a period of reactive and opportunistic exporting. Bell (1995) argues that the attainment of export competencies, such as planning, may result in a strategic approach to exporting, rather than planning being (initially) a part of the strategic approach. The implementation and use of formal control systems for monitoring activities usually associated with
planning (Johnson and Scholes, 1993) has been shown to be associated with export success (Kirpalani and MacIntosh, 1980; Burton and Schlegelmilch, 1987).

2.2.4.5 Managerial Factors

Internal managerial factors have been shown in a number of studies and review articles to influence export performance (e.g. Aaby and Slater, 1989; Das, 1995; Chetty and Hamilton, 1996; Diamantopoulos and Schlegelmilch, 1994). The variables contributing to this factor are discussed below.

Managerial Characteristics

A firm’s export marketing activities and export success may be related to the quality, attitudes and characteristics of its managers. For example, a manager’s knowledge of foreign business languages (Bilkey and Tesar, 1977), attainment of formal education (Schlegelmilch and Ross, 1987) and experience abroad (Langston and Teas, 1976; Da Rocha, Christensen and Da Cunha, 1990), as well as their age (Caughey and Chetty, 1994), may influence export involvement and success.

Certain managerial characteristics, such as quality and skills of top managers were found to be key export success factors by Kammath et al (1989) in a study of successful Canadian exporters. In contrast, the study also found that other managerial factors, such as international background of company personnel, were not crucial for export success. Managerial experience has been shown to be a key variable affecting the export activities of Central American firms exporting to developed countries (Dominguez and Sequeira, 1991), and of Brazilian firms (Da Rocha, Christensen and Da Cunha, 1990).
In a study of Canadian firms, Hardy (1987) found that firms that did not export failed to do so because of the lack of management skills (including financial expertise), rather than a lack of resources or technical deficiencies. Cavusgil and Naor (1987) suggest that export success has a significantly positive relationship with extensive management expertise in finance and planning. Moini (1995) also found that successful exporters were knowledgeable in the areas of finance and marketing.

A link between the characteristics of managers and export success has been identified in a number of studies (e.g. Cavusgil and Naor, 1987; Reid, 1981; Bello and Barksdale, 1986; Diamantopoulos and Schlegelmilch, 1994). However, the level of impact of managerial characteristics on export performance has been shown in a number of studies to be persistently low (Jaffe, Nabenzahl and Pasternak, 1988; Holzmuller and Kasper, 1991; Das, 1994; Moini, 1995.). It appears that managerial attitudes to exporting that is a crucial managerial elements (Aaby and Slater, 1989), as discussed later in this section.

Other studies have shown the association between export development and managerial characteristics. For example, firms with greater international involvement have more cosmopolitan, multilingual and educated personnel than firms with less involvement in international markets (Cavusgil, 1982, Barrett and Wilkinson, 1986). Leonidou and Katsikeas (1996) noted that other studies have found that management quality and dynamism (expressed by technical skill, business competence and planning orientation) were the most important factors associated with a firm’s decision to move to more advanced export stages (Bilkey and Tesar, 1977; Cavusgil, 1982).
Communication difficulties were ranked first by small- and medium-sized firms in terms of export-related problems in a study by Czinkota and Johnston (1982), and this has been supported by other studies, especially in regard to language (e.g. Sullivan and Bauerschmidt, 1987; Joynt, 1982).

Management Style

As other factors, such as firm characteristics, change when firm moves along the export development path, so does management style (Leonidou and Katsikeas, 1996). These authors explain that managers move from an initial approach to exporting which is informal, disjointed and unplanned, to one which shows more experience and commitment to foreign business operations. The early stages are characterised by an absence of suitable systems for the acquisition, analysis and transmission of foreign market information, and ineffective export planning activities. In the latter stages, there is an improvement in, and formalisation of, export management systems, which accommodate the effective implementation of internationalisation strategies (Cavusgil and Godiwalla, 1982; Barrett and Wilkinson, 1986).

Managerial Perceptions and Attitudes

Managers’ attitudes towards, and perceptions of, exporting, may be based on experience in exporting (from current or previous exporting activities), or they may be subjective (Leonidou, 1995a). The importance of managerial attitudes in a firm’s export involvement and success has been widely reported (Gronhuag and Lorenzen, 1982; Johnston and Czinkota, 1982; Cavusgil, 1984; Bauerschmidt, Sullivan and Gillespie, 1985; Sullivan and Bauerschmidt, 1987; Keng and Jiuan, 1989; Bijmolt and Zwart, 1994). In a review of thirty three studies, Aaby and Slater (1989) reported that
management perceptions represented one of the most important firm determinants for export success. Specifically, positive managerial attitudes towards exporting have been associated with an increased propensity to export, the perception of fewer export barriers (Pavord and Bogart, 1978), and increased exports (Tookey, 1964; Bilkey and Tesar, 1977; Tesar, 1975). In contrast to these findings, however, Moini (1995) found no significant relationship between management export expectations and export success of small firms. This may relate to the fact that the study compared different classes of exporters, rather than non-exporters and exporters studied in other research; Jaffe, Nebensahl and Pasternak (1988) also report similar findings.

Whether or not a firm starts exporting, and the continuity of the export activities is determined by the way the decision-maker perceives and reacts to external and internal stimuli respectively (Caughey and Chetty, 1994). Negative perceptions about risk and potential for export have been noted as substantial barriers to success (Sullivan and Gillespie, 1985). According to Simpson and Kujawa (1974), a firm’s export orientation is determined, in part, by its manager’s perception of the risk, profit and cost of export marketing. Perceptions of high risk were accompanied by expectations that higher levels of profit would compensate. However, Chetty and Hamilton (1996) observed that such expectations were frequently unfounded, with only three out of eight exporters actually reporting higher profits from exporting compared to domestic business. Non-exporters appear to have more realistic expectations in this regard (Simpson and Kujawa, 1974; Ogram, 1982).

In the context of export assistance, a number of studies have found that managers of exporting firms did not perceive export assistance and tax incentives as high in
importance as did non-exporters (Kaynak and Kothari, 1984; Kaynak and Stevenson, 1982; Bauerschmidt et al, 1985; Malekzadeh and Nahavandi, 1985). Perceptions relating to a firm’s domestic market situation and market potential have also been studied. For example, firms that perceive large opportunities in the domestic market and have ongoing domestic demand are less likely to export, or have lower export performance, than firms that have spare capacity and can grow within their current organisational infrastructure (McConnell, 1979; Rabino, 1980; Kaynak and Stevenson, 1982; Cooper and Kleinschmidt, 1985; Sullivan and Bauerschmidt, 1987).

An important issues for theory building for the construct export performance is raised by Diamantopoulos and Schlegelmilch (1994). In their study of export manpower characteristics, they noted the multidimensional nature of manpower characteristics (as well as export performance). The manpower construct was represented by ten characteristics, which included numbers of export managers and employees, training and educational levels of export managers overseas visits by export managers and export attitudes of export managers. While the results showed a general impact of export manpower characteristics on export performance, a key finding was that specific manpower characteristics impinged on specific export performance measures. Models of export performance somehow need to incorporate the concept, not only of multidimensionality of the export performance construct, but also of some of its antecedent variables, such as those relating to export manpower, or export managerial factors.

**Export and Management Commitment**

Management commitment is important at various stages of the internationalisation process; that is, in the response to export stimuli at the start of exporting, and through
the process of export development. Exporters have been typed as being “aggressive” (actively seeking the first export order) or “passive” (not actively seeking the first export order) by Tesar (1975) and Tesar and Tarleton (1982). Passive exporters perceive export obstacles to be more severe than do aggressive exporters (Sharkey, Lim and Kin, 1989), and this may partly account for their relatively poorer export performance.

Management commitment to exporting has been shown to have a positive relationship with export performance (Bilkey, 1982; Johnston and Czinkota, 1982; Rosson and Ford, 1982; Daniels and Robles, 1985; Cavusgil and Zou, 1994; Chetty and Hamilton, 1996). Issues concerning information become more important as export commitment increases, and managers need information (such as information on legislation, standards, etc) to assist them with further international transactions or else their commitment may decline (Crick, 1995).

In terms of export development, the stages models of internationalisation indicate that managerial commitment to exporting increases as firms move along the internationalisation path (Calof and Viviers, 1995), as they learn more and uncertainty is reduced (Bilkey and Tesar, 1977; Johanson and Vahlne, 1977; Kedia and Chokar, 1986). A firm’s commitment to exporting may, however, be influenced by the decision-maker’s view of an ideal firm size; where such an ideal imposes a limit on growth, the export commitment will be correspondingly limited (Caughey and Chetty, 1994).

**Personal Contact with Buyers**

Regular personal contact by exporters with customers in their export markets, has
been reported in numerous studies (Cunningham and Spigel, 1971; Kirpalani and MacIntosh, 1980; Tesar and Tarleton, 1982; Hart et al, 1994; Katsikeas, 1994; Crick and Katsikeas, 1995; Moini, 1995). In addition, the importance of relationships between buyers (importers and intermediaries) and suppliers (exporters) is well acknowledged in the export marketing literature (Rosson and Ford, 1980; 1982; Leonidou, 1989; Katsikeas and Piercy, 1990). The concept of personal contact and relationships has been developed into alternative views of internationalisation and export performance based on relational and network approaches (e.g. Styles and Ambler, 1994 and Johanson and Mattsson, 1988, respectively) - see elsewhere in this chapter.

An important outcome of personal contact and relationship building between buyers and exporters is the development of trust; Liang (1995) quotes Granovetter (1992, p. 313) on trust: “better than the statement that someone is known to be reliable is the information from a trusted informant that he has dealt with that individual and found him so”; each player has an economic motivation to be trustworthy. Executives have been shown to prefer personal sources of information than other sources (Rosson and Ford, 1982; Roux, 1987); that is, informal, rather than formal sources (Oviatt and McDougall, 1994). In Johanson and Mattsson’s (1988) study, 60-70% of the relationships between international suppliers and customers considered the relationships as involving ‘close personal relations’ or ‘friendly business relations’, rather than more ‘formal business relations’. Such relationships imply a higher degree of management commitment to the export venture.

### 2.2.4.6 External Factors

Among the key variables that have been associated with exporting and export
performance, external variables have been found to play an important role (Rao et al, 1983; Cavusgil, 1984; Cooper and Kleinschmidt, 1985; Green and Larsen, 1987; Rosson, 1987; Turnbull, 1987; Walters and Samiee, 1990).

From a strategic perspective, external variables are fundamental in the formation and implementation of business and export strategy (Johnson and Scholes, 1993; Cavusgil and Zou, 1994). In the context of exporting, there are two categories of external factors: those relating to the domestic market and those relating to foreign markets. Unlike purely domestic firms, exporters face more diverse and complex environments at the levels of both the industry and the firm (Huszagh et al, 1992; Miller, 1992; Miller, 1993). Even local or regional differences within a country may impact on exporting Calof (1994); this is supported by recent work on regional clusters by Enright (1995).

Exporters may have to adjust their export strategy in response to environmental changes in their home and/or export markets (Bilkey and Tesar, 1977; Axinn, 1988; Gripsrud, 1990), and studies suggest that firms which make these adjustments, enabling a match between their marketing strategies and changes in their external environment, achieve enhanced export performance (Kaynak and Kuan, 1993). Depending on the environmental changes and the level of environmental hostility, these adjustments may include modification of their target markets (Green and Allaway, 1985), product adaptation or standardisation (Cavusgil, Zou and Naidu, 1993), adjustment of other marketing mix variables (Munro and Beamish, 1987), or export intensity (Cooper, Hartley and Harvey, 1970).
While external variables, such as the level of competition, type of industry in which the firm operates, economic and political factors, and the country of origin of the buyer, have been recognised as impacting on exporting and export performance, Das (1994) notes that very few studies have actually examined the impact of these. The majority of studies have considered the external environment as “uncontrollable” or “given”, with firms adopting an essentially reactive stance (Yeoh and Jeong, 1995). For example, Aaby and Slater (1989) state: “The individual exporter can only to a very limited extent influence this environment, and in most situations must consider the macro-parameters as given constraints.” (p. 7). Also, Katsikeas and Morgan (1994) noted that many researchers have recognised that the external environment determines the origins of a large number of exporting problems facing companies. These perceived problems include: currency devaluations (Czinkota and Ricks, 1983; Cavusgil, 1984; Bauerschmidt, Sullivan and Gillespie, 1985), high costs of financing exports (Bilkey, 1978; Albaum, 1983; Czinkota and Ricks, 1983; Bodur, 1986; Keng and Jiuan, 1989), dealing with bureaucracy within public agencies (Rabino, 1980; Tesar and Tarleton, 1982; Cavusgil, 1984; Bodur, 1986), lack of government support in overcoming export difficulties (Kaynak and Kothari, 1984; Kaynak and Erol, 1989; Weaver and Pak, 1990), national export promotion programmes that are ineffective (Kaynak and Kothari, 1984; Weaver and Pak, 1990), and hostile international competition (Sullivan and Bauerschmidt, 1989; Dichtl, Koglmayr and Muller, 1990; Gripsrud, 1990; Yang, Leone and Alden, 1992).

Thus, the external environment is conceptualised as containing perceived obstacles to, or problems associated with, exporting (Bauerschmidt, Sullivan and Gillespie, 1985; Gripsrud, 1990). This view largely ignores the possibility of firms adopting proactive
stances to external uncertainties, and perceiving opportunities for innovative and aggressive marketing, or new product or market development (Yeoh and Jeong, 1995). Katsikeas (1994) suggests that certain eternal environment factors may, indeed, lead to competitive advantages for exporting firms. These include: the cost of raw materials (Dess and Davis, 1984; Parker and Helms, 1992); access to external sources of finance (Bilkey and Tesar, 1977; Miesenbock, 1988); distribution system opportunities (Cavusgil and Naor, 1987; Namiki, 1988; Keng and Jiuan, 1989); and proximity to the export market (Khan, 1978; Madsen, 1989). The way in which external factors are perceived is, however, influenced by managerial attitudes and characteristics (Cavusgil and Nevin, 1981).

Because of the complexities associated with, and the uncontrollable nature of, a firm's external environment, many studies of export performance, while recognising the important role played by the external environment, have chosen not to study it in any depth (Aaby and Slater, 1989; Bijmolt and Zwart, 1994; Cavusgil and Zou, 1994). On the other hand, a number of contingency-type models of export performance have been developed, which explicitly recognise the influence of external factors (e.g. Cavusgil and Zou, 1994; Yeoh and Jeong, 1995). Operationalisation of the external environment construct would require composite measures and multivariate analytical methods. These approaches have only recently started to be used with organisational variables and constructs associated with exporting, but, if also applied to external factors, they would provide significant insights into the role of external factors in export performance.

2.2.5 Export Barriers

Exporting, as a mode of foreign market entry requires the least amount of capital
investment and has lower commercial and financial risk compared to some forms of direct investment. However, in many developed countries, small and medium-sized firms account for only a small share of total exports (Jaffe and Pasternak, 1994). As a consequence, a large number of conceptual and empirical studies have been undertaken to investigate the problems or obstacles perceived by firm decision-makers in relation to the exporting process (Bilkey, 1978; Miesenbock, 1988; Aaby and Slater, 1989; Seifert and Ford, 1989; Buckley and Brooke, 1992). Bilkey (1978) asserts that the removal or minimisation of barriers to exporting would facilitate a higher export propensity and performance and move towards the achievement of the international goals of many governments.

Most of these studies of export barriers have focused on firms in the US, and the generalisation of findings to other countries with different macro-environmental influences and systems is problematic (Katsikeas and Piercy, 1993). Also, despite the many independent research efforts, there have been few attempts to review the literature on export barriers, with the notable recent exception of Leonidou (1995b, 1995c).

According to Leonidou (1995b), barriers to exporting are “all those attitudinal structural, operational, and other constraints that hinder a firm’s ability to initiate, develop or sustain international operations.” But while acting as constraints, these factors will not, alone, inhibit the firm’s progress in exporting. These latent barriers become operative when they are associated with other forces, or factors, such as: characteristics of the manager/decision-maker (Cavusgil and Nevin 1981; Cavusgil, 1982; Cavusgil, 1984; Barrett and Wilkinson, 1986); the organisation (Bilkey and
Tesar, 1977; Cavusgil, 1982; Moon and Lee, 1990); or the environmental within which the company operates (Cavusgil and Nevin 1981b; Garnier, 1982).

Export barriers exist at all stages of the internationalisation process, including the pre-export, or non-export stage, and also impact in various ways on export performance (Bilkey and Tesar, 1977; Cavusgil and Nevin, 1980). The nature, frequency, and severity of export barriers will differ systematically from stage to stage of the internationalisation process (Pavord and Bogart, 1975; Bilkey and Tesar, 1977; Bilkey, 1978; Tesar and Tarleton, 1982; Ford and Leonidou, 1991). According to Barrett and Wilkinson (1985), perceptions of export barriers will also differ among firms within the same export stage. For non-exporters, barriers to export will, necessarily, be of a perceptual nature, while, for exporters, the barriers will be seen largely from experience (Leonidou, 1995a), although perceptions will still play a role.

It has been suggested that the inability of non-exporters to cope with impediments at the early initiation stages can cause a passive attitude towards exporting and international operations (Leonidou, 1995c). This may prevent a firm from entering into exporting (Olsen and Wiedersheim-Paul, 1978; Wiedersheim-Paul et al, 1978) or contribute to a firm’s failure in later exporting activities, such that the firm withdraws permanently from the exporting process (Wiedersheim-Paul, 1980).

Leonidou (1995a) has developed a typology for classifying obstacles to exporting, which involve internal/external and domestic/foreign obstacles. External and internal barriers are discussed below, with foreign- and domestic country obstacles considered within each discussion.
In Leonidou's (1995b) review, some barriers were found to occur irrespective of the time period concerned (e.g. limited information overseas markets, and restrictions imposed by foreign rules and regulations), while others were found to have changed their emphasis over the last decade or two. For example, difficulties in handling export documentation and procedures were more prevalent prior to the early 1980s, while strong competition in the international market place was a major obstacle during the last decade, relating to the increased global competition as growing integration of world markets occurred (Douglas and Craig, 1992). Leonidou's (1995b) review found no uniform pattern in the rank order of the various export barriers identified in the literature; this was attributed to wide variability in the nature of the studies.

2.2.5.1 External Barriers

The nature of external problems tends to vary widely, and range from: financial issues, such as currency devaluations (Czinkota and Ricks, 1983; Cavusgil, 1984; Bauerschmidt, Sullivan and Gillespie, 1985); high relative cost of export financing (Bilkey, 1978; Albaum, 1983; Czinkota and Ricks, 1983; Bodur, 1986; Keng and Juian, 1989); dealing with bureaucratic agencies (Rabino, 1980; Tesar and Tarleton, 1982; Cavusgil and Ricks, 1983; Bodur, 1986), lack of government support for dealing with export difficulties (Kaynak and Erol, 1989; Weaver and Pak, 1990), and ineffective export promotion programmes (Cavusgil and Nevin, 1981; Kaynak and Kothari, 1984; Weaver and Pak, 1990).

National export policy issues have been noted as problems for exporters (Kaynak and Kothari, 1984), and are generally viewed unfavourably (Albaum, 1983), contrary to
government opinion. However, government assistance and export promotion programmes are not crucial to exporting firms, according to Van der Ster (1971), O'Rourke (1985) and Katsikeas and Morgan (1994). A reason for this may be that export firms have a low awareness of the existence and type of government services available (Denis and Depelteau, 1985; Korth, 1991; Yang, Leone and Alden, 1992). In their study of Greek firms, Katsikeas and Morgan (1994) found a significant relationship between national export policy issues and firms' export experience. They suggest that larger firms are more likely to be users and beneficiaries of government services (Rabino, 1980) and so it is probably the smaller firms that identify the problems.

In a study of fresh produce exporters, Aksoy and Kaynak (1994) found that barriers such as a lack of exposure to other cultures (also noted by Bauerschmidt et al, 1985; Rabino, 1980) and inadequate understanding of export market channel needs inhibited exporters from determining their export consumer needs. Political issues restricting exports include tariff and non-tariff barriers (Ogham, 1982; Kaynak and Kothari, 1984; Sullivans and Bauerschmidt, 1989).

2.2.5.2 Internal Barriers

Internal barriers to exporting relate to controllable issues within the firm itself (Katsikeas and Morgan, 1994), such as product characteristics (for example, export packaging (Tesar and Tarleton, 1982; Czinkota and Ricks, 1983)), meeting importers' quality standards (Rabino, 1980; Tesar and Tarleton, 1982; Dichtl, Koglmayr and Muller, 1990; Gripsrud, 1990), suitability of design and image for export markets (Czinkota and Ricks, 1983; Kaynak and Kothari, 1984; Kedia and Chhokar, 1986), degree of organisation and formalisation of export departments (Bauerschmidt,
Sullivan and Gillespie, 1985; Yang, Leone and Alden, 1992); and competency of personnel to administer exporting activities (Rabino, 1980; Ogram, 1982; Yaprak, 1985; Dichtl, Koglmayr and Muller, 1990). Among issues about which exporters have complained are a lack of suitable consulting expertise to improve their export marketing performance (Weaver and Pak, 1990; Yang, Leone and Alden, 1992); an inability to self-finance export activities (Bilkey, 1978; Albaum, 1983; Keng and Jijuan, 1989; Weaver and Pak, 1990); and a lack of information about foreign markets (Bilkey, 1978; Bodur, 1986; Alexandrides, 1971; Pavord and Bogart, 1975). Some of these issues are addressed in more detail in the following paragraphs.

Low management commitment and managerial disinterest have been shown to be barriers to export (Bauerschmidt et al, 1985; Sullivans and Bauerschmidt, 1989). Jaffe and Pasternak (1994) found that perceived barriers to export were only weakly associated with export intention, and they posit that it is management’s perception of the firm’s competitive or differential advantage (Cavusgil and Nevin, 1981; Reid, 1981) that will motivate the intention to export.

The tenet that exporting problems are explained by firm size (Rabino, 1980; Culpan, 1989; Ghauri and Kumar, 1989; Samiee and Walters, 1991; Bonaccorsi, 1992) and export experience (O’Rourke, 1985; Madsen, 1989) has been partially supported in a study by Katsikeas and Morgan (1994). In their study, managers of larger firms perceived information-gathering and communication, product adaptation issues, and exogenous logistics issues as less problematic than did smaller firms. However, logistical issues have been perceived as problematic by firms of all sizes, and not specifically smaller firms (Rabino, 1980; Bodur, 1986; Kedia and Chhokar, 1986;
O'Rourke, 1985). Logistics problems can be compounded by the high cost of transporting products overseas (Alexandrides, 1971; Bauerschmidt, Sullivan and Gillespie, 1985; Sullivan and Bauerschmidt, 1989; Gripsrud, 1990; Yang, Leone and Alden, 1992), and this may be a more significant problem for smaller exporters in countries more distant from major markets. Others have shown that passive exporters perceive export barriers in a more severe light than aggressive exporters (Sharkey, Lim and Kim, 1989).

Overall, Katsikeas and Morgan (1994) and others (e.g. O'Rourke, 1985; Culpan, 1989; Samiee and Walters, 1991) have found that smaller firms tend to be very concerned with the mechanics of exporting, an exception being perceived procedural complexity, which was shown to be significantly associated with a firm's export market experience (Katsikeas and Morgan, 1994). Less experienced exporters perceived greater problems in the areas of documentation and dealing with bureaucratic procedures of public agencies. This may relate to a lack of knowledge of procedures to deal with the associated administrative demands (Rabino, 1980; Tesar and Tarleton, 1982), or lack of staff time to deal with them (Ogram, 1982). Payment delays from distributors in the export markets may also represent a problem for exporters (Rabino, 1980).

Industry and product type will influence the type of factors that are perceived as export barriers. For example, South African fresh produce exporters were inhibited by long transport distance and climatic adversities, such as serious droughts, in their home country (Aksoy and Kaynak, 1994). Export pricing constraints have also been shown to be an issue for exporting firms, regardless of age or experience (Seifert and
Ford, 1989, Katsikeas and Morgan, 1994), although the latter authors suggest a possible inverse relationship between perceived export pricing problems and experience.

Johanson and Vahlne (1977) suggest that an important obstacle to the development of international operations is a lack of market knowledge. The proposition that exporters who do not conduct international market research would experience greater export problems has not, however, been validated empirically (Diamantopoulos, Schlegelmilch and Allpress, 1989). In the context of channel selection, which is a critical issue for exporting, lack of information about distributors has been noted as a problem for exporters (Pavord and Bogart, 1975; Bilkey, 1978; Rabino, 1980; Tesar and Tarleton, 1982; Albaum, 1983; Kaynak and Kothari, 1984; Bailie, 1992).

2.3 Section C. Implications of Export Research Findings

From the extensive literature on the many facets of exporting, numerous implications have emerged. Export development and performance models have offered, and provided, assistance to practitioners, governments and researchers (Thomas and Araujo, 1985; Miesenbock, 1988; Andersen, 1993). In this section, the literature on implications of export research findings for government and managers is outlined in Tables 2.2 and 2.3, respectively. The third set of implications relates to research and theory development, and these are discussed in detail in Section C of this chapter.

For the government and managerial implications, each table outlines the key implications identified in the literature and the main authors noting the implication concerned. Underlying research supporting each implication is discussed throughout
this chapter. Implications for government (Table 2.2) and for management (Table 2.3) are not specifically discussed here, since they derive directly from the literature reviewed in the rest of this chapter. Implications for research and theory development are, however, discussed explicitly in the following section, because the design of this study and the research objectives build directly from the implications. While the issues and underlying research information have been addressed in Section B of this chapter, it is necessary to address and reframe them specifically in terms of their implications for research and theory development. This will inform the remainder of the study and provide necessary inputs into the study objectives and design. The following section discusses the research issues and implications for theory development arising from the literature review.

Table 2.2
Summary of Managerial Implications

<table>
<thead>
<tr>
<th>Managerial Implication</th>
<th>Main Researchers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care in hiring managers, and time to enable learning about exporting. Successful managers have &gt;9 years experience.</td>
<td>Das (1994)</td>
</tr>
<tr>
<td>Access, organisation and dissemination of information important to reduce exporting risk. Information and communication need to be managed carefully.</td>
<td>Hart, Webb and Jones (1994)</td>
</tr>
<tr>
<td>Competitive advantage can be increased by more market-led export strategy, therefore focusing on marketing skills</td>
<td>Katsikeas and Morgan (1994)</td>
</tr>
<tr>
<td>Small size (and low resources) not necessarily a constraint to exporting; managers should look beyond size in exporting decisions.</td>
<td>Calof (1994)</td>
</tr>
<tr>
<td>Important influence of the interplay between internal and external forces. Managers must hire or train qualified personnel, accumulate international experience systematically and allocate sufficient resources to capitalise on export opportunities. Need to develop a network of foreign distributors to provide adequate support.</td>
<td>Cavusgil and Zou (1994)</td>
</tr>
<tr>
<td>Proactive approach to exporting needed - it should not be a way of selling surplus from the domestic market</td>
<td>Crick and Katsikeas (1995)</td>
</tr>
</tbody>
</table>
### Table 2.3
Summary of Implications for Government Policy

<table>
<thead>
<tr>
<th>Government Policy Implication</th>
<th>Main Researchers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Targeting of export promotional activities towards industries with high levels of competition and turbulent internal environment, in order to encourage exporting.</td>
<td>Das (1994)</td>
</tr>
<tr>
<td>Offer of tangible assistance e.g. for foreign market selection.</td>
<td>Jaffe and Pasternak (1994)</td>
</tr>
<tr>
<td>Provision of different export assistance programmes for firms of different size.</td>
<td>Katsikeas (1994)</td>
</tr>
<tr>
<td>Differentiation of government assistance on basis of proactive/reactive and current/past exporters</td>
<td>Jaffe and Pasternak (1994)</td>
</tr>
<tr>
<td>Facilitation of capital infrastructure to assist exporters to meet lean changes</td>
<td>Katsikeas and Morgan (1994)</td>
</tr>
<tr>
<td>Promotion of exporting to firms which perceive exporting as high risk</td>
<td>Crick (1995)</td>
</tr>
<tr>
<td>Focus on SMEs for export policy</td>
<td>Bijmolt and Zwart (1994)</td>
</tr>
<tr>
<td>Encouragement by government of business institutions (e.g. trade associations, export clubs) to influence firms to export or develop existing export business</td>
<td>Crick (1995)</td>
</tr>
<tr>
<td>Development of effective targeting criteria for export assistance programmes</td>
<td>Crick (1995)</td>
</tr>
<tr>
<td>Government assistance about information that is available to exporters (access not a problem)</td>
<td>Crick (1995)</td>
</tr>
<tr>
<td>Protection against exchange rates</td>
<td>Leonidou (1995a)</td>
</tr>
</tbody>
</table>
2.3.1 Export Research Issues and Implications for Theory Development

There is an extensive literature on the topic of exporting including recent attempts to review and synthesis the research findings (for example, Aaby and Slater, 1989; Leonidou and Katsikeas, 1996; Miesenbock, 1988; Chetty and Hamilton, 1993). These have extended the original synthesis of export research by Bilkey (1978).

However, a common conclusion emerging from these reviews is that export research is fragmented, in terms of methodologies and findings (Katsikeas, 1994; Leonidou and Katsikeas, 1996) and is focused predominantly on developed countries (Das, 1994), particularly the US (Cavusgil and Naor, 1987; Aaby and Slater, 1989). It is, therefore, difficult to generalise from these findings, or use them to develop export theory (Leonidou and Katsikeas, 1996). Aaby and Slater (1989) concluded that: "given the quantity of published research on export practice, it is surprising that so few solid conclusions are available." (p. 23). Discussions in the literature review incorporated some critical assessment of the aspects concerned, and some perspectives on implications for research and theory development. This section focuses specifically on these implications; it offers further discussion of the key issues and implications and classifies them into a frame, which provides a synthesis of the key issues. The objective of this section is to critically assess key aspects of the literature, and consider their implications for research and theory development.

Certain of these issues are distilled from the broader classification to develop the specific research objectives and research design for this study (Chapter 3).

The purpose of this section, therefore, is to outline some of the major research issues that have emerged from the literature, and to consider the implications of these for
theory building in the area of export performance. Details of, and background to, the research issues mentioned in this section are provided in Section B of this chapter. For purposes of clarity, the research issues have been summarised into structural, methodological, and conceptual research issues, utilising an adaptation of a classification presented by Leonidou and Katsikeas (1996). Used in this way, the classification is open to interpretation, as many of the issues can be classified in more than one way, or belong to more than one category. This section considers research issues concerned with the areas covered in the literature review; these extend beyond specific export performance literature to include related areas, such as internationalisation. This broader perspective has been utilised because it was considered necessary to understand the broader context from which the export performance issues arise may arise. In other words, from a theoretical point of view, it is not logical to consider the construct export performance in isolation from other firm-related and externally related influences and phenomena, even if it is not possible to study all the connections at one time. An assessment of other, related research issues enables future research opportunities to be identified. The issues and implications for theory have informed and guided the research objectives and approach in this report, focusing specifically on the area of export performance. A number of specific research questions have thus been formulated for in-depth study (Chapter 3). The following discussion focuses on the research issues and their implications for theory building, following the classification outlined in Table 2.4.
<table>
<thead>
<tr>
<th>Research Issues</th>
<th>Main Researchers</th>
<th>Implications for Theory</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STRUCTURAL</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Strategic approach limited:</strong></td>
<td>Aaby and Slater (1989); Dalli (1994); Katsikeas (1994); Leonidou &amp; Katsikeas (1996)</td>
<td>- The need for investigation of the association between a firm’s overall strategy and export performance, both conceptually and operationally.</td>
</tr>
<tr>
<td>- role of overall firm strategy</td>
<td>Cavusgil &amp; Zou (1994)</td>
<td></td>
</tr>
<tr>
<td>- influence of external environment</td>
<td>Das (1994)</td>
<td>- The three-way relationship between firm-level strategy, export strategy and export performance needs to be both conceptualised and operationalised.</td>
</tr>
<tr>
<td>- differences in destination markets</td>
<td>Katsikeas (1994)</td>
<td></td>
</tr>
<tr>
<td>- translation of performance variables into competitive advantage in foreign markets</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Separate streams of research:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- internationalisation / export performance</td>
<td>Katsikeas (1994); Donthus &amp; Kim (1994); Leonidou &amp; Katsikeas (1996); Moon and Lee (1990)</td>
<td>- The need to integrate these two strands of export research, and to develop the findings of the few studies in this area</td>
</tr>
<tr>
<td><strong>Few challenges to internationalisation stages theory:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- relevance and generalisation to exporting processes today</td>
<td>Diamantopoulos &amp; Inglis (1988); Bell (1995); Crick (1995); Leonidou &amp; Katsikeas (1996); Bell (1995); Moon and Lee (1990)</td>
<td>- Export performance should be considered also in the light of alternative export development processes to the stages internationalisation models (such as the born global, or INV phenomena, and network theory).</td>
</tr>
<tr>
<td>- industry differences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- methodological problems</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>METHODOLOGICAL ISSUES:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Different Sampling Frames:</strong></td>
<td>Matthysens and Pauwels (1996)</td>
<td>- The need for sampling frames need to be either consistent across studies, or to have adequate controls, or for individual studies to incorporate multiple settings (e.g. environment, countries and levels of economic development, firm sizes, destination markets, and industries).</td>
</tr>
<tr>
<td>- location of research</td>
<td>Cavusgil &amp; Naor (1987); Aaby &amp; Slater (1989); Anderson (1993); Cavusgil &amp; Zou (1994); Katsikeas (1994); Das (1994); Chetty and Hamilton (1996)</td>
<td></td>
</tr>
<tr>
<td>- destination markets</td>
<td>Reid (1981); Aksoy &amp; Kaynak (1994); Calof (1994)</td>
<td></td>
</tr>
<tr>
<td>- industry differences</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>• firm size differences</strong></td>
<td>Calof (1994); Cavusgil &amp; Zou (1994)</td>
<td>- The need to extend the classification of non-exporters/exporters, in order to understand more fully their impact on export performance</td>
</tr>
<tr>
<td>• limited research in non-exporters</td>
<td>Leonidou (1995b)</td>
<td></td>
</tr>
</tbody>
</table>

**Level, or Unit, of Analysis**

| Madsen (1987); Cavusgil & Zou (1994); Axinn et al (1996); Matthyssens and Pauwels (1996) | - The need for export performance to be assessed at the product/market, or venture level; however, the wider firm-level influences on the export performance must not be omitted |

**Different Approaches to Data Collection and Analysis**

| Aaby & Slater (1989); Katsikeas (1994); Leonidou (1995b); Matthyssens and Pauwels (1996) | - the need for accurate and full reporting of data collection, analysis and measurement methods. |
|  | - the need for mutually-reinforcing quantitative and qualitative approaches to research on export performance. |

**Omission of the Time Dimension**

| Cavusgil & Nevin (1981a); Reid (1981a); Aaby & Slater (1989); Leonidou (1995b); Axinn et al (1996); Chetty & Hamilton (1996) | - the need for more longitudinal research in both internationalisation and export performance |
|  | - the need to ascertain the (time-related) dynamics and contingencies, associated with the construct, and to meaningfully represent these in export performance models |

**CONCEPTUAL ISSUES**

**Conceptualisation and operationalisation of export performance**

| Cavusgil & Nevin (1980); Madsen (1987); Aaby & Slater (1989); Leonidou (1995b); Matthyssens and Pauwels (1996) | - the need for reported research on export performance should be more explicit about conceptualisation of the research problem and its operationalisation |

**Export Strategy/Export Marketing Strategy**

| Cavusgil and Zou (1994); Bijmolt and Zwart (1994); Axinn et al (1996) | - the urgent need for conceptualisation of the export strategy and export marketing strategy constructs to be developed and agreed |

**Variables and Indicators**

<p>| Aaby &amp; Slater (1989); Andersen (1993); Cavusgil &amp; Zou (1994); Leonidou (1995a); Yeoh &amp; Jeong (1995); Leonidou &amp; Katsikeas (1996) Aaby &amp; Slater (1989); Flint (1989); Cavusgil &amp; Zou (1994); | - the need for consistency in, and clear communication of, conceptualisation and operationalisation of variables relating to export performance |
|  | - the most critical requirement for theory development is an agreed measure or measures for the construct, export performance which can be readily operationalised |</p>
<table>
<thead>
<tr>
<th>Topic</th>
<th>References</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>International channel choice and role of foreign buyers</td>
<td>Cavusgil &amp; Nevin (1981); Johanson &amp; Mattsson (1988); Ramaseshan &amp; Patton (1994); Styles &amp; Ambler (1994); Lindsay &amp; Arthur (1998)</td>
<td>- the need to incorporate relational and network theories in export / export performance research</td>
</tr>
<tr>
<td>Export Performance Models: Cause-Effect Relationships</td>
<td>Bijmolt &amp; Zwart (1994); Chetty &amp; Hamilton (1996); Leonidou &amp; Katsikeas (1996)</td>
<td>- the need for export performance theory to capture the processes by which firms attain performance outcomes. Models need to be causal or explanatory in nature</td>
</tr>
<tr>
<td>Export Performance Frameworks</td>
<td>Cavusgil &amp; Zou (1994); Matthysens and Pauwels (1996)</td>
<td>- the need for export performance theory to integrate other bodies of knowledge, and thus be developed from an eclectic research base</td>
</tr>
<tr>
<td>Need for an Eclectic Basis for Export Research</td>
<td>Andersen (1993); Yeoh &amp; Jeong (1995); Leonidou and Katsikeas (1996)</td>
<td></td>
</tr>
</tbody>
</table>
2.3.1.1 Structural Issues

Table 2.4 shows the key structural issues arising from the export literature. These are each discussed below.

**Limited Strategic Approach**

The majority of export studies focus on specific aspects of export activity, in particular the marketing activities and the variables influencing these (Aaby and Slater, 1989). Little attention is paid to the other important activities of the business, such as domestic expansion, new product development, diversification, or the relationship of these with the exporting venture/s (Leonidou and Katsikeas, 1996). Undoubtedly, in firms that conduct both domestic and export business, there will be conflicting demands on many of the shared functions and resources, and even activities dedicated to exporting will likely compete within the larger business portfolio. Dalli (1994) maintains that exporting is not usually sufficient to ensure optimal overall performance, so exporting must always compete with domestic business for resources. The assessment of the performance of export activities in isolation from the rest of the firm’s business activities is therefore problematic.

A number of export performance models build on the original ‘strategy-structure-performance’ model of Thorelli (1977), for example, Cooper and Kleinschmidt (1985) and Cavusgil and Zou (1994). However, use of the strategy construct is almost entirely in the export context, rather than the firm’s overall business strategy. However, from their review of export performance literature, Aaby and Slater (1989) conclude that export performance is directly influenced by a firm’s business strategy.
Cavusgil and Zou (1994) state that: "The central role of proactive marketing strategy in determining export performance has not been emphasised." (p. 2). Cavusgil and Zou (1994) also suggest that exporting should be viewed as a firm's strategic response to the interplay of internal and external forces, export marketing strategy should be emphasised as a key determinant of export performance, and the strategic dimensions of export performance must be tapped. Although, therefore, the central role of strategy has been acknowledged in the literature, there is little overall clarity on the level of strategy concerned and the interplay between export and firm-level strategy.

Taking the issue of strategic context further, Katsikeas (1994) notes that, while many researchers have given attention to the role of variables, such as those associated with firms’ characteristics (for example, Czinkota and Johnston, 1983; Reid, 1982; Cavusgil, 1984; Moon and Lee, 1990), there is little systematic research relating these organisational features to the firms’ ultimate competitive advantages in their export markets. This implies that competitive advantage may be as much an outcome of a firm’s overall business strategy as specific export performance variables.

**Implications for Theory Development**

The key implication for export theory arising from these research issues is the need for investigation of the association between a firm’s overall strategy and export performance, both conceptually and operationally. A further implication arises from the inconclusiveness about the relationship between firm-level strategy and export strategy. In order for theory on export performance to be progressed, the three-way relationship between firm-level strategy, export strategy and export performance needs to be both conceptualised and operationalised. Insights into these relationships
could be gained form other related disciplines, such as strategic management, as suggested by Axinn et al (1996).

**Separate Streams of Research**

There are two main streams of export research that emerge from the literature. The first of these is a group of studies that describes the process of internationalisation of firms (Johanson and Vahlne, 1977; Wiedersheim-Paul et al, 1978). Exporting is a part of this process, and the studies have tended to concentrate on two main areas: the decision by non-exporters to export and the initiation of exporting (Burton and Schlegelmich, 1987; Cavusgil and Naor, 1987) and the subsequent stages of development of these firms to a point where they are committed, competent exporters (Cooper and Kleinschmidt, 1985; Madsen, 1989).

The second stream of research concerns export performance (for example, Axinn, 1988; Koh and Robicheaux, 1988; Matthyssens and Pauwels, 1996), with a concentration on relationships between independent and dependent variables. Seldom have these been linked to an accepted body of theory (Kamath et al, 1987), or even to the way that they contribute to the competitive advantage of firms in the foreign marketplace (Katsikeas, 1994). There is also a lack of consensus among researchers in this stream of research on how export performance should be measured, an issue addressed elsewhere in this chapter.

It is clear that there have been few attempts (an exception is Moon and Lee, 1990) to link performance or competitive advantage to the stage of a firm’s export development or internationalisation (Katsikeas, 1994). Donthus and Kim (1994) consider this linkage an essential prerequisite for a firm in its continued progression
along the export development path. Many studies have identified competitive elements that distinguish non-exporters from exporters (e.g. Malekzadeh and Nahavandi, 1985; Keng and Juan, 1989), but these disclose nothing about how performance characteristics change during the export development process (Leonidou and Katsikeas, 1996). Similarly, the literature on barriers to exporting is deficient in studies that incorporate the context of the different stages of export development (Katsikeas and Morgan, 1994).

Implications for Theory Development

While internationalisation or export development is not a part of the research in this study, the issues raised in the above discussion are likely to impact on theories of export performance. A number of future research implications in this area are discussed in Chapter 6.

The key implication for theory development in export performance is the need to integrate these two strands of export research, and to develop the findings of the few studies in this area. Export performance models must take into account the stage of internationalisation, or export development of the firm, as it is possible that different levels of export performance (and probably different measures) are evident at different stages. The multidimensionality of both the export development and export performance constructs presents this area of research with some interesting methodological challenges.

Few Challenges to Internationalisation Stages Theory

The stages theory of internationalisation was developed around twenty years ago, and has received wide acceptance until more recently, when its appropriateness has been
challenged. For example, Crick (1995) states: "Considering that the theoretical basis
of a stages approach to internationalisation rests on a fairly limited amount of
empirical work and the formulation of relatively similar models, it is perhaps
surprising that the theory has become so widely accepted, or at least that it has
received so little criticism." (p. 77). While many of the stages models build on the
early work of Bilkey and Tesar (1977), there is no single agreed model, partly because
of the differences in sampling frames and construct operationalisation that have been
used.

A major limitation of the stages theory of internationalisation is the "use of linear
models to try to explain complex, dynamic, interactive and frequently non-linear
behaviour" (Bell, 1995). This view supports the criticisms of Reid (1983) and
Standskov (1994) who also considered the approach to be eclectic and mechanistic.
Leonidou and Katsikeas (1996) also argue that the basic mechanism of
internationalisation is circular. They give the example of market knowledge and
commitment affecting commitment decisions and the performance of current
marketing activities. In turn, these influence market knowledge and commitment.
Given this scenario, it is difficult to argue a strictly linear process that characterises
the stages models of internationalisation.

A number of studies have shown that the time and sequence of exporting during a
firm's development are by no means universal (Diamantopoulos and Inglis, 1988;
Sullivan and Bauerschmidt, 1990) and, further, the external influences on firms in
certain industries (e.g. high-tech) drive patterns of internationalisation that are notably
different from that described in stages theory (Bell, 1995).
Andersen (1993) suggests that the behavioural models of internationalisation lack the power to explain the process of internationalisation and how firms move between the stages. He also asserts that the models have not been rigorously tested on a longitudinal basis. Small sample size used in previous research studies has also posed problems for the interpretation of results, where sub-samples representing different stages of internationalisation have been too small to be representative (Moon and Lee, 1990). For example, only four case firms were used in Johanson and Wiedersheim-Paul’s (1975) study.

The lack of a contingency approach to export performance (Walters and Samiee, 1990), can be also extended to the debate on internationalisation, with Thorelli (1980) noting that small business venturing into international marketing in itself constitutes entrepreneurship - a recognition of the influence of integrated contingent variables from the fields of entrepreneurship and export research. A number of authors are now taking a contingency view of internationalisation (for example, Yeoh and Jeong, 1995) and this includes the networking school (for example, Johanson and Mattsson, 1988). Network theories of export behaviour suggest that the internationalisation process is much more complex and less structured than implied by earlier theories and models (Bell, 1995). However, they do not satisfactorily explain all the behaviour patterns exhibited by exporting firms (Bell, 1995); thus, an agreed model of export development within internationalisation theory remains lacking.
Implications for Theory Development

Implications of this issue for further research and theory development on export performance relate to the implications discussed for the previous issue. The above findings and observations would suggest that export performance should be considered also in the light of alternative export development processes to those represented by the internationalisation stages models (such as the born global, or INV phenomena, and network theory). In this respect also, the contingency approaches to export performance (Cavusgil and Zou, 1994; Yeoh and Jeong, 1995) make an important contribution.

2.3.1.2 Methodological Issues

Methodological issues have been highlighted in many reviews of export research (for example, Aaby and Slater, 1989; Katiskeas, 1996; Matthyssens and Pauwels, 1996). This section discusses the key points relating to these issues.

Different Sampling Frames

A number of different aspects of the sampling frame have come under criticism for lack of rigour or representativeness. These are discussed below.

Location of Research

The majority of empirical export research studies have surveyed firms in highly industrialised countries, particularly the US, an issue discussed fully in Cavusgil and Naor (1987) and Aaby and Slater (1989). Not only have they been country-specific, but they have also tended to be region-, or state-specific, such as Bilkey and Tesar’s (1977) study of Wisconsin firms, and this excludes the opportunity to draw nationwide conclusions (Leonidou, 1995b). Theory building has been inhibited by the fact
that very few studies have examined the validity of their models in multiple environments (Andersen, 1993).

While the exporting activities of less developed countries (LDCs) have increased dramatically over the last decade, there is still a limited literature dedicated to firms in these countries (Das, 1994). It has been concluded that attempts to generalise from studies of the highly industrialised countries to LDCs is problematic (Ford et al, 1987; Das, 1994, Leonidou, 1995b), particularly where there are clear differences in macro-environmental factors, such as socio-cultural, economic, political, legal and technological factors (Katsikeas, 1994). Empirical research undertaken in some of the LDCs supports these differences, and confirms the difficulties of trying to generalise to models of export behaviour and performance (Das, 1994; Moon and Lee, 1990).

Even across the highly industrialised countries, there are differences sufficient to make generalisation difficult. For example, smaller economies, such as Holland (Bijmolt and Zwart, 1994), Norway (Joynt, 1982) and New Zealand (Chetty and Hamilton, 1996), share many common factors which influence export behaviour and performance of firms located there which are not significant features of larger countries. Not least of these are a small domestic market and a predominance of small and medium sized enterprises (SMEs), whose growth strategies rely on exporting.

Another feature of country differences often overlooked in export research is composition of GNP (Gross National Product). Despite falling into the category of ‘developed’, there are some countries that are not as highly industrialised as would be
expected from economic indicators. New Zealand is a case in point. Ranking eighth in the recent World Competitiveness Report (INSEAD, 1996), it still relies heavily on primary products for trade and GNP. It has been described as 'an anomaly' in the industrialised world (Crocombe et al, 1990). The impacts of relatively recent industrialisation on exporting firms are many, and some are likely to be similar to those experienced in LDCs, for example, relative inexperience of international business of firms in the secondary and tertiary sectors. Other 'developed' countries have similar profiles to New Zealand, for example, South Africa, Australia and Ireland (Crocombe et al, 1990), and empirical research in these countries (e.g. Caughey and Chetty, 1993; Calof, 1995) suggests that some of the influences on their exporting firms may be different to those reported in the wider literature.

**Destination Markets**

Katsikeas (1994) states: "scant attention has been given in the general export marketing field to considering the effect of export destination on export behaviour."

Destination countries are likely to have considerable structural differences that will be reflected in the export behaviour of exporting firms. Few studies make this distinction in their empirical research, and results tend to be generalised for all destination markets, as noted by Cavusgil and Zou (1994) in their investigation of specific product/market related export marketing strategies of firms.

**Industry Differences**

Apart from issues associated with the country location of empirical work on exporting, there is also evidence to suggest significant differences in the export behaviour of firms in different industries. While manufacturing industries have formed the core element of export behaviour studies, and most 'theory' has been
derived from this base (Aaby and Slater, 1989), other industries have shown some differences. For example, high-tech firms may exhibit different internationalisation behaviour (Bell, 1995) and consumer and industrial products differ in most elements of the marketing mix and overall marketing strategy (Cavusgil & Zou, 1994). Furthermore, the imperative to export clearly differences across industries at particular points in time (Calof, 1994). Some industries adopt exporting because their domestic market is too small (high-tech firms in New Zealand (Caughey and Chetty, 1993)), while others are constrained by high domestic demand (e.g. Das, 1994) or large export costs.

Thus, generalisation of research conclusions across industries and sectors is problematic. In another vein, research which uses cross-sections of industries generally fail to consider industry-specific factors and may result in bias in the overall findings (Reid, 1981).

**Firm Size Differences**

One of the most widely researched relationships in export research is that between firm size and exporting behaviour (Bonaccorsi, 1992), but there is little consensus about the existence or nature of the relationship (Calof, 1994). It is suggested that one of the reasons for the inconsistency in findings is the different measurements being used for firm size (Cavusgil, 1976, 1984). For example, some studies use number of employees as the measure for size (Bilkey and Tesar, 1977; Cavusgil and Naor, 1987), while others use the sales level of the firm (Holden, 1986). In addition, the definition of firm size differs in different countries (Leonidou, 1995b), so ‘small’ in one country (e.g. the US) may equate to large in another (e.g. New Zealand).
While most export researchers have focused on SMEs (e.g. Cavusgil and Nevin, 1981; Ali and Swiercz, 1991), some have focused more on larger firms (e.g. Johanson and Wiedersheim-Paul, 1975; Lall and Kumar, 1981), and others have studied a broad cross-section of firms (e.g. Bilkey and Tesar, 1977; Burton and Schlegelmilch, 1987; Cavusgil, 1984). Calof (1994) argues that there is a greater likelihood of finding a significant relationship between firm size and export behaviour if the sample consists of a broad range of sizes. In the case of a general sample, where variations in size need to be accounted for, performance indicators may be measured in ratio, rather than absolute, terms (Diamantopoulos and Schlegelmilch, 1994).

**Limited Research on Non-Exporters**

Leonidou (1995a) suggests that research into the effect of stimulating factors on non-exporters' behaviour have been largely neglected. This issue has important government policy implications, as it indicates a perception that it is harder to persuade non-exporters to initiate exporting than encourage exporters to increase their existing activities (Leonidou, 1995a).

In his review of research on export stimuli, Leonidou (1995a) found many inconsistencies in research findings, due largely to differences in conceptualisation and in the research methodologies employed. This mirrors the conclusions of reviewers of much of the export literature, as discussed elsewhere in this chapter.

**Implications for Theory Development**

For the purpose of building theory on export performance, and particularly for the development of findings and insights from other research in this process, it is important that the sampling frame issue be addressed. Thus, there is a need for
sampling frames to be either consistent across studies, or to have adequate controls, or for individual studies to incorporate multiple settings (e.g. environment, countries and levels of economic development, firm sizes, destination markets, and industries).

There may be a need for cooperative research efforts in this area.

An additional implication arises from research issues associated with the non-exporter/exporter dichotomy. This is the need to extend the classification of the two groups, particularly the exporter group, such as evidenced in Moini's (1994) study, in order to understand more fully their impact on export performance. Further classification may create overlap with internationalisation stages theory, and so the possibility of integrating of these two bodies of knowledge more explicitly would arise.

**Level, or Unit, of Analysis**

Cavusgil and Zou (1994), in a study of the relationship between export performance and export marketing strategy, suggest that there are limitations in using the firm as the unit of analysis, as considerable variations exist across various product-market export ventures in the same firm. It is unlikely that the same marketing strategy will be used across all export products and markets of a firm, and aggregating them in one firm investigation will undoubtedly lead to confused results (Madsen, 1987). This view is also strongly supported by Axinn et al (1996) and Matthyssens and Pauwels (1996). Notwithstanding this limitation, previous studies have mostly been conducted at the overall firm level.

**Implications for Theory Development**

Implications for export performance models arise from this issue. While more explicit and probably more meaningful results would be obtained by modelling export
performance at the product / market, or venture level, it is important for the wider firm-level influences on the export performance not to be omitted.

Different Approaches to Data Collection and Analysis

Katsikeas (1994) claims that “there is a dearth of empirical research concerned with the systematic examination of those elements that mark a firm’s export competitive profile”. (p. 35). He argues that, where there are a large number of items relating to competitive advantage, data-reduction approaches (Bauerschmidt et al, 1985), rather than descriptive statistical methods should be used. Others (for example, Aaby and Slater, 1989; Cavusgil and Zou, 1994) suggest that more in-depth, focused research is needed, in order to distinguish and understand more clearly the differences noted from questionnaire-based mail surveys. There are situations where both recommendations are appropriate; for example, Bijmolt and Zwart (1994) conclude that it is best to precede an explanatory study by a thorough descriptive study. The diversity in the number of export barriers reported by different researchers and reviewed by Leonidou (1995b) is attributed to the absence of qualitative research prior to the start of a full-scale study, as well as to different types of questions used.

Issues of data collection are raised by Leonidou (1995b), who concludes that the heavy reliance of previous research on mail surveys as the principal data collection method does not allow for in-depth examination of the subject under investigation. In contrast, he suggests that personal interviews offer more insightful information. However, in personal interviews, personal bias is a common tendency when researchers ask respondents to recall events in the firm’s history (Strandskov, 1994). Respondent bias is also possible, when information is obtained from only one
respondent who is assumed to be the decision-maker (Phillips, 1981), though this is more likely to be a problem in larger firms.

In reviewing export development research, Leonidou (1995a) noted that the methodological or analytical rigour of the studies, and the reporting of results was inconsistent, and, in many cases, inadequate. Likewise, in assessing the relationship between firm size and export behaviour, Calof (1994) highlighted discrepancies in other research findings and the absence of reported variable statistics. These issues make comparison of research findings difficult, and impede the formulation of a body of theory on which future research can build (Cavusgil and Zou, 1994).

**Implications for Theory Development**

The key implications for development of theory of export performance are the need for accurate and full reporting of data collection, analysis and measurement methods, enabling consistent and reproducible research across different studies. There is also a need for mutually-reinforcing quantitative and qualitative approaches to research on export performance.

**Omission of the Time Dimension**

Most empirical research on exporting has been static (Chetty and Hamilton, 1996; Leonidou and Katsikeas, 1996). One of the major methodological issues is the limited use of longitudinal studies (Aaby and Slater, 1989). This is a particularly important issue for research on exporting in terms of both the internationalisation process of firms (Jaffe and Pasternack, 1994), and export performance (Aaby and Slater, 1989). In the former case, most of the studies investigate either independent stages of the process, or seek retrospective information from firms, in some cases,
going back a number of years and involving different managers. As already mentioned, few studies have looked at the full spectrum of stages, from pre-export (non-exporters) through to committed exporters (Jaffe and Pasternack, 1994), thus making associations of particular performance and other outcomes with export development stages difficult. In the case of export performance, the time dimension is important in relation to measuring the impact of changes in both internal and external environments on export performance over time. Axinn et al (1996) note the importance of macroeconomic changes and organisational learning in their longitudinal study of export performance.

The value of a longitudinal approach has also been documented in the investigation of export barriers (Leonidou, 1995b). These are deemed to be dynamic, multivariate and long lasting in nature. However, the time, organisation and cost involved in longitudinal studies are well recognised and thought to be the major barrier to this type of investigation (Cavusgil and Nevin, 1981a; Reid, 1981).

**Implications for Theory Development**

This research issue highlights a need for more consistent and clearly presented methodological approaches in export research. There is also a need for more longitudinal research in both internationalisation and export performance studies. Longitudinal research is also an obvious way to research the association between these two streams of research, discussed earlier in this section.

In terms of theory development for export performance, it is important to ascertain the (time-related) dynamics and contingencies associated with the construct, and to meaningfully represent these in export performance models. This suggests that export
performance models may need to offer less simplistic representations of the construct than are currently available.

2.3.1.3 Conceptual Issues

Fundamental to the validity of research on exporting is its conceptual base, but many authors declare inconsistencies and other problems associated with this.

Inconsistency in Conceptualisation, Operationalisation and Measurement of Constructs

Conceptualisation and operationalisation of export marketing strategy and performance have been stated to differ substantially across different research studies (Madsen, 1987; Aaby and Slater, 1989). In addition, problems associated with measurement, sampling and validity have seldom been fully reported and research approaches have tended to be simplistic (Cavusgil and Zou, 1994) and lacking in methodological rigour and conceptual frameworks (Aaby and Slater, 1989).

In reviewing previous research on export barriers, Leonidou (1995b) concluded: "The investigation covered 35 studies and revealed that from the conceptual aspect, research on the subject is still at the identification and conceptualisation stage. It was also demonstrated that the methodologies were unsophisticated and flawed in some respects." (p. 29).

A conceptual issue also noted by Leonidou (1995b) is the tendency for researchers (on export barriers) to ignore previous work on the subject, leading to duplication and stagnation of the overall research. Cavusgil and Nevin (1980) noted that the tradition of building on previous research is not strong in international marketing. Particular issues associated with conceptual, operational and measurement are discussed below.
Reported research on export performance should be more explicit about conceptualisation of the research problem and its operationalisation, in order that other researchers may build on a solid base of knowledge and progress the development of export theory. Implications relating to specific related issues are discussed, as follows.

**Implications for Theory Development**

Export Strategy / Export Marketing Strategy

The terms, 'export strategy', 'export marketing strategy' and 'export strategies' have been frequently used in the literature in an interchangeable way, without clear distinction between them. Thus, conceptualisation of these constructs is either poorly explained or inconsistent. The implications of these different perspectives for research and theory development are important. For example, export strategy is often presented or perceived as the firm's strategy in relation to exporting, but is operationalised purely in terms of product (adaptation vs standardisation) and market decisions (e.g. Axinn, 1996), or as marketing mix decisions (e.g. Cavusgil and Zou, 1994). Researchers also discuss firm choices of numerous export strategies, represented at the operational-level of the firm (e.g. Axinn et al, 1996). The wider aspects of export strategy, such as export objectives (for example, vis a vis domestic business objectives), competencies and manpower (Diamantopoulos and Schlegelmilch, 1994), and organisational structure (Bijmolt and Zwart, 1994), including inter-organisational relationships and/or networks (e.g. Styles and Ambler, 1994), in these situations are largely ignored, at least in terms of operationalisation. Questions then arise as to the frames of reference for these terms. The issue is more problematic when export strategy / export marketing strategy is positioned as a core component of export performance models (e.g. Cavusgil and Zou, 1994). In these
situations, the scope of the construct may, in fact, be operationalised at a narrow, and operationally focused level, rather than at the strategic level of the firm, as often implied, or intended.

**Implications for Theory Development**

There is an urgent need for conceptualisation of the export strategy and export marketing strategy constructs to be developed and agreed. Confusion over the way that these constructs are conceptualised and operationalised means that theory development cannot proceed from a clear, agree, understanding of existing research in this area.

**Variables and Indicators**

There is little consistency between studies of the variables associated with export performance or stages of development, and, in many cases, independent variables are considered as single, rather than combined, influences; this approach ignores the composite effect of all independent variables (Leonidou and Katsikeas, 1996). Many studies use simple bi-variate (one predictor, independent variable and one dependent variable) relationships, which, argue Aaby and Slater (1989), may be a cause for many of the contradictory results found in their review. Andersen (1993) claims that variables are often chosen randomly, rather than relying on a theory-building approach. In his review of research on export barriers, Leonidou (1995b) reported that the statistical analysis of data has been seriously impeded by a heavy reliance on unidimensional measurement bases and the use of relatively simple measurement scales. In some cases, such analysis has led to misleading findings (Albaum and Peterson, 1984).
This issue has wider implications in the strategic sense, as the role of these variables in a firm’s overall strategic direction is seldom considered (see earlier part of section). Like Cavusgil and Zou (1994), Yeoh and Jeong (1995) assert that it is necessary to adopt a contingency approach to export performance, where exporting is considered to be a firm’s strategic response to the interplay of internal as well as external factors. Thus, multiple variables are regarded in the light of an exporter’s contextual situation; this will be dynamic, and, therefore, devoid of any one set of key success factors (Walters and Samiee, 1990).

The operationalisation of export development models is also an issue. Internationalisation models are criticised for having no consistent and reliable export stage classification schema, and most classifications that have been used have been conducted ex-post facto, and somewhat arbitrarily (Andersen, 1993, Strandskov, 1994). The boundaries of the stages lack clear definition (Turnbull, 1987), making the progression of firms difficult to accurately track.

**Implications for Theory Development**

Similar implications for theory development in export performance arise in relation to inconsistencies in conceptualisation and operationalisation of variables and indicators as for export strategy / export marketing strategy. That is, there is a need for consistency in conceptualisation and operationalisation of variables relating to export performance and clear communication about these in published research.

Theory development needs the selection, and operationalisation of variables to be based on a theory-building approach, rather than being randomly based. Export
performance theory development should strive to explain the relationships between variables and identify the constructs that are multivariate in nature.

**Measures of Performance**

One of the reasons why an underlying theory for export performance has not emerged from the literature is because there has been no agreement of how to measure performance, with many studies using different measures for the criterion (Aaby and Slater, 1994; Matthyssens and Pauwels, 1996). In their review of the export performance literature, Aaby and Slater claim that the two key emphases for further research are export performance and longitudinal studies. There is debate about the number of indicators that represent the performance variable, and they range in the research studies from single indicators, such as export intensity or export growth rate, to multiple indicators, which include strategic, as well as financial, measures (Cavusgil and Zou, 1994; Matthyssens and Pauwels, 1996; Souchon and Diamantopoulos, 1996, 1997). The use of a single indicator might not capture the construct, while multiple indicators have an infinite number of permutations. This issue has also been discussed in detail in section B of this chapter.

An issue noted by Aaby and Slater (1989) is that many of the studies comparing the characteristics and performance of non-exporters and exporters group the exporters together and do not differentiate between poorly and highly performing (or motivated) exporters. Thus, conclusions drawn about exporters from these types of studies may not be reliable.
Implications for Theory Development

Probably the most critical requirement for theory development is an agreed measure or measures for the construct, export performance. Theory on export performance can only justifiably relate to the measures used for the construct. Thus, a definition, or conceptualisation, of export performance is needed, with an agreed and feasible set of measures with which it can be adequately operationalised. There are likely to be associated methodological implications, in terms of complexity and rigour, and in the consistency of the research approaches used across studies.

International Channel Choice and the Role of Foreign Buyers

There is a substantial literature on international channels, but a paucity of investigations of international channel choice among small business exporters (Ramaseshan and Patton (1994). Integration of this topic with recent relational and network theories is also very limited, with some exceptions being the work of Johanson and Mattsson (1988), Styles and Ambler (1994) and Lindsay and Arthur (1998).

It has also been noted that the role of the foreign buyer in the development of a firm’s exports has been largely neglected (Cavusgil and Nevin, 1981; Bello et al, 1991), despite the fact that international transactions involve both exporters and importers (Leonidou and Katsikeas, 1996).

Implications for Theory Development

In view of the increasing involvement of relational and network theories in export research, it is important that these be incorporated into export and export performance
theory. This raises implications for export performance theory in relation to the unit of analysis employed for study, since relational and network theories would extend the possibilities for the unit of analysis to have inter-organisational dimensions.

**Export Performance Models: Cause-Effect Relationships**

The vast majority of studies on export performance or success specify frameworks in which these are entered as an outcome caused by a number of variables (e.g. Axinn, 1988; Cooper and Kleinschmidt, 1985; Kirpalani and MacIntosh, 1980; Reid, 1983). However, Bijmolt and Zwart (1994) challenge the assumption of this causal direction and suggest that specific export policies may be embraced after export success is achieved (perhaps after an 'accidental' or 'passive' start), rather than a priori. While they end up supporting the popular assumption, they raise an issue that requires further research. Chetty and Hamilton (1996) point out that most of the studies are concerned with content (identifying the direct correlates of export performance, rather than process, with relatively little focus on the overall causal pattern).

The issue of causal relationships is particularly relevant in the context of the stages of export development in the internationalisation process (Moon and Lee, 1990), and studies which can combine this area of study with a longitudinal approach would make a major contribution to the literature (Bijmolt and Zwart, 1994). Leonidou and Katsikeas (1996) suggest that the reason why none of the studies in their review of export development attempted to investigate cause-effect relationships was due mainly to the lack of longitudinal research.
Implications for Theory Development

Export performance theory need to capture the processes by which firms attain performance outcomes. In other words, models need to be causal or explanatory in nature. Without this dimension, models remain static and compartmentalised, shedding little light on relationships between variables and the dynamics involved. A longitudinal dimension is important in this regard, as mentioned earlier.

In view of the possibilities noted in the literature of alternative cause-effect relationships and feedback loops, export performance theory might be enhanced by the incorporation of systems theory. Mapping techniques, such as cognitive mapping methods, might be helpful in presenting complex relationships developed in models of export performance.

Need for Eclectic Basis for Export Research

Many critics conclude that export research has been poorly integrated into an agreed theoretical framework/s, despite a large body of research existing. At the same time, there are calls for a wider involvement of other fields of research into the export arena, for example, from the fields of entrepreneurship and organisational behaviour (Yeoh and Jeong, 1995). Leonidou and Katsikeas (1996) capture these needs in the following statement: “Future research in the field should harness the eclectic contribution afforded by existing theory and, at the same time, enhance its status with contributions from marketing, business and other disciplines.” (p. 517). Similarly, Andersen (1993) asserts that the field of exporting is in its early phases of theory building and contributions from other disciplines are crucial to its development.
Implications for Theory Development

Other implications discussed in this section have noted the need for export performance theory to integrate other bodies of knowledge. Particular research streams likely to help in the development of theory are strategic management, relational and network theory, entrepreneurship and organisational behaviour.

Export and export performance theory, therefore, needs to be developed from an eclectic research base, broadening the field from its current, predominantly marketing, perspective.

2.4 Summary

This section has attempted to highlight some of the main issues arising from research in the field of exporting, in particular, those relating to export performance. Implications for theory development in this area have been discussed and summarised in Table 2.4. These issues and implications form the basis for the development of specific research objectives and questions discussed in Chapter 3.
This chapter is divided into three sections. Section A discusses the research questions and objectives of the study, following on from Chapter 2. Section B discusses the research approach, design and method, and Section C outlines some of the main limitations associated with these.

3.1 A. Research Questions and Objectives

The Literature Review describes the status of current knowledge about export performance and related export topics, and identifies a number of research gaps and problems either not addressed by the extant literature, or remaining inconclusive. From these gaps and problems a number of research questions have been formulated, as outlined below.

The research follows a grounded research approach (Glaser and Strauss, 1967), and, in line with this and qualitative methods, research questions, rather than hypotheses, have been formulated as the basis for the research. This is also in accordance with Eisenhardt's (1989) case study method, which the study utilises, and which recommends the use of research questions rather than hypothesis. Research questions associated with grounded theory particularly address the 'how' and 'why' of qualitative research, rather than the 'what' and 'how many', usually associated with quantitative research. In contrast to research hypotheses, research questions assume no prior conceptualisation, or sufficient only to provide scope for the study, as was the
case with this study. The research questions align with the research objectives of the study, and these address selected gaps and issues identified in the research literature.

3.1.1 Research Questions

The research questions are presented in the context of the two main stages of the study: Stage 1, which investigates a small number of successful, export award winning exporters, and Stage 2, which is a longitudinal study of a larger group of exporters with varying performance profiles. Results from Stage 1 provide input into the development of a conceptual model and these both inform Stage 2 of the study. Research questions relating to Stages 1 and 2 are now outlined.

3.1.1.1 Stage 1

Question on the characterisation of successful exporting firms:

The literature suggests that the profile of an exporting firm, including aspects such as size and age, may be associated with export performance. The question is therefore posed:

(a) How are successful New Zealand exporting firms characterised, in terms of firm and management characteristics, and products and markets?

Questions on export performance of successful exporting firms:

Research on export performance has produced a diversity of approaches and outcomes, and an uncertainty about the relationships between the variables concerned (Aaby and Slater, 1989, Leonidou and Katsikeas, 1996). Generalisability of research results and conclusions to countries beyond those published in the export literature is also an issue. Furthermore, studies on the export performance of New Zealand firms are very limited, with the main exception being the work of Caughey and Chetty
(1994) and Chetty and Hamilton (1996). One way to overcome some of the methodological issues associated with export performance is to study a ‘homogenous’ group of exporters to develop a conceptual base, and then apply this to a wider group of firms (Cavusgil and Zou, 1994). Stage 1 of the study relates to a group of exporters deemed homogenous by virtue of their export award winning status. Questions that arise in relation to the above issues, in the context of this group of firms are:

(b) What variables are concerned with the export performance of successful New Zealand exporting firms?

(c) How are these variables different or similar to those influencing export performance, as identified in the literature?

(d) How are the variables interrelated, and how can the dynamics of export performance be explained?

3.1.1.2 Stage 2

There is considerable disagreement about the variables and antecedents of export success in the literature (Aaby and Slater, 1989; Cavusgil and Zou, 1994; Leonidou and Katsikeas, 1996). One of the reasons for this stems from a lack of understanding of the interrelationships between variables concerned, with researchers acknowledging that success factors are unlikely to derive from singular influences (Aaby and Slater, 1989; Cavusgil and Zou, 1994; Souchon and Diamantopoulos, 1997; Matthyssens and Pauwels, 1996). Stage 2 develops the concepts formulated in Stage 1, in particular through application of the conceptual model, in an attempt to cast light on this issue. Stage21 represents a group of exporters of varying levels of performance. It is informed by the findings of Stage 1, and by answers to the
questions above. The following questions aim to determine the differences between successful and unsuccessful exporters in relation to export performance and over time.

**Questions on the characterisation of successful and unsuccessful exporting firms:**

Part of the debate about successful versus unsuccessful exporters relates to firm characteristics, such as age and size, and their role in export performance e.g. Aaby and Slater, 1989). These questions seek to ascertain whether or not there are any significant differences between successful and unsuccessful exporters in this regard.

(e) **How are successful and unsuccessful New Zealand exporting firms characterised, in terms of firm and management characteristics, and products and markets?**

And:

(f) **Are there significant differences between the two groups of exporters (successful and unsuccessful)?**

**Question on the differences between successful and unsuccessful firms in relation to the variables associated with export performance, and their interrelationships:**

This question is concerned with the particular variables and their interrelationships as discussed above. In addressing these issues, generalisability of the model of export performance developed in Stage 1 is also determined.

(g) **What are the similarities and differences between successful and unsuccessful firms with regard to the variables, and their interrelationships, that influence export performance, and how do these relate to the model of export performance developed in Stage 1?**
Questions relating to export performance over time in successful and unsuccessful exporting firms:

Few studies have determined how variables involved in export performance, and their influences and interrelationships, change over time; a notable exception is the recent study of Axinn et al (1996). This question aims to provide insights into the dynamics of export performance, by investigating export performance variables, and performance patterns, in a group of firms over a six year time frame.

(h) How do the variables, and their interrelationships, associated with export performance, change over time, in relation to exporters' changing export performance patterns?

Question relating to the export performance model developed in Stage 1:

A synthesis of the results from the previous research questions will determine whether or not changes in firms' export performance-related activities over time require changes to be made to the model of export performance developed in Stage 1. The question is:

(i) What changes, if any, are required to the export performance model developed in Stage 1, to reflect changes in firms' export performance-related activities and the associated variables and interrelationships over time?

These questions are addressed in Chapters 4 and 5, and are referenced specifically at appropriate points in the presentation and discussion of results.

3.1.2 Objectives

Objectives of the study derive directly from the research problems identified from the
literature and the research questions outlined above, the rationale for which has already been discussed. Specifically, the objectives are:

- To identify the variables that relate to export performance of New Zealand exporters, and distinguish between successful and unsuccessful exporters.

- To conceptualise these export performance variables and their interrelationships in a model of export performance

- To investigate the changes in these variables and their interrelationships in exporting firms over a six-year period.

The remainder of this chapter describes the research approach used to address these research questions and objectives.

3.2 B. Research Design and Method

This section firstly provides a brief outline of the research design and method. It then discusses the rationale for the research approach taken. This is followed by a detailed discussion of the research method, using a modification of the framework developed by Eisenhardt (1989). In Section C, limitations of the research approach are discussed.

3.2.1 Brief Outline of Research Design and Method

The study design involves case study research (e.g. Yin, 1994; Eisenhardt, 1989), utilising a partially grounded theory approach (Glaser and Strauss, 1967). This approach follows the recommendation of Miles and Huberman (1994, p17), who
suggest that some prior conceptualisation of emergent issues, rather than a pure
grounded theory approach (Glaser and Strauss, 1967), which builds theory from a
base of zero conceptualisation. Prior conceptualisation about export performance was
attained from a detailed literature review, which led to the formulation of research
questions.

Theory-building qualitative methods of analysis were predominantly used, facilitated
by the use of computer-assisted qualitative data analysis software (CAQDAS)
programme called NUD-IST, which is discussed in detail later in this section.
NUDIST also facilitated basic quantitative analysis of the qualitative data, enabling a
more substantive result than would have been possible using only qualitative methods
(Miles and Huberman, 1994, p40). Quantitative analysis was also conducted on
interval data relating to firm characteristics, and on categorical, ordinal data
associated with Stage 2 of the study. Thus, both parametric and non-parametric
analytical methods were used.

Theory building was developed further through a conceptual mapping process,
providing the basis for a tentative explanatory model of export performance. This
mapping process was assisted by the use of decision modelling software package
called Decision Explorer, which is discussed in more detail later in this chapter.

3.2.2 Rationale for the Research Approach

The research design chosen for the study is summarised in Figure 3.1.
The research approach was strongly influenced by the contemporary literature that highlighted the issues associated with inappropriate or inadequate methodologies and conceptualisation applied to export research (e.g. Leonidou, 1995a). These issues are discussed in detail in Chapter 2 and summarised as implications for theory development in Table 2.4. Methodological approaches evolved during the six year period of the study. Initial influences were derived from the key studies and review articles published during and before 1989, both in terms of research issues (discussed in Chapter 2) and methodological approaches and issues, discussed in this chapter. Two key influences on the research methodology were the early editions of books by Miles and Huberman (1984) and Yin (1984). The discussion in this chapter, however, draws principally from the more recent publications by these authors (Miles and Huberman, 1994) and Yin, 1994), providing a more recent perspective on the issues discussed.
Four key implications for theory development on export performance, noted in Chapter 2, are relevant to the research approach developed for this study. These are noted below and are followed by a discussion of the rationale for the design of the study, that is, the two research stages.

1. More in-depth qualitative studies.
Aaby and Slater (1989) argue that more in-depth, focused research methods would enable a greater understanding of export performance and the underlying variables involved. A more conceptual input into research design has been suggested (e.g. Leonidou, 1995a; Cavusgil and Zou, 1994; Matthyssens and Pauwels, 1996). These perspectives provided the main rationale for the core, Stage 1, part of the study. This was case study based, using personal interviews and qualitative analysis techniques to gain an in-depth understanding of export performance (specifically, export sales performance) of a sample of predetermined successful exporters. It also provided a means to conceptualise the construct, export sales performance, through the development of a conceptual model.

2. Conceptualisation of the construct, export performance, operationalisation of variables and relationships between variables.
The overall research approach enabled this issue to be addressed in both Stage 1 and Stage 2 of the study. The approach of Stage 1 enabled an in-depth conceptualisation of the construct, export sales performance, and the variables concerned and also provided insights about the operationalisation of the variables. This was important for
the subsequent testing of the construct and variables in Stage 2, which was able to provide further insights into these conceptualisation and operationalisation issues.

3. **Use of qualitative and quantitative methods.**

The need for both qualitative and quantitative research methods to be applied in export research has been noted by a number of authors (e.g. Aaby and Slater, 1989, Souchon and Diamantopoulos, 1996). The application of a focused quantitative phase (Stage 2) subsequent to the in-depth qualitative phase (Stage 1) in the study conforms to these views. Stage 1 also incorporated quantitative analysis and testing of the more exploratory and conceptual outcomes. Stage 2 was supported by in-depth qualitative data, providing a contextual basis for the quantitative outputs.

4. **Longitudinal Research**

The need for more longitudinal research on export performance has been noted by Aaby and Slater (1989) as one of the two most important areas for future research, and this view is shared by others (e.g. Axinn et al, 1996). The rationale for the incorporation of a longitudinal component in the study was based largely on this key implication for theory development in export performance research. It was also influenced by other issues discussed in Chapter 2 (summarised in Table 2.4), relating to the need to understand the process and dynamics of export performance (e.g. Aaby and Slater, 1989; Chetty and Hamilton, 1996), and the role of firms' changing external environments and situational contexts (Cavusgil and Zou, 1994; Yeoh and Jeong, 1995).
The research design and approach used in the study were also determined by the need to achieve the stated objectives (see earlier in this section). The rationale for the research design and approach was supported by the fact that the objectives were developed from the research issues and implications for theory (Chapter 2).

3.2.2.1 Research Design – The Research Stages

The research stages and their rationale are discussed in this section. This section starts with a discussion on the operationalisation of export performance, since this is a fundamental component of the study.

The issues and implications relating to the choice of export performance measures are discussed in detail in Chapter 2. The use of a single export performance measure in studies of export performance has been criticised in the literature (Cooper and Kleinschmidt, 1985; Madsen, 1988; Matthyssens and Pauwels, 1996). For this reason, Stage 2 of the study utilised three measures: export sales growth, export intensity and growth in export intensity, all of which have been used singly, or combined, in other studies. The measures and their value as indicators of export performance are discussed in detail in other parts of this chapter and in Chapter 2.

Export sales trend is a useful performance measure in providing information about the revenue earned from export over a firm’s recent history. Growth in export sales suggests an increase in export business over the time period measured, usually 3, or 5 years. However, increased export sales revenue could arise from static or declining volumes of export product, if, for example, currency or price fluctuations occurred over that time. The export intensity measure seeks to provide information on the ratio
of export: domestic business, and, therefore, on the implied degree of export commitment. The main criticism of this measure, however, is that it does not necessarily reflect changes in export earnings or volume. For example, export intensity may increase simply by virtue of a decline in domestic business. Trend in export intensity helps to provide a more stable perspective of the export:domestic business ratios over time, but it is also vulnerable to the same criticisms as absolute export intensity.

Stage 1 firms were export award winners, and, although there a number of criteria for this award, the key export performance indicators used were export sales growth over the previous five years and export intensity. Thus, export performance was operationalised in the study using mainly export sales-based measures. A significant limitation of this choice of export performance measures is evident, since they do not reflect wider export performance related influences, such as those associated with productivity, profitability, or strategy. The limitations are discussed more fully later in this chapter.

Reasons for the choice of the particular export sales-based performance measures were as follows. Firstly, these measures were used in the vast majority of studies of export performance consulted at the start of the study, when the research design was initially formulated. Very few of the earlier studies, using similar export sales-based measures, often alone, have made any distinction between export performance and export sales performance. In other words, they have represented export sales performance as export performance.
Although problems in export performance measurement were noted by Aaby and Slater (1989), only more recently have strong criticisms been voiced in the literature and more viable alternatives presented (Cavusgil and Zou, 1994; Matthyssens and Pauwels, 1996; Souchon and Diamantopoulos, 1996, 1997). Secondly, export sales growth and export intensity were the key export performance indicators for the successful, export award winning group of firms in Stage 1. Use of a similar measure was considered important to provide broad relativity for Stage 2 firms, although a direct comparison between the two stages was not a part of the study. Thirdly, information for some alternative, or additional measures, particularly financial, was difficult to obtain consistently across all firms. For example, profitability was, in some cases, confidential, unknown, or measured differently by different firms. However, recent literature suggests using relative measures for these indicators to avoid this problem, and to control for differences in firms across industries (e.g. Diamantopoulos and Schlegelmilch, 1994). Strategic performance indicators, such as the extent to which strategic objectives were achieved (Cavusgil and Zou, 1994) also presented some differences in interpretation, particularly with regard to perceptions of what constituted ‘strategic’ factors, or the time frame concerned. None of these issues, however, are insurmountable, as shown by researchers in the more recent literature. Fourthly, given these difficulties, use of the export sales-based measures provided consistency across the firms in the study and across the three time periods studied, and, as already noted, they were closely aligned with the measures indirectly applied to Stage 1 firms.

Notwithstanding the evidence supporting the use of composite measures for export performance, a disadvantage has been noted where individual variable relationships
may be masked by composite measures of export performance (Venkatraman and Ramanujam, 1986). These authors recommend that export performance measures should be used individually, rather than aggregated into a single composite measure. On the other hand, in order to capture influences of individual variables, the model developed in Stage 1 of the study allows both composite and individual influences to be represented in the conceptual map. The additional use of multivariate analysis would add considerably to an understanding of the relationships between the variables concerned (Souchon and Diamantopoulos, 1996). Multivariate analysis was used in this study to analyse the multi-variable relationships in the context of export sales performance. Extension of this approach to a more composite export performance measure is possible.

The research thus involved a two-stage process, with Stage 2 building directly on the outputs and outcomes of Stage 1 data and the resulting conceptual model. One of the outcomes of Stage 1 was a conceptual model. This model represents only successful firms, using recent Export Award winners. The decision to work with only a successful group of exporters, rather than a wider, random group, was based on a number of factors, discussed below.

A research design which investigates the association of success characteristics with firms from a predetermined sample judged to be successful has been encouraged by other researchers (Baker and Abou-Zeid, 1982; Ughanwa and Baker, 1989). As noted in Chapter 2, however, there is an argument for other approaches to be used alongside this approach in order to attain a more complete understanding of export performance. This would involve the proposal of conceptual frameworks (Cavusgil and Zou, 1994).
and the differentiation of successful from unsuccessful firms from a cross-sectional sample (Hooley and Lynch, 1985). The observation that there are few, if any, studies that incorporate all three approaches, provided a justification for using all three approaches in this study.

Successful firms were chosen for the first part of the study, in which a conceptual model was developed, as suggested by Cavusgil and Zou (1994). Export award winning firms were chosen because they represented a predetermined set of successful firm (Baker and Abou-Zeid, 1982; Ughanwa and Baker, 1989) against which comparisons with unsuccessful firms could be subsequently made from a cross-sectional sample (Hooley and Lynch, 1985). The assumption was made that winning an Export Award was a proxy for export success (Styles and Ambler, 1994), although limitations of this have already been noted. The assumption was made that winning an Export Award was a proxy for export success Styles and Ambler (1994).

The research questions and conceptual model were concerned with export performance, specifically export sales performance, and it was considered more likely that successful firms would display more variables associated with export performance than unsuccessful firms, or a randomly selected group. The study, therefore, used successful firms to identify the factors and variables, which were apparently associated with success. Subsequent testing of this assumption with both successful and unsuccessful export firms provided some insights into the relationship between these factors and variables and export sales performance. These insights were enhanced by the longitudinal nature of the study, which enabled an investigation
of the changing influences of the factors and variables in the evolving performance and circumstances of individual firms.

As already suggested, the relationships demonstrated in the model between factors and variables and export success would not be valid without a research step that tested the model against other export firms, both successful and unsuccessful. Stage 2 of the study enabled the key success factors and variables associated with export sales success to be identified, and isolated from those which did not differ between successful and unsuccessful exporters. Success criteria in the study were based on the export performance measures outlined above. Discussion of the assessment of success is presented later in this chapter. However, since the model is concerned with export performance and not 'success' per se, it was necessary to design the study to enable the identification of factors and variables that were important for exporting, regardless of the degree of export success enjoyed by the firms. Stage 2, therefore, provided the opportunity to test the model and achieve construct validity. While having an in-depth qualitative foundation, Stage 2 utilised quantitative methods to test, not only the significance of the independent variables relative to export sales performance, but also to test their combined influences. The anticipated outcome of this part of the research was thus a confirmation of the key variables associated with export sales performance, their combined effects, and their relative importance in determining export sales performance.

Two other related factors illustrate concerns of researchers into export performance. These are the need to understand the process and dynamics of export performance, and the implications for export performance of a changing external environment and a
firm’s situational context. Both of these issues were addressed in the study by the incorporation of a longitudinal component. The Stage 2 sample of firms was studied over a six-year period and relevance of the conceptual model was assessed. Because the longitudinal study involved both qualitative and quantitative methods, it was possible to both test the model quantitatively over time, and capture qualitative insights into the changing dynamics of, and influences on, export sales performance over time.

3.2.3 Use of Computer-Assisted Qualitative Data Analysis Software (CAQDAS)

Until recently, the focus of the literature on qualitative research has been on data collection methods, with relatively little attention being paid to qualitative data analysis or the interaction between different phases of qualitative research (Burgess, 1995). With regard to data analysis, Eisenhardt (1989, p539) quotes Miles and Huberman (1984): “One cannot ordinarily follow how a researcher got from 3600 pages of field notes to the final conclusions, sprinkled with vivid quotes though they may be.” (p.16). Because qualitative data cannot usually be easily quantified, it is not surprising that their analysis is accompanied by practical, technical and methodological problems (Fielding and Lee, 1995).

In recognition of these difficulties, awareness of Computer-Assisted Qualitative Data Analysis Software (CAQDAS) has grown in recent years. Two main types of CAQDAS programmes have been distinguished, those designed for descriptive-interpretative research and those which explicitly support theory building (Tesch, 1991). The programme used for qualitative data analysis in this study, NUD•IST (Non-Numerical Unstructured Data Indexing Searching and Theorising), is one of the
earliest programmes firmly supporting theory building, while also enabling
descriptive-interpretative approaches.

Discussion of the advantages and issues associated with the use of CAQDAS and
qualitative research in this context has been provided in Chapter 2. Debate about the
value of CAQDAS to qualitative research outcomes continues, but these systems are
now an accepted component. Advantages include the lessening of the labour
intensive aspects of doing qualitative research; speeding up of the coding and retrieval
process; depending on the actual programme, an increase in sophistication and
complexity of analysis through the use of Boolean searches on any code or
combination of codes, which enhances the analyst’s ability to generate and test
theory; (in NUD•IST, this is enhanced through a process called system closure); and
the opportunity to enhance validity by quantifying the qualitative data (Hesse-Biber,

While CAQDAS are relatively new to researchers in qualitative research, at least
compared to statistical computer programmes, many of the initial fears and proposed
difficulties associated with CAQDAS have not materialised (Fielding and Lee, 1995).
However, Hesse-Biber (1995) emphasises that it is important for the researcher to
assess their own strengths and weaknesses as well as the implications of using
computer-assisted software to analyse quantitative data. She states that: “It is clear
that the interpretation of qualitative data is enriched by the use of computer software
programmes and that more dialogue is needed on other issues …” (p.39) to overcome
common fears associates with this technology. These fears are summarised by
Burgess (1995) as: that computer technology will separate the researcher from the
creative process; that computer programmes will superimpose the logic of survey research on qualitative data; that the computer will dictate the analysis; that qualitative measure associated with reliability and validity will be used; and that issues of confidentiality will be more acute when such software is used.

The NUD*IST programme was designed not only for organisation of data, but also for exploring the relationship between data and ideas (Richards, 1995). Use of NUD*IST in a live, longitudinal project has been thoroughly documented by Richards (1995). She strongly supports the benefits of computer-assisted data analysis technology reported by others, in particular, the change in balance between organisation and creativity. She asserts that the exploration and creative processes become freer and enhanced because data organisation is made easier. However, while she also concurs with many of the disadvantages noted by others, Richards points out that analysis is ultimately the responsibility of the researcher. Another user of NUD*IST succinctly describes the balance of researcher responsibility and advantages of increased researcher control: “Although software may invoke a new potential for an infinite array of connections between previously unconnected things, we maintain that it is the researcher who must still decide what is meaningful and how it is meaningful. Moreover, the capacity to monitor and interpret one’s own means of arriving at new insights - as facilitated by the ‘system closure’ capabilities of NUD*IST and other sophisticated programmes - enhances the self-reflexive nature of QDA.” (Bassett et al, 1995, p 18).

In using NUD*IST as the principle analytical tool in this study, the researcher was cognisant of the advantages and disadvantages noted above. Overall, the benefits to
the research of using NUD•IST were very evident in the contribution it made to achieving the research objectives. With the volume of data involved and the complexity of relationships between various parts of the study, the analysis would have been extremely problematic were it done manually.

3.2.3.1 Quantitative Analysis From Qualitative Research

There is ongoing debate surrounding the issue of linking quantitative and qualitative data, although a number of authors contend that these are “inextricably intertwined” (Howe, 1985, 1988; also Reichardt and Cook, 1979; Miller and Fredericks, 1991). Rossman and Wilson (1984, 1991) suggest that linking qualitative and quantitative data enables triangulation and provides richer detail and fresh insight. Miles and Huberman describe three levels of linkage: “quantizing”, where qualitative information is counted or converted into ranks or scales; linkage between distinct data types, when qualitative data is compared with quantitative data; and overall study design, where all parts of the study may combine qualitative and quantitative data.

The quantification of qualitative data (“quantizing”) includes straightforward counting of events, patterns, words etc present in the qualitative data, which Morse (1989) calls “appurtenant counting”, or application of a rating scale of some kind. Miles and Huberman (1994, p42) illustrate the latter from their own study, where they rated categories of information from their interview data on three- to five-point scales. This provided a perspective on relative similarities and differences across cases. However, they emphasise that the “numbers” gained from the rating are kept closely associated with the words, and the overall context.
Where computer assisted qualitative data analysis systems are used, the opportunity to draw out quantitative data from qualitative information is much greater than with manual analysis systems. Some computer programmes actually provide facilities to achieve this, e.g. NUD•IST, with vectors and matrices. While expressing cautions noted above, Hesse-Biber (1995) suggest that quantifying qualitative data can enhance its validity. Both Hesse-Biber (1995) and Silverman (1985) argue that it is necessary to link quantitative outcomes (e.g. counting themes or categories in the data) with qualitatively-derived insights about the setting and the respondent’s own view of the world. This linking enables the researcher to assess the representativeness of the data as a whole and to tighten their analysis (Silverman, 1985).

3.2.4 Conceptual Mapping Using Decision Explorer

Decision Explorer is a mapping and analysis software tool. The classic use of Decision Explorer is in cognitive mapping (Eden, 1988), for the gathering, structuring and analysis of qualitative data. It is especially useful for large maps and a lot of data, and has been used for mapping managerial cognition (Jenkins and Johnson, 1997). Used in conjunction with NUD•IST software, which codes and organises qualitative data into themes and patterns, Decision Explorer structures these linear sets of data into cognitive, or conceptual, maps which highlight the linkages and relationships between the variables, or concepts, concerned. There appear, however, to be no studies that have explicitly linked these two programmes in this way. Decision Explorer provides “…an explicit picture of an issue which clearly shows the inter-relatedness and inter-dependencies of different aspects of the issue, which can then be explored and debated.” (Decision Explorer manual, p. 6). The conceptual maps provide construct validity and may be analysed to provide further insights into the data and areas for further investigation.
Use of this type of mapping process allows complex data to be put together into a coherent picture to improve understanding of the situation. Decision Explorer maintains the richness of the data by managing its complexity, rather than having to provide a summarised overview (Decision Explorer manual, p6), as would be the case with most manual methods of analysis. Model building from cognitive, or conceptual, maps supports the phenomenological approach to research: "A map is not a reflection of some objective reality but rather a representation of an individual’s perceptions of an issue." (Decision Explorer manual, p. 18). Model building in Decision Explorer is based on a body of cognitive psychology theory, known as "personal construct theory" (Kelly, 1955). This type of modelling provides an approach that is particularly appropriate for studying relational perspectives of exporting (e.g. Styles and Ambler, 1994), incorporating linkages, both internal and external to the firm, and enabling a more dynamic and process-oriented approach. Details of the use of Decision Explorer are provided later in this chapter and in Chapter 4.

The following section describes the details of the research method used in the study.

3.3 Research Method

The process of case study research developed by Eisenhardt (1989, p533), and similar to that of Yin (1994), was used in a modified format, as shown in Table 3.1. The research method is now discussed, according to this modified format.
Table 3.1
Modification of Eisenhardt’s (1989) ‘Process of Building Theory from Case Study Research’ Used for the Study

<table>
<thead>
<tr>
<th>Step</th>
<th>Activity</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Getting Started</td>
<td>Definition of research question</td>
<td>Focus efforts</td>
</tr>
<tr>
<td></td>
<td>Possibly a priori constructs</td>
<td>Provides better grounding of construct measures</td>
</tr>
<tr>
<td></td>
<td>Neither theory nor hypotheses</td>
<td>Retains theoretical flexibility</td>
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<td></td>
<td></td>
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<tr>
<td>2. Selecting Cases</td>
<td>Specified population</td>
<td>Constrains extraneous variation and sharpens external validity</td>
</tr>
<tr>
<td></td>
<td>Theoretical, not random, sampling</td>
<td>Focus efforts on theoretically useful cases i.e. those that replicate or extend theory by filling conceptual categories</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Crafting and Verifying Instruments and Protocols, and Verification</td>
<td>Multiple data collection methods</td>
<td>Strengthens grounding of theory by triangulation of evidence</td>
</tr>
<tr>
<td></td>
<td>Qualitative and quantitative data combined</td>
<td>Synergistic view of evidence</td>
</tr>
<tr>
<td></td>
<td>Multiple investigators</td>
<td>Fosters divergent perspectives and strengthens grounding</td>
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<tr>
<td>4. Entering the Field</td>
<td>Overlap data collection and analysis, including field notes</td>
<td>Speeds analyses and reveals helpful adjustments to data collection</td>
</tr>
<tr>
<td></td>
<td>Flexible and opportunistic data collection methods</td>
<td>Allows investigators to take advantage of emergent themes and unique case features</td>
</tr>
<tr>
<td>5. Analysing Qualitative Data</td>
<td>Within-case analysis</td>
<td>Gains familiarity with data and preliminary theory generation</td>
</tr>
<tr>
<td></td>
<td>Cross-case pattern search using divergent techniques</td>
<td>Forces investigators to look beyond initial impressions and see evidence through multiple lenses</td>
</tr>
<tr>
<td>6. Displaying Qualitative Data</td>
<td>Present data in visual formats and identify relationships between categories and patterns</td>
<td>Provides &quot;... visual formats that present information systematically, so that the user can draw valid conclusions and take needed action&quot; (Miles &amp; Huberman, 1994).</td>
</tr>
</tbody>
</table>
7. Analysing Quantitative Data
   Use of appropriate quantitative analysis techniques
   Provides new insights or confirmatory evidence of qualitative analysis

8. Defining Constructs and Verifying Relationships
   Iterative tabulation of evidence for each construct
   Replication, not sampling, logic across cases
   Search evidence for "why" behind relationships
   Sharpens construct definition, validity and measurability
   Confirms, extends, and sharpens theory
   Builds internal validity

9. Enfolding Literature
   Comparison with conflicting literature
   Comparison with similar literature
   Builds internal validity, raises theoretical level, and sharpens construct definitions
   Sharpens generalisability, improves construct definition, and raises theoretical level

10. Reaching Closure
    Theoretical saturation when possible
    Ends process when marginal improvement becomes small

3.3.1 Step 1: Getting Started - The Research Stages

As outlined earlier, three basic approaches have been taken in research on export performance, each aiming to determine the influences on export performance and the antecedents of export 'success'. This study utilised all three approaches in an attempt to provide a more comprehensive understanding of export performance and a set of results that have more internal validity than has been generally demonstrated. The in-depth study of 'successful' exporters was followed by the development of a conceptual model (both in Stage 1); this adopts the recommendations of Bijmolt and Zwart (1994) who suggest that it is best to precede an explanatory study by a thorough descriptive study. Stage 2 analysed the differentiation of successful from unsuccessful firms from a cross-sectional sample (Hooley and Lynch, 1985). The unit of the research was the firm, with each case representing a single firm. The research
was divided into two stages, shown in Figure 3.1. The last stage, Stage 2, comprised three parts, separated by time intervals totalling 6 years.

**Stage 1** of the study was concerned primarily with identifying and modelling factors associated with export performance, addressing, specifically, research questions (a), (b) (c) and (d). Stage 1 was an exploratory and descriptive study of 16 exporters, judged, as export award winners, to be 'successful'. The conceptual modelling of Stage 1 results also provided a tentative explanatory approach to export performance. Stage 1 was guided by the prior conceptualisation of export performance developed from the review of the literature. Theoretical flexibility was also retained, enabling potential new influences and factors to emerge from the case studies.

**Stage 2** was a six-year longitudinal study of export performance from 60 firms, different to those in Stage 1, and representing varying levels of export performance. This part of the study was concerned with confirming (or not), and developing the conceptual model from Stage 1. It also aimed to provide further tentative explanation of export performance, especially in light of changes over the six-year period. Stage 2 was involved in theory building from a detailed cross case, and a longitudinal, perspective; it specifically addressed research questions (e), (f), (g), (h) and (i). While essentially qualitative in design, both qualitative and quantitative methods, including multivariate analysis, were used to research and analyse Stage 2. Theoretical flexibility was retained to allow the development of new insights from the data and analysis.

### 3.3.2 Step 2: Selecting Cases

Case study research relies on theoretical, rather than statistical, sampling (Glaser and
Strauss, 1967), the goal being to replicate or extend emergent theory (Eisenhardt, 1989). For these reasons, Eisenhardt notes that, “while cases may be chosen randomly, it is neither necessary, nor even preferable.” (p. 537).

The sampling procedure differed for the two stages (discussed below), although many of the sample characteristics were the same. The study firms were all from the manufacturing sector, and they were all active exporters; the research did not include non-exporters. While not a homogeneous industry, manufacturers are all producers, operating at similar parts of the value chain, and they are regarded in government policy and industry terms as a discrete sector. The firms were predominantly small and medium-sized, using the UK size criterion of <200 employees, although a few larger firms were included in the study. Difference in other firm characteristics, such as age, sales turnover, export experience, did not, however, distinguish these firms from the others. These larger firms were included in the study for this reason and also to determine relationships between firm size and other variables to be examined (since the literature is highly equivocal in this regard).

Firms were visited on site and the Managing Director (MD), and/or Export Manager were interviewed. Since few of the companies had managers dedicated to the export function, it was the MD who was interviewed in the majority of cases. In a few instances, the MD and another manager (e.g. export, production, and marketing) were interviewed together. For clarity, the term ‘Manager’ is used hereafter in reference to the interviewee - this may reflect any of the situations noted above.
Stage 1 involved a sample of 16 national export award winners from recent years (up to and including the previous 3 years). Export award winners have been used in other studies to represent ‘successful’ exporters (e.g. Styles and Ambler, 1994). As in other countries, one of the criteria for the export award is the achievement of export growth over the previous 5 years (overall, rather than consecutive). Identification of export award winners was available from the Trade Development Board offices. The 16 export award winners were chosen to match the population criteria; that is, small- to medium- sized manufacturers, with locational spread. This number of cases was chosen to enable a generalisation of findings across multiple cases without losing richness of the data (Miles and Huberman, 1994). The sample typology was “criterion sampling” (Patton, 1990; Kuzel, 1992), where all the cases met the export award winning criterion. Details of the firms participating in Stage 1 are provided in Chapter 4).

Stage 2. Because Stage 2 involved testing for replication of the conceptual model from Stage 1 over time, firms were selected to represent a cross-section of export performance. This enabled both literal and theoretical replication (Yin, 1994, p46) within a longitudinal context. The sampling typology used was “maximum variation” (Kuzel, 1992; Patton, 1990), where variations in export performance, as well as common patterns, could be identified.

Theoretical sampling was applied to firms for Stage 2, as follows. From the same population of firms as before (small- to medium-sized, exporting manufacturers), New Zealand Trade Development Board (TDB - previously Market Development Board) regional staff were asked to nominate exporting firms in their regions that
were active - that is, they were known to have exported products during the last two years. They were then asked to eliminate from this list the firms that had been interviewed in Stage 1 of the study. Thirdly, they were asked to separate these exporters into two categories (high ('successful') and low ('unsuccessful') export performers) of roughly equal size, based on their own experience of working with the firms. The complete list of 72 firms was then submitted to the central TDB office and passed on to the researcher, without any indication of the categories to which the firms belonged. Telephone interviews were arranged with 60 of the firms, with the remainder being either unavailable or unwilling to participate in the study. This process enabled the sample to contain approximately equal numbers of probable high and low export performing exporters, with minimal interviewer (researcher) selection bias. The sample number of 60 allowed both literal and theoretical replication of the findings from Stage 1, using a single- and multiple case approach. Details of the firms participating in Stage 2 are provided in Chapter 5).

Stage 2 was a longitudinal study involving three time points over a six-year period, with approximately equal intervals. *Phase 1, 2 and 3* involved the same sample of firms, with *Phase 2* conducted two and three-quarter years after *Phase 1*, and *Phase 3* conducted three and a quarter years after *Phase 2*. Not all sixty firms were present in the latter two phases for reasons discussed in Chapter 5.

### 3.3.3 Step 3: Crafting Instruments and Protocols, and Verification

A number of methods of data collection were used in the study, providing various means of triangulation, to strengthen the substantiation of constructs (Eisenhardt, 1989). These methods included the combined use of quantitative and qualitative data from the case studies, the use of expert opinions, and the use of published material
(though limited) about the case study firms. Questionnaire guidelines for Stages 1, 2 and 3 are shown in Appendix 1. Four experts on exporting issues from the MDB and one academic expert were utilised throughout the study, to broaden the ease of understanding of, and familiarisation with, the issues, and to provide complementary insights (Eisenhardt, 1989).

Stage 1. Although focusing on qualitative data, Stage 1 cases also yielded quantitative data, providing triangulation of evidence and synergistic perspectives (Miles and Huberman, 1994, p41). A semi-structured questionnaire was developed, guided by the findings of the literature review (Tables 3.3 and 3.5). The focus was on export performance, but the questionnaire was open-ended to allow exploration of additional aspects of exporting as they arose in the interviews, in the process of cooperative inquiry. Because Stage 1 involved export award winning firms, it was possible to include published material as part of the instrumentation process, providing further triangulation.

Stage 2 cases yielded both qualitative and quantitative data; quantification of qualitative data also took place during Stage 2 analysis. A semi-structured questionnaire was developed to assist theoretical replication of the conceptual model and other findings from Stage 1 (Tables 4.3 and 3.5). The questionnaire therefore focused on those concepts, but remained open-ended, in order to allow new dimensions, not detected in the earlier stages, to emerge. Validation of the instrument and data analysis process was assisted by the presence of an academic expert at four of the case study interviews in Phase 1 (the first time point in the longitudinal study).
The three phases in Stage 2 were undertaken over a six-year period. Instrumentation and protocols were similar for all three phases, except that the instrument continued to be reviewed between phases, reflecting changes in the firms’ external environment, as well as researcher insights, as the database grew.

3.3.4 Step 4: Entering the Field

In case study research, there is a strong argument for frequent overlap of data analysis with data collection (Eisenhardt, 1989). Miles and Huberman (1994) support this observation with their notion of data reduction, as shown in Figure 3.2. They describe data reduction as “... the process of selecting, focusing, simplifying, abstracting, and transforming the data that appear in written-up field notes or transcriptions.” (p. 10). One way of accomplishing this overlap is the use of field notes after and between interviews, based on both observation and early analysis (Van Maanan, 1988). Team meetings between investigators are also helpful (Eisenhardt, 1989). These overlapping processes inform the researcher’s perspective for subsequent detailed analysis, and enable the inclusion of new insights into the topic as the research progresses. New lines of thinking can thus be incorporated into the data collection process, allowing the probing of emergent themes and a better grounding of theory (Eisenhardt, 1989). Adjustments, such as additional questions to an interview protocol, or the addition of data sources (Harris and Sutton, 1986) may be made to the data collection instrument as data collection progresses.

Stage 1. The researcher interviewed the 16 firms in Stage 1. Managers were visited on site, and interviews lasted from one to four hours, with the majority being between two and three hours. The interviews were not tape-recorded, but documented by the researcher in shorthand. This recording process was chosen because a small number
of the companies did not agree to the use of a tape recorder, and consistency between cases in recording method was considered important. In some cases, the interviewer was invited to visit the factory, which provided a wider perspective of the firms concerned. At the end of each interview, impressions, emerging themes or additional questions that could be useful for subsequent interviews were noted.

Preliminary findings, impressions and insights of the researcher were discussed in a group setting with a panel of experts from the Trade Development Board and one academic expert, providing some degree of triangulation. The shorthand interview notes were transcribed for subsequent analysis and were returned to a few of the firms to check for content and meanings captured by the researcher. No significant issues arose from this process, suggesting that the data achieved face validity.

Stage 2 fieldwork process was similar to that for Stage 1. Four Phase 1 interviews were attended by the academic expert, helping to validate the interview process and the later interpretation and analysis of the data, thus providing a measure of triangulation to this stage of the study. For the same reasons as in Stage 1, the interviews were not tape-recorded, but documented in shorthand by the researcher. After transcription of the interview notes, some were sent to the participating firms for face-validation, as for Stage 1; no issues arose from this process. In addition, a documented report of the (generalised) results and analysis were sent to each of the participating firms at the end of Phase 1 of the study, and presentations were made by the researcher to some of them. Feedback from these actions was positive and confirmatory.
Phase 1, 2 and 3 of Stage 2 were conducted in the same way. Between each phase, additions and changes to the research instrument were made in response to emerging insights and themes, as well as to changes in the external environment. For example, significant exchange rate changes between Phase 1 and Phase 3 encouraged subtle, but important, changes in the way this topic was addressed in Phase 3. Also, the quality system, ISO, had become accessible to companies between Phase 1 and Phase 2, and so specific questions on ISO were introduced into Phases 2 and 3 of the Stage 2 study.

3.3.5 Step 5a: Analysing Within-Case Qualitative Data

Within-case analysis is a crucial first step in multiple case study research (Eisenhardt, 1989; Miles and Huberman, 1994). Driven by the need to distil the large volumes of data present in case study research, within-case analysis provides a mechanism for ordering data. At the same time, it provides the researcher an opportunity to develop a “rich familiarity with each case which, in turn, accelerates cross-case comparison.” (Eisenhardt, 1989). Becoming familiar with each case as a stand-alone entity allows the unique patterns of each case to emerge as coding takes place. Miles and Huberman (1994, p57) refer to this as pattern-coding. Concurrent with the identification of patterns, Miles and Huberman (1994, p72) encourage the practice of memoing; that is, the recording of notes about ideas, themes, unique situations, relationships etc that occur to the researcher during the process of coding. At a later stage of analysis, these memos can provide useful inputs.

Validity of within-case and cross-case analysis can be obtained through a process of discussion and debate. Strauss (1987) states: “Whether experienced or inexperienced, a common tactic for reducing uncertainty is ‘the trial’ - try it out on other people,
individuals, or groups, informally or formally.” (p260). This process of ‘trial’ was used frequently in this study, by informal discussion with members of the expert team.

One important distinction in within-case analysis is that between variable-oriented and process-oriented approaches. A variable-oriented approach deals with relations among well-defined concepts or variables (Ragin, 1987). A process-oriented approach follows events in an individual case context over time (Maxwell, 1992; Mohr, 1982). In keeping with the recommendation of Miles and Huberman (1994, p91), both approaches were used in this study for within-case analysis. Stage 1, the conceptual model-building stage, was predominately variable-oriented, while the longitudinal component of Stage 2 was mainly process-oriented.

Another distinction is between descriptive (and exploratory) and explanatory analysis. Bernard (1988) defines description as “... Making complicated things understandable by reducing them to their component parts”, and explanation as: “making complicated things understandable by showing how their component parts fit together according to some rules.” (in Miles and Huberman, 1994, p. 90). Explanation is the development of theory, and Miles and Huberman (1994) suggest that: “Conceptual frameworks are the researcher’s first cut at making some explicit theoretical statements.” (p91). In this study, Stages 1 and 2 were exploratory and descriptive, and the analysis provided an early attempt at explanation.
While qualitatively-driven, the study included analysis of numeric interval data, and some categorical ordinal data relating to certain variables, to which quantitative analysis was applied (see later).

**Stage 1.** Within-case analysis was conducted using the NUD•IST programme described earlier. Transcribed interview notes were downloaded into the software package. The data were formatted to enable individual sentences to be the coding text unit. Data from each case were coded subjectively, sentence-by-sentence, into ‘nodes’, which represented categories of themes. Initial coding into themes is referred to as first-level coding and re-coding of these into specific patterns is called pattern-coding (Miles and Huberman, 1994, p1). Patterns in NUD•IST refer to variables or combinations of variables gathered at a node, which describe particular emergent combinations of themes from the data. Table 3.2 outlines the different uses of terminology in the NUD-IST and Decision Explorer programmes and the literature.

Some data were coded into more than one node, and this started to reveal some interrelationships between the themes and patterns. Ongoing re-coding, re-naming and combining of nodes took place, reflecting the deeper understandings of the data as analysis progressed. Coding was considered complete when all the data had been coded and re-coded until no further refinement was necessary; in other words, when all of the incidents had been classified and a sufficient number of “regularities” had emerged (Lincoln and Guba, 1985; Strauss, 1987). By this point, patterns within each case were identified, and these were later compared across cases in a process called ‘pattern-matching’ (Miles and Huberman, 1994).
Stage 2. Coding was conducted in the same way for Stage 2 as for Stage 1. This time, there were 60 cases and three time points; three separate coding processes took place, so that each time point could be analysed on its own, and in conjunction with the others.

Table 3.2
Terminology for Data Reduction in NUD-IST and Modelling in Decision Explorer

<table>
<thead>
<tr>
<th>Step 1:</th>
<th>Step 2:</th>
<th>Step 3:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coding of data (sentence units)</td>
<td>Minimal data reduction (re-work of nodes)</td>
<td>Change terminology: nodes become variables</td>
</tr>
<tr>
<td></td>
<td></td>
<td>and indicators</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Change terminology: themes become factors</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Change terminology: factors, variables and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>indicators become concepts</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 refers to NUD-IST terminology; 2 refers to terminology used in the literature; 3 refers to Decision Explorer model terminology.

Within-case analysis thus occurred for cases at each time point as well as across the three time points, and likewise for cross-case analysis. Node identities in Stage 2 were similar to those in Stage 1, with a few new, or different nodes reflecting differences in the firms’ external and internal contexts.

3.3.6 Step 5b: Searching for Cross-Case Patterns

Cross-case analysis enables researchers to look at data in many divergent ways and avoids premature conclusions being drawn or early interpretative bias perpetuating from within-case analysis (Kahneman and Tversky, 1973; Eisenhardt, 1989).

Eisenhardt (1989) asserts that the use of structured cross-case analysis improves the likelihood of accurate and reliable theory that fits with the data.
While the distinction in within-case analysis was between variable and process-oriented approaches, in multiple- or cross-case data analysis, a key distinction is between variable-oriented and case-oriented analysis. In variable-oriented analysis, the focus is on variables and their relationships across cases. Whether or not the resulting picture fits any particular case is not known from the analysis. In case-oriented analysis, patterns and themes emerging from each particular case are documented, and the way that variables interact within a specific context becomes evident. By looking at several cases, it may be possible to see recurrent patterns or families of patterns (Miles and Huberman, 1994, p70). Ragin (1987) indicates that a case-oriented approach considers the case as a whole entity. Configurations, association, causes and effects are examined within the case, and only then is comparative analysis undertaken. The main difference between the approaches is that the variable-oriented approach is conceptual and theory-driven from the start, while the case-approach seeks to find specific, historically-grounded patterns common to cases, thus supporting the building of theory. Miles and Huberman (1994, p70) suggest that one method is not necessarily better than the other for qualitative data analysis. Rather, it is a question of choosing what is most appropriate at various stages of a study, and often, a combination of both methods is preferred, as was undertaken in Stage 1 and 2.

In keeping with suggestions by Miles and Huberman (1994, p70), Stage 1, utilised a variable- and a case-oriented approach, identifying common patterns and themes, and also examining their more context-related relationships.
A number of ways of doing cross-case analysis are recognised. This study uses the method undertaken by Borgeois and Eisenhardt (1988), that builds readily on the data structure resulting from the NUD·IST programme. Using this method, patterns derived from within-case analysis could be matched across the wider number of cases - a process termed “pattern-matching” (Miles and Huberman, 1994, p70). Analysis of the relationships between cross-case patterns and with other data (e.g. numeric data representing firm characteristics) was also possible within this process. Each stage also included cross-case analysis of numeric interval data relating to firm characteristics.

**Stage 1.** Patterns and themes determined for complete cases in the within-case analyses were analysed using both variable- and case-oriented approaches. A case-oriented approach is important because not all cases have the same patterns and themes in case study research (Miles and Huberman, 1994, p173). Differences and similarities between cases can be determined by displaying data in matrix form. Use of a variable-oriented analytical approach, compared the occurrences of variables/patterns across cases; application of a case-oriented approach enabled patterns within cases to be determined, and compared with other cases.

Specifically, case-oriented analysis involved identifying and counting the patterns/variables coded in NUD·IST, associated with each case, and displaying them in matrix form. This facilitated discussion of the overall patterns across case and their similarities and differences. A variable-oriented approach was used to develop matrices in NUD·IST to produce cross-tabulations of patterns within and between cases. For example, the cases with concerns about the exchange rate were cross-
tabulated with the variables, performance and quality. The qualitative data supporting these relationships formed the basis for the discussion of case data in Stage 1.

Decision Explorer was used to organise and link the patterns/variables coded in Stage 1 in NUD-IST. This enabled the creation of a conceptual causal map of the relationships and processes involved in export sales performance. Each pattern/variable (called ‘concept’ in Decision Explorer) was plotted onto a map and linked in a way which showed the main factors relating to export performance, and the explanations for (indicators), and consequences of (outcomes) each pattern/variable associated with the factors. While subjective, this was an iterative process, with frequent reference being made to the qualitative data associated with the variables. Consequent adjustment of the concept linkages was made, and the process continued until the map appeared to represent a robust interpretation of the data, at which point it was referred to as a model of export sales performance, with various export sales-related performance measures being utilised, as discussed in detail elsewhere in this chapter. Once completed, the model was subjected to a number of analytical techniques available in Decision Explorer (Chapter 4). These tested the relative importance of particular concepts or variables, and the causal and consequential pathways involved in the construct, export sales performance.

Stage 2. All three phases of Stage 2 followed the same process for cross-case analysis as Stage 1. Specific patterns and their relationships identified in the conceptual model from Stage 1 were analysed in Stage 2 using both variable- and cases-oriented approaches, providing an opportunity for further theory-building. In addition, the study was longitudinal, so time-related changes were also explored.
Full interpretation and reporting of the qualitative analyses of three Stage 2 phases was beyond the scope of the study. To facilitate comparison across the three time points, and with the conceptual model from Stage 1, the NUD-IST data was ‘quantized’ (Miles and Huberman, 1994, p42), as discussed earlier. Thus, for each concept determined in the model, and coded in NUD-IST, the researcher applied a subjective rating. The rating derived directly from the coded data from open-ended interviews, and was assisted by the researcher’s memos written at the end of the case interviews and from discussion with the expert team at the end of each phase. The two earlier stage of the study, Stage 1, provided a comprehensive grounding for the researcher in the topics concerned, and in understanding firms’ preferences in exporting. Thus, the ratings were based on the researcher’s own judgement about the Managers’ answers to questions pertinent to the variable, as well as the words given by the executives that suggested the ratings. The researcher assigned a 3-point bipolar scale to rate each of the Top15 concepts (a method suggested by Miles and Huberman, 1994, p72). This process is similar to that utilised by Cavusgil and Zou (1994), although two researchers were present for all of their interviews. In this study, however, the coded data in the NUD-IST database provides a permanent reference for the coding process, and this may be cross-checked by the same, or other researchers, for interpretation. The concept rating scales are shown in Table 3.3. The two concepts, Competency Management and Structure and Resource Management tended to be more subjectively based than the others are, since they were an overall assessment of a number of component elements. Nevertheless, the combined approaches for determining the rating (researcher’s perspective, data analysis and Managers’ perspectives through the use of words that would suggest the score)
appeared to provide a sufficient basis for providing a rating. Examples of the data supporting the rating scales are shown in Appendix 2.

Table 3.3
Rating Scales Used For Top 15 Concepts in Stage 2 Analysis

<table>
<thead>
<tr>
<th>Concept</th>
<th>Ratings (Firm Performance)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export Strategy Implementation</td>
<td>1 High 2 Average 3 Poor</td>
</tr>
<tr>
<td>Competency Management</td>
<td>1 High 2 Average 3 Poor</td>
</tr>
<tr>
<td>Investment (Availability)</td>
<td>1 Favourable 2 Neutral Unfavourable</td>
</tr>
<tr>
<td>R&amp;D/Technology</td>
<td>1 High 2 Average 3 Poor</td>
</tr>
<tr>
<td>Quality</td>
<td>1 High 2 Average 3 Poor</td>
</tr>
<tr>
<td>Productivity</td>
<td>1 Increased 2 Static 3 Poor</td>
</tr>
<tr>
<td>Relationships/Personal Contact</td>
<td>1 High 2 Average 3 Decreased</td>
</tr>
<tr>
<td>Marketing</td>
<td>1 High 2 Average 3 Poor</td>
</tr>
<tr>
<td>External Environment</td>
<td>1 Favourable 2 Neutral Unfavourable</td>
</tr>
<tr>
<td>Market Research</td>
<td>1 High 2 Average 3 Poor</td>
</tr>
<tr>
<td>Management</td>
<td>1 High 2 Average 3 Poor</td>
</tr>
<tr>
<td>Export Strategies</td>
<td>1 High 2 Average 3 Poor</td>
</tr>
<tr>
<td>Export Strategy Formulation</td>
<td>1 High 2 Average 3 Poor</td>
</tr>
<tr>
<td>Market Selection</td>
<td>1 High 2 Average 3 Poor</td>
</tr>
<tr>
<td>Structure and Resource Management</td>
<td>1 High 2 Average 3 Poor</td>
</tr>
</tbody>
</table>
and explained by the qualitative data underlying them. This was readily achieved by the use of NUD-IST, and the analysis of Stage 2 continually drew on this coded qualitative data. Concept ratings for each firm, for each phase, were thus determined from the coded data for analysis. Both variable- and case-oriented approaches were used for analysis of Stage 2 ratings across all three time points. Analytical methods were predominantly quantitative, as discussed later. These included multivariable analysis to assess the influence of, and relationships between variables. Analytical methods are discussed later in this chapter.

### 3.3.7 Step 6: Displaying Qualitative Data

Miles and Huberman (1994) describe data displays as “visual formats that present information systematically, so that the user can draw valid conclusions and take needed action.” (p. 91). Data display types used for interpreting and presenting within- and cross-case analyses (using terminology from Miles and Huberman, 1994) are shown below. The use of these displays is explained more fully in the relevant results chapters.

*Stage 1:* check-list matrix; content-analytic matrices; conceptual (cognitive) causal map;

*Stage 2:* case-ordered meta-matrix; conceptual (cognitive) causal map.

In addition, usual forms of tabular and graphical presentation were used throughout.

### 3.3.8 Step 7: Analysing Quantitative Data

Quantitative data were obtained in two ways:

- from data provided by the firms on firm characteristics. These included interval data (e.g. age of firm, years engaged in exporting, number of employees, and export intensity), and nominal and ordinal data (e.g. trends in sales, operations
overseas, first export market). The categories used for the nominal and ordinal data are shown in Table 3.4.

- directly from the qualitative interview data, using the process of “quantizing” (described earlier). This involved nominal and ordinal data that utilised counting, procedures and conversion of rating scales.

Table 3.4
Categories for Firm Characteristics (Nominal and Ordinal Data)

<table>
<thead>
<tr>
<th>Firm Characteristic</th>
<th>Categories</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trend (Total Sales)</td>
<td>Increased</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trend (Export Sales)</td>
<td>Increased (growth)</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trend (NZ sales)*</td>
<td>Increased</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NZ Market Share</td>
<td>Leader/Major Player</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ownership</td>
<td>Private</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trend (Employees)</td>
<td>Increased</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overseas Manufacture</td>
<td>Yes</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Market</td>
<td>Australia</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;10 Markets</td>
<td>Yes</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trend (Export Intensity)*</td>
<td>Increased</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Export Intensity</td>
<td>&gt;60%</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* data available for Phases 2 and 3 only

3.3.8.1 Overview of Analytical Procedures

Table 3.5 shows the types of analytical procedures for each stage of the study. Each of the procedure is discussed in relation to its specific use in the relevant sections of Chapter 4 and 5. Approaches used for analysing the longitudinal data are also discussed in Chapter 5. Details of the data types and their derivation have been discussed in earlier sections of this chapter. Multiple regression analysis was used for
Stage 2, in addition to qualitative and other quantitative analyses. While multiple regression is a parametric statistical technique, and not strictly applicable to the type of data gathered in the study, it did address an important question relating to the importance of the variables concerned in the model and their multiple relationships. In view of the rigorous qualitative procedures used in the study, and the strength of the resulting data, it was considered appropriate to use this technique to provide preliminary insights into this question. Use of the multiple regression technique is discussed further in Chapter 5.

Table 3.5
Overview of Analytical Procedures Used in the Study

<table>
<thead>
<tr>
<th>Stage</th>
<th>Data Type</th>
<th>Parametric Analysis</th>
<th>Non-parametric Analysis</th>
<th>Data Type</th>
<th>Qualitative Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Interval</td>
<td>Descriptive statistics; Frequencies</td>
<td>&quot;Quantized&quot; (from coded data)</td>
<td>Frequencies; Crosstabulations</td>
<td>Qualitative interview data</td>
</tr>
<tr>
<td>2</td>
<td>Interval</td>
<td>Descriptive statistics; Frequencies; Pearson Correlation Coefficient; Independent 2-sample t-test (two-tailed); ANOVA; Bonferroni test for multiple comparisons</td>
<td>Categorical (nominal and ordinal); &quot;Quantized&quot; categorical (ordinal)</td>
<td>Frequencies; Chi-Square Analysis (Pearson); Spearman Correlation; Mann-Whitney Test; Kruksal-Wallis Test</td>
<td>Parametric; multiple regression</td>
</tr>
</tbody>
</table>

Since the study was concerned with export sales performance, appropriate performance and "success" measures were required. The literature review outlines the difficulties in determining useful measure of export performance and, regardless of attempts, Buckley et al (1988; 1990) points out that problems of measuring "success" still exist. Three measures of export performance were used in the study: export sales trend, export intensity and trend in export intensity (a measure seldom used in other studies, although an exception is Dichtl, Kogelmayr and Muller (1990)).
Categories for these measures are shown in Table 3.4. Phase 1 data used a 5-year trend for export sales, consistent with the literature. Phases 2 and 3, however, used 3-year trends (for export sales and export intensity) because this represented the approximate time period between each phase and the study was interested in changes between these times. These measures were all export sales-related, and reasons for their use in the study have been discussed earlier in this chapter. Limitations of their use are also discussed in the last section of this chapter.

### 3.3.9 Step 8: Defining Constructs and Verifying Relationships

This discussion relates to both stages of the study. The purpose of this stage of the case analysis process is to systematically compare emerging theory with the data. Eisenhardt (1989) suggests a two-part process to this step: (i) refining the definition of the construct and (ii) building evidence which measures the construct in each case, emphasising the iteration between data and emerging theory, until a point of theoretical saturation is reached (Glaser and Strauss, 1967). The purpose is to strengthen theory building by constructing sharply defined and measurable constructs, and providing construct validity.

In qualitative research, the construct, its definition and its measurement through various indicators usually emerge from the analysis itself, rather than being stated a priori, as in quantitative research. In this study, variables and indicators (measures) for the construct, export sales performance, were developed in Stage 1, and the definition of the construct was refined in the conceptual model-building process. Further refinement and building of concepts relating to the construct occurred in Stage 2, through within- and cross-case analyses. Unlike in quantitative construct development, not all the cases necessarily have all the indicators (variables, concepts
etc), or they may be expressed in different ways. Therefore evidence supporting constructs in qualitative research is usually summarised in tabular form with examples from the case data (Eisenhardt, 1989). This was achieved by the development of content-analytic tables in Stage 1, using NUD-IST-coded data, and with case examples in Stage 2.

Verification of constructs occurs when emerging relationships between variables/concepts fits the data in each case. The underlying logic is literal and theoretical replication, where each case is regarded as a single experiment serving to confirm or disconfirm the evidence, respectively (Yin, 1994, p46). In this way, the dynamics of emergent relationships can begin to be understood, providing strong internal validity. While more judgmental than quantitative techniques, presentation of the data and their relationships qualitatively can allow others to verify the analyses and help to create more meaningful and useful outcomes (Miles & Huberman, 1994, p11). Verification of the construct was achieved through the use of the various qualitative data displays already discussed. In addition, periodic discussion of the construct and emerging relationships between variables/concepts with the expert team also assisted verification, and helped to reinforce the notion of “critical subjectivity” (Reason, 1988) on the part of the researcher.

3.3.10 Step 9: Enfolding Literature

Theory building requires comparison of emergent themes, concepts or theory with the extant literature. This process helps to both explain the research findings and challenge them where the findings are in conflict. Challenges force the researcher to look at the data in a more creative or frame-breaking mode than has been done to that point (Eisenhardt, 1989). Linkage with a variety of literature may also provide
stronger internal validity, wider generalisability and a higher conceptual level (Eisenhardt, 1989). A conceptual framework, such as that developed in this study, is recognised by Harris and Sutton (1986) as a product of theory-building emerging from case study research.

In this study, the literature was reviewed and integrated on an on-going basis, and specifically at the following points. A broad and in-depth literature review enabled research questions to be formulated. The literature also played a significant role in Stage 1 where results relating to the construct, export performance, were compared with existing knowledge. The extant literature on export performance was enfolded with the results to help provide internal validity to the outcome. The literature was also reviewed and enfolded with the results of Stage 2, providing further internal validity. As noted earlier, the literature spanning the entire period, including more recent literature, was included in the Literature Review (Chapter 2), in order to provide a current perspective of knowledge in the export research area.

3.3.11 Step 10: Reaching Closure

The two issues of closure noted by Eisenhardt (1989) are: when to stop adding cases and when to stop iterating between theory and data. The rationale for the number of cases used in the study is discussed earlier in this chapter. The second consideration is guided by the concept of saturation (Glaser and Strauss, 1967). Coding of data into patterns and themes and recoding and recombination of these ceased when there was no further gain in insights or theory building by a continuation of the iterative process.
3.4 C. Limitations of the Research Approach, Design and Method

A number of limitations concerning the research methodology used in the study are recognised. These are the operationalisation of export performance, using mainly export sales related measures, the use of only successful firms for model-development in Stage 1, the subjectivity associated with qualitative research methods, the use of subjective ratings for quantitative analysis, and the absence of ongoing data on cases no longer available over the longitudinal time points (including ‘failed’ firms and those moved to new locations, outside the study area). Each of these is discussed below.

3.4.1 Operationalisation of Export Performance

The issues concerned with the choice of export performance measures in this study have been discussed in depth in other parts of the chapter and preceding chapters. Notwithstanding these difficulties, the omission of wider measures of export performance remains a limitation of the study. In hindsight, some of the difficulties could have been overcome, for example, by using relative measures (% or % change), as advocated by Diamantopoulos and Schlegelmilch (1994). This might also overcome differences between firms in relation to characteristics such as size, or industry, as well as managerial perceptions, since these will be relative to other perceptions of the same managers. The approach of Diamantopoulos and Schlegelmilch (1994) would also be helpful in comparing longitudinal differences between firms, where extraneous changes make the interpretation of absolute results more complex e.g. age of firm and export experience.
3.4.2 Use of Successful Firms for Model Development

Stage 1 firms were predetermined as successful, by virtue of their export award winning status. While this has been used by other researchers as a proxy for export success (e.g. Styles and Ambler, 1994), it may not be an adequate measure. For example, different countries use different indicators for success. (It should be noted that there is still no agreement in the literature as to what constitutes an appropriate measure, or set of measures, for export success (Matthyssens and Pauwels, 1996)). A potential limitation of the study, therefore, was the assumption that export award winners were representative of export success. However, in the absence of a better predetermined successful group of exporters, and in the light of the use of export winners in other research, these firms were chosen as the successful sample. The uncertainty about an agreed definition for export success in the literature reinforced the need to test the model developed from this group of exporters across firms with a range of export performance in Stage 2 of the study.

While not explicit, there is an implication (as noted in many studies of export performance e.g. Aaby and Slater, 1989; Cavusgil and Zou, 1994; Bijmolt and Zwart, 1994), that export performance models encompass the factors and variables necessary for successful export performance, and that ‘failure’ or unsuccessful export performance would be the absence of, or poor performance in, these factors and variables. Matthyssens and Pauwels (1996), however, raise an interesting question about the success / failure dichotomy that challenges the assumption that one is simply the reverse of the other. It may be, as they suggest, that ‘failure’ is associated with different factors and variables that are not the extremes of a unidimensional performance scale.
3.4.3 Subjectivity of Qualitative Methods

Subjective assessment is a necessary element of qualitative research (Miles and Huberman, 1994). There are obvious disadvantages to this, especially the likelihood of various forms of bias of the interviewer or the key informant. One outcome of this is the inability of such a study to be easily replicated by other researchers. However, qualitative research does not aim to offer statistical replication or, usually, generalisation across studies. Rather, it aims to provide literal replication for the purpose of theory building. This is discussed elsewhere in this chapter. Some of the limitations of using subjective assessment, however, can be minimised, for example, by the use of 'experts' to consider the assessments and conclusions drawn by the researcher; the use of CAQDAS, which provide a variety of checking systems for coding and interpretation of data; either the use of a panel of coders who debate and agree on consistency of coding criteria, or, in some cases, the use of a single coder (who may be the researcher) to ensure that any bias is consistent across the data.

On the other hand, an advantage of subjective assessment of data, particularly when obtained from the subject, or key informant, is that it may better represent the 'reality' than may objective assessment (Matthyssens and Pauwels, 1996).

3.4.4 Subjective Ratings

Interview data rated post-interview by the researcher is one method for achieving quantitative measures from the qualitative interview data (e.g. Cavusgil and Zou, 1994; Miles and Huberman, 1994). The majority of studies of export performance that use ratings have used self-ratings by the subject, or a combination of both rating
methods. Both methods have their limitations. In the first case, the results are dependent entirely on the interviewers’ interpretations, along with the usual problems of bias. However, it is inevitable that ratings obtained this way will also be influenced by the subject, since the researcher is reliant on him, or her, as the main information source. Checking of interview data with other informants may help to overcome this issue. Self-assessment by the subject runs the risk of being inappropriate in the sense that it captures perception rather than the actual situation, although some researchers argue that perception better represents ‘reality’ (Matthyssens and Pauwels, 1996).

In Stage 2, the analysis was based on a system of post-interview rating by the researcher (who was also the interviewer). The ratings were informed by discussion-based responses to the rated topics given by the informant, a process recently recommended by Matthyssens and Pauwels (1996). While recognising the limitations of this approach (discussed above), the study contained strong qualitative data that supported the ratings, and a clear trail of logic accessible through the NUD-IST analysis. The rationale for the approach was thus based on these factors and by the similar method reported subsequently by Cavusgil and Zou (1994).

3.4.5 Subjectivity Associated With Use of NUD-IST and Decision Explorer Software

While the processes involved in both NUD-IST and Decision Explorer were very thorough (Richards, 1995; Decision Explorer Manual), they both rely on subjective inputs. In the case of NUD-IST, as with any qualitative analysis methods, the interview data input is largely, though not exclusively, subjective. Coding and data
reduction processes, for which NUD-IST has received acclaim, are, similarly, subjective processes. Issues of subjectivity per se have been discussed elsewhere in this chapter and in Chapter 2. The use of NUD-IST is, thus, accompanied by the usual limitations of subjective analysis, although it is argued that the processes are more transparent and rigorous than many manual processes (Richards, 1995). Because every word of the interview data is included in the NUD-IST analysis codes, and every process and step in data reduction and theme building is recorded in the database, NUD-IST analysis comes with a very strong, rigorous audit trail, from which the logical pathway to resulting assertions and conclusion can be traced. These factors provided the major logic for utilising NUD-IST in the study. Furthermore, the use of NUD-IST allowed the qualitative analytical procedures recommended by Eisenhardt (1989) and Miles and Huberman (1994) to be followed with little modification. Contributions in this field from these authors are highly regarded in the literature and form the mainstay of qualitative research methodology. NUD-IST is considered helpful in enabling the following: lines of thinking to be re-explored back to their source, and maybe modified in the light of new evidence; other researchers or investigators to assess bias and consistency of coding and data reduction; individual data items to be coded in a number of ways, without losing the original integrity or context of the items (Richards, 1995). Discussion of the experiential findings associated with the use of NUD-IST in the study is included in Chapter 6.

Like NUD-IST, Decision Explorer relies on subjective input. Choice of concepts or variables to map, positioning of these concepts or variables on the map and links between them, are all determined by the researcher. As with other qualitative analysis methods, issues of bias and interpretation are significant, particularly when used as
the starting point of the analysis. For the purposes of cognitive mapping, for which
the software was originally developed, subjectivity presents less difficulty, since it is
cognition, or perception, that is being deliberately captured in these situations.

When Decision Explorer is used as a tool used in conjunction with a foundation of
strong qualitative analysis, many of the issues associated with subjectivity are
reduced. For example, concepts and variables in the study were already determined
through prior coding and data analysis. Likewise, insights into relationships between
concepts and variables were also preconceived through data reduction and pattern
building. The mapping process thus incorporates earlier analytical outcomes into a
spatial arrangement that best represents the insights already gained. The process of
mapping also challenges these preconceptions and insights, and allows for the
incorporation of other concepts and ideas, for example, from the literature, or other
disciplines, thus enhancing the earlier analysis. These interpretations and
representations may then be challenged and remodelled by an iterative process
between underlying data, the spatial maps and other conceptual inputs. Thus, the
method provides triangulation and allows for clarification and development of
analytical outcomes from qualitative coding and data reduction methods. While all
these outcomes are subjectively derived, the processes involved provide various paths
of associated explanation and logic.

Analytical methods available in Decision Explorer assist the researcher to test
assumptions and conclusions about the concepts and variables, and their links and
associations with the construct concerned. This, again, is supported by and iterative
process back to the underlying data and other supporting information.
On balance, given that the rationale for undertaking a largely qualitative study was established, the use of the two software programmes (NUD-IST and Decision Explorer), particularly their use in a mutually-supporting way, was thought to offer advantages over standard manual methods, as outlined above. Apart from the issue of subjectivity already discussed, other limitations of these computer-based methods relate mainly to operating considerations, discussed in Chapter 2 and Chapter 6.

3.4.6 Lack of Follow-up of Missing Cases

As with most longitudinal studies, firms ‘fall out’ of the study over time, for a number of reasons, either known or unknown. There are undoubtedly valuable insights to be gained about the firms, particularly those that appeared to have ‘failed’. For example, such a process might help to address the question raised by Matthyssens and Pauwels (1996) about the success/failure dichotomy (see earlier).

Firms in the study that remained accessible after changes, such as in ownership, or movement into new trading situations, were followed up, but others, which either failed, or moved to another country, were not pursued. Although the focus of the study was not on firms’ decline or failure, the lack of follow-up of these firms could be regarded as a limitation of the research design. It does, however, suggest a direction for future research. Knowledge of these firms’ changed circumstances could assist the development of a model of export sales performance, and contribute more generally to theory building on export performance.
3.5 Summary

This chapter has discussed, and explained the rationale for, the research approach, design and method, and highlighted the main limitations associated with these. Eisenhardt’s (1989) framework for case study research was modified and used to guide the research method used in the study. The next chapter presents and discusses the results of each stage of the research outlined in Figure 3.1.
4.1 Outline of Results and Discussion

Chapter 4 begins with an outline of the chapter and describes the results from Stage 1 of the study. Stage 2 results are discussed in Chapter 5. Stage 1 results are divided into two parts: Part A is an in-depth analysis of the factors involved in export sales performance, guided by the findings of the literature review (Chapter 2). Part B is the development of a conceptual model of export sales performance, based on the in-depth result from Part A. The results to questions (a), (b), (c), and (d) are addressed in this chapter.

4.2 Stage 1, PART A: IN-DEPTH ANALYSIS

This section analyses Stage 1 of the study, and is concerned with understanding export performance in a group of 16 successful (export award winning) firms. The section is divided into two parts, the first addressing research question (a) about the characterisation of successful exporting firms, and the second addressing questions (b), (c) and (d) about export performance of successful exporting firms.

4.2.1 Characterisation of Successful Exporting Firms

This part addresses research question (a): “How are successful New Zealand exporting firms characterised, in terms of firm and management characteristics, and products and markets?”
The 16 firms in Stage 1 were all export award winners over the previous three year period, and were thus deemed ‘successful’ (see Chapters 2 and 3 for relevant discussion). Descriptive statistics and data about these firms, in terms of firm and management characteristics and products and markets are presented in Table 4.1, which is discussed below. The relationship of these characteristics to export sales performance is discussed in part 2.

12 of the 16 firms were privately owned, with 11 of these being owned and managed by the originator of the firm. The one exception was a firm that had changed hands privately since its inception. The private firm owner-managers were referred to as Managing Directors and these managers were generally responsible for the export, as well as domestic, business. Two of the larger private firms had dedicated export managers leading the export business. Of the four publicly owned firms, two had export managers and two had a general manager leading the export business. The managers with the titles noted in Table 4.1 were those who participated in the interview process; they were all male.

The mean firm age was 27 years, which was fairly young according to Das’ (1994) classification. There was a wide range of ages, noted by the high standard deviation. The firms had exported for a mean period of 15 years, with a mean of 12 years in business before exporting. The mean size of the firms was 178 employees, closer to the top end of small- and medium-sized firm category, though the top and bottom values in the range were widely separated. Export intensity was uniformly high, with no firm having less than 20%, and all firms having a mean of 60% export intensity.
## Table 4.1
Firm and Management Characteristics - Stage 1

<table>
<thead>
<tr>
<th>Firm ID</th>
<th>Management Characteristics</th>
<th>Firm Characteristics</th>
<th>Products</th>
<th>1st Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>M Pvt MD</td>
<td>Age (Years) 23</td>
<td>Yrs. Pre-Exporting 11</td>
<td>No. Employees 12</td>
</tr>
<tr>
<td>B</td>
<td>M Pub MD</td>
<td>Years Exporting 8</td>
<td>Yrs. Pre-Exporting 8</td>
<td>No. Employees 0 11</td>
</tr>
<tr>
<td>C</td>
<td>M Pvt MD</td>
<td>Age (Years) 12</td>
<td>Yrs. Pre-Exporting 12</td>
<td>No. Employees 0 25</td>
</tr>
<tr>
<td>D</td>
<td>M Pvt MD</td>
<td>Age (Years) 13</td>
<td>Yrs. Pre-Exporting 13</td>
<td>No. Employees 0 90</td>
</tr>
<tr>
<td>E</td>
<td>M Pub EM</td>
<td>Age (Years) 27</td>
<td>Yrs. Pre-Exporting 27</td>
<td>No. Employees 0 500</td>
</tr>
<tr>
<td>F</td>
<td>M Pvt MD</td>
<td>Age (Years) 50</td>
<td>Yrs. Pre-Exporting 22</td>
<td>No. Employees 28 260</td>
</tr>
<tr>
<td>G</td>
<td>M Pub GM</td>
<td>Age (Years) 75</td>
<td>Yrs. Pre-Exporting 63</td>
<td>No. Employees 12 385</td>
</tr>
<tr>
<td>H</td>
<td>M Pvt MD</td>
<td>Age (Years) 9</td>
<td>Yrs. Pre-Exporting 9</td>
<td>No. Employees 0 83</td>
</tr>
<tr>
<td>I</td>
<td>M Pvt EM</td>
<td>Age (Years) 8</td>
<td>Yrs. Pre-Exporting 8</td>
<td>No. Employees 0 81</td>
</tr>
<tr>
<td>J</td>
<td>M Pvt GM</td>
<td>Age (Years) 16</td>
<td>Yrs. Pre-Exporting 15</td>
<td>No. Employees 1 132</td>
</tr>
<tr>
<td>K</td>
<td>M Pvt MD</td>
<td>Age (Years) 7</td>
<td>Yrs. Pre-Exporting 1</td>
<td>No. Employees 6 6</td>
</tr>
<tr>
<td>L</td>
<td>M Pub EM</td>
<td>Age (Years) 25</td>
<td>Yrs. Pre-Exporting 9</td>
<td>No. Employees 16 800</td>
</tr>
<tr>
<td>M</td>
<td>M Pvt MD</td>
<td>Age (Years) 110</td>
<td>Yrs. Pre-Exporting 8</td>
<td>No. Employees 102 120</td>
</tr>
<tr>
<td>N</td>
<td>M Pvt MD</td>
<td>Age (Years) 3</td>
<td>Yrs. Pre-Exporting 2</td>
<td>No. Employees 1 13</td>
</tr>
<tr>
<td>O</td>
<td>M Pvt MD</td>
<td>Age (Years) 24</td>
<td>Yrs. Pre-Exporting 8</td>
<td>No. Employees 16 130</td>
</tr>
<tr>
<td>P</td>
<td>M Pvt EM</td>
<td>Age (Years) 19</td>
<td>Yrs. Pre-Exporting 18</td>
<td>No. Employees 1 212</td>
</tr>
<tr>
<td>Totals</td>
<td>16 M 12 Pvt 10 MD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 Pub 4 EM 2 GM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>27 15 12 178 11 19</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>29 15 25 218 14 27</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Key: M=Male; Pvt=Private; Pub=Public; MD=Managing Director (usually owner); EM=Export Manager
GM=General Manager (usually hired manager); Con=Consumer; Ind=Industrial; Pac-Is=Pacific Islands; Aus=Australia
Total mean sales of $19M and mean export sales of $11M were not high for the mean age and size of the sample, though, again, there was a wide variation.

Most (10) firms were manufacturing products for industrial customers, though 4 firms were making consumer products. 50% of firms exported to Australia as their first export market; if the Pacific Islands are included in the nearest neighbour category, this increases to 62.5%. 4 firms exported to the US first, one to Japan and one to the Middle East. All these characteristics are discussed more fully later in this section.

**4.2.2 Export Performance of Successful Exporting Firms**

This section addresses questions (b), (c) and (d). These are referred to at appropriate points in the discussion.

Coding and initial analysis of interview data was done using the CAQDAS, NUD·IST. The analysis followed a step-wise process of data reduction (Miles and Huberman, 1994). First-level coding was undertaken to identify topics, themes and patterns in the interview data from all cases. Subsequent data reduction used techniques of pattern coding (for within-case analysis) and pattern matching (for cross-cases analysis). Data was then organised in a conceptual mapping process, leading to the development of a conceptual model of export sales performance. This progression of analysis enabled the building of a logical chain of evidence (Miles and Huberman, 1994) as well as an understanding of the underlying elements of export sales performance. Each stage of data reduction and analysis addressed some of the research questions posed in Chapter 3.
4.2.2.1 Identifying Topics and Themes (Variables): First-level Coding

First-level coding was done on a case-basis, rather than a topic-, or issue-basis (Miles and Huberman, 1994), in order to allow within-case assessment of the data, and to provide a case-based context for the analysis. It is also an appropriate method of coding where little prior conceptualisation exists (Miles and Huberman, 1994), as was the case with this research, and it follows grounded theory approaches.

In accordance with grounded theory, and with qualitative coding techniques, most of the coding was established from the first case; there was no pre-selection of cases for the order of analysis. Other cases contributed to this coding, and/or added new codes (‘nodes’, in NUD-IST terminology). At the end of the coding process, each node contained data from all the cases with relevant material. This provided a database for cross-case analysis, at the same time preserving the opportunity to conduct within-case analysis. During first-level coding, some basic data reduction took place, which involved merging of nodes representing similar topics, and renaming nodes to reflect more appropriately the topic or theme (or variable) they represented. Many of the nodes contained sub-nodes; these were indicators relating to the variable coded at the main node e.g. the ‘quality’ node (variables) had sub-nodes for the indicators, ‘importance’, ‘systems’, and others.

It is important in first-level coding to identify all the nodes that represent topics and themes, or variables, from all the cases, before further data reduction takes place. There are three reasons for this. Firstly, it enables an understanding of the variables or issues
that underlie any subsequent aggregation of data. Secondly, it allows more relevant comparison with other research findings, which may be either not aggregated, or aggregated in different ways. Thirdly, it allows data that is aggregated or patterned to be revisited and reduced in other ways, according to evolving interests in specific themes. The variables associated with export sales performance and identified in the first-level coding process are discussed below.

4.2.2.2 Variables Involved in Export Performance of Successful New Zealand Exporters

This analysis addresses the research question (b): What variables are concerned with export performance of successful New Zealand exporting firms?

From the first-level coding, 49 variables were identified as being involved in export performance. These variables are shown in Table 4.2; none of the indicators (sub-nodes) associated with the variables are shown. The number and percentage of cases that contained data on the relevant variable are shown in Table 4.4, which is the result of subsequent data reduction procedures. There is no attempt, at this stage of the analysis, to provide detail about the strength and polarity (whether positive or negative) of these influences, or their specific role in export sales performance; these questions are addressed later in the analysis.

Within-case analysis showed that not every case contained data that coded for all the variables. This is not unusual for case study research based on grounded theory (Miles and Huberman, 1994; Yin, 1994). Cases had a range of coding from 24 to 39 of the 49
variables. However, the full complement of 49 variables emerged across the sixteen cases. Cross-case analysis showed the relative frequency of coding for these variables across all the cases, giving a preliminary indication of their relative importance. This aspect was examined in more detail in the

Table 4.2
First-Level Coding of Factors Involved in Export Performance

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>FACTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to Labour</td>
<td>26. Labour Skills</td>
</tr>
<tr>
<td>Australian Market</td>
<td>27. Location of Firm</td>
</tr>
<tr>
<td>Capacity</td>
<td>28. Management Style</td>
</tr>
<tr>
<td>CER (NZ-Aus Trade Bloc)</td>
<td>29. Market Development</td>
</tr>
<tr>
<td>Competition</td>
<td>30. Market Entry</td>
</tr>
<tr>
<td>Competitive Advantage</td>
<td>31. Market Research</td>
</tr>
<tr>
<td>Constraints / Barriers to Export</td>
<td>32. Market Selection</td>
</tr>
<tr>
<td>Co-operation</td>
<td>33. Marketing (4Ps + service)</td>
</tr>
<tr>
<td>Costs</td>
<td>34. New Zealand Image</td>
</tr>
<tr>
<td>Customers</td>
<td>35. Operations</td>
</tr>
<tr>
<td>Domestic Market</td>
<td>36. Organisational Structure</td>
</tr>
<tr>
<td>Employees</td>
<td>37. Ownership</td>
</tr>
<tr>
<td>Export Strategy</td>
<td>38. Patents / Intellectual Property</td>
</tr>
<tr>
<td>Export Trigger / Stimulus</td>
<td>39. Personal Contact</td>
</tr>
<tr>
<td>External Environment</td>
<td>40. Planning</td>
</tr>
<tr>
<td>Financial Control</td>
<td>41. Plant &amp; Equipment</td>
</tr>
<tr>
<td>Firm Reputation</td>
<td>42. Productivity</td>
</tr>
<tr>
<td>Firm Size</td>
<td>43. Quality</td>
</tr>
<tr>
<td>Firm Strategy Development</td>
<td>44. R&amp;D / Technology</td>
</tr>
<tr>
<td>Foreign Market Portfolio</td>
<td>45. Raw Materials</td>
</tr>
<tr>
<td>Freight</td>
<td>46. Regulations / Standards</td>
</tr>
<tr>
<td>Government Schemes (IEP)</td>
<td>47. Seasonality</td>
</tr>
<tr>
<td>Growth Strategy</td>
<td>48. Suppliers</td>
</tr>
<tr>
<td>Industry Linkages</td>
<td>49. Trade Development Board</td>
</tr>
<tr>
<td>Investment</td>
<td></td>
</tr>
</tbody>
</table>

model-building part of Stage 1. The frequency of coding for each variable ranged from 100% (coded from all 16 cases) to 6% (coded from only 1 case). While this gives some indication of the relative importance of the variables, it is important to note that neither
indicators for, nor interrelationships between, the variables have been included. This is addressed later in the analysis of Stage 1.

4.2.2.3 Comparison of Factors from New Zealand Exporters with Factors Derived from International Studies

Further analysis determined the similarities and differences between the variables identified for the New Zealand firms and those documented in the international literature (Chapter 2) in relation to export performance. Variables that appear to be present or absent from the New Zealand firms may highlight aspects of exporting requiring further investigation. Also, the ways in which these variables are grouped or clustered in both situations may provide some insights into the processes involved in export performance. These comparisons (and the subsequent descriptive narrative) address question (c): How are these variables different or similar to those shown to be involved in export performance in the international literature?

Table 4.3 shows the results of a comparison. Variables from the literature are categorised into broad sets of factors consistent with a synthesis of export performance models found in the literature. Table 4.3 also shows that variables identified in the study cases fit into the broad portfolio of factors determined from the literature. Many of the study variables fitted into more than one factor group from the literature. Some variables had specific interpretations relating uniquely to New Zealand, although these were also consistent with generic variables or factors identified in the literature. For example, CER (Closer Economic Relations) is a trade bloc specific to New Zealand and Australia, but this factor was
Table 4.3
Comparison of Factors and Variables Involved in Export Performance: The Literature vs Stage 1 Exporters

Checklist Matrix (Stage 1)

<table>
<thead>
<tr>
<th>FACTORS IDENTIFIED IN THE LITERATURE</th>
<th>AGREEMENT (YES) OR DISAGREEMENT (NO) FROM FIRST-LEVEL CODING OF STAGE 2 FIRMS (name of variable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>External environment</td>
<td></td>
</tr>
<tr>
<td>Foreign market</td>
<td>YES: External Environment; Foreign Market Profile; CER-NZ/Aus Trade Bloc; Australian Market; Seasonality; Regulations and Standards</td>
</tr>
<tr>
<td>Domestic market</td>
<td>YES: External Environment; Trade Development Board; NZ Image</td>
</tr>
<tr>
<td>Firm-level Strategy</td>
<td>YES: Firm Strategy; Importance of Domestic Market; Growth Objectives; Competitive Advantage</td>
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<td>Export strategy:</td>
<td>YES: Export Strategy; Growth Strategy; Suppliers; Freight; Importance of Domestic Market</td>
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<td>Market selection</td>
<td>YES: Market Selection; Export Markets; NZ Image</td>
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<td>Market development</td>
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<td>Market entry</td>
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<tr>
<td>Importance of domestic market</td>
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</tr>
<tr>
<td>Firm Characteristics</td>
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<tr>
<td>Firm size</td>
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<tr>
<td>Investment</td>
<td>YES: Investment</td>
</tr>
<tr>
<td>Age of Firm</td>
<td>YES: Age of Firm</td>
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<tr>
<td>Export experience</td>
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<td>Export intensity or involvement</td>
<td>YES: Export Intensity</td>
</tr>
<tr>
<td>Firm resources</td>
<td>YES: Plant &amp; Equipment; Capacity; Costs; Operations; Financial Control; Labour Skills, Access to Labour; Raw Materials; Productivity</td>
</tr>
<tr>
<td>Export Stimuli and motivation to export</td>
<td>YES: Export Trigger / Stimulus</td>
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<tr>
<td>Organisational structure and context</td>
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<td>YES: Ownership Type</td>
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<td>Agent and distributor support</td>
<td>YES: Distribution - sub-category of Marketing; Personal Contact/Relationships</td>
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<td>Links with export markets</td>
<td>YES: Personal Contact/Relationships; Customers; Organisational Structure</td>
</tr>
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<td>Firm Competencies</td>
<td>YES: Quality</td>
</tr>
<tr>
<td>---------------------------------------</td>
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<tr>
<td>Quality</td>
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<td>R &amp; D / Technology</td>
<td>YES: Patents/Intellectual Property</td>
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<td>YES: Market Research</td>
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<td>Market knowledge</td>
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<tr>
<td>Readiness to export</td>
<td>Planning</td>
</tr>
<tr>
<td>Export planning</td>
<td>YES: Personal Contact/Relationships; Co-operation; Links with Industry Bodies; Firm Reputation</td>
</tr>
<tr>
<td>Communication</td>
<td>YES: Productivity</td>
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<tr>
<td>Productivity</td>
<td>YES: Competitive Advantage</td>
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<td>Competitive Advantage</td>
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<td>Managerial Factors</td>
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<td>Managerial characteristics</td>
<td>YES: Govt. Schemes; Competition; Trade Development Board; Constraints/Barriers to Export</td>
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<tr>
<td>Management style</td>
<td>YES: Number of Markets</td>
</tr>
<tr>
<td>Managerial perceptions and attitudes</td>
<td>YES: Personal Contact/Relationships</td>
</tr>
<tr>
<td>Export and management commitment</td>
<td>YES: Management</td>
</tr>
<tr>
<td>Personal contact with buyers</td>
<td>YES: Management</td>
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<tr>
<td>Performance Measures</td>
<td>YES: Management</td>
</tr>
<tr>
<td>Propensity to export</td>
<td>YES: Export Performance (export sales)</td>
</tr>
<tr>
<td>Export sales</td>
<td>YES: Constraints/Barriers to Export</td>
</tr>
<tr>
<td>Export problems</td>
<td>YES: Management</td>
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<td>Exporters vs non-exporters</td>
<td>NO: Not applicable</td>
</tr>
<tr>
<td>Level of export</td>
<td>YES: Export Performance (export intensity)</td>
</tr>
<tr>
<td>Perceptions towards export</td>
<td>YES: Management</td>
</tr>
<tr>
<td>Export growth intensity</td>
<td>YES: Export Performance (export sales trend)</td>
</tr>
<tr>
<td>Barriers to export</td>
<td>YES: Constraints/Barriers to Export</td>
</tr>
</tbody>
</table>
classified under the External Environmental factor. Similarly, the Australian Market is unique to New Zealand firms as an influence on export performance, but is consistent with the influences reported in the literature of nearest neighbour markets (Calof, 1994) and the concept of psychic distance (Johanson and Wiedersheim-Paul, 1975), and can be classified alongside Foreign Market Environment.

While the case study and literature-based variables are broadly similar, questions arise about the categorisation of the factors and their interrelationships. Many export performance models are criticised because the variables are treated as independent, with little consideration of how and why they may be interlinked (Bijmolt and Zwart, 1994; Leonidou and Katsikeas, 1996), although Cavusgil and Zou (1994) use path analysis to try to determine these relationships. The criticism occurs partly because many models are based predominantly on quantitative data and analysis (such as factor and cluster analysis), with little qualitative understanding to explain the influences and interactions of the variables concerned (Aaby and Slater, 1989).

The results shown in Table 4.3 illustrate these points. A subjective assessment shows that a number of the variables from the study fit with more than one factor, or match with more than one variable from the literature. For example, Personal Contact/Relationships matches with three different variables represented by three different factors from the literature: Links with Export Markets (Firm Characteristics), Communication (Firm Competencies) and Personal Contact with Buyers (Managerial Factors). Similarly, Firm-level Strategy, Organisational Structure, Government Agencies (Trade Development
Board), Government Policy Instruments (IEP), Domestic Market, Management, New Zealand Image, and Market Research, match with more than one variable or factor from the literature.

These results suggest a lack of independence of the variables, and of the broader factors or themes to which they belong, supporting the concerns of Bijmolt and Zwart (1994). It is reasonable, then, to question whether or not the categorisations of the factors and variables associated with the various existing models of export performance are sufficient to explain export performance. The results in Table 4.4 suggest two reconsiderations: firstly, with regard to clustering of variables, factors or themes that best represent their influence/s on export performance; and secondly, with regard to potential interrelationships between them, which challenge the static perspective of most export performance models, and provide some insights into the dynamic nature of export performance.

Export performance models are also criticised in relation to the category, Firm Characteristics. Bijmolt and Zwart (1994) suggest that some firm characteristics, such as age of firm, number of employees, and years in exporting are relatively constant and have only an indirect influence on export performance. They suggest that these Firm Characteristics should be regarded differently from the other variables that are usually characterised as Firm Characteristics. These include variables which can be influenced by export strategy and which may impact on export performance; for example, firm
resources, links with export markets and ownership. This argument further prompts the reconsiderations discussed above.

Cavusgil & Zou (1994) express another concern about the role and influence of firm-level vs export strategy in many export performance models. These authors maintain that most export strategy variables identified in export studies are marketing-related and often bear little relationship to firm level strategy particularly at the stage of export strategy formulation. Table 4.3 illustrates this point, showing that the variables usually categorised under Export Strategy (left-hand column) are mainly concerned with export markets and marketing. Bijmolt and Zwart (1994) note that there is no clear distinction between the factors competencies and strategy in most export performance models, referring particularly to the summary model of Aaby and Slater (1989). In this connection, the study firms revealed a number of variables aligned with export strategy that were not purely market- and marketing-related variables (see Table 4.3).

Furthermore, several variables clustered more appropriately at firm-level, rather than export-level, strategy. Given these arguments it is prudent to re-examine the composition of the export strategy factor, particularly for determining the roles and interrelationships of the variables concerned.

The answer to research question (c), posed above, therefore, has five components which start to expose the complex nature of export performance. First, it appears that the variables involved in export sales performance are broadly similar to those identified in the literature. Second, some of these variables have interpretations unique to New
Zealand, such as CER, and Australian market, but, nevertheless, they fall into the broad categories of factors outlined in the literature. Third, the duplication of a number of the variables across more than one literature-based factor or variable reinforces concerns (Bijmolt & Zwart, 1994) about the simplicity of export performance models, and suggests that variables and factors are interrelated, rather than independent. Fourth, case study variables matching those in the Firm Characteristics factor were actually a mixture of constant and flexible factors, confirming Bijmolt and Zwart's (1994) views that the literature-based Firm Characteristics category needs redefinition. Fifth, the case study coding questions the definition and scope of the export strategy factor and its component variables, in accordance with the concerns of Cavusgil and Zou (1994). These issues are all addressed in the next stage of the analysis.

4.2.3 Finding Patterns and Themes (Data Reduction)

This analysis addresses the issue of variable overlap across numerous factors and variables, by creating a set of factors (patterns or themes) for the study cases, which takes account of the similarities and differences with the literature based categorisation. The analysis uses a process of pattern coding within cases and pattern matching across cases. These are qualitative methods broadly equivalent to factor- and cluster-analysis used in quantitative research (Miles and Huberman, 1994).

Patterns and themes were developed from reduction of the coded data shown in Tables 4.2 and 4.3, firstly on a single-case basis, and then across all the cases. Variables (nodes) were aggregated into themes or patterns, which, in the terminology of export performance models, relate to factors.
4.2.3.1 Pattern Coding and Pattern Matching

Individual cases were examined to assess how the coded variables might be clustered into patterns or themes, to reflect their influences on export sales performance. Data were thus reduced to a more manageable and contextual form (Miles and Huberman, 1994). After matching across all the cases, a final set of patterns and themes, equivalent to factors, was produced. Table 4.4 shows the resulting factors. Similarities and differences between these and factors identified in the literature are evident when Tables 4.3 and 4.4 are compared.

Table 4.4 shows that the variables grouped into ten factors, with some notable differences to those outlined in the literature. The factors were: External Environment, Firm-level Strategy, Firm Competencies, Firm Characteristics, Firm Structure and Resources, Managerial Factors, Export Strategy Formulation, Export Strategies, Export Strategy Implementation, and Export Performance. A full discussion of these factors and their component variables and indicators is provided in the descriptive narrative and summary that follows. The major differences with the literature are discussed briefly below.

(a) Disaggregation of Firm Characteristics into two factors: Firm Characteristics, which contains 'constant' variables, and Firm Structure and Resources, which contains 'flexible'
Table 4.4
Factors and Variables Developed From Pattern Coding And Pattern Matching Of Coded Case Study Data

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>VARIABLES</th>
<th>FREQUENCY OF MENTION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td># cases</td>
</tr>
<tr>
<td><strong>External Environment</strong></td>
<td></td>
<td></td>
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<tr>
<td>Foreign Market</td>
<td>Political/Economic - general</td>
<td>2</td>
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<tr>
<td></td>
<td>Trade Barriers</td>
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<td>CER</td>
<td>4</td>
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<tr>
<td></td>
<td>Australian Market</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Regulations and Standards</td>
<td>5</td>
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<td></td>
<td>Foreign Market Competition</td>
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<tr>
<td></td>
<td>Seasonality</td>
<td>7</td>
</tr>
<tr>
<td>Domestic Market</td>
<td>Political/Economic - general</td>
<td>16</td>
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<tr>
<td></td>
<td>Exchange Rates</td>
<td>15</td>
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<td></td>
<td>Interest Rates</td>
<td>13</td>
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<td></td>
<td>Available Finance</td>
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<td>Import Deregulation</td>
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<td>Export Incentives and Government Assistance</td>
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<td></td>
<td>Domestic Market Competition</td>
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<td><strong>Firm-level Strategy</strong></td>
<td>Firm Strategy Decisions</td>
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<td>Growth Objectives</td>
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<td>Domestic Market</td>
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<td></td>
<td>Competitive Advantage</td>
<td>12</td>
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<td>16</td>
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<td>R&amp;D / Technology</td>
<td>16</td>
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<td>Intellectual Property Protection</td>
<td>7</td>
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<td>Relationships / Personal Contact</td>
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<td>Export Marketing</td>
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<td>Reputation</td>
<td>6</td>
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<td>Market Research/Knowledge</td>
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<td>Links with Industry Bodies</td>
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<td>Interfirm Co-operation</td>
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<td>Financial Control</td>
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<tr>
<td></td>
<td></td>
<td># cases</td>
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<td>Export Experience</td>
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<td><strong>Firm Characteristics</strong></td>
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<td>Firm Size</td>
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<td>Years in Exporting (Export Experience)</td>
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<td>Ownership Type</td>
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<td>Organisational Structure</td>
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<td>Export Intensity</td>
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<td>Export Sales</td>
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<td>Relationships and Personal Contact (see Firm Competencies)</td>
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<td>Plant &amp; Equipment / Capacity</td>
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<td>Productivity (see Firm Competencies)</td>
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<td>Location of Operations</td>
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<td>Supplier Relationships</td>
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<td>Employees - skills and availability</td>
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<td><strong>Export Strategy Formulation</strong></td>
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<td>Export Growth Strategy (see Firm Strategy)</td>
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<td>Export Trigger/Stimulus</td>
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<td></td>
<td>Constraints / Barriers to Exporting</td>
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<td>Export Strategy Implementation</td>
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<td>External Environment (see External Environment)</td>
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<tr>
<td></td>
<td>Constraints / Barriers to Exporting (see Export Strategies)</td>
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<tr>
<td></td>
<td>Export Sales Trend (5 years): Increased, Static, Decreased</td>
<td>16 100</td>
</tr>
<tr>
<td></td>
<td>Export Intensity</td>
<td>16 100</td>
</tr>
<tr>
<td></td>
<td>Number of Markets¹</td>
<td>16 100</td>
</tr>
<tr>
<td></td>
<td>Achievement of Firm’s Export Objectives</td>
<td>16 100</td>
</tr>
</tbody>
</table>

¹ An indirect performance measure, but one which gives a view on export scope. Research literature supports the association of ‘number of export markets’ with financial/export success (see Lit Review).
variables (see earlier discussion). The latter factor contains mainly operational elements of the firms; these are often poorly represented in existing export performance models.

(b) **Addition of a Firm Strategy factor.** This reflects the point raised by a number of authors, notably Aaby and Slater (1989), Bijmolt and Zwart (1994), Cavusgil and Zou (1994), and Yeoh and Jeong (1995), that firm strategy has an influence on export performance. Among other things, firm strategy will influence export objectives, resources committed to exporting, and the organisational structure within which exporting activities will operate.

(c) **Addition of an Export Strategy Formulation factor.** The importance of this was evident from two sources. Firstly, strategy formulation is a key element of the strategy process (Johnson and Scholes, 1993). Secondly, some case study variables appeared to be related to the process of export strategy development or formulation. Variables and their associated data included export planning, export growth strategy, export triggers or stimuli, competitive advantage, and others shown in Table 4.4.

(d) **Re-naming and Expansion of the Export Strategy factor, to Export Strategies.** This enables the inclusion of variables relating to operations, organisational structure, and firm resources, as well as the market- and marketing-related variables emphasised in the literature. Reasons for this are similar to those outlined for Firm Strategy. Export strategies needs to take account of demands on aspects like firm resources and investment, and on opportunities arising from them. It should also be recognised that
requirements for, and opportunities from, exporting may be distinct from the firm's other business.

The Export Strategies factor also contains all those variables belonging to the factor, Firm Competencies, which is a significant departure from existing export performance models. Reasons for this are, again, founded mainly from strategic management theory, particularly resource based view (RBV) theory (Prahalad and Bettis, 1986). There is some explicit support for this from Bijmolt & Zwart (1994), who note that the distinction between firm competencies and export strategy in Aaby and Slater's (1994) model is equivocal. Applied to export strategy, RBV theory suggests that exporting firms need to consider how existing competencies may be deployed in the future, and what new competencies need to be developed. These considerations need to be specified as competency-related export strategies. Competencies are, therefore, important inputs into export strategy formulation, as existing models depict, but are also key export strategy outputs, contributing to explanations of export performance.

(e) Inclusion of an Export Strategy Implementation factor. A number of study firms discussed aspects relating to implementation of export strategy; for example, constraints and barriers to implementing plans for improved quality programmes, new market development etc. Implementation is a crucial part of the strategy process, as even the best formulated strategy decisions cannot achieve desired results unless implemented properly (Johnson and Scholes, 1993). Hamel & Prahalad (1994) refer to implementation as mobilisation and suggest that this is important in all aspects of the strategy process.
Implementation is a factor that appears to be virtually absent from existing models of export performance, with the exception, through implication, of relational models (Styles & Ambler, 1994). Cavusgil and Zou (1994) suggest that a firm’s capability to implement a chosen strategy is part of the Firm Characteristics factor, but it does not enjoy an explicit role in their export performance model.

The ten factors are discussed in detail in the descriptive narrative that follows. This provides additional perspectives on the answer to research question (c) outlined earlier.

4.2.4 Descriptive Narrative of Stage 1 Results

This section draws from the coded (NUD-IST) interview data and describes the ten factors, and their associated variables and indicators, represented as nodes in NUD-IST. Two analytical procedures were applied to this data. Firstly, basic counting methods were applied to the NUD-IST coding, to derive frequencies associated with the nodes; and secondly, cross-tabulations were used to determine the association between certain nodes. Descriptive statistics and correlations have been used to describe and analyse interval data relating to some variables associated with Firm Characteristics. The discussion in this section is focused primarily on how and why the factors, variables and their indicators influence export performance, or, more specifically, export sales performance; that is, question (c) is addressed in considerably more depth. The results are discussed in the context of the existing literature. This qualitative process takes the analysis beyond an initial identification of variables involved in export sales performance (the ‘what’), to a tentative explanation of export sales performance. The latter aspect is
developed further in the conceptual model-building step of the analysis, which follows this section.

For each factor, a content-analytic matrix is presented, which includes examples from the interview data to illustrate the discussion. In the following text, the number of firms with data relating to a variable is shown, with the percentage of the total number of firms (i.e. 16) that this represents in brackets; the percentage relates to the total number of firms (i.e. 16). Each factor is discussed in order of presentation in Table 4.4.

**4.2.4.1 External Environment**

Many export performance models consider the external environment to be an ‘uncontrollable’ or ‘given’ (Bijmolt and Zwart, 1994), to which firms are assumed to adopt an essentially reactive stance (Yeoh and Jeong, 1995). However, it is also recognised that the external environment is the source of a substantial number of problems for exporters (Katsikeas and Morgan, 1994). Results from this study support this latter view, and suggest that the external environment is a major determinant of export sales performance. Even though firms, especially SMEs, cannot generally influence their external environment, they are affected by, and respond to, the associated forces in different ways. This is recognised in strategy process models, where the external environment is a key input into strategic decision-making and hence, performance outcomes (Hamel and Prahalad, 1994; Johnson and Scholes, 1993). With export strategy presented at the heart of most export performance models, it is incongruous for the external environment to be ignored, or diminished, as an influencing factor, as noted by a number of authors (e.g. Aaby and Slater, 1989).
The external environment was coded in the study as two sub-factors: Foreign Market Environment and Domestic Market, in accordance with the literature. The variables and indicators concerned with these factors are shown in Table 4.4.

**Foreign Market Environment**

The following discussion outlines the main findings relating to the foreign market environment. A content-analytic matrix for each variable, with examples of the interview data, is shown in Table 4.5.

**Political / Economic Environment – General**

The broad political/economic influence of foreign export markets was noted by two firms, both emphasising the importance of the economic state of these markets, in keeping with other studies (e.g. Huszagh et al, 1992). One firm’s strategic response to these influences was to change the mix of markets it exported to, similar to the types of adjustments made by firms noted by Green and Allaway (1985).

**Exchange Rates**

The influence of exchange rates arises from both domestic and foreign markets circumstances. It is discussed under the Domestic Market sub-factor because exchange rate was perceived by the firms as a predominantly New Zealand issue.
<table>
<thead>
<tr>
<th>Variables Associated with Factor / # (%) of Cases Coded at Variable</th>
<th># (%) of Cases Coded at Variable</th>
<th>Examples of Data From Cases [case reference]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political / Economic Environment - General 2 (13%)</td>
<td></td>
<td>There has been no influence of economic constraints in NZ, but they may need to change their mix of markets because of economic conditions in their markets. [E #44]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The economic state of the export markets has a major influence on sales of the product. [O #46]</td>
</tr>
<tr>
<td>Exchange Rates</td>
<td>15 (94%)</td>
<td>See Domestic Market Environment sub-factor</td>
</tr>
</tbody>
</table>
| Trade Barriers 13 (81%)                                       | 9 (69%)                         | Problem  
Canada has trade barriers and therefore (the firm) has not tried to export there. [B #76]  
The major cost is tariffs, which apply in most markets. [F #51]  
Trade barriers are not major, but when present prevent their operations e.g. Taiwan tariffs were 45% and they could not export, but it reduced to 4%, so they now export there. [G #72]  
Not a Problem  
Trade barriers are not a problem. Taiwan did have barriers, but they were removed. They are not discouraged by duties. [N #111-113.]  
There are no significant trade barriers; there are quotas in New Caledonia and Fiji, but none of these is prohibitive. [E #48] |
|                  | 4 (25%)                         | 2 Benefit  
CER will see an end to the quotas; the quota system is very competitive. [D #45]  
CER; there is an advantage in the economies being closer; it also expands the local markets. NZ and Australia need a common exchange rate in the long-term. [P #80,81]  
No Impact  
CER has not made any difference because Australia was already duty free. [A #96] |
| Australian Market 3 (19%)                                     | NA                              | Australia is included in the NZ market. They have an advantage in being able to test their products in Australia before hitting the other markets. [I #40,112]  
They include Australia in with the domestic market. [C #24] |
<p>| Regulations and                                               |                                 | Some flexibility is needed in the product models for some export market e.g. the have 15 different models because |</p>
<table>
<thead>
<tr>
<th>Standards</th>
<th>5  (31%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>of different regulations etc - this is very difficult. [F #78] Regulations and standards (internal market standards) are very time-consuming and costly to comply with; they keep people out of the market. [M #27]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Seasonality</th>
<th>7  (44%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Seasonality is mostly balanced with the different markets. The Northern Hemisphere has a winter peak and a summer peak; NZ has one peak (Xmas and summer); Japan and Asia are all year markets. They have tried to overcome seasonality also with different product lines as well as different markets. [B #154-156] There is seasonality, but this is balanced by exporting to a range of markets. [G #32]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Foreign Market Competition</th>
<th>8  (50%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong Competition</td>
<td>All the export markets have resident producers of (product). They also compete against other NZ companies in the domestic and export markets. [E #31-32] Competition is very tough. There are two major competitors in the US and one in the UK. (Firm H) wins against the competition on price and quality; there is room in between the major competitors for (Firm H). The competitors must understand each other. [H #58-61]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Foreign Market Competition</th>
<th>6  (38%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average/Weak Competition</td>
<td>There is no effective competition. There are lots of (products) around, but they don't work.</td>
</tr>
</tbody>
</table>
Trade Barriers

Trade barriers in foreign markets were perceived as an influence on export sales performance by 12 (75%) firms. 9 (69%) of these reported problems associated with trade barriers, while 4 (31%) noted that trade barriers were not a problem. Trade barriers included tariff barriers, import duties, foreign market quotas, and technical standards. High costs (or reduced margins) were problems associated with trade barriers in existing markets, or with new market entry. For example, five firms rejected potential export markets, because import duties were prohibitive, given pricing expectations from the markets concerned. These findings agree with those of Barker and Kaynak (1992), who found that trade barriers were the most important barriers encountered by exporters, and the most important impediment for non-exporters. On the other hand, favourable tariff rate changes in some markets encouraged market entry by a number of study firms which had been unable to export there before. Of the 4 firms that claimed that trade barriers were not a problem, three found that the tariff levels were manageable within their pricing structures, and one had never experienced trade barriers.

Closer Economic Relations – CER

Closer Economic Relations (or, more formally, Australia and New Zealand Closer Economic Relations Trade Agreement - ANZCERTA) is a trade agreement between Australia and New Zealand, formulated in 1983. An outcome has been duty free trade between both countries and an almost fully harmonised business environment e.g. business law, technical standards etc. Four cases (25%) had data relating to the impact of CER on their exporting activities. Two of these reported direct benefits, one because it removed a restrictive quota system, and the other because it brought the two economies
closer together and effectively expanded the New Zealand market. Two firms noted no impact of CER because their industries were duty-free already. No firms reported any negative effects of CER.

**Australian Market**

In accordance with the stages model of internationalisation and the concept of psychic distance (Bilkey and Tesar, 1977), the first export market for most firms was their nearest neighbour, Australia. With the low psychic distance, experience in exporting, and the effect of CER, 3 (19%) firms had refocused the Australian market as an extension of the New Zealand market, even though the two countries had different currencies. These firms integrated strategies for the two markets and gained advantages, such as economies of scale and distribution benefits. This also suggested that the firms' managers had positive attitudes to exporting and were not impeded by potential barriers like differences in exchange rates and consumer profiles.

**Regulations and Standards**

Regulations and standards imposed by foreign markets required compliance by 5 (31%) firms. Firms faced regulations in areas such as product certification, hygiene, safety and technical standards. Frost and Jones (1994) found that compliance to regulations was almost a necessity and prerequisite to perform well internationally, agreeing with perceptions of the five study firms. Requirement for compliance with foreign-market regulations is also reported in the literature as an important impediment to exporters (Crick, 1995; Leonidou, 1995b; Leonidou, 1995c), and this was noted by two firms in the study. Yeoh and Jeong (1995) found that entrepreneurial firms considered regulations
less of an obstacle to exporting than did conservative firms, although there was no such
classification of firms in the study.

**Seasonality**

Seven (44%) study firms were influenced by seasonality i.e. product sales occurred
mainly in one season, for example, in food and fashion industries. This may create
problems for firms, unless they develop strategies to achieve year-round sales, a point
noted to be relevant, but only moderately so, by Leonidou (1995a). Strategies employed
by the study firms involved selling products to markets with opposite seasons, and
development of new product lines for the off-season. In general, exporting helped
overcome seasonality effects in the domestic market because products could be sold to
markets with opposite seasons (e.g. Europe), providing year-round sales. Furthermore,
where fashion was concerned, it enabled a preview of Northern Hemisphere trends six
months before marketing in New Zealand and Australia, and provided first-mover
advantage against local competitors. This is similar to observations noted in research in
the food and beverage industries (for example, Aksoy and Kaynak, 1994).

**Foreign Market Competition**

Intense competition is characteristic of a hostile environment, and, for small and medium-
sized firms exporting to competitive foreign markets, it may be a stimulus to innovate
(Yeoh and Jeong, 1995). Competition is one of the two most serious barriers to exporting
activity for non-exporting firms (Leonidou, 1995a). Competition in export markets has
been reported as a determinant of export performance (e.g. Das, 1994; Crick and
Katsikeas, 1995), and this result was shared by 15 (94%) study firms. Major competitors
were generally firms in the export markets themselves, or, in the case of 4 (25%) study
firms, from other New Zealand exporters. Each of these four firms was a technology leader and their Managers claimed that other New Zealand firms competed with them overseas once the technology had been developed and assimilated. They also reported price-cutting practices and undermining of market opportunities by competing New Zealand firms.

Competition in their export markets was perceived as strong by 8 (53%) firms, of average intensity by 2 (13%) firms, and weak by 4 (27%) firms. In response to strong competition, some firms targeted niches, in order to capture premium prices, attempting to avoid competition, rather than confront it head-on. This conforms to findings of Cavusgil and Zou (1994), who suggest that firms which know the subtle differences in the degree of competition in foreign markets are most likely to select the most attractive markets and adapt their marketing strategy accordingly.

**Domestic Market Environment**

A content-analytic matrix for each variable with examples of the interview data is shown in Table 4.6.

**Political/Economic Environment – General**

All firms commented on this variable in general, as well as specific, terms. The biggest impact of government policy on the study firms was the deregulation and economic restructuring that started in 1984. Overall, the rapid and major changes in economic policy had been a significant, but not threatening, factor for study firms, a point noted
also by Chetty and Hamilton (1996). The specific aspects of the New Zealand political/economic environment are discussed below.

**Exchange Rates**

The impact of exchange rate on export behaviour and performance has been noted by several authors (e.g. Cavusgil, 1984, Leonidou, 1995b). 11 (74%) of the 15 (94%) study firms commenting on exchange rates indicated that the rates were a problem and 4 (25%) indicated that they were not. Problems were of two kinds: firstly, the level and secondly, the volatility of the exchange rate, consistent with the findings of Leonidou (1995c). These problems did not always occur together; for some firms, the exchange rate level was manageable, but the fluctuations created issues of inconsistency in pricing and margins. Adverse exchange rates forced firms to either cope with reduced margins, or exit the market/s concerned. Very few firms were able to increase prices to counteract increasing exchange rates, because of distributor and market resistance. Firms found exchange rate fluctuations to be a major impediment to the maintenance of fundamentally important price competitiveness in their export markets, similarly noted by Cavusgil (1984), and Sullivan and Bauerschmidt (1989). Many firms were able to accommodate some reduction in margin, or improve efficiencies to deal with the issue, but most believed that there was a limit to the extent of exchange rate increase that their business could tolerate. Accompanying economic restructuring in New Zealand since 1984, resulted in exchange rates that were high and volatile. This was, and remained for some time, a testing time for many exporters.
### Table 4.6
External Environment: Domestic Market Environment Sub-Factor
Content-Analytic Matrix (Cross-case)

<table>
<thead>
<tr>
<th>Variables Associated with Factor / % (%) of Cases Coded at Variable</th>
<th># (%) of Cases Coded at Variable</th>
<th>Examples of Data From Cases [case reference]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political / Economic Environment - General 16 (100%)</td>
<td>13 (81%)</td>
<td>They have not been affected by anything associated with NZ economics or politics. Because they are small, they are insulated. [B #69-70]</td>
</tr>
<tr>
<td>Exchange Rates</td>
<td></td>
<td>Inflation is major worry. Industry cost structures include government taxes in the industry, especially resource rentals and fuel tax, which is 100% and a major cost for the industry. [L #38, 42]</td>
</tr>
<tr>
<td>15 (94%)</td>
<td>4 (27%)</td>
<td><strong>Problem</strong> Exchange rates are a major roadblock. Exchange rates change too quickly, especially over the end of the 1970s and the early 1980s. [A #70-71]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Exchange rates are the biggest worry - they caused a lot of grief last year and they would have folded without the domestic business. Exchange rate changes upset the asset ratios. [F #81-82]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>They deal in the export market currencies, or US$, this is by far the biggest negative influence. Prices can be flexible, but not too much (to overcome exchange rates). Customers are not interested in NZ's exchange rate problems. [G #77, 80-81]</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>No Problem</strong> Exchange rates are not a problem. The price varies with each exchange rate and the customers are OK about this. They usually quote on the present exchange rate. [N #116-118]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>They can live with the exchange rate. Major exporting countries have strong currencies. The main problem is the fluctuations in exchange rates. [B #98-100]</td>
</tr>
<tr>
<td>Interest Rates</td>
<td>9 (69%)</td>
<td><strong>Problem</strong> They do a lot of R&amp;D, but the risk and high interest rates make it difficult. [M #70]</td>
</tr>
<tr>
<td>13 (81%)</td>
<td>4 (23%)</td>
<td>These are a major expense. [O #34]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>They are undercapitalised and rely on borrowed capital, therefore interest rates are a problem. [A #105]</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>No Problem</strong> Interest rates are a major factor in investment decisions. [P #143]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The can use the export markets for loans, which gives them a choice as to where they borrow from. Export markets are not concerned with NZ's problems and with its internal economy. Interest rates are not as important as exchange rates. [D #100-102]</td>
</tr>
<tr>
<td>Available Finance</td>
<td></td>
<td>They have a high level of debt for expansion; they use a mixture of overseas and NZ funds; but it is difficult to get credit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>3</td>
<td>(19%)</td>
<td>ratings overseas because NZ is no known. [P #144] Financial institutions are not prepared to give funds easily to exporters because of the general problems associated with export companies; this is a major impediment and is a Catch 22 situation. [H #47] The banks still need to have their loans tightly secured, not like the US and other countries. [K #9]</td>
</tr>
<tr>
<td>Export Incentives</td>
<td>10</td>
<td>(63%)</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>(94%)</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>(32%)</td>
</tr>
<tr>
<td>Government Assistance</td>
<td>5</td>
<td>(32%)</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>(56%)</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>(25%)</td>
</tr>
<tr>
<td>Import Deregulation</td>
<td>8</td>
<td>(50%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IEP Programme</td>
<td>8</td>
<td>Users They have used the IEP scheme, but it could be larger; the grants only amount to a small part of what is needed. The IEP</td>
</tr>
<tr>
<td>TDB / TradeCom</td>
<td>14 (88%)</td>
<td>6 (38%)</td>
</tr>
<tr>
<td>----------------</td>
<td>---------</td>
<td>--------</td>
</tr>
<tr>
<td>Problems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The business is too specialised for TradeCom to handle. [M #55]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TradeCom has been very good in the UK (identified retailers etc); in the US, they were not so good, but in Japan, they were good. [D #122]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Users</td>
<td></td>
<td></td>
</tr>
<tr>
<td>They used TradeCom in the UK and are now using them in Europe; they have also used their offices and equipment. They have also used TradeCom for market research in Italy and China. In the UK, TradeCom helped with the selection of agents. [N #123-125]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>They use TradeCom to do company investigations; (the firm) gives them the specs and TradeCom screens prospective companies (agents, licensees). [C #71]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competition</td>
<td>12 (75%)</td>
<td></td>
</tr>
<tr>
<td>(Domestic Market)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weak / No Competition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>There is no competition in NZ - they have all dropped out and (Firm A) has gained business from the NZ companies who have gone out of business. [A #92]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>They are the only company making woven labels in NZ in this way. [I #7]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>There is approx. 10 (competitor firms) in NZ. (Firm B) has led the development of unique NZ products because they are a leader; they have therefore helped other NZ companies to get into business (the followers) and set the scene for related products in the export markets.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
39 (56%) firms commented on foreign exchange (forex) management, with 6 (67%) using, and 3 (33%) not using, forward exchange rate cover. The high exchange rate volatility was one reason cited for not using forex cover. Of the 6 firms taking forward cover, 5 (83%) also reported experiencing problems with the exchange rate, along with 2 (67%) of the non-users of forex cover. In these cases, firms may have been motivated to take forex cover because they had experienced exchange rate problems, or, their forex cover may not have helped. The data do not distinguish between these.

Some firms believed that gains from raw material import prices compensated for export-related losses when the exchange rate rose (‘natural hedging’). Customer/distributor resistance to pricing in NZ$ was high, so firms were mostly unable to limit the effects of exchange rate changes through the use of New Zealand currency. Of the 7 (44%) firms with relevant data, 6 (86%) priced their exports in the foreign market currencies or in US dollars, and only 1 (14%) priced in New Zealand dollars.

**Interest Rates**

Domestic interest rates have been shown to impact on export performance (Katsikeas and Morgan, 1994). 13 (81%) study firms had data relating to interest rates; 9 (69%) regarded interest rates as a problem, and 4 (23%) did not. The interest rate problem was twofold: because of economic restructuring since 1984, interest rates were very high (lending rates over 25%), and many firms carried high debt, a consequence of private ownership and lack of a venture capital industry. Of the four firms that claimed no problem with interest rates, two used more favourable overseas borrowings and two had
minimal debt. In no cases had high interest rates been a significant threat to export business, but they had reduced profitability and limited activities, such as R&D.

**Available Finance**
Access to capital is a key requirement for small and medium-sized firms (Churchill and Lewis, 1983), in particular, those engaged in exporting and export development (Chetty & Hamilton, 1996; Johanson and Vahlne, 1990). While many study firms relied on high levels of borrowing, only 3 (19%) commented on the availability of finance. However, 15 (94%) firms noted the need for government assistance, implying a need for investment finance. Profits were usually reinvested back into the firms, but they were often insufficient to support large capital projects, or even routine export development activities, e.g. market development and R&D. External sources, particularly banks, were the main providers of finance. However, firms noted that banks had tightened their lending criteria markedly over recent years, creating problems for firms seeking investment. The options of equity involvement and/or going public were unattractive to the three firms concerned. New Zealand had no venture capital industry at the time, or previously, making it difficult for firms to engage in new projects or exporting. Not surprisingly, many of the older firms had started exporting with the assistance of generous export incentives before economic restructuring in 1984 (see later discussion); this start-up assistance had not been available to many of the newer firms in the study sample.

**Import Deregulation**
A significant outcome of government policy from 1984 was import deregulation. Many study firms were in industries which were ‘protected’ to varying extents. The removal,
or reduction, of import duties impacted directly on their cost structures and local businesses, as noted also in Chetty and Hamilton's (1996) study. Of the 8 (50%) firms that had data coded for this variable, 3 (19%) reported problems, and 5 (31%) reported no problems associated with import deregulation. Reasons for these results have been discussed under Domestic Competition and include minimal changes in import duties in their industry, or firm strategies that dealt effectively with import competition. There were also advantages in access to, and cost of, imported raw materials in terms of exchange rate. While not necessarily affecting their own business, some firms perceived an imbalance between New Zealand policy and that of other (competitor) countries.

**Export Incentives and Government Assistance**

Much has been written about the role of government assistance and export incentives (e.g. Bauerschmidt et al, 1985; Malekzadeh and Nahavandi, 1985). 15 (94%) study firms commented on export incentives and government assistance. Export incentives were included in pre-1984 government policy to improve New Zealand's foreign exchange earnings, but were removed with the change of government in 1984. All except two study firms began exporting during this period of incentives. For 10 (63%) firms, export incentives were fundamental in getting started in exporting, and in the early export development phase. While these firms' Managers recognised the value of export incentives, most believed them to be inappropriate in the current environment, at the same time acknowledging that export entry was difficult for present-day firms. The Managers generally supported more tightly controlled and accountable government assistance programs, particularly for R&D, as noted by 5 (31%) study firms. 5 (31%)
firms indicated that export incentives had not been fundamental for starting export business, claiming that they would have exported anyway.

One government assistance scheme, the Individual Exporter Program (IEP), had been operating for approximately two years at the time of the study, and was the only exporter assistance programme available. 11 (69%) firms commented on the use of the IEP program; 3 (19%) firms used it a lot, 5 (32%) sometimes, and 3 (19%) never. Users of the programme were generally enthusiastic about its role, and utilised it for a variety of export-related activities, such as employment of export personnel and market entry. Criticisms of the program included: small size of the grants, limited accountability, lack of follow-up and excessive bureaucracy (also noted as a problem by Katsikeas and Morgan (1994) and Crick (1995)).

The New Zealand Trade Development Board (TDB) is a government body established in 1989 to support exporters; TradeCom was, at the time of the study, the arm of the organisation responsible for overseas support to exporters. 14 (88%) firms provided data relating to TDB/TradeCom, and commented on the organisation, its performance and their degree of utilisation. Firms used the TDB primarily for foreign market research and agent and distributor selection through the related TradeCom overseas offices. TradeCom was also able to provide office space in the overseas markets for Managers to use while visiting those markets, assisting their negotiations with clients.
Competition (Domestic Market)

Domestic competition was noted by 12 (75%) firms and arose from two main sources: import competition and local firms. While many export industries and their incumbent firms had experienced major difficulties from import competition over the previous four years, as import deregulation came into force (Chetty and Hamilton, 1996), the study firms noted little impact from import competition, despite contrary perceptions. These results tend to contradict the findings of Katsikeas (1994) who noted that competition in the domestic market might be a threat to an export firm’s performance. As noted by one firm, import deregulation had forced many small and medium-sized firms out of business, providing increased business opportunities for remaining firms. Because of their strong domestic base, many firms had developed effective strategies to deal with local and import competition. Study firms with high export intensities tended not to be significantly affected by competitors in the New Zealand market, because of the relatively low volume of business concerned. These firms had also developed high levels of expertise in their foreign markets which made them effective competitors in New Zealand - the reverse of the assumptions in Porter’s (1990) diamond model of national competitiveness.

Study Managers perceived domestic market competition as a motivator, rather than a barrier to exporting, in accordance with findings of Leonidou (1995a). Also, as entrepreneurs, rather than conservative exporters (Yeoh and Jeong, 1995), the Managers generally perceived the risk of domestic and foreign market competition to be low. Firms’ responses to these two dimensions appeared to be influenced by their relative
positions of strength - an additional variable in the ‘success’ debate. It is not clear from the study, whether firms were successful because they were motivated by domestic market competition, and had a low risk perception of competition, or whether the firms' existing strength and success enabled them to adopt these perspectives.

4.2.4.2 Firm Strategy

The rationale and context for this factor is discussed earlier in this chapter. Firm Strategy was represented by four variables from the study firms: firm strategy decisions, growth strategy, importance of domestic market and competitive advantage (Table 4.4). All 16 (100%) firms had data relating to one or more of these variables, each of which is discussed below. Examples of the interview data are presented in Table 4.7.

Firm Strategy Decisions

Strategy development at the firm level was an important pre-determinant of export strategy noted by 5 (31%) study firms, confirming the assertions of Cavusgil and Zou (1994), Bijmolt and Zwart (1994) and Yeoh and Jeong (1995). Firm-level strategic decisions included the role of exporting in the overall firm’s current and future direction. For example, decisions about export intensity were articulated as a clear firm-level strategic objectives. In addition, there was some evidence that firms were planning for changes in firm structure as part of their overall and export strategy.

Competitive Advantage

Competitive advantage may lead to, or result from, the development of both firm level and export strategy. 12 (75%) firms commented on competitive advantage in relation to
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THIS THESIS HAS BEEN REPRODUCED EXACTLY AS RECEIVED
A Strategic View of Export Performance:

A New Zealand Perspective

Valerie Jean Lindsay

A thesis submitted in fulfilment of the requirements for the degree of
Doctor of Philosophy,
Marketing and Strategic Management Group,
University of Warwick, June, 1999
<table>
<thead>
<tr>
<th>Variables Associated with Factor / # (% of Cases Coded at Variable)</th>
<th># of Cases Coded at Variable</th>
<th>Examples of Data From Cases [case reference]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm Strategy Decisions</td>
<td>5 (31%)</td>
<td>The firm sees itself as a global company. [L #114]</td>
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<td>Very early on they decided to increase exports; they wanted to diversify the market, rather than the products. [D #15]</td>
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<td>Exports are 25-30% of sales; they have no desire to go beyond this; they prefer to keep the risks down. [P #24]</td>
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<td>Also looking at a change in ownership and options with suppliers. [O #117]</td>
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<tr>
<td>Growth Objectives</td>
<td>12 (75%)</td>
<td>They have an expansionary policy - a continual growth policy. [I #31]</td>
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<td>Growth will come totally from exports, though the NZ market is important. [I #85]</td>
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<td>He wants to grow in a planned way. [K #117]</td>
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<td>They expect to grow from both domestic and export business.</td>
</tr>
<tr>
<td>Competitive Advantage</td>
<td>12 (75%)</td>
<td>The key to success was and is personal contact - going to their factories (customers) and understanding fully their products and processes. [A #37]</td>
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<td>They use high tech equipment; not many companies have the equipment and this gives them a competitive advantage. [D #106]</td>
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<td></td>
<td>Their 3 years experience has given them a competitive advantage with (the product). [E #34]</td>
</tr>
<tr>
<td>Importance of Domestic Market</td>
<td>13 (81%)</td>
<td>The NZ market is a buffer for exports - it enables exports to happen [B #158,159]</td>
</tr>
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<td>They have been in the domestic market since 1977 and it is essential. The domestic market sales give them a cash flow advantage. [D #22,23]</td>
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<td></td>
<td>They started business in the domestic market and trialed and developed the products here for standards and applications; the NZ market is very sophisticated (about 20 years ahead of competitors). [F #10]</td>
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<tr>
<td></td>
<td></td>
<td>The domestic base is vital, strategically, not financially; it was not a springboard before, but it is now. [L #113]</td>
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</tbody>
</table>
export performance. Study firm managers who recognised their firm’s competitive advantage developed firm-level and export strategies that exploited the competitive advantage over the long-term (e.g. the recognition and use of technology as a competitive advantage). This result concurs with the findings of Katsikeas (1994) and Jaffe and Pasternack (1994), who showed that managerial perception of competitive advantage was one of three constructs relating to export intention and, thus, was an important strategic component of exporting.

The association of competitive advantage with the factor Firm Strategy is important for sustainability, rather than short-term competitiveness, in international markets (Katsikeas, 1994). In support of this, one manager in the study was more concerned with achieving a sustainable competitive position than on competing directly with rival firms. He accepted a small foreign market share in favour of a long-term presence, and this may be a point of differentiation of small from larger exporters. Typically, low market share in a foreign market/s represents a significant volume of business for a small firm, but some firm managers perceived that this level of business constituted only a minimal threat to larger international players, thus emphasising an advantage of being small. Two firms noted small firm size as a competitive advantage. This association of firm size with competitive advantage contrasts with findings of Katsikeas (1994) which showed that larger firms perceived a better competitive position than did smaller firms. Reasons for this were associated more with firm-related attributes, such as resource availability, and market strength, than ‘positional’ aspects noted by the small New Zealand firms.
Other advantages noted by the study firms related mostly to firm-level competencies, as shown by Katsikeas (1994). These included quality and reputation, personal contact, professionalism and reliability, central accounting, use of high-tech equipment, product and market experience, service, and innovation. These factors are discussed elsewhere in this chapter.

**Growth Objectives**

Strategy decisions involve objectives for a firm’s future direction. For exporting firms, export strategy is generally part of their growth objectives, since exporting contributes to firms’ overall growth portfolio (Aksoy & Kaynak, 1994). Most study firms had firm-level and closely aligned export growth objectives. These objectives described future expectations and potential, and were generally motivated by unfavourably perceived New Zealand conditions evident in recent years. Reid’s (1981) internationalisation classification suggests that these firms were in the early ‘export awareness’ stage of internationalisation i.e. exporting is recognised as a solution to problems in the domestic market or of new growth opportunities. While for many of the firms in the study this was an initial motivation for growth, most had moved on to the more experienced ‘export acceptance’ stage of Reid’s (1981) model; that is, where exporting was adopted as an important part of the firm’s business. Bonaccorsi (1992) suggests that small firms value initial domestic growth as a means of achieving a larger size before taking on the challenge of exporting. With the study firms, however, the very small size of the New Zealand market meant that they were motivated to export before they achieved much increase in size - in accordance with findings by Chetty and Hamilton (1996).

Furthermore, because of the unfavourable economic environment perceived by these
firms over the previous five years, many had not increased the number of their employees, with some having reduced them, thus, these firms appeared not to have grown, at least in terms of this size criterion. The Manager of one firm, involved in high-tech research, expressed a desire to limit overall growth, stating advantages in remaining a small focused company, similar to findings obtained by Caughey and Chetty (1994) in a study of New Zealand firms.

Export business had an important role in the firms’ overall business, as evidenced by generally high levels of export intensity. Of the 12 (75%) firms that noted the significance of a growth strategy, 8 (50%) had export intensities of over 60%. In contrast to findings reported by Ogbuehi and Longfellow (1994), there was little observed association between the presence of a growth strategy in the study firms and export experience (measured as years in exporting).

**Importance of the Domestic Market**

The domestic market was important for 13 (81%) case study firms. This is interesting, given the high export intensities noted in many of these firms, and the perceived unfavourable nature of the domestic market. Three of the firms had export intensities in the range 81-90%, and four had export intensities between 61% and 80%. For these firms the importance of the New Zealand market would be expected to diminish, as their export revenues increased.

Reasons for the importance of the New Zealand market included: its value as a leading edge, sophisticated test market for new products; its strategic importance as a springboard
to other markets; its provision of a cash flow advantage and higher profitability than that attained in export markets; and, most commonly, its role as a buffer to exports, should they decline or fail. This latter point indicated an awareness of exporting risk, but firms were not deterred from maintaining high export intensities. Managers of two firms with export intensities of >81% stated that the domestic market was no longer important, in contrast with their views in earlier stages of their export development.

10 (63%) firms, for which the domestic market was important, were also in a high market share (4 firms (31%), or market leadership positions (6 firms (46%) in the domestic market. This result suggests that, even though the New Zealand business was small relative to exports, the firms' domestic market position was important at the overall firm level, and acted as a buffer, should export business decline.

An argument for establishing a strong domestic market before exporting, put forward by Porter (1990) in his diamond model of national competitiveness, is its role in preparing firms for international business. This argument has been empirically supported in exporting studies (e.g. Bonaccorsi, 1992; Calof, 1994; Leonidou, 1995b; Chetty and Hamilton, 1996). For the study firms, the role of the domestic market as a precursor for exporting was indicated by the number of years they were in business before exporting. However, 4 (31%) firms undertook exporting before, or at the same time that, they entered the domestic market, and a further 3 (19%) farms exported within 2 years of commencing domestic business. That is, 7 (44%) of the firms which considered the domestic market to be important developed their export business very early in their
evolution. This puts a different slant on Porter’s (1990) assertions, and suggests similarities to born global firms (e.g. Knight and Cavusgil, 1996), or international new ventures (e.g. Oviatt and McDougall, 1994). In the total study sample, 8 firms (50%) qualified as ‘born global’ or as INVs, according to the criterion for years before exporting. Only one of these 8 firms did not consider the domestic market to be important. This firm (H) had an export intensity of 97%, having started business as an exporter and followed a strategy of export, rather than domestic, growth. This firm remained in New Zealand for reasons mainly personal to the owner, rather than strategic.

There is little written about the importance of the domestic market for born global firms or INVs. Typically, these types of firms do not consider the domestic market important in terms of revenue, although it may have strategic importance. For example, the domestic market may provide sophisticated demand (Porter, 1990) for technology, facilitating development and testing of competencies and new products, even though these may be targeted at export markets. This was evident in three of the four ‘born global’ firms in the study.

In conclusion, many firms in the study demonstrated an unusual combination of characteristics, seemingly not evident in the literature on the role of the domestic market. That is, they conformed to other findings on the importance of the domestic market, but a significant number of them had not built up domestic business before exporting. These same firms conformed to the characteristics of born global firms, but also demonstrated a reliance on the domestic market, which is unusual with this phenomenon.
4.2.4.3 Firm Competencies

The factor, Firm Competencies, as defined in the study, involves existing and future competencies of the firm, which are either firm-wide, or specific to the export function, or both. This is a more explicit definition of the competence factor than is generally available in existing export models, because it recognises the importance of firm-level strategies, and future, as well as existing, competencies.

The Firm Competencies factor comprised fourteen variables, and associated indicators, as shown in Table 4.4. The components of the Firm Competencies factor are discussed below and examples from the interview data are shown in Table 4.8.

Quality

16 (100%) firms noted the importance of product and service quality, as well as other aspects, such as quality systems and objectives. None suggested that quality was either immaterial or unimportant. This result concurs with the recognised strategic role of quality (Frost and Jones, 1994), and its influence on export performance (Cavusgil and Nevin, 1981; Burton and Schlegelmilch, 1987; Madsen, 1989). Study firms indicated that because product quality was an absolute requirement in foreign markets and was no longer a competitive advantage, at least on its own, quality of service had become a key differentiator against competition.
### Table 4.8
Firm Competencies Factor
Content-Analytic Matrix (Cross-Case)

<table>
<thead>
<tr>
<th>Variables Associated with Factor / # (%) of Cases Coded at Variable</th>
<th># (%) of Cases Coded Variable</th>
<th>Examples of Data From Cases [case reference]</th>
</tr>
</thead>
</table>
| Quality                                                       | 16 (100%)                    | *Important*
|                                                               |                              | Quality is a key success factor. [A #65] |
|                                                               |                              | Quality is very important; it permeates the whole organisation. [E #91] |
|                                                               |                              | Quality is key, paramount. They need a reliable product because it has got to work; they are too far for the markets to go and repair the products. [F #104-105] |
|                                                               | 16 (100%)                    | *Status: Good* |
|                                                               |                              | They have very good QC, across the board. QC is an individual responsibility. [A #66-67] |
|                                                               |                              | SB is number one in the world with product quality. They have a 2 year window on competition (increasing) in Europe. [M #41-42] |
|                                                               | 4 (25%)                      | *Systems* |
|                                                               |                              | QC is formal - at each stage of production. All procedures and manuals are available. Their policy is to get it right first time. [G #147-149] |
|                                                               |                              | They have instigated a quality circles programme in NZ and they still use after 7 years. Quality pervades the whole organisation. [P #92-93] |
| R&D/Technology                                                | 16 (100%)                    | *Important* |
|                                                               |                              | The % of sales spent on R&D is high. R&D is a very important part of the business. [G #89-90] |
|                                                               |                              | They have a major emphasis on R&D and product development. [L #86] |
|                                                               |                              | The difference between (the firm) and other companies is their substantial R&D; they want to be innovative. [N #17] |
|                                                               | 8 (50%)                      | *Unique Technology* |
|                                                               |                              | New products are essential and must be frequent. R&D is therefore very important. [P #48-49] |
|                                                               |                              | Their technology was first developed in NZ and they realised that they had a unique advantage and so pursued export markets. [F #16] |
|                                                               |                              | They have often invented the machines for doing the process work. They have never bought their technology - always developed it themselves. [A #22, 110] |
|                                                               |                              | They have a unique processing system, using the highest technology - the only one in the world; it was developed by (the firm) - the processing systems are usually low-tech. [L #87] |
|                                                               |                              | NZ is leading the world in this technology, because of the need to experiment with primary products and with a wide
<table>
<thead>
<tr>
<th>Intellectual Property and Patents</th>
<th>Use of Patents</th>
<th>The patent life is expiring, but they will continue with the standard product (90% of the business) and new products will take over. [C #43]</th>
<th>4 (25%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>The first (product) was made here in 1983 and they patented it. [K #24]</td>
<td>7 (44%)</td>
</tr>
<tr>
<td></td>
<td>Problems with Patents</td>
<td>Patents are not very effective and they are too expensive to defend. [P #53]</td>
<td>5 (31%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>There are 40 copiers of the product world-wide, even though it is patent protected. [O #11]</td>
<td></td>
</tr>
<tr>
<td>Relationships / Personal Contact with Buyers</td>
<td>Important</td>
<td>The key to success was and is personal contact - going to their factories (customers) and understanding fully their products and processes. [A #37]</td>
<td>16 (100%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>There is no substitute for personal contact. [B #23]</td>
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<td></td>
<td></td>
<td>Personal contact is very important - both ways. Contact needs to be at the top level as well as the export manager. [G #66-67]</td>
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<tr>
<td></td>
<td>Customer Visits to NZ</td>
<td>Personal contact is critical to develop trust. [H #1]</td>
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<tr>
<td></td>
<td></td>
<td>The customers come here often and they are very good friends with (the MD); the clients are really interested in NZ. [A #41]</td>
<td></td>
</tr>
<tr>
<td>Export Marketing</td>
<td>Marketing Orientation</td>
<td>For R&amp;D inquires, it is better to bring the client here, rather than send R&amp;D people there, especially with established client. [F #35]</td>
<td>16 (100%)</td>
</tr>
<tr>
<td></td>
<td>Unique Product</td>
<td>Their philosophy is to be market-driven - definitely. Their marketing philosophy stabilises their operations. There is a close association between departments especially marketing and R&amp;D / technology. They started off with a clear product orientation, but then developed a very dominant marketing orientation. [L #14,51,106-107]</td>
<td>6 (38%)</td>
</tr>
<tr>
<td>Category</td>
<td>Proportion</td>
<td>Description</td>
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<td>----------------------</td>
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<tr>
<td><strong>16</strong> (100%)</td>
<td>(38%)</td>
<td>Buying barriers are low because it is a unique product - world wide uniqueness. [N #52] The product is very competitive; it has unique features and is noted for its simplicity. The product was developed about 8 years ago and was a first for NZ. [M #9-10]</td>
<td></td>
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<tr>
<td><strong>6</strong> (38%)</td>
<td></td>
<td><strong>Product and Packaging Adaptation</strong> Some flexibility is needed in the product for some export markets e.g. the have 15 different models because of different regulations etc - this is very difficult. [F #78] Products are standard across all the export markets, but they can be flexible if it pays. [B #57] Packaging and presentation of product is very, very important - it is key. They have researched the presentation of (the product). They have about 50 different packs, with different languages etc.</td>
<td></td>
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<tr>
<td><strong>16</strong> (100%)</td>
<td></td>
<td><strong>Product Positioning: Niche and Top-End</strong> They target the product up-market and emphasise through restaurants, chains etc., rather than retail; the restaurants introduce the products to the consumer. [B #40] The target a niche market (18-35 year old females). They are high quality, up market and are selective about who can sell their products. [D #146-147]</td>
<td></td>
</tr>
<tr>
<td><strong>3</strong> (19%)</td>
<td></td>
<td><strong>Branding</strong> The brand is used for catering and retail. They do other labels and blank if required. Branding has paid off in the US and NZ, but unsure about Japan yet, as they have had only recent growth. They can build on their brand with product diversification. They have had orders for new products on the basis of brand acceptance. [B #78-80; 88-89] They are a purveyor of branded products. Their own branding id important throughout the process stages. Branding for export markets is helpful now, but was not initially. Brand image must be there. [L #15-16; 21; 34; 119]</td>
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**Promotion**

<table>
<thead>
<tr>
<th>Category</th>
<th>Proportion</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>13</strong> (81%)</td>
<td></td>
<td><strong>Important</strong> They provide some marketing input for their licensees e.g. they do some market research, but a lot of contact with the markets is done by the licensees. They also provide promotional videos and brochures. [C #102-103] Advertising and promotion are all done from NZ.</td>
</tr>
<tr>
<td><strong>10</strong> (63%)</td>
<td></td>
<td><strong>Use of Trade Fair</strong> Very, very important. Not in the game if they do not go to these. [I #79-80] They also go to trade shows - this is very important; there are approx. 20-25 trade shows a year, mostly in food. [P #61]</td>
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</table>

**Pricing**

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<th>Category</th>
<th>Proportion</th>
<th>Description</th>
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<td><strong>9</strong> (56%)</td>
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<td><strong>Important, But Not Key</strong> Price is important, but is not driving competition. [I #44] Price is important, but is not a determining factor; quality and style are most important. [D #77] In marketing, they have to convince the consumers (catering especially) of the value of the product e.g. no wastage, all the work done etc). The premium price is forced rather than deliberate - they can capitalise on the price premium. [B #90-91]</td>
</tr>
<tr>
<td><strong>3</strong> (19%)</td>
<td></td>
<td><strong>Not Important</strong> High transportation costs are not a major disadvantage because they have unique product outcomes and price is not important. [L #68]</td>
</tr>
<tr>
<td><strong>12</strong> (75%)</td>
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<tr>
<td>Distribution</td>
<td></td>
<td>Price sensitivity is not an issue. The product is expensive, but they need it. [N #102-103]</td>
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<tr>
<td>Requirements</td>
<td>The need to find a person in the market who knows the market and is committed; it is difficult to find people, however. [B #136]</td>
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<td></td>
<td>It is important to have local people in local markets; they have the experience knowledge and high acceptance in the market, as well as the language (even in the US). [D #171]</td>
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<tr>
<td>Use Agents and Distributors</td>
<td>In Japan, they use the traditional distribution system (brokers etc). They have agents / brokers in most countries; they are not employees, but they work very closely with (the firm). [L #63-64]</td>
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<td></td>
<td>The most successful distributors are small and specialised; most of them become sole agents, selling only (the firm's) products. [F #44]</td>
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<tr>
<td>Problems</td>
<td>The first two years of export were trial and error, but he did not always have the best agents and brokers; it was better when he went himself. [B #21]</td>
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<td></td>
<td>Selected agents themselves in Australia and US. Had some bad experiences in US; trial and error. [J #47-48]</td>
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<tr>
<td>Relations</td>
<td>Their world-wide distribution system creates a strong family atmosphere and they provide strong marketing support to the distributors. [F #47]</td>
<td></td>
</tr>
<tr>
<td>Service</td>
<td>Important</td>
<td>Their major competitive advantage is service, communication and looking after people. [H #67]</td>
</tr>
<tr>
<td></td>
<td>Service is very important. They work closely with customers. Customers come here and product technology people go into the field. [P #158-160]</td>
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<td></td>
<td>Servicing is very important (including training to use); agents need to be trained also. [N #67]</td>
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<tr>
<td>Reputation</td>
<td>Important</td>
<td>They have a good reputation for reliability. [C #114]</td>
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<td>They do not make (these products) as this would be damaging to their reputation; (these products) have traditionally very poor quality. [G #61]</td>
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<td></td>
<td>The emphasis now is on PR to enhance their reputation. [K #112]</td>
<td></td>
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<tr>
<td>Market Research</td>
<td>Important</td>
<td>Market research is mostly done by (the firm's) people in the export markets; market intelligence is very important. [G #144]</td>
</tr>
<tr>
<td></td>
<td>For market research, they get feedback from their distributors. They have their own people based in their companies in overseas markets. [H #154-155]</td>
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<tr>
<td></td>
<td>Market research is critical and good. [I #96]</td>
<td></td>
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<tr>
<td>Links with Industry Bodies</td>
<td>Export Institute Member</td>
<td>The contact with people through the Export Institute is very important, but there is not much direct help. [A #119]</td>
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<td></td>
<td>They are involved in the Export Institute. They are teachers rather than learners. [G #103-104]</td>
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<tr>
<td>11 (63%)</td>
<td>5 (31%)</td>
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<tr>
<td><strong>Industry Associations</strong>&lt;br&gt;They are members of the Export Institute and they find it useful - the training they offer is very useful. [E #57]&lt;br&gt;<strong>Do Not Practice, But Good Idea</strong>&lt;br&gt;The Tanners Association is helpful - they arrange NZ's participation at international trade fairs etc. [G #110]</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Interfirm Cooperation</strong>&lt;br&gt;12 (75%)</td>
<td>3 (19%)&lt;br&gt;<strong>Practising</strong>&lt;br&gt;They are now very successful with (the two firms) marketing together. Many new product opportunities have been taken up, designed by (Firm A). They have done exclusive development with (the other - Australian - firm); it is a two-way exclusive arrangement; they have very high quality standards. [A #16-17]&lt;br&gt;Cooperation within the industry: they exchange advice on markets etc - a small group, fairly close; they also exchange information, especially credit-checking information (on customers). [D #124]</td>
<td></td>
</tr>
<tr>
<td>3 (19%)&lt;br&gt;<strong>Do Not Practice, But Good Idea</strong>&lt;br&gt;A sector basis for (the firm) has not worked because individuals have not seen market development as their primary function - more individual developments. But, properly controlled with orderly, central, non-partial (e.g. TDB) arrangements, it would be good. [G #108-109]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 (25%)&lt;br&gt;<strong>Not a Good Idea</strong>&lt;br&gt;Sector groups are not viable and they don't work. Companies are too competitive and there are too many diverse methods used by NZ companies. [F #60-61]</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Productivity</strong></td>
<td>7 (44%)&lt;br&gt;<strong>Significant Improvement</strong>&lt;br&gt;Production efficiency has increased significantly (approx. 100% per employee); this has helped delay the need to expand and has therefore reduced the investment needs. [B #172]&lt;br&gt;Productivity has increased 3x with product volume. Productivity has increased and this has been exclusively due to improved manufacturing process technology. [H #117,172]</td>
<td></td>
</tr>
<tr>
<td>14 (88%)&lt;br&gt;<strong>Some Improvement</strong>&lt;br&gt;Productivity is good and increasing. Their production methods and designs are sophisticated. [M #77-78]</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Financial Control</strong></td>
<td>Various&lt;br&gt;<strong>No Improvement</strong>&lt;br&gt;Production is very inefficient because they are a small company, but it is OK. [N #153]</td>
<td></td>
</tr>
<tr>
<td>10 (63%)</td>
<td>Lead times: there is 3 months between order and sale. They do not hold inventory now - it is too expensive. [F #76-77]&lt;br&gt;They need to have an inventory to provide reliability of supply. [G #54]&lt;br&gt;He (the MD) spends a lot of time on the computer system; materials management (CBA) is the most critical thing; it also gives very good control over cash flow. [K #106]</td>
<td></td>
</tr>
<tr>
<td>Export Experience</td>
<td>8 (50%)</td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>16 (100%)</td>
<td></td>
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</table>

**Managerial Export Experience**

Export experience is very helpful; The MD has lived in the US and UK (for 3 years each); the US uses a very different language to NZ. [H # 151]

He has experienced all sorts of knocks and hung in; this has given him confidence. [A #56]

Export experience is helpful; it gets easier, but each market still has its own characteristics. [G #145]
Firms perceived that demands for quality were stronger in export markets than in the domestic market, and that they were vulnerable if they did not meet export market quality standards. In this context, quality could be viewed as a means of overcoming barriers to export success, in accordance with findings in an Australian study by Frost and Jones (1994). The firms acknowledged that quality was a continually developing competence, and many had achieved high quality standards in the domestic market before exporting, concurring with Chetty and Hamilton's (1996) finding that quality was a necessary competence for initiating New Zealand exporters. However, other firms without a domestic history, still achieved high quality standards at the time of exporting. Frost and Jones (1994) associated quality standards determination with high levels of export motivation, and this may have applied to these other (born global) firms.

Quality was generally considered to be a firm-wide competence, not just relating to product. Formality of quality systems was also discussed, with 4 (25%) firms having formal quality control or quality assurance systems, and 3 (19%) having informal systems. Awareness of Total Quality Management systems was still developing in New Zealand at the time of the Stage 1 study, and ISO systems were not widely available.

All 16 (100%) firms perceived quality in their organisations to be good, but most acknowledged that it could be improved and had continuous improvement policies to enable this. Apart from gaining and retaining export business, another impact of high quality noted by one firm was increased production efficiency - an important consideration with the pressures from economic restructuring in New Zealand.
Service quality is discussed in more detail within the Marketing factor.

**R&D / Technology**

The role of R&D and technology in export behaviour and performance has been well documented (e.g. Sriram, Neelankavil and Moore, 1989; Cavusgil and Nevin, 1981). 16 (100%) study firms had data coded for R&D and technology, with all of them claiming their importance in export performance. There were two key drivers for R&D and technology. Firstly, firms needed to produce unique, or world class products to be competitive in overseas markets, and this needed to be ongoing. This agrees with the results of Chetty and Hamilton (1986), who suggested that New Zealand firms became technologically advanced in order to export. Secondly, the need to design and make their own process technology, or adapt existing technology, was noted in 8 (50%) firms. This enabled them to manufacture unique, or superior, products, when the technology did not exist, or when it was too expensive. Having a technological superiority enabled these firms to compete more effectively in niche markets, as Moini (1995) also found.

Thus, many firms had unique product/s and/or unique technology, resulting from a focus and commitment to R&D, and technological development. This high involvement may be a reason why technology was associated with export performance in these firms, supporting Reid's (1986) assertions that technology per se is not sufficient as a competitive advantage, and that other factors, such as appropriateness and management of technology are important.
All but two of the firms were involved in moderately high-tech businesses, and many were technology leaders. Some were probably motivated by their technology to export, as noted by Reid (1986). Included in this group were those firms that showed similarities to 'born global' firms (discussed elsewhere); technology and/or product uniqueness are also characteristics of these types of firms (Knight and Cavusgil, 1996).

Where R&D expenditure figures were available, they ranged from 3-10% of sales. 6 (38%) firms had dedicated R&D departments or staff, while the others incorporated R&D into their activities less formally - for example, within the production department, or in conjunction with marketing. One firm employed a 'skunk works' philosophy, and two firms did R&D in co-operation with specialised research institutes.

7 (44%) firms indicated that product design was an important influence on export performance. Product design often resulted in unique or differentiated product features and these enabled firms to achieve price advantages in their markets (as noted by Crick and Katsikeas (1995). In addition, product design often facilitated production efficiencies. These results tend to confirm the view that design is an important factor contributing to a firm’s efficient and successful exporting (Cunningham and Spigel, 1971; Joynt, 1982).

**Intellectual Property and Patents**

The association between the possession of patents and export success has been noted (Moini, 1995), especially for small and medium-sized firms (Joynt, 1982). Results from the study tend not to support these views. Comments concerning intellectual property
and patents were noted in 7 (44%) firms. A motivator for procuring patent protection was the perception that the product or technology would be copied. Only 4 (25%) firms carried patent protection, although they still took other measures to avoid copying, such as choosing favourable markets and striving for continuous leadership in technology and product development.

**Relationships / Personal Contact with Buyers**

The literature cites many benefits of relationships between exporting firms and their foreign markets and of personal contact between firm managers and their buyers (e.g. Bello and Williamson, 1985; Cavusgil and Naor, 1987; Caughey and Chetty, 1994). Results supporting these findings are discussed. All 16 (100%) study firms supported the role of relationships and personal contact with players in their foreign markets, claiming the critical importance of these variables in their export success. The main benefits were: understanding their customers’ products and processes and, therefore, their requirements; ensuring access to information, particularly market intelligence; enabling quality service, especially through post-sale visits; building trust, friendship and loyalty; provision of in-market product training; overcoming customers’ perceived difficulties relating to New Zealand’s distance and reliability of supply; and better assessment of their agents’ and distributors’ performance.

Two factors were important in developing relationships and personal contacts: firstly, an adequate number of visits, and secondly, the involvement of the Managing Director in the relationship-building processes. All the firms had personnel visiting their overseas customers. 7 (44%) firms reported 2-4 visits a year; 2 (13%) reported 5-7 visits a year,
and 1 (6%) reported more than ten visits a year to their major markets. The remaining six firms did not indicate the number of visits, other than that they were 'frequent'. The frequency of visits was apparently thought by many buyers to be greater than that of geographically closer competitors, and this factor earned the New Zealand firms the respect of their customers.

Managers of the firms believed that it was important for the Managing Director (MD) / CEO to visit customers frequently, and this was carried out in all cases. The status of the New Zealand contact was thought to indicate a level of commitment and professionalism that assisted in building the relationship. Coupled with the frequency of visits to the markets, these demands on the MD’s time and energy were often quite extreme.

The nature of relationships between exporting firms and foreign market buyers has been studied elsewhere (e.g. Bello and Williamson, 1985). Friendship was a frequently reported outcome of relationships with customers in foreign markets in the study. The firms often hosted customer visits to New Zealand, with customers combining business matters, such as training or factory visits, with a short vacation. 9 (56%) firms reported that customers came to New Zealand to visit the managers at their firms’ premises. All aspects of these results support the emerging relational literature associated with exporting (e.g. Johanson and Mattsson, 1988); Styles and Ambler, 1994).

**Export Marketing**

Export marketing has been shown to play a critical role in the competitiveness of firms in export markets (Cavusgil and Zou, 1994; Aaby and Slater, 1994). By implication,
competencies and techniques in export marketing are necessary components of an export firm's performance (Moini, 1995).

Not surprisingly, all 16 (100%) firms had data coded for marketing. A number of indicators were derived from sub-codes created in the first-level coding and pattern-coding processes. They were marketing orientation, product (including positioning, branding, and packaging), promotion, distribution, pricing, and service. Each of these indicators is discussed in turn.

**Marketing Orientation**

6 (38%) firms commented directly on their marketing orientation, emphasising marketing activities and innovation, and a close relationship between the marketing and R&D functions. Keegan (1989) supports a similar notion of a strategic marketing orientation in international business.

**Product**

All 16 (100%) firms had data relating to their product/s and product-related competencies. Many of the firms’ present owners had developed the firm’s original core product as owner-originator managers. These core products still formed the main export business, with ongoing innovation and new (related) product development.

Product advantages (McGuiness and Little, 1981) and product superiority (Katsikeas, 1994) have been shown to be positively associated with export performance. The following discussion highlights key product-related competencies and characteristics that were associated with export sales performance in the study.
Product uniqueness was reported to be associated with export performance by 6 (38%) firms, confirming findings of Cavusgil and Nevin (1981) and Burton and Schlegelmilch (1987). Firms with unique products used both standard and proprietary technology and production processes, and generally gained competitive advantage and price premiums in their markets.

Product adaptation requirements depend on whether the product needs to meet standard, or specialised needs of the market (Cavusgil, Zou and Naidu, 1993). Only 3 (19%) firms commented on the need for, or desirability of, product adaptation, for reasons such as different regulation requirements (noted also by Frost and Jones, 1994), and different customer tastes (in accordance with Levitt, 1983). The small number of firms adapting products may be explained by their limited resources (Katsikeas, 1994), or by the fact that their technology base made them less susceptible to changeable needs such as tastes, habits and customs, as noted by Levitt (1983).

The 4 (25%) firms for which packaging was important adapted packaging and presentation to the needs of their customers. This enhanced the products’ quality image and gave the firms a differential advantage over competitors.

Product positioning for all 16 (100%) study firms’ was in niche, or specialised markets, or at the top, high price end of their markets. This was motivated firstly by a desire to avoid head-on competition with major international players, and secondly by the presence
of superior attributes like quality and technology. The firms also tended to target markets offering the appropriate niche, ahead of markets that were psychically close, as noted also by Bell (1995) with high-tech firms. Operation in niche markets is also characteristic of born global firms (Rennie, 1993), and firms with a technological edge (Moini, 1995), both notable amongst the study firms. 3 (19%) firms operated in non-specialised, broad markets, but differentiated their products to a high price segment through quality and design.

Product branding is generally more important for consumer, than for industrial, products (Kotler, 1984). Branding is related to promotion strategies (Cavusgil and Zou, 1994) and to country image (see later discussions). Even though many of the study firms produced industrial products, they generally used their brand names in export markets; however, only 3 (19%) commented on the importance of branding. Two of these found the New Zealand image to be helpful, and promoted this aspect with their brand. Johanson and Mattsson (1988) suggest that investment in brand names is an important element of internationalisation, and this concept was supported by one firm which stated that brand name had become more important with export experience.

Promotion

Promotion is an important component of the export marketing mix, and its effectiveness is determined by requirements for adaptation and use of the most appropriate promotion method. Some authors have noted a positive relationship between promotion adaptation and export success (e.g. Kirpalani and MacIntosh, 1980), although Cavusgil and Zou (1994) noted an inverse relationship. While 13 (81%) firms commented on promotion in
relation to export performance, none of them undertook any significant promotion adaptation, other than language changes with promotional material. As noted earlier, many study firms were unable to optimise market information in areas such as promotion needs, and relied heavily on distributors for advice on, and usually execution of, promotional campaigns. This was generally thought to limit the effectiveness of promotions because the distributors were perceived to be less than fully committed to the exporters’ firms.

A popular mechanism for promotion was trade fairs. Given that the firms had high export intensities, this supports the finding of Karafakioglu (1986) that heavy exporters were more active than lighter exporters in participating in trade fairs and exhibitions. 4 (25%) firms considered trade fairs to be important, and used them regularly. An additional 6 (38%) firms used trade fairs sometimes. Trade fairs served two main purposes: they facilitated promotion, and they were a source of market and competitor information. 3 (19%) firms claimed not to have used trade fairs, one because they were considered inappropriate, another preferring to use its own resources, and one planning to attend their first major trade fair in the near future.

The other main method of promotion was personal selling, noted as important by Crick and Katsikeas (1995). Personal selling was closely related to relationship development and personal contact in export markets; the closer the relationship, the more perceived effectiveness of the selling. Trade fairs were also a vehicle for personal selling and relationship-building.
Pricing

Pricing has been related both positively (e.g. Koh, 1991) and negatively (Madsen, 1989) to export performance. Price was relevant to export performance for 12 (75%) study firms. 9 (56%) suggested that it was important, and 3 (19%) remained neutral. This result tends to support the positive relationship noted by Koh (1991). Some firms, however, indicated that price and price sensitivity differed in different markets, so the importance of price was more product-market related than generic, conforming to Cavusgil and Zou’s (1994) assertion that export strategies and activities are product-market specific.

Katsikeas (1994) has shown that export pricing is the most highly rated dimension of competitive advantage, but this is only partly supported by the study firms. In no case was price alone seen as a competitive advantage. Rather, it needed other advantages to be present, such as quality, product/technology uniqueness or differentiation, and service.

Few firms were able to engage in price competition because of high and/or volatile exchange rates (see earlier), and, sometimes, high transportation costs (both noted also by Sullivan and Bauerschmidt (1989)). Firms priced their products at a level the market could bear, aiming for a price premium, and focusing on value, rather than price. These results indicate that firms were interested more on survival and maintenance of success, than short-term financial benefit, a point considered important by Katsikeas (1994). This perspective, however, differs from that of Cavusgil and Zou (1994) who suggest that firms in high-tech industries (like many of the study firms) are more likely to engage in
competitive pricing in order to maximise the short window of opportunity associated with their products. 3 (19%) firms stated that price was not important in export performance, because their markets were not price-sensitive for the products concerned.

As noted earlier, pricing tended to be in currencies determined by the export market, rather than in New Zealand dollars, thus limiting the firms' abilities to effectively control their pricing strategies and margins. Of the 10 (63%) study firms that provided data on margins, 3 (19%) claimed that export margins were higher than domestic; 5 (31%) that export and domestic margins were the same, and 2 (13%) that export margins were lower than domestic margins. It is difficult to reconcile this result with the export literature, because of the inconsistencies in profitability measures used and the variety of ways in which firms calculate their own margins.

**Distribution**

The assertion by Rameseshan and Patton (1994) that distribution constitutes one of the most vital aspects in international marketing was supported by the study firms, with all 16 (100%) commenting on the relevance of distribution to export performance. Key issues were having people in foreign markets with good market knowledge, commitment, and language capability, as well as being financially stable and trustworthy.

Selection of appropriate distribution systems and people is thus a major issue (Bilkey and Tesar, 1977). 15 (94%) firms used foreign market based agents and distributors, supporting Rosson's (1984) assertion that indirect channels are the most common method of distribution. Several firms had different strategies for different markets, and 6 (38%)
of the 15 firms also distributed directly to customers, as did the remaining firm not using agents and distributors. Distribution via a joint-venture arrangement, and licensed overseas manufacture were also represented.

Distributor selection was problematic for some firms. Resources (time and money) and skills were often not sufficient to enable firms to conduct formal, systematic searches, a situation common with SME exporters as noted by Liang (1995). Firms sometimes used TradeCom to select agents or distributors (or licensees), but more often conducted the search and made the selection themselves. The firms provided support to distributors, such as marketing, and visits to customers, as described before. Criteria used for agent/distributor selection included: carrying quality products in similar industries, implying that the distributor had proven him/herself already; good reputation, especially financial; face-to-face commitment; industry knowledge; experience; and willingness to undergo training. Distributor selection decisions were made by the Managers of the study firms, based on their perceptions of how the distributors matched up to these largely subjective criteria. 7 (44%) firms reported problems with distributors, mostly arising from poor selection. Problems included agents and distributors being difficult to work with; poor selling and marketing performance; financial insecurity, leading to bankruptcy; lack of contact and follow-up with customers, and take-over by another distributor. Two firms negotiated exclusive selling rights for their products, believing that this was a good motivator for the distributors. Distributor training was important for two firms whose products were high-tech.
Firms operating their own distribution process to end-users generally chose this strategy when suitable agents and distributors were not available, or where the product needed expert advice in its use. The types of structures that these firms used for this varied from direct selling to operating through their own subsidiaries.

Personal relationships between the Managers and agents and distributors were considered to be important in gaining distributor loyalty and maintenance of the arrangement, as well as in enabling effective control measures, which Sachdev, Bello and Pilling (1994) also noted. One of the more important control mechanisms is information, and the firms were acutely aware of the role of the distributor in the provision and use of information, and the importance of personal contact in this regard. 5 (31%) firms commented specifically on relationships with agents and distributors. None of the firms utilised network opportunities arising from their relationship with their distributors, a point noted by Lindsay and Arthur (1998) to be important in the competitive performance of the exporter-distributor unit.

**Service**

8 (50%) firms commented on the importance of service in export performance, while others had discussed service quality in the context of overall quality. Service was thought to be a contributor to growth, and a competitive advantage. 5 (31%) of the 8 firms stated that their service was good, while the other three indicated that their service was acceptable, but could be improved. One firm noted that agents needed to be trained in the service elements of the business. Service included delivery service and reliability, product service and training, information provision, and after-sales service, similar to the
findings of Bell (1995) in a study of software firms. The results differ, however, from the
suggestion by Cavusgil (1980), that customer service and communication are more
important in the early stages of internationalisation, since the 8 firms concerned were not
all early exporters.

Reputation

6 (38%) firms had data relating to firm reputation, with 3 (19%) of them noting its
importance in export performance. One Manager perceived that his firm’s reputation was
less important than that of his agents, because the firm was small by international
standards. Some firms had gained an international reputation in the domestic market and
this assisted in their acceptance overseas. Quality and personal contact/relationships
were instrumental in building the firms’ reputations. These results are consistent with the
findings of others (e.g. Kirpalani and MacIntosh, 1980; Burton and Schlegelmilch, 1987)
that company reputation is an important antecedent of export success.

Market Research

The importance of market research for international business is widely recognised (e.g.
Cavusgil, 1984; Diamantopoulos et al, 1990; Souchon and Diamantopoulos, 1996,
1997)). In the study, 12 (75%) firms commented on the importance of market research in
relation to export performance. It is difficult to relate the findings of the study to those of
Diamantopoulos et al (1989), who found that 50% of exporters achieved the same
proportion of sales and profitability from their export activities without using any export
market research information, compared with firms which did. Profitability and sales data
were not available for the study firms, but they all represented a successful exporting
group. However, their market research activities varied from formal to informal and specific research to general market intelligence, making it difficult to draw parallels with other studies.

Most study firms undertook market research themselves, as found by others (e.g. Johanson and Vahlne, 1977; Cavusgil, 1984). They perceived that their needs were specialised and that only they could understand the subtleties of the market and product offering. The two more experienced firms in the study used formal market research methods, supporting Cavusgil's (1984a) view that more experienced exporters use sophisticated and formal market research methods.

Most firms used their distributors and personal visits to gain ongoing market and competitor information, in agreement with Hart et al (1994), and some used trade fairs for this purpose. These firms relied, therefore, more on primary, than secondary sources of information, in accordance with findings by Crick and Katsikeas (1995). There was a common view, however, that personal visits to markets and information gathering was compromised by resource constraints, the latter noted as a characteristic of SMEs by Liang (1995). Firms also appeared not to distinguish between perceptions of market intelligence and market research (noted also by Souchon and Diamantopoulos, 1996, 1997), although the two firms conducting formal research used it appropriately for specified projects. Market research and intelligence gathering activities also contributed to new market options and monitoring of firms’ activities in existing markets. These results suggest that the scope of market research and intelligence-gathering was quite
wide, agreeing with the assertions of others (e.g. Hart et al, 1994; Souchon and Diamantopoulos, 1996, 1997).

**Links With Industry Bodies**

Industry linkages were of two main types: industry associations and an export association, called the Export Institute. 11 (69%) firms commented on this variable, with 9 (56%) belonging to the Export Institute, and 5 (31%) to their relevant industry association. Firms generally acknowledged the export assistance potential of these organisations, but views on their effectiveness were mixed.

Members of the Export Institute were divided about its value. 4 (25%) found it was helpful, 3 (19%) found no benefit, and 2 (13%) were unsure. Noted benefits included: contact with other exporters, access to information, and education. Criticisms were mainly centred on the views that the offerings were inappropriate, and two firms suggested that they contributed more in terms of knowledge and experience than they received.

**Interfirm Co-operation**

Interfirm co-operation and networking have become increasingly important in international business, particularly for small and medium-sized firms (Rosenfeld, 1996). Government-supported business network programmes have been established around the world to support this concept, with New Zealand being a recent participant in the concept (Lindsay et al, 1998). While networking had not been promoted by government at the time of Stage 1, 12 (75%) study firms were aware of, and 4 (19%) were participating in
co-operative arrangements. Types of co-operation included: sharing advice on overseas markets, sharing information on credit-worthiness of customers, and combining product developments. Three firms co-operated with overseas organisations in product development, and their experiences had been successful. 3 (19%) other firms had attempted to form co-operative sector groups, but had experienced disinterest from the other firms. 4 (25%) firms considered interfirm co-operation to be not viable for the following reasons: firms were too competitive; firms used diverse approaches to export business; firms were individualistic; and firms were too specialised in their markets.

Productivity

Productivity is an important component of business success, and, thus, success in overseas markets. Morbey and Reithner (1990) showed, for example, that increased R&D and technology did not contribute to export success unless they were accompanied by productivity improvements. With economic deregulation in New Zealand, improved productivity had become essential for the survival of most firms (Birks and Chatterjee, 1997, pp. 104-107). In the context of this environment 14 (88%) study firms discussed the role of productivity in export performance. 7 (44%) firms noted significant improvements in productivity over the previous five years. These improvements resulted mainly from: improved quality, different styles of management, improved manufacturing process technology, and reductions in employee numbers. A further 5 (31%) firms reported some improvements in productivity, with most still attempting to improve. Employee productivity is often represented as the trend in employee numbers relative to turnover, or some other measure of performance. The study firms had all shown export
sales growth over a recent five years period, and the employee trends over the same
period were as follows: 5 (31%) firms recorded employee reductions, one significant; 5
(31%) firms had no change in employee numbers; and 6 (38%) recorded a slight increase
in employee numbers. It follows that the 10 (63%) firms with static or declining
employee numbers of employees had demonstrated an increase in employee productivity,
although this was only explicitly stated in 3 (19%) firms. The six firms which recorded
slight increases in employee numbers may, or may not, have had increased productivity,
depending on their relative increases in sales turnover. Data to determine this were not
available.

Only 1 (6%) firm indicated no improvement in productivity, noting that their processes
were inefficient because they were a small firm. Accepted wisdom on productivity,
however, would suggest that small size should not be a direct cause of production
inefficiency, but, more likely, the opposite.

**Financial Control**

Financial control mechanisms and management are essential to business, particularly
international business (Hill, 1989), because such business involves numerous financial
risks. For example, export business involves translation exposure due to exchange rates;
creditor and debtor arrangements are usually over longer periods, affecting working
capital; and inventories have to be sufficient to ensure reliable supply. 10 (63%) study
firms commented on financial management in relation to at least one of these areas. The
most discussed aspects were foreign exchange management issues (see earlier), and
inventory management, and these tended to pose difficulties for the firms.
Export Experience

Export experience is interpreted variously in the literature. Mostly, it refers to the number of years that a firm has been exporting (Ogbuehi and Longfellow, 1994). Erramilli (1991) however, suggests that export scope is also an indicator of export experience, as the more markets exported to, the more experience a firm gains. An additional aspect of expert experience, not well discussed in the literature, is the role of managerial export experience. This is often assumed to equate to export experience of the firm. However, a firm may have a significant history in exporting, but its management may lack export experience. Alternatively, a firm may be new to exporting, but management may be experienced. Export performance from these two scenarios is unlikely to be comparable. Management export experience (and perceptions of experience) has been included as an export experience variable in the study, and is discussed separately.

The number of years that the study firms had exported ranged from 1 year to 63 years, with the median being 10 years (Table 4.2). By comparison with international standards, this median value would be considered low, representing relative inexperience. However, because all the firms were ‘high performers’, it was difficult to relate the years of exporting to export performance. This issue is investigated more fully in the Firm Characteristics factor, and is examined further in Stage 2 of the study. It is therefore difficult to determine whether or not there is any conformity with findings that firms with greater export experience achieve a better export performance (e.g. Aaby and Slater, 1989; Cavusgil and Zou, 1994).
The number of markets to which firms exported ranged from 1 to over 40 (see Table 4.2), with 10 (63%) firms exporting to more than ten markets. Of these, 6 (38%) had exported for over 10 years, 2 for 9 years each and 2 for 8 years each, suggesting a relatively high level of export experience, associated with a large number of markets. Given, also, the high export intensities of these firms, these results support the view that firms with a greater export involvement adopt a spread strategy and diversify to a larger number of markets (Piercy, 1981; Dalli, 1994; Naidu and Prasad, 1994).

Managerial exporting experience, and perceptions of experience, appeared to be an important variable in relation to export sales performance in the study. Managers of 8 (50%) firms indicated that managerial export experience was helpful to their export activities, facilitating more efficient operations and better decisions. In some cases, experience was perceived as a competitive advantage. 7 (44%) managers were their firms’ founders and their experience incorporated the entire life of the firms. In these cases, there was no distinction between years that the firms had been exporting and managerial experience.

**Export Planning**

Export planning, particularly formal planning, is positively associated with export performance (e.g. Cavusgil, 1984; Christensen et al, 1987). While most of the study firms undertook some kind of planning for the business as a whole, only 3 (19%) specifically articulated plans for their export business. However, many firms had demonstrated planning for exporting at a functional level; for example, in areas like as
technology, investment in equipment, and product developments. All 16 (100%) firms had plans for reaching export intensity goals. In most cases, planning was informal, often not written down, but explicit in planned export-related activities and commitments. (See also Export Strategy Formulation).

### 4.2.4.4 Firm Characteristics

The classification of firm characteristics has been discussed in the previous section. This section is a quantitative analysis of 'constant' firm characteristics (Bijmolt and Zwart, 1994) and a qualitative analysis relating to the 'flexible' firm characteristics. The eight variables associated with the Firm Characteristics factors were: five 'constant' variables (age of firms - YrsInBus, firm size - NoEmp, and export experience (YrsExp), export sales - ExpSales, and total sales - TotSales; and 'flexible' variables (ownership type, organisational structure, and export intensity - ExpInt) - Table 4.4.

The sixteen firms in Stage 1 of the study were all recent export award winners, and were, on this basis, able to be classified as a 'successful' group of exporters (according to Styles and Ambler, 1994). The constant firm characteristics were analysed in relation to each other and to export sales and export intensity, both indicators of export sales performance. Because the sample of firms was small and a 'successful' group, differences were likely to be small compared to a larger sample of firms with varying degrees of export success. (The latter type of sample formed the basis for Stage 2 of the study). However, it was considered important to identify associations between these variables for input into the conceptual modelling phase of the study. Below are the quantitative and qualitative analyses of the firms in relation to these constant and flexible
variables. Further details of relationships between firm characteristics and other variables are provided in the descriptive narrative elsewhere in this chapter.

‘Constant’ Variables

The following variables are similar to those described by Bijmolt and Zwart (1994) as ‘constant’ or uncontrollable variables. Because the sample was small, and was not randomly selected, the non-parametric technique, Spearman’s correlation, was used to assess relationships between the ‘constant’ variables and between these and two export sales-related performance indicators, export intensity and export sales. Table 4.9 shows the results of this analysis, with Table 4.9a providing a key for the variables, variable labels and associated measurement levels. The following text discusses the results. A notable observation from Table 4.9 is that none of the constant variables were significantly correlated with export intensity, contrasting with the findings of Calof (1994). However, all firms in the Stage 1 had high export intensities, and it may be that the range of intensities was not great enough to detect significant relationships.

Firm Size

There are conflicting views in the literature about the influence of firm size on export performance. The measure used in the study for firm size was number of employees, in accordance with Bilkey and Tesar (1977). The mean number of employees was 178 (Std.Dev. 218); the high standard deviation indicates the wide range, from 6 to 800 employees (Table 4.1). Because of the wide range of values, the results have to be interpreted cautiously. A frequency distribution shows that: 4 (25%) firms had over 250 employees; 8 (50%) of the firms had less than 100 employees, and 12 (75%) firms had
less than 250 employees. This suggests that the majority of firms could be classified as small to medium-sized; the median statistic (105 employees) supports this view. Since all the firms had recent positive export growth trends, there was little to suggest that firm size was associated with export growth, in agreement Aaby and Slater (1989) and others.

Four firm characteristics were significantly and positively correlated \( (p=0.01) \) with firm size (Table 4.9). The correlation with export sales and total sales suggests that larger firms generated larger sales turnover in both export and overall sales. This result is in keeping with the general literature, but it is difficult to make any judgements about export performance from these results. The significant relationship between firm size and both years in business and years in exporting indicates that the larger firms tended to be the older firms and those with greater export experience. This supports the general view of the literature of growth paths of exporting firms (particularly the stages models of internationalisation (e.g. Johanson and Vahlne, 1977).

Table 4.9 shows no correlation between firm size and the number of years in business before exporting. This suggests that born global firms (0-2 years in domestic business before exporting) do not necessarily remain small, as noted by some researchers (Rennie, 1993; Knight and Cavusgil, 1996), although only one criterion (size) was used for classifying the study firms as born global.

Thus, firm size was significantly associated with sales-related and age/experience-related firm characteristics for the study group of firms. The results for association with export
performance could not be readily determined. Since the literature is highly equivocal about relationships of various variables with firm size, it is difficult to position these results within the frame of the extant literature.

Table 4.9a
Key to Constant Variables

<table>
<thead>
<tr>
<th>Variable Label</th>
<th>Variable</th>
<th>Measurement Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXPINT</td>
<td>Export Intensity</td>
<td>Export sales as % of total sales</td>
</tr>
<tr>
<td>EXP$</td>
<td>Export Sales</td>
<td>Export sales $</td>
</tr>
<tr>
<td>NOEMP</td>
<td>Number of Employees</td>
<td>Number (absolute)</td>
</tr>
<tr>
<td>TOTSALES</td>
<td>Total Sales</td>
<td>Total sales $ (domestic and export sales)</td>
</tr>
<tr>
<td>YRSBEFEXP</td>
<td>Years Before Exporting</td>
<td>Number of years firm has been in business before exporting</td>
</tr>
<tr>
<td>YRSINBUS</td>
<td>Years in Business</td>
<td>Number of years firm has been in business</td>
</tr>
<tr>
<td>YRSINEXP</td>
<td>Years in Exporting</td>
<td>Number of years firm has been exporting</td>
</tr>
</tbody>
</table>

Table 4.9
Spearman Correlation Coefficients for Firm Characteristics

<table>
<thead>
<tr>
<th></th>
<th>EXPINT</th>
<th>EXP</th>
<th>NOEMP</th>
<th>TOTSALES</th>
<th>YRSBEFEXP</th>
<th>YRSINBUS</th>
<th>YRSINEXP</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXPINT</td>
<td>1.000</td>
<td>.442</td>
<td>.253</td>
<td>.238</td>
<td>.065</td>
<td>.197</td>
<td>.140</td>
</tr>
<tr>
<td>EXP$</td>
<td>.442</td>
<td>1.000</td>
<td>.925**</td>
<td>.959**</td>
<td>.151</td>
<td>.752**</td>
<td>.749**</td>
</tr>
<tr>
<td>NOEMP</td>
<td>.253</td>
<td>.925**</td>
<td>1.000</td>
<td>.961**</td>
<td>.332</td>
<td>.781**</td>
<td>.697**</td>
</tr>
<tr>
<td>TOTSALES</td>
<td>.238</td>
<td>.959**</td>
<td>.961**</td>
<td>1.000</td>
<td>.158</td>
<td>.739**</td>
<td>.744**</td>
</tr>
<tr>
<td>YRSBEFEXP</td>
<td>.065</td>
<td>.151</td>
<td>.332</td>
<td>.158</td>
<td>1.000</td>
<td>.622*</td>
<td>-.045</td>
</tr>
<tr>
<td>YRSINBUS</td>
<td>.197</td>
<td>.752**</td>
<td>.781**</td>
<td>.739**</td>
<td>.622*</td>
<td>1.000</td>
<td>.592*</td>
</tr>
<tr>
<td>YRSINEXP</td>
<td>.140</td>
<td>.749**</td>
<td>.697**</td>
<td>.744**</td>
<td>-.045</td>
<td>.592*</td>
<td>1.000</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level
* Correlation is significant at the 0.05 level

Age of Firm

As for firm size, there is similarly conflicting evidence for the influence of firm age on export performance. Mean age of the study firms was 27 years, but, again, there was a
wide range, from 3 to 110 years (Table 4.1). Because of the wide range of values, the results have to be interpreted cautiously.

There was no apparent association with export sales trend for reasons already mentioned. Correlation coefficients for firm age and other variables are shown in Table 4.9. No correlation occurred between firm age and export intensity, but a strong positive correlation existed between firm age and all other constant variables, suggesting that older firms tended to be larger (as noted earlier), and have higher export and total sales, consistent, again, with the stages theory of internationalisation (Johanson and Vahlne, 1977). The relatively weak correlation of firm age with years before exporting (p=.05) suggests that the older firms took longer to initiate export business. This is consistent with other results from the study, which suggest that building a strong domestic base before exporting was important for older firms. The result also supports the view that the born global phenomenon is fairly recent (Rennie, 1993; Knight and Cavusgil, 1996). The correlations with export experience indicates that older firms tend to be more experienced in exporting, but the significance of this relationship was weak (p=.05).

**Years in Exporting**

This is the commonly used measure for export experience (Ogbuehi and Longfellow, 1994) (see also discussion under Competencies). The mean length of time that the study firms were involved in exporting was 15 years, with a wide range from 1 year to 63 years (Table 4.1).
While most studies contend that firms with greater experience have better export performance, this is not supported by the results for export intensity in Table 4.9. There were, however, strong positive correlations with export and total sales, suggesting higher sales-related performances from experienced exporters, using these absolute sales measures. The relationships with firm size and firm age have been discussed earlier.

**Years Before Exporting**

This is a measure of the time firms spend in their domestic business before exporting, and is a useful guide to the export orientation of the firms, and their propensity for adopting born global strategies (Knight and Cavusgil 1996). The mean amount of time spent by firms in domestic business before exporting was 12 years, (standard deviation 25.4 years) (Table 4.1). Again, there were wide variations across the sample, and 9 of the 16 firms qualified on this criterion, as ‘born globals’ (see Chapter 2), having less than two years in business before exporting.

The only significant correlation, though weak (p=0.05), was with firm age (years in business), suggesting that the older firms spent longer than smaller firms doing business in the domestic market before exporting (Table 4.9). This is discussed in more detail later in this section.

**Total and Export Sales**

Descriptive statistics for total and export sales have been described elsewhere, and are shown in table 4.1. Total and export sales were significantly correlated with firm size and export experience, as well as with each other (Table 4.9). Total sales is an indication of both domestic and export turnover, and its relationship to firm size is in keeping with
the general literature, as discussed earlier. Because export sales are a component of total sales, it is not surprising that they are positively correlated. This result also implies, however, that firms with high export sales also had high domestic sales, although the lack of association with export intensity casts uncertainty on the role of domestic sales in these relationships. Stage 2 of the study examined these interrelationships in more detail and included trends in the three indicators (export and total sales, and export intensity) in order to gain a more dynamic perspective of these performance indicators.

'Flexible' Variables

The following variables are considered to be controllable by the firm (Bijmolt and Zwart, 1994). Examples from interview data relating to the 'flexible' variables are shown in Table 4.10.

Ownership Type

Firm ownership is associated with export performance, with, according to Das (1994), smaller, privately owned firms having higher export intensity. This association was not apparent in the study firms, where the 4 (25%) highest export intensities were associated with the 4 (25%) publicly-owned firms, which were also amongst the largest (Table 4.1). 5 of the 12 (75%) private firms were family firms, with more than one family member involved. The remainder had either just one owner, or the originator and other (usually 2 or 3) partners. 11 of the 12 firms were owned and managed by the founder, or a direct family member. Most Managers had a related engineering or product development background that they continued to utilise in the business.
<table>
<thead>
<tr>
<th>Variables Associated with Factor / # (%) of Cases Coded at Variable or Indicator</th>
<th># (%) of Cases Coded at Sub-Variable or Sub-Indicator</th>
<th>Examples of Data From Cases [case reference]</th>
</tr>
</thead>
</table>
| Ownership Type | 12 (75%) | Private  
The company is owned by 3 family members (father and two sons) who are on the Board along with 3 other people. [F #93]  
Private: himself and his wife. [K #119] |
| | 4 (25%) | Public  
Having the public ownership has done them good - having to be accountable; but the other shareholders are generally hands-off. [B #166] |
| Organisational Structure | See Firm Structure And Resources |  |
| Export Intensity | 16 (100%) | They now export 80% of production. 4 years ago, they exported only 40%, but they responded to the change in economy. [G #12-13]  
Exports are 25-30% of sales; they have no desire to go beyond this; they prefer to keep the risks down. [P #24] |
While some private firms had considered going public in order to gain equity funding, none of the Managers were enthusiastic about this option, preferring to keep ownership and control of the business. They perceived that company culture was an important ingredient of success, and that this would be jeopardised by changes in ownership. The four publicly-owned firms identified benefits from such ownership that included accountability, and access to funds, information and raw materials.

**Organisational Structure**

This firm characteristic is discussed in the section on Firm Structure and Resources.

**Export Intensity**

The mean export intensity of the study firms was 60% (Table 4.1), a high ratio and consistent with the classification for ‘high involvement’ exporters noted by Diamantopoulos and Inglis (1988). The range of export intensities in the study firms was 21% to 97%, with 11 (69%) firms having an export intensity of >40%, 9 (56%) with intensities of >60% and 5 (31%) with intensities of >80%. The relationship between export intensity and importance of the domestic market has been discussed elsewhere in this chapter, in an attempt to explain the high intensities achieved by the study firms. The literature is comprehensive in its treatment of export intensity as an export performance measure and the factors that may lead to changes in export intensity, as detailed in Chapters 2 and 3. In the study, there is some evidence of the influence on export intensity of the size and demands, or constraints, of the domestic market (in accordance with Das, 1994), and self-imposed limits to growth (Caughey and Chetty, 1994).
Specifically, small domestic market size was a primary factor motivating study firms to attain high export levels.

The study results have both similarities and differences to the literature, in regard to the findings related to export intensity (discussed more fully in other parts of this chapter). For example, as high involvement (intensity) exporters, the study firms did not demonstrate higher levels of product adaptation, as noted by Katsikeas (1994). They did, however, demonstrate clear perceptions of their competitive advantage, and had production capability able to meet volume demands of their markets - both results noted also by Katsikeas (1994). In contrast to findings of Katsikeas (1994), however, the firms appeared to have a relatively high level of marketing capability, and did not generally adopt aggressive competitive pricing policies.

4.2.4.5 Managerial Factor

Managerial factors have been shown to be important influences on export performance (e.g. Aaby and Slater, 1989, Chetty and Hamilton, 1996). All 16 (100%) firms commented on managerial influences on export performance. The variables associated with the Managerial Factor are shown in Table 4.4, and examples from the interview data are presented in Table 4.11. Those variables not discussed elsewhere in the chapter are discussed below.

The majority of Managers had no formal business qualification or training, with most being 'self-taught' on the job. On the other hand, most were technically trained or
formally qualified in the area of their business, having applied their often considerable skill to the initiation and continuing development of the firm.

Management experience is discussed with Export Experience in the Firm Competencies section. Managerial commitment to exporting was evidenced by the significant amounts of time and energy devoted by managers to their export business. For example, they all spent considerable periods visiting foreign markets, agreeing with findings by Crick (1995) that information becomes more important as managerial commitment increases. Managerial commitment is also evidenced by the Managers either retaining control of exporting, or setting up dedicated export departments. High levels of export intensity also suggested managerial commitment, and all but one Manager aspired to further increase the ratio of export business in their firms. The number of markets to which firms exported can be regarded as an indirect indicator of export commitment, and this is discussed under Firm Competencies.

For existing exporters, managerial perceptions are likely to be both experientially- and subjectively-based (Leonidou, 1995b). Other studies suggest that firms with positive managerial perceptions of exporting are likely to perform well (e.g. Bilkey and Tesar, 1977). Results in the literature on managers’ perceptions of external environmental stimuli are, however, unclear (see Chapter 2). As discussed earlier, all 16 (100%) firms perceived one or more external environmental variable as problematic; these negative perceptions represent substantial barriers to export success, according to Sullivan and
### Table 4.11
Managerial Factor
Content-Analytic Matrix (Cross-Case)

<table>
<thead>
<tr>
<th>Variables Associated with Factor / # (%) of Cases Coded at Variable</th>
<th># (%) of Cases Coded at Variable</th>
<th>Examples of Data From Cases [case reference]</th>
</tr>
</thead>
</table>
| Managerial Variables (various)                               | 16 (100%)                       | *Management Characteristics*
|                                                               |                                 | He is a tradesman / joiner, self-taught in business management and exporting (he has met other exporters and swapped information). Now the business is easier to run - he used intuition, which he is good at. [A #53-54]
|                                                               |                                 | (The MD) has a plastics background; his father was a pioneer in plastics in NZ. [P #15]
|                                                               |                                 | *Management Style: Participative*
|                                                               |                                 | They have an executive management group and all management groups meet regularly; then the next tier of management join the meeting and give a team brief; there is 2-way communication. Staff relations are very important; people matter and the management shares in the company position, information etc, which is good for morale. [F #70,110]
|                                                               |                                 | Teamwork is encouraged by (the MD) - he is well known for this. He has regular meetings with the employees, to talk about objectives for the week and month and general housekeeping. In general, he shares information about the health of the business (good and bad); he tries to find a good balance. The employees take an active interest. [A #147-151]
|                                                               |                                 | They are a strong team and are not reliant on one or two individuals. The MD is hands-on and very much involved; this leads to fast decision-making, which is very important. [N #132, 134]
|                                                               |                                 | *Managerial Experience* (See Export Experience, Firm Competencies factor)
| Employee Relations                                           | 9 (56%)                         | He prefers to pay for quality people. Staff are very well informed; they are part of the family. Staff involvement is very important for motivation - a key success factor, especially in times of difficulty e.g. when the US business reduced, the staff volunteered to work for half pay. [H #119-121]
|                                                               |                                 | Staff relations are very important; people matter and the management shares in the company position, information etc, which is good for morale. [F #110]
| Relationships/Personal Contact with buyers                   | See Firm Competencies factor     |                                               |
Gillespie (1985). Even when firms considered these external factors as constraints (8 firms - 50%), however, they had apparently developed strategies to overcome them.

Only one firm perceived an internal issue as a constraint to exporting, and this related to a capacity problem. All managers perceived exporting as an important part of their overall business, and this was reinforced by their commitment and achievement of high export intensities.

Managerial style is thought to influence export development (Leonidou and Katsikeas, 1996), and, therefore, indirectly, export performance. Aspects of management style discussed by the study firms related to ways in which they managed their staff and decision-making and planning processes. 10 (63%) firms described their management style as participative, using a variety of indicators to illustrate; for example, a team approach to decision-making, information-sharing about the business, its goals and performance among all employees, hands-on participation by the Managers, and an informal style. All the Managers concerned believed management style to be an important element of their success, as it motivated employees to meet objectives, such as quality and production standards. Participative management style was evident across the whole range of firm sizes, and with both formal and informal organisational structures. However, Managers of smaller firms perceived participative management to be easier in a smaller firm, and endangered by growth beyond a certain size. There was no evidence of autocratic management styles in any of the study firms.
Employee relations are an indication of managerial style. 9 (56%) firms indicated that they had good relations with staff, and no firms indicated poor relations. Apart from aspects of participative management noted above, practices associated with good employee relations included travel to attend courses and trade fairs, staff training, and performance incentives. Only one firm reported staff turnover as anything other than low, and this was categorised as average for the industry. Managers perceived that good employee relations had a direct influence on operational and product quality and, ultimately, on export performance.

4.2.4.6 Firm Structure and Resources

This factor is not an explicit part of existing export performance models. Following Bijmolt and Zwart (1994), it categorises many of the 'flexible' (controllable) variables normally classified under Firm Characteristics. The variables concerned with the Firm Structure and Resources factor are shown in Table 4.4, with examples from the interview data presented in Table 4.12. Those variables not discussed elsewhere in the chapter are discussed below.

Organisational Structure

The way that an export firm is organised can impact on export performance (Bijmolt and Zwart, 1994), and this topic received comment from 16 (100%) study firms. 10 (63%) firms had a formal structure i.e. they organised into functional units and the Manager delegated most of the operations to functional managers. Many of the Managers, however, retained control over marketing, especially export marketing, because this
<table>
<thead>
<tr>
<th>Variables Associated with Factor / # (% of Cases Coded at Variable)</th>
<th># (% of Cases Coded at Variable)</th>
<th>Examples of Data From Cases [case reference]</th>
</tr>
</thead>
</table>
| Organisational Structure                                   | 10 (63%)                        | *Formal*  
They have a functional structure: marketing, production, finance, engineering (the MD is an engineer). [C #78]  
They have functional managers: finance, technology, export and the owner/manager (MD). [I #89]  
*Informal*  
AM is the MD; he does sales and production, and most of the marketing (export and domestic); his wife, GM, does the finance and PR. They also have a factory manager, a packaging supervisor and a sales administrator. [B #148-149] |
| 16 (100%)                                                  |                                 |                                   |
| Firm Resources                                             | See External Environment        |                                   |
| 16 (100%)                                                  |                                 |                                   |
| Investment Capital                                         | See External Environment        |                                   |
| Plant and Equipment, and Capital                           | 7 (44%)                         | *State-of-the art or new plant & equipment*  
Process technology is very important; it changes very frequently; they are the leader in process technology and they do not follow. Competitors have the same plant and equipment, but FWP does it better. [E #98-99]  
They use high tech equipment; not many companies have the equipment and this gives them a competitive advantage. [D #106]  
*Capacity: OK*  
Capacity is not a constraint; they have just had an MRPII system implemented and they can now better utilise the shifts. [F #72]  
Capacity is OK now and it will increase. [P #138]  
*Capacity: Insufficient*  
The limitations on growth are lack of factory capacity and the ability to keep up. They are at full capacity and they have too many opportunities, in a way. [A #131, 142] |
| 11 (69%)                                                   | 7 (44%)                         |                                   |
|                                                           | 2 (13%)                         |                                   |
| Productivity                                               | See Firm Competencies           |                                   |
| Location                                                   | 4 (25%)                         | *Location Within New Zealand*  
Location is important; (the town's) 'personality' permeates throughout. (The firm) is a major player in (the town). [L |
<table>
<thead>
<tr>
<th>8 (50%)</th>
<th>#110-111</th>
<th>(The city) is the family’s home and regional incentives for business were available. [P #22]</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 (44%)</td>
<td>Overseas Operations</td>
<td>They have a finishing plant in the UK and Canada, and manufacturing in Taiwan. [H #3] They manufacture overseas, because although they could provide the product, delivery, service etc from NZ in the long-term, it is too difficult ad costly - customers need the confidence in their ability to supply and service etc. [P #98]</td>
</tr>
<tr>
<td>Raw Materials</td>
<td>9 (56%)</td>
<td>Overseas Source</td>
</tr>
<tr>
<td>15 (94%)</td>
<td>Supplier Relationships</td>
<td>4 (25%)</td>
</tr>
<tr>
<td>Operating Costs</td>
<td>14 (88%)</td>
<td>Labour</td>
</tr>
<tr>
<td>15 (94%)</td>
<td>10 (63%)</td>
<td></td>
</tr>
<tr>
<td>Transport</td>
<td>11 (69%)</td>
<td>Good or Satisfactory</td>
</tr>
</tbody>
</table>
Pagination Error
provided an overview of exporting in relation to the whole firm. Also, the Managers were able to build up relationships with overseas customers and access information.

Organisational structure is thought to influence the search for, and use of, information (Piercy, 1983). The study results indicate that information was perceived as a key source of competitive advantage for some of the larger firms. 2 (13%) firms had a separate export department, which may indicate a higher export commitment; however, the Managers of these firms continued to visit their export markets, as discussed elsewhere.

Where relevant, the Managers welcomed the functional breakdown of business; it relieved them of excessive workloads, and provided operational focus and expertise. The four publicly owned firms had formal structures and processes determined by their head offices. Overall, this was seen as an advantage, because it facilitated the achievement of goals.

3 (19%) firms had an informal structure, with the Manager undertaking management of most of the functional areas. These firms were the three smallest in the sample, all having less than 20 employees. In this situation, it is feasible that the Manager could manage most of the business alone. The results tend to support an association between export firm size and structural formality suggested in the literature on small firms (e.g. Churchill and Lewis, 1983).
**Firm Resources**

A number of indicators were apparent for the Firm Resources variable; these are discussed below.

*Investment*

Investment in plant and equipment and operational support is critical for export growth (Chetty and Hamilton, 1996). Scarcity of resources limits the ability of small firms to reach more advanced stages of internationalisation (Dunning, 1980, 1988). 12 (75%) study firms indicated a need for investment and available finance to support export activities, in particular R&D. Only 3 (19%) firms suggested that there were problems in obtaining finance, and only 1 (6%) firm perceived lack of investment finance as a constraining factor. Reasons for most of the firms not perceiving problems in this area may relate to their stage of export development, and favourable investment prospects. For example, they had mostly undergone reasonably significant growth over the previous five or more years, and had already some large capital investment (see Plant & Equipment and Capacity). Also, the result may illustrate the success that some firms had in obtaining finance from banks, despite their stricter lending criteria. The study firms generally had positive indicators for investment financing, such as export growth and growth plans, high domestic market share, and, in most cases, a proven track record, as well as strong managerial commitment (see Managerial Factor) which is positively associated with export performance (e.g. Cavusgil and Zou, 1994).

Study firms noted the importance of investment in market development, particularly for travel and time spent visiting existing and new markets. As noted elsewhere,
many of the study firms indicated that resources for export market development were limited, both in human (as noted by Calof, 1994) and financial terms.

**Plant and Equipment, and Capacity**

Data from 11 (69%) firms were coded for plant and equipment and capacity.

7 (44%) firms reported having state-of-the-art or new equipment, and only 1 (6%) had equipment which was not new. The main benefits of state-of-the-art equipment were: increased productivity, competitive advantage in enabling production of better quality, higher value, or cheaper products and required volume, and first-mover advantage in the use of proprietary technology developed by the firm.

Regarding capacity and capacity utilisation, 1 (6%) firm had excess capacity (this was a younger firm, newer to exporting, but planning for high growth), 6 (38%) firms had satisfactory capacity, and 2 (13%) had insufficient capacity. One of the latter firms also had older plant and equipment and was in a strong growth phase; the Manager planned to up-grade the equipment, at the same time as increasing capacity. Many of the firms with sufficient current capacity were reaching capacity limits and were expecting to expand. The opportunity to increase capacity utilisation with extra shifts appeared to be limited, although one firm planned to use outside contractors to cope with volume demands.

**Productivity**

Improved productivity is a key outcome of the efficient use of a firm’s operational systems, resources and processes. This has been discussed in detail in the section on Firm Competencies. Improved productivity was an important goal and achievement of most of the study firms.
**Location of Operations**

Two location considerations were discussed. Firstly, reasons for the location of the firm, both in, and within, New Zealand, and secondly, the issue of overseas location of some of the firms’ operations.

Location of the firm in New Zealand was primarily a result of the owner / manager being a New Zealander. Firms were motivated to remain in New Zealand to maintain their high market share or leadership achievement, and because of the importance of the New Zealand market, as noted earlier. 7 (44%) firms, however, had established additional operations offshore, in order to access raw materials, appropriate infrastructure and foreign market incentives. These firms conformed broadly to the characteristics of exporters in the more advanced stages of internationalisation (Johanson and Vahlne, 1977), even though 4 of them had been exporting for under ten years. The longest serving exporter amongst the 7 firms with overseas operations had exported for 22 years. 3 of the 7 firms were characterised as born global firms, or international new ventures, and were concerned with value-added activities in their foreign markets (such as finishing of part-processed products). This conforms broadly to the findings that international new ventures establish foreign location advantages relatively early and have significant resources in more than one nation, according to Oviatt and McDougall (1994).

3 of the 7 firms had overseas manufacturing plants, one had company-owned access to overseas raw materials, one had foreign licensees assembling product, one had semi-processed products finished in overseas markets, and one firm had an office and warehouse in an overseas market. Reasons for location of operations in foreign
markets were: efficiencies in transport and servicing, and proximity to customers, some of whom perceived New Zealand’s distance as problematic. Only one firm located operations offshore because of dissatisfaction with New Zealand (e.g. difficulty accessing skilled staff).

**Raw Materials and Supplier Relations**

Another aspect of resources is raw materials availability, reliability of supply, and cost (Dess and Davis, 1984). Consequences for exporters are potentially considerable if raw materials supplies or pricing become difficult. 15 (94%) firms commented on the influence of these aspects on export performance. For some firms, raw materials were a major cost; 9 (56%) firms imported key raw materials were imported. Although importing was often perceived as a natural hedge against losses from exchange rate-induced price changes, there was a perceived’ pricing risk concerning reliability of supply. Reasons for importing raw materials included lack of availability in New Zealand, poor quality, high cost, and unreliability of supply. Notwithstanding these reasons, 4 (25%) firms sourced raw materials principally from New Zealand, in three cases because of their superior attributes, particularly quality.

Supplier relations are increasingly instrumental in value creation (Normman and Ramirez, 1993) and successful business. Supplier relations were associated with export performance by 4 (25%) study firms. One firm was dependent on high quality raw materials, so the Manager worked closely with checked suppliers to ensure that this was achieved. The management of supplier relations was considered to be easier with New Zealand-based, rather than overseas suppliers.
Operating Costs

All 16 (100%) firms commented on the influence of operating costs on export performance - an important factor noted by Welch and Luostarinin (1993). 14 (88%) firms strongly emphasised the impact of labour costs, and, where skill level requirements were high, there were correspondingly higher labour costs (see later). Other costs were also discussed by the Managers of 10 (63%) firms. Most important of these were raw materials and transport costs, followed by power, tariffs, and capital equipment.

Transport

The distance of firms from their markets could be perceived as a problem by either or both the firm and its foreign customers (e.g. Davidson, 1982; Keegan, 1984; Chetty and Hamilton, 1996). All 16 (100%) firms commented on this variable. Managers of the study firms worked hard to overcome customers’ negative perceptions about distance, by having an emphasis on service, personal visits, and reliability of delivery (which relied strongly on the performance of freight providers). Given the perceived importance of the transport variable, and the potential for problems, 11 (69%) firms reported good or satisfactory performance of their freight providers. Both sea and air freight was used, depending on the product and required speed of delivery to market.

7 (44%) firms noted problems with freight and transport; some of these also reported satisfactory experiences, which occurred either at different times, or in relation to different markets. Problems included: high cost (a predominant issue, and one noted by Katsikeas (1994) as a threat to the maintenance of price competitiveness in export markets), product damage, and unreliability of delivery.
**Employees**

Employees are a key organisational resource, and the main aspects of this variable include number of employees, employee productivity, and employee skills and availability (noted also by Diamantopoulos and Schlegelmilch, 1994).

The influence of the number of employees on export sales performance is discussed in relation to firm size, elsewhere. Productivity issues have also been discussed. Requirements for specific labour skills were reported by 9 (56%) firms, with 6 (38%) of these requiring a high skill level and 3 (19%), a medium skill level. High and medium level skills were generally needed for specialised tasks and were technical in nature. Quality, technology and product development all required high level skills. 3 (19%) firms experienced difficulties in accessing staff with appropriate skills.

4.2.4.7 Export Strategy Formulation

Export strategy is seldom reflected as a decision-making process in export performance models. Rather the literature tends to treat export strategy as an outcome, that is, as a collection of decisions about how the firm will compete in its export markets (Aaby and Slater, 1989; Cavusgil and Zou, 1994). The influences on, and processes of, decision-making appear to be largely overlooked. In this study, these considerations are incorporated into a factor called export strategy formulation, distinct from the factor export strategies which is concerned with outcomes of strategy formulation. The rationale for these separate factors is discussed earlier in this chapter. Briefly, export strategy formulation is concerned with the process of determining export strategy, which, if omitted, may lead to no strategy, or strategy based on weak, or unchallenged, assumptions. The variables from the study cases
making up this factor are shown in Table 4.4, and examples for the interview data are presented in Table 4.13.

**Export Planning**

Export planning is discussed under the Firm Competencies factor, and its role is in the export strategy formulation process. While only 3 (19%) firms discussed export planning specifically, most firms demonstrated planning for exporting at a functional level (e.g. product and technology development, plant and equipment, overseas investment etc). Bell (1995) suggests that competencies, including planning, may be built up after a period of reactive and opportunistic exporting, and before a full strategic approach to exporting is undertaken, rather than the other way around. This may be applicable to the study firms, many of which had well developed competencies, but informal and poorly developed strategic approaches to their export business.

**Growth Strategy**

The growth strategy variable is discussed under the Firm Strategy factor. Study firms included plans for export growth in their overall growth plans, suggesting that they perceived exporting as an integral, but independent, part of the overall business, reinforcing their status as experienced exporters. Cavusgil and Zou (1994) have discussed this in relation to the role of firm strategy in export performance.

**Export Trigger / Stimuli**

Study firms discussed export triggers or stimuli in the context both of initiating exports and sustaining export activities; this concurs with the definition of the variable by Leonidou (1995a). 11 (69%) firms coded for specific data on this variable. Of
### Table 4.13
Export Strategy Formulation Factor
Content-Analytic Matrix (Cross-Case)

<table>
<thead>
<tr>
<th>Variables Associated with Factor / # (%) of Cases Coded at Variable</th>
<th># (%) of Cases Coded at Variable</th>
<th>Examples of Data From Cases [case reference]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export Planning</td>
<td>16 (indirect) (100%)</td>
<td>They need to plan 5 years ahead, but there is too much uncertainty. [H #176] He employs a business consultant to help periodically with planning and financial control [A #161]</td>
</tr>
<tr>
<td>Growth Strategy</td>
<td>See Firm Strategy factor</td>
<td></td>
</tr>
<tr>
<td>Export Trigger/Stimuli 11 (69%)</td>
<td></td>
<td>Their technology was first developed in NZ and they realised that they had a unique advantage and so pursued export markets. [F #16] Exporting was opportunistic, when the domestic market started to soften and they were pursuing growth. [E #8] The trigger for export was the need for a bigger market; a single market (NZ) was also insecure. [G #25]</td>
</tr>
<tr>
<td>Competitive Advantage</td>
<td>See Firm Strategy factor</td>
<td></td>
</tr>
<tr>
<td>Competition</td>
<td>See Firm Strategy factor</td>
<td></td>
</tr>
<tr>
<td>Organisational Structure</td>
<td>See Firm Structure and Resources factor</td>
<td></td>
</tr>
<tr>
<td>Managerial Variables</td>
<td>See Managerial Factor</td>
<td></td>
</tr>
</tbody>
</table>
these firms, 7 (44%) indicted 'proactive' initiating motives, and 3 (19%) indicated 'reactive' initiating motives (Bilkey, 1978). Proactive motives included market expansion into export markets for growth (the most common motive), with specific stimuli including attendance at foreign market trade shows; and exploitation of a differential advantage, such as a unique technology. Reactive motives included: response to demand from agents; and a declining domestic market.

Many firms reported a positive influence of export incentives in the initiation and development of exporting, and some of them also claimed that they were motivated to export proactively. It appears that export incentives may have acted as an additional, reactive influence on these firms at the start and early development of their export business. Caughey and Chetty (1994) suggested that internal stimuli tended to motivate existing exporters, while external stimuli tended to motivate non-exporters. The results suggested that the study firms were motivated by a mixture of external (e.g. small NZ market and export incentives) and internal stimuli (e.g. firm goals and technology developments).

**External Environment, Market Research, Competitive Advantage,**
**Competition, Organisational Structure, and Management**

These variables have all been discussed in the context of other factors in this chapter. Export market research is a key input into the export strategy formulation process, being the main window into the external environment. Firms' knowledge and perceptions of their competitive advantage and the state of competition are important inputs into the strategy formulation process. Organisational structure of firms will directly influence the
process of strategy formulation, for example, the people involved and the degree of formality of the process. Likewise, management (characteristics, style, and commitment) helps to shape the process of strategy formulation, directly, and through a number of variables already discussed.

4.2.4.8 Export Strategies

The Export Strategies factor is concerned with specific export strategies determined by firms' export strategy formulation processes. The factor considers the broad export strategies articulated by the firms e.g. market selection, investment, and strategies relating to firm competencies and structure and resources. Table 4.4 shows the variables constituting the Export Strategies factor, and examples from the interview data are presented in Table 4.14. Those variables not discussed elsewhere in the chapter are discussed below.

Most export studies that investigate the role of export strategy in export performance, adopt a 'fit' perspective of strategy (e.g. Porter, 1980). That is, existing external and internal variables influence export strategy which, in the extreme representation of 'fit' is shaped to fit the existing situation, particularly the external environment. Little attention is paid to the way that these variables (particularly internal) may be leveraged or reconfigured for future environments. The inclusion of Export Strategy Formulation and Export Strategies in the study allows a wider 'stretch' perspective of strategy (Hamel and Prahalad, 1994), where future strategic direction is considered along with requirements for current and future competencies.
Table 4.14
Export Strategies Factor
Content-Analytic Matrix (Cross-Case)

<table>
<thead>
<tr>
<th>Variables Associated with Factor / # (%) of Cases Coded at Variable</th>
<th># (%) of Cases Coded Variable</th>
<th>Examples of Data From Cases [case reference]</th>
</tr>
</thead>
</table>
| Market Selection 16 (100%)                                  | 10 (63%)                      | *Psychically and Geographically Close First Markets*
Australia was the first market (they are still there), followed by the US; Australia, US are the top countries they export to. [F #13]
Australia was the first market and they are still there. [E #9]  |
| Market Development 16 (100%)                                | 4 (25%)                       | *Concentration Strategy*
For the US, market penetration is the priority. They do not want more market yet, they want to increase sales in the current markets. [D #168-169]
They concentrate on existing markets, and they might introduce new products there. [E #86]  |
| Constraints and Barriers to Exporting                       | 6 (100%)                      | Weather can also be a constraint - cold weather increases demand, but the diversity of markets and products have helped to insulate against weather effects. [G #45]
The limitations on growth are lack of factory capacity and the ability to keep up. [A #131]  |
| Market Research                                             | See Firm Competencies         |                                                |
| Investment                                                  | See Firm Structure and Resources |                                                    |
| Firm Resources                                               | See Firm Structure and Resources |                                                |
| Organisational Structure                                    | See Firm Structure and Resources |                                                |
Market Selection

The Market Selection variable has a number of indicators contributing to market selection outcomes. All 16 (100%) firms discussed aspects of market selection, including selection processes, and first export markets. The process of market selection was linked with other variables such as Market Research and Relationships/Personal Contact. These two variables both enabled access to market information, with Relationships/Personal Contact being perceived to be very important in this regard. For new markets, firms used a combination of TradeCom’s broad market research, with trade fairs, and personal contact providing detailed market information (see elsewhere in this chapter). Some firms, though a minority, used formal market research processes which were largely systematic and guided by clear objectives and agendas. However, most of these firms used informal methods of information-gathering, through relationships and personal contact. The firms were also generally risk averse, supporting the use of systematic approaches to market selection. Firms using systematic approaches to market selection have been shown to demonstrate export success (Tesar and Tarleton, 1982; Moini, 1995), consistent with the study results.

Proximity factors (psychic distance and geographic distance) were important in the early stages of market selection for the study firms, as also noted by others (e.g. Calof, 1994; Chetty and Hamilton, 1996). 10 (63%) firms exported first to their nearest neighbours, Australia and the Pacific Islands, which are both psychically and geographically close. The UK, also psychically close, was the first export market for only one firm, the US for 2 firms, Europe for one firm, Japan for one firm and the Middle East for one firm. Cooper and Kleinschmidt (1985) and Diamantopoulos and Inglis (1988) suggest that
subsequent wider market coverage (world orientation) is evident in more successful, or more highly involved exporters, respectively. Similarly, the firms with ‘close’ first export markets in this study subsequently developed more distant (geographically and psychically) markets. Many firms had more than ten export markets at the time of the study. It appeared that, over time, market selection decisions were made on more strategic grounds, with consideration of external environmental influences and specific market characteristics.

**Market Entry**

There is an abundant literature on market entry strategies, particularly in relation to the internationalisation process (e.g. Johanson and Vahlne, 1977). All 16 (100%) study firms used exporting as the preferred method of market entry, with 15 (94%) firms using direct, and one, indirect methods. Direct exporters used agents and distributors based in their foreign markets, noted also by Rosson (1984). 2 (13%) firms had licensees operating in their foreign markets, involved in manufacturing and selling the products in these markets. One of these firms also exported finished product from New Zealand, thus having a dual foreign market entry strategy. The other firm retained the manufacture of a core part of the machinery that contained the intellectual property, while licensing the remainder of the manufacturing process. Reasons for licensing included high transportation and manufacturing costs, currency problems and cultural and political barriers. As discussed earlier, 7 (44%) firms had operations in overseas markets, implying a more advanced stage of internationalisation (Johanson and Vahlne, 1977). However, these firms all continued to export from New Zealand, and expected to continue this practice.
Export Market Development

Export market development is dependent on a number of factors, such as distribution networks, export market knowledge, marketing, personal contact and firm reputation (e.g. Kirpalani and MacIntosh, 1980). For the study firms, these variables have been discussed in the context of other factors (see elsewhere). All 16 (100%) firms acknowledged the influence of some, or all, of these on export performance, and thus, the overall importance of market development.

Approaches to market development include market concentration and market spread strategies (Piercy, 1981). Of the 5 (31%) firms that commented on export market development, 4 used a market concentration, and one, a market spread strategy. Research evidence suggests that a market concentration strategy is chosen by firms in the early stages of export development, while more experienced exporters adopt a spread strategy, diversifying to a larger number of markets (Piercy, 1981). This relationship does not appear to hold for the 4 study firms using a market concentration strategy, as the range of experience was 6-20 years (early to experienced exporters respectively). There was some evidence to suggest that two of these firms had recently changed from a spread to a concentration strategy, deciding to consolidate business in existing export markets.

Constraints and Barriers to Exporting

Constraints and barriers to exporting for small and medium-sized firms have been investigated for both existing and non-exporters (e.g. Bilkey, 1978; Aaby and Slater, 1989). Most studies have been conducted in the US and there is, consequently, the possibility of location bias. Chetty and Hamilton’s (1996) consideration of the New
Zealand external environment in their research provides a helpful perspective for this
study. Constraints and barriers can be external or internal to the firm. All 16 (100%) of
the study firms identified constraints and barriers to exporting, 9 (56%) firms
commenting specifically, and the rest indirectly through their discussion of external
environmental problems. Constraints and barriers were mainly external factors, such as
exchange rates and interest rates, but other issues included raw material prices, wharf and
transhipment charges, and foreign market regulations and standards.

Only one firm reported internal barriers that related to capacity limitations. Managerial
attitudes have been reported in the literature as barriers to exporting (Leonidou, 1995b)
and this variable has been discussed elsewhere in this chapter. Overall, managerial
attitudes and commitments were positive to exporting, and in no case did these variables
appear to be a constraint.

Somewhat paradoxically, the study firms reported a relatively large number of constraints
and barriers to exporting, while, at the same time, performing well in their export
business. This apparent contradiction may be explained by the observation of Leonidou
(1995b) that many barriers are latent, and become operative only when they are
associated with other forces, relating, for example, to certain manager and organisational
characteristics (observed by Cavusgil, 1982). The results suggest that managerial and
organisational influences in the study firms were still supportive of successful exporting.
4.2.4.9 Implementation

Implementation is an important part of the strategy process (Johnson and Scholes, 1993). Export performance may suffer if appropriate strategies are not effectively implemented. Existing models of export performance tend not to involve the implementation process as an independent influence on export performance, and seldom does it appear as an explicit part of the export strategy factor. Rather, there is an assumption that export performance results directly from export strategy (Aaby and Slater, 1989). The limitations of this assumption have been discussed earlier in this chapter.

Although no firms specifically discussed export strategy implementation, it appeared to be influenced by three main factors: management variables, external environment and constraints and barriers to exporting, all of which are discussed in detail elsewhere in this chapter (see Table 4.5). They are briefly discussed in the context of export strategy implementation below; other parts of this chapter discuss these factors more fully.

Management’s role in implementing strategy was most apparent in terms of management skills, and attitude to risk. One firm reported that “it did everything wrong” in implementing its strategy to export to a distributor in Australia, but later developed the skills to make it successful. Management’s key role in achieving implementation of export strategies was in managing the competencies and resources involved. These are discussed in other parts of this chapter.
The external environmental factor disclosed a number of problems with potential to impact on the implementation of firms' export strategies. Most prevalent of these were exchange rate changes, which directly influenced the firms' abilities to exploit market opportunities. Adverse changes in exchange rates could suddenly limit a firm's ability to implement a market entry or development strategy that would otherwise be successfully implemented. Other uncontrollable factors influencing implementation included distributor bankruptcies, and sudden political/economic changes in a foreign market.

Constraints and barriers to exporting comprised a number of variables that impacted directly on the firms' abilities to implement chosen export strategies. For example, internal barriers included insufficient factory capacity, inability to hire skilled labour, and financial and other resource constraints. External barriers were those variables already discussed under External Environment. No content-analytic matrix is provided for Export Strategy Implementation because the factors, variables and indicators concerned are presented elsewhere in this chapter.

### Export Sales Performance

Export performance is the final outcome of various influencing factors in existing export performance models. However, as discussed in Chapters 2 and 3, there is little agreement among researchers as to the variables and indicators that adequately measure export performance (e.g. Hooley and Lynch, 1985). Typically, particularly in earlier export studies, export sales trend is used, either independently, or with other variables such as export intensity. Despite recently highlighted problems, outlined in Chapters 2 and 3, export intensity is often used as a sole measure of export performance. Until recently,
qualitative measures have been infrequently utilised, but one measure that has provided a useful adjunct to quantitative measures is managers’ assessments of their firms’ achievement of their export objectives (Cavusgil and Zou, 1994). Aksoy and Kaynak (1994) conclude that export performance is a subjective measure that may differ among different firms. For example, they found that simply selling into a new market might represent ‘success’ for some firms. The export performance measures used in the study were predominantly sales-related. Stage 1 of the study also utilised, to a lesser extent, two other measures (number of export markets and achievement of export objectives), although there was limited data available from the study firms to enable these to be meaningfully integrated into export performance measures in Stage 2. The first three export performance measures discussed below are also discussed under the Firm Characteristics section of this chapter. The variables associated with Export Sales Performance are shown in Table 4.4.

Export Sales

Export sales figures for two study firms were not available, although data on other variables were. The mean value for 1988 export sales from the remaining 14 firms was $10.8M, with the range from $0.1M to $40M (Table 4.1). A snapshot view of export sales data is, however, not very informative, either on a single-, or multiple firm comparative basis. Export sales trend provides a more dynamic and contextual perspective of export sales performance.
Export Sales Trend

Interval data was not available for all the firms in Stage 1, so the following three categories were used to represent export sales trend, over the previous five year period: increase; static; and decrease.

All the firms showed an increase in export sales over the previous 5 year period. This was a criterion for gaining an export award, although some of the firms had gained their export awards up to three years previously. Two of these firms, while still showing a slight increase in export sales trend over the five year period, had, in recent times, experienced a downturn in their export sales. The other 14 firms had been showing consistent growth over the five years preceding the study.

Export Intensity

Export intensity figures for the 16 firms have been presented in Table 4.1, and under the Firm Characteristics factor, which included discussion on the relationship between export intensity and other firm characteristics.

The relationship between export sales performance measures is helpful in ascertaining which measures, or combination of measures is the best indicator of export sales performance. Non-correlation of measures suggests that the measures are not equivalent and need to be interpreted differently. Because all the firms in Stage 1 were 'successful' exporters, all belonging to the category representing increase in export sales, it was not possible to perform a correlation analysis between the two export sales performance
measures, export sales trend and export intensity. This, however, formed a major part of the analysis of Stage 2 firms, described in Chapter 5.

**Number of Export Markets**

This variable has been discussed in relation to export commitment in the Managerial Variables factor. It is sometimes used as an additional measure of export performance (Matthyssens and Pauwels, 1996), though no significant association (chi-square analysis) or correlation (Spearman Correlation) was noted in the study between this variable and export intensity, both of which were categorised to facilitate analysis. However the small number of firms and the relatively small range of export intensity values may not have provided sufficient discriminating capacity between the categories. These limitations were overcome in the Stage 2 analysis.

**Achievement of Firms’ Export Objectives**

This variable relies on managers’ own perceptions of performance and although subjective and potentially respondent-biased, it is considered a useful qualitative measure of export performance, when considered alongside other quantitative measure (Aksoy and Kaynak, 1994; Cavusgil and Zou, 1994; Matthyssens and Pauwels, 1996). Managers from all 16 (100%) firms indicated in various ways that their export objectives had been largely met. While still achieving their objectives, some Managers indicated that constraints and barriers had prevented them from achieving their firm’s full potential.

Exporters’ objectives included financial (e.g. achievement of export sales growth or export intensity), strategic (e.g. market entry in specific markets) and operational (e.g.
meeting design or quality standards for export markets) elements. These elements are discussed in the context of other variables in this chapter, and for this reason, a separate content-analytic matrix is not presented.

4.2.5 Interim Summary: Stage 1 Qualitative Analysis

An interim summary of the key findings and conclusions from the Stage 1 analysis is helpful at this stage to better ground the conceptual model-building. Variables identified as influencing export sales performance were broadly similar to those found in the literature. However, categorisation of these variables into broader factors which constitute the major influences on export performance in existing export performance models was found to be limiting and simplified. The results from the study firms highlighted the interrelationships between variables and the importance of strategy process in export sales performance. Decision Explorer modelling and conceptual mapping takes the analysis back to a within-case, holistic view of export sales performance. Thus, the cross-case analysis is brought into the context of a single case scenario, with all the support of earlier analyses, thus enhancing the grounded theory approach to model development (Miles and Huberman, 1994).

4.3 Stage 1, Part B: Conceptual Model-Building

This section describes the conceptual model-building process using Decision Explorer software, and the results from various types of analysis applied to the model. This part of the study addresses the need expressed by Aaby and Slater (1989) for a more conceptual understanding of export performance. The concerns of Chetty and Hamilton (1996) that
export performance models have focused little on the overall causal pattern, but have rather concentrated on content, are also directly addressed. The model directly addresses the assertion by Leonidou and Katsikeas (1996) that independent variables are too often considered as single, rather than as combined, influences, ignoring the composite influence of all independent variables. The earlier analysis (using NUD-IST coded data) sought to gain a deep understanding of the components of the export sales performance process, and some perspectives on the associated dynamics. This model-building stage takes those perspectives further and attempts to tentatively identify the causal patterns of export sales performance from the variables discussed in the preceding section.

Specifically, this section aims to address research question (d): How are the variables interrelated, and how can the dynamics of export sales performance be explained?

4.3.1 Using Decision Explorer to Build the Model

Interaction between factors and their variables demonstrates the interactive and non-static nature of the exporting process, according to Chetty and Hamilton (1996). For example, they suggest that there is evidence for direct links from firm characteristics to competencies, and also note the opposite causation. Mapping variables and their relationships is one way to take these ideas forward. Decision Explorer is a mapping and analysis tool that provides a basis for linking variables or concepts in order to gain a deeper understanding of the dynamic nature of their interrelationships. This has been discussed in detail in Chapter 3.

The factors, variables and indicators identified in the NUD-IST analysis were mapped using Decision Explorer, to show their interrelationships. Decision Explorer terminology
assigns the term ‘concepts’ to factors, variables and indicators, and the term will be used in this way in subsequent discussion.

Concepts were mapped by the researcher, as described shortly, to reflect factors, their constituent variables, and their constituent indicators, resulting in three concept levels. The concepts were derived directly from the coding and pattern matching determined in the NUD-IST analysis. All the factors, variables and indicators (nodes and sub-nodes) identified in the NUD-IST analysis that showed relevance to the construct, export sales performance (see Section A of this chapter), were included in the conceptual map. Thus, selection of the concepts in the model was based on existing analysis, rather than on an independent, subjective process. Linkages were created by the researcher to represent the relationships and interrelationships between the concepts, again, informed primarily by the NUD-IST analysis. Weick (1979) refers to the need for the researcher / analyst to be exposed to a stream of experiences (noted in Miles and Huberman, 1994, p. 153). In the study, experiences were gained principally by exposure to the case study data and informants. Experiences were also gained by exposure to the research literature, both in exporting and other disciplines, particularly strategic management (advocated by Yeoh and Jeong, 1995, and Axinn et al, 1996). Simplified maps were produced during the analysis to reduce complexity and to illustrate the conclusions being drawn.

Creation of links was important, because it facilitated the association of variables with more than one factor and with other variables, a process initiated in the NUD-IST analysis. It also enabled the causes (explanations) and outcomes (consequences) of the
concepts (variables) to be determined, providing the main elements of the causal model. This is supported by the assertions of Miles and Huberman (1994) that the plot, or story, associated with the relationships in such causal networks, or maps, is directional, assuming that some variables exert influence on others. It was thus possible to illustrate the full extent of the relationships and their complexity, and provide some insights into the process and dynamics involved in export performance, from the data and experiences gained up to this point in the study. The conceptual maps show the causes (explanations) of concepts and their outcomes (consequences), the combined effect being a tentative explanation of export sales performance.

The concept and linkage polarities (positivity or negativity of the links) in the model were not indicated because there was no control group in Stage 1. The Stage 1 firms were all export award winners, and, while polarities were implied because the entire sample was a successful group, more valid results would be possible by comparing successful and unsuccessful exporters. Concepts were, therefore, at this stage, represented as ‘assertion’ concepts (Decision Explorer manual); these simply state that the concepts exist, without indicating the positive or negative aspect of the concepts or their linkages. The model was used in Stage 2 to assess the differences between successful and unsuccessful exporters, and thus assign polarities to the concepts and their links. Stage 2 also investigated the sustainability of the model over time, assisting in the confirmation of the causal nature of the model.
Various analytical techniques associated with Decision Explorer were applied to the
model to determine the following. (The names of the analytical techniques are noted in
parentheses).

- The relative importance of the concepts, based on the number of links into and out of
each concept (Domain Analysis and Centrality).
- The relative independence of the concepts, based on the degree of overlap of inward
linkages (Set Logic; LSS); this was important to ensure the integrity of each variable,
as well as to determine their scope of connectedness.
- The explanations for, and consequences of, each, or selected, concepts (Explore).

Decision Explorer based path analysis applies a more detailed analysis, but was
considered unnecessarily complex for the purpose of the analysis.

Equivalent quantitative analytical techniques include: factor and cluster analysis,
measures of association between variables (e.g. collinearity), and path analysis. The
purpose of the analyses used in Decision Explorer was to provide insights into the
identification of the most important or central concepts, the nature of their
interrelationships, and the main paths of causation from the concepts to export sales
performance.

The following sections discuss firstly, the causality associated with the model, and
secondly, the model building steps and analytical procedures undertaken with the model.
These are followed by a discussion of the conclusions that can be drawn from these
results, including the key differences between the conceptual model and existing models of export performance.

4.3.2 Causal Nature of the Conceptual Model

The conceptual model developed in Stage 1 of the research provided a preliminary causal model of export sales performance, in which the positive and negative nature of the links, though implied, were not determined. The emphasis, at this stage of the study, was on the actual relationships between concepts involved in export sales performance, rather than the polarity of their links. The directional nature of the links and relationships suggests a causal process, which was investigated further in Stage 2. The sequence and direction of relational links was determined by the researcher, drawing directly from the NUD-IST analysis and the review of the literature, as discussed earlier. This process conforms with the view of Miles and Huberman (1994), who suggest that identifying concepts and seeing their interaction, a method of ‘variable’ analysis (Mohr, 1982), is part of understanding causality. Abbott (1992) refers to the need to understand the ‘plot’ (the events arranged in a loose causal order) in assessing causality. Abbott (1992) asserts that causality is the inclusion of the ‘why’ question into the assessment of data. The conceptual model in the study addressed the issue of causality in these contexts, attempting, as Polkinghorne (1988) described, to configure ‘the events in such a way that their part in the whole story becomes clear.’ (p. 171). This ‘process’ analysis (Mohr, 1982), or ‘contextual’ analysis (Maxwell and Miller, 1992) was the main focus of the conceptual model development, building directly on the concepts and their interaction (the ‘variable’ analysis) derived from the NUD-IST data. Miles and Huberman (1994) refer to the ‘process’ mode as referring to the flow of connected events in context. Use of
both 'variable' and 'process' analysis in this way is helpful in “showing that ‘stories’ are not capricious, but include underlying variables, and that variables are not disembodied, but have connections over time.” (Miles and Huberman, 1994, p. 147) – the time dimension is addressed in the study in Stage 2. The conceptual map is, therefore, a preliminary causal map “which pulls together independent and dependent variables and their relationships into a coherent picture.” (Miles and Huberman, 1994, p. 148). Miles and Huberman (1994) also assert that a causal network, or map, should have associated analytic text describing the meaning of the connections among factors or variables: “... text and network together communicate more than either could alone.” (p. 153). In the study, this important aspect was provided by the detailed NUD-IST data, described in Section A of this chapter. The longitudinal study in Stage 2 develops the resulting picture further by investigating the chronological and temporal aspects of the data.

4.3.3 Model Building Steps

Figure 4.1 shows the ten factors determined from the earlier NUD-IST analysis, and their interrelationships. This representation is similar in format and scope to existing export performance models in the literature. It is a linear and compartmentalised view of the key influences on export sales performance. The model is explained as follows.

The External Environment, Existing Competencies, and Existing Firm Structure and Resources influence the development or modification of Firm Strategy. They also contribute to Export Strategy Formulation, which is guided and informed by Firm Strategy (for example, the extent to which exports will contribute to the overall business). Other inputs into Export Strategy Formulation are Managerial Variables and Firm
Characteristics. The formulation of export strategy results in specific Export Strategies. These articulate the Competencies that are needed, or which require modification, as well as other, operational-level strategies directed at achieving the wider export goals of the firm. These latter strategies include those for Investment and changes or modifications to Firm Structure and Resources. Thus, Competencies and Firm Structure and Resources are both inputs to and outputs from, export strategy, in keeping with strategy process theory (Johnson and Scholes, 1993; Hamel and Prahalad, 1994). The Export Strategies factor leads directly to Implementation, which is also influenced by Managerial Factors and Firm Characteristics. These latter factors were also contributors to Export Strategy Formulation. Implementation leads directly to Export Sales Performance.

This model, although simplified itself, highlighted the same limitation in other models of export performance. In addition, the dual involvement of Competencies and Firm Structure and Resources as both inputs and outputs of export strategy adds a new perspective. These factors are usually incorporated in other models of export performance as a single influence on export strategy, and the models ignore the possible requirements for reconfiguration of these factors in the execution of export strategy. Maps 4.2 and 4.3 incorporate these new factors and relationships.

In considering these issues, it became evident that reconfiguration of these factors (Competencies and Firm Structure and Resources) was actually a management process. In other words, the two factors influenced export strategy formulation in their existing
Figure 4.2  Conceptual Model of Export Sales Performance (Factors and Variables)

1st level = Factors (green)  2nd level = Variables (yellow)
Pagination
Error
Figure 4.3 Conceptual Model of Export Sales Performance (Factors and Variables and Indicators)
form and among the resulting export strategies were management processes associated with the factors i.e. Competency Management and Firm Structure and Resources Management. These management processes then influenced competencies and structure and resource variables accordingly, with an emphasis on the ways in which they and/or their component variables should be utilised, changed, or reconfigured in implementing the export strategy. Recognition of the role of these management tasks provided a dynamic, process-driven perspective of model.

Figure 4.2 shows additional concepts (variables, which explained the factors) in the model. With the associated links, the model becomes more complex, and entirely supports the research need to consider the factors and variables associated with export performance as interrelated, rather than unconnected, entities. The apparent complexity of the model may be one reason why attempts to investigate the relationships between variables in export performance models have been few. The advantage of using a computer modelling tool is that the complexity can be represented in a complete map, which can also be disaggregated into component parts for easier understanding. This understanding is assisted by access to underlying data, in this case, from the NUD-IST analysis. The approach supports the contention of Miles and Huberman (1994), that good causal maps must respect complexity; they suggest that complex maps can be viewed in sections, in conjunction with associated text (p. 153).

Figure 4.3 includes the remaining concepts (indicators, which explain the variables) and shows a further level of complexity, not easily deciphered at first glance, but able to be
broken into parts for investigation and analysis. When all the factors, variables and indicators were mapped, the model contained 82 concepts. These represented all the nodes and sub-nodes identified in NUD-IST as relevant to the construct, export sales performance. While the map is as comprehensive as the data and its interpretation permitted, it is possible that additional concepts and links may have been overlooked.

To facilitate interpretation of the model, shown in Maps 4.1 – 4.3, the three building steps have been coded according to style and colour of the concept surround. The first level concepts (factors) have a rectangular style and are coloured green. Second level concepts (variables) have an oval style and are yellow. The third level concepts (indicators) also have an oval style and are orange.

4.3.4 Analysis

The four types of analysis applied to the model were: Domain Analysis; Centrality Analysis; LSS set logic (overlap), and Explore (explanations and consequences). These are now discussed.

4.3.4.1 Domain Analysis

This was applied to the model to investigate the connectivity of the concepts. Domain Analysis enabled the identification of ‘busy’ concepts in the model - that is, those with a large number of links. These concepts tend to be the key issues in the model (Decision Explorer manual p58).
Full results of the Domain Analysis are shown in Appendix 3. The factor, Competency Management, was the highest scoring concept (16 links), followed by Export Strategy Implementation (14 links), and Management (12 links). Since the number of concepts was high, and many were only lightly connected, it was decided to select the top 15 concepts to provide a base for further analysis. However, there was no distinction between the 15th and 16th concept (both scoring 7 links) in the analysis, so 16 concepts were chosen (Table 4.15-Part 1).

Domain Analysis also showed the number of inward and outward links for each concept, to one level. Table 4.15 (part 1) shows this analysis for the top 16 concepts. Most of the links for Competency Management were outward (13 out of the 16); this is not surprising because it influences, or explains, all the competencies variables. In contrast, Export Strategy Implementation had a high number of inward links, because it is the consequence of a large number of preceding concepts. Most other concepts had approximately equal numbers of inward and outward links, or combinations that could be explained by examination of their position in the model. From this analysis, it as possible to determine which variables were predominantly explanatory, or causal concepts (many outward links) and which were predominantly consequential concepts, or effects (many inward links). The actual links concerned were determined from the Explore analyses in Decision Explorer. These are shown for the top 16 concepts in map form in Appendix 4.

Most concepts were both explanatory and consequential to varying degrees, except for those at the 'edges' of the model. These concepts are called Heads and Tails; with Heads
Table 4.15
Domain and Central Analysis, with results from each analysis shown in decreasing order
(Concept number in parentheses)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Part 1: Domain Analysis</th>
<th>Part 2: Centrality Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Concept Name</td>
<td>Rank</td>
</tr>
<tr>
<td>1</td>
<td>Competency Management (88)</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Export Strategy Implementation (87)</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Management (19)</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>R&amp;D/Tech (6)</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>Market Selection (13)</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>Relationships / Personal Contact (14)</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>Productivity (15)</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>Investment (82)</td>
<td>8</td>
</tr>
<tr>
<td>9</td>
<td>Export Strategy Formulation (86)</td>
<td>9</td>
</tr>
<tr>
<td>10</td>
<td>Firm Structure and Resources Management (89)</td>
<td>10</td>
</tr>
<tr>
<td>11</td>
<td>External Environment (1)</td>
<td>11</td>
</tr>
<tr>
<td>12</td>
<td>Firm Strategy (2)*</td>
<td>12</td>
</tr>
<tr>
<td>13</td>
<td>Marketing (4)</td>
<td>13</td>
</tr>
<tr>
<td>14</td>
<td>Quality (5)</td>
<td>14</td>
</tr>
<tr>
<td>15</td>
<td>Domestic Environment (8)*</td>
<td>15</td>
</tr>
<tr>
<td>16</td>
<td>Firm Characteristics (72)</td>
<td>16</td>
</tr>
</tbody>
</table>

* = concepts not part of domain analysis
^ = concepts not part of centrality analysis
Pagination Error
having only inward links (consequential concepts) and Tails have only outward links (explanatory concepts). Appendix 5 shows the result of a Heads and Tails Analysis to determine those concepts that had only one ‘role’ (explanatory or consequential) in the model.

The following key points emerged from the Domain Analysis (summarised in Table 4.15 - Part 1):

- Competency Management is the most important concept in the model, and is predominantly explanatory.
- Export Strategy Implementation is the next most important concept, and is predominantly consequential.
- Management is the third most important concept and is more explanatory than consequential.
- The explanatory or consequential nature of the concepts can be readily identified using Domain Analysis.

Domain Analysis thus provided a preliminary view of the most important concepts in the model and their major roles, as explanatory, or consequential concepts. Centrality Analysis enabled a more in-depth view of the important concepts, as discussed below.

4.3.4.2 Centrality Analysis

Centrality (or Central) Analysis goes further than Domain Analysis by including a wider context of the map. It calculates the connectivity of concepts to a specified level beyond the ‘central’ concept. In the study, 3 levels of connectivity (i.e. 3 concept levels) were used. This provided some insight into the centrality of each concept in the entire model, rather than its immediate vicinity (determined with Domain
Analysis). The deeper and more numerous the linkages, the more central role played by the concept.

Centrality is calculated using a scoring system for concepts at the different levels; the more distant the concept, the lower the score. For concepts one level away, the score is 1.0 for each concept; if there are three connected concepts at level one, the score would be 3. For concepts two levels away, the score is 0.5 per concept; and for concepts three levels away, the score is reduced to 0.33. This implies that the closer the linked concept, the more important it is to the central concept. Two measures are provided in the centrality analysis, shown in Table 4.15 (part 2). The first (left-hand) measure is the score, calculated in the way described. The second (right-hand) measure is the number of concepts involved for all the levels calculated. For example, the concept Export Strategy Implementation produced a centrality result of 44 from 81. In other words, concepts from three levels of linkages produced a score of 44, and 81 concepts were involved. The analysis does not specify how many concepts were involved at each level. Like Domain Analysis, centrality calculates both inward and outward linkages. However, unlike Domain Analysis, Centrality Analysis does not distinguish between, or identify, inward and outward linkages. These can be determined using another form of analysis in Decision Explorer, such as Explore.

The model contains only three concept levels, so some of the most 'central' concepts were linked to almost all the other concepts in the model. This is to be expected in a highly linked model, and confirms the importance of interrelationships in the conceptual model of export sales performance in the study. The highest centrality
score (Table 4.15 (part 2) belonged to Export Strategy Implementation. This captured all the consequences of the preceding concept in the model, but this was only apparent when analysed to three levels, which Centrality Analysis enabled. Export Strategy Implementation is thus central to export sales performance. This result is not surprising, since implementation is a key element of successful strategy outcomes. What the model highlights, however, is its degree of importance. Most export performance models tend to take implementation for granted, moving directly from export strategy to export performance; seldom do they include implementation explicitly. Cavusgil and Zou's (1994) export performance model does include implementation, somewhat indirectly, and its central importance is not emphasised.

The next most important concept was Competency Management, carrying all the outward links to individual competencies and inward explanatory links from the strategy development process. Competency Management and Export Strategy Implementation were also top of the Domain Analysis, although their positions have become interchanged. This suggests that they are robust through all 3 concept levels, meaning that most, if not all, factors, variables and indicators involved in export performance were, in some way (by explanation or consequence), associated with them. In other words, the connections were deeply rooted.

Investment, a direct consequence of the Export Strategies factor, ranked third in the Centrality Analysis. This is a significant move up the ranking from the Domain Analysis, where it was eighth. This indicates that Investment has a larger number of secondary and tertiary links than a number of other concepts, which may have been more primary, or immediate links. Thus, Investment was also deeply rooted in the
model, particularly through its relationship with individual competencies. Table 4.15 (part 2) shows the remaining concepts with gradually decreasing centrality values.

A comparison of Centrality results with the Domain Analysis (Table 4.15-parts 1 and 2), showed that the majority (14) of the concepts in the top 16 were the same. Even though Centrality Analysis takes the analysis deeper, there was little difference in the identity of the top 16 concepts. The two exceptions were: Firm Strategy and Domestic Environment, which were replaced in the Centrality Analysis by Market Research and Export Strategies, both with fairly high scores. The latter two concepts were more widely linked at lower levels than the former two. Many of the concepts in the top 16 changed ranking between the two types of analysis. The top two concepts and R&D moved least. The concept that moved up the most was quality, whose deeper links gave it a higher Centrality score. The concept that moved down the most was Management, from 3rd in the Domain Analysis to 11th in the Centrality Analysis. This indicated that, while Management had a high number of immediate links with other concepts, it had few links deeper than first level.

Because of its deeper analysis of concepts and links, Centrality Analyses was considered to provide a more accurate indication of the relative importance of the concepts in the model than Domain Analysis. Subsequent analysis of the ‘most important’ concepts used results from the Centrality Analysis. Domain Analysis remained important in determining primary links and the concepts responsible for direct explanations and consequences.
Results from the Centrality Analysis suggest that:

- Export Strategy Implementation, Competency Management and Investment are the three most important, or central concepts in the model, by virtue of the number of links at three concept levels.

- Some concepts have a larger number of links than others at the second or third level (e.g. Export Strategies and Market Research). These links collectively make the concepts more ‘central’ to the model than others with mainly primary links. This is because their relationships and overall impact are more deeply rooted in the model.

Since there were clear distinctions between the Centrality scores, and the 16th concepts, Firm Characteristics, was to be analysed separately (described in Chapter 3), the top 16 concepts were reduced to the originally intended number of 15 concepts for subsequent analysis. The inclusion of Firm Strategy, towards the end of Stage 2 of the study, where its apparent importance in export sales performance became evident, is explained in Chapter 5.

4.3.4.3 Set Logic Analysis Showing Degree of Concept Overlap

A powerful way of structuring the model data is to arrange related concepts into sets (Decision Explorer Manual, p52). Differences and similarities between sets can then be analysed. Each of the top 15 concepts from the Centrality Analysis were arranged into sets which comprised the first level explanatory (inward) concepts to which they were linked. Set Logic analysis showed the explanatory concepts that were shared by others, enabling some insight into the independence of the concepts concerned. This assesses the integrity of the concepts as independent variables, and has parallels with co-linearity analysis in quantitative research. For example, if two concepts share a
large number of explanatory links, then it is difficult to attribute influences of either
congcepts to one or the other alone. A high degree of overlap suggests that the
variables are not independent.

A summary of the Top 15 concept overlaps is shown in Table 4.16. An overwhelming
majority (71.4%) of concept combinations had no shared links at the immediate
explanatory level, and only 6.5% of the total number of overlaps had 50% or greater
actual overlap. This result suggests that, in terms of shared explanations, the top 15
concepts were independent. The small number of overlaps that did occur, was
indicative of some of the interdependencies of these concepts, although, as shown in
the map, most interdependencies occurred with concepts at the second or third
linkage levels.

Table 4.16
Summary of Concept Overlaps From Conceptual Model

<table>
<thead>
<tr>
<th>% overlap</th>
<th>No. of occurrences</th>
<th>% of occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>5</td>
<td>2.4</td>
</tr>
<tr>
<td>67</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>57</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>50</td>
<td>6</td>
<td>2.9</td>
</tr>
<tr>
<td>43</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>33</td>
<td>3</td>
<td>1.4</td>
</tr>
<tr>
<td>29</td>
<td>9</td>
<td>4.3</td>
</tr>
<tr>
<td>25</td>
<td>4</td>
<td>1.9</td>
</tr>
<tr>
<td>22</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>20</td>
<td>3</td>
<td>1.4</td>
</tr>
<tr>
<td>17</td>
<td>38</td>
<td>3.8</td>
</tr>
<tr>
<td>14</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>9</td>
<td>4.3</td>
</tr>
<tr>
<td>10</td>
<td>3</td>
<td>1.4</td>
</tr>
<tr>
<td>8</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>0</td>
<td>150</td>
<td>71.4</td>
</tr>
</tbody>
</table>

Total no. of concept combinations = 210
When the overlaps were analysed to determine which concepts were the most involved with other concepts (overlap frequency), it was found that Investment and Competency Management scored highest, overlapping with other concepts 16 and 15 times respectively. Other concepts had 5 or less overlaps. This suggested that, among the top 15 concepts in the model, Investment and Competency Management were the most frequent explanatory concepts - that is, they contributed most to the explanations leading to export sales performance. This is consistent with the results of the Domain and Centrality Analyses, except that Export Strategy Implementation did not score high on overlap frequency (for explanatory links); this is because it is a predominantly consequential concept, as discussed earlier. Investment was an explanatory concept behind 6 of the top 15 concepts; for example, investment is necessary for quality and other competencies, as shown in the model. The explanatory role of Competency Management has been discussed earlier; it is a key input into the competencies and their effective implementation.

4.3.5 Summary of Decision Explorer Analysis

In summary, conceptual mapping of the factors, variables and indicators associated with export sales performance, and derived from qualitative (NUD-IST) analysis of the data, enabled interrelationships to be established. The conceptual map and mapping process provided insights into the research question (d) outlined earlier. The conceptual map tentatively identified the causal links leading to export sales performance, and the chains of explanation and consequence leading to this outcome. For each concept, it was possible to determine the direct and indirect links to export sales performance, as well as to other concepts. Analyses of the conceptual map led to an assessment of the top 15 concepts in the model. Of these, Competency Management, Export Strategy Implementation and Investment were the most
important, or central, concepts, with most other variables being either explanations, or consequence of these. Investment and Competency Management were shown to have the widest association with other concepts, confirming their importance in the model.

4.3.6 Comparison of the Conceptual Model with Existing Models of Export Performance

Notwithstanding the fact that the conceptual model used the construct, export sales performance, rather than export performance, a comparison with existing models of export performance is helpful. Such a comparison provides insights into the overall export performance construct, while recognising that most models use different export performance measures, with some similarly restricted to mainly export sales-based measures (see discussion in Chapters 2 and 3).

The model is derived from a qualitative study of export firms, which, itself, represents (a) a significant departure from the approach of most other models, and (b) a response to often stated requirements of export research (e.g. Aaby and Slater, 1989; Leonidou and Katsikeas, 1996). A number of key differences between the conceptual model and other export performance models are noted below.

The model attempts to represent the process of export sales performance, capturing the dynamics as they relate to the interrelationships between the variables concerned. While other models also reflect a number of directional linkages towards the outcome, export performance, the models are, by comparison, more simply presented. For example, the main concepts in these models are factors, which are few in number (usually 5-7), and linear in their relationships with one another and export
performance. The numerous variables influencing, or contributing to, these factors are generally listed below the relevant factors in the models, with little description or mapping of their relationships with each other or other factors and their variables. Since answers to the ‘why’ and ‘how’ questions relating to export (sales) performance rely on an understanding of the associated process and dynamics, it is not surprising that these questions are thought to be largely unanswered (Aaby and Slater, 1989; Caughey and Chetty, 1994). The conceptual model developed in Stage 1 of the study contributes to this understanding, by mapping all the key factors, variables and indicators and their linkages involved in export sales performance, and by providing qualitative data to support and explain the many aspects of the resulting model.

A fundamental aspect of the conceptual model is the role of strategy, which supports the involvement of 'process' perspective (Mohr, 1982; Miles and Huberman, 1994) in export sales performance, and which further sets the conceptual model apart from others. Similarly to other models, the conceptual model incorporates export strategy/ies. However, the key difference is in the incorporation of other crucial parts of the strategy process, namely export strategy formulation and export strategy implementation. Cavusgil and Zou (1994) address the issue of implementation in their model of export performance, but only indirectly. The conceptual model also recognises the important interaction between export strategy formulation and firm strategy, supporting the strategic management perspective of the overriding influence of corporate-level (or, in a single business firm, the business-level strategy) (Johnson and Scholes, 1993; Hamel and Prahalad, 1994). Although some researchers (e.g. Aaby and Slater, 1989; Bijmolt and Zwart, 1994) recognise the role of firm strategy in export performance, this factor does not explicitly feature in other models.
The three export strategy related factors (export strategy formulation, export strategies and export strategy implementation) form the backbone of the process leading to export sales performance. This is informed both by detailed data from the NUD-IST analysis and the strategic management literature. Other models of export performance appear not to consider these strategy process factors, but assume export strategy to be a largely independent entity, leading directly to export performance.

A further difference between the conceptual model and others relates to the interpretation and operationalisation of the export strategy factor. While many models incorporate export strategy, it is most often operationalised as export marketing strategy, with a focus on marketing mix variables. (e.g. Cavusgil and Zou, 1994). Additionally, there is often no distinction made between the terms export strategy and export strategies in the same study (e.g. Axinn et al, 1996), resulting in lack of clarity or consistency about the level of strategy/strategies in question. Although Cavusgil and Zou (1994) discuss the wider importance of strategy and export strategy in export performance, their model incorporates these as export marketing strategy, with a marketing (functional-level) focus. Bijmolt and Zwart (1994) have export policy as a central component of their export performance model, and, while it integrates a number of other key variables, it remains relatively narrow in its interpretation and operationalisation of export strategy. Wider aspects of export and firm level strategy, such as competencies, like quality, resources, firm structure, and investment, are not generally explicit in the operationalisation of export strategy, because of the marketing emphasis of most other models. A higher business-level perspective of export strategy is important because it incorporates key activities and processes involved in export performance, such as those mentioned above. The
conceptual model incorporates export strategy at a higher business-level, rather than functional level in the firm, and thus provides an unusual approach to this factor.

As a result of the qualitative approach and mapping methods applied, the conceptual model identifies all the key variables and their linkages associated with export sales performance. This approach enables the data to be treated in a multi-variable, rather than uni-, or bi-variable manner. The latter approach has been criticised in the literature (e.g. Aaby and Slater, 1989; Leonidou and Katsikeas, 1996), in particular, those studies that measure the influence of each variable on export performance independently of other variables and influences. Although adopting a qualitative and subjective approach, the conceptual model provided a mechanism for considering the multi-variable influences on export sales performance. The study design allowed the application of quantitative analytical procedures to the data that tested the model over time (Stage 2). These quantitative methods included multivariate analysis, which specifically addressed the combined influences of multiple variables on export sales performance. Cavusgil and Zou’s (1994) study analysed multivariate relationships involved in export performance using path analysis, although, as mentioned, their study had an export marketing emphasis.

A unique feature of the conceptual model, which relates directly to the central role of the export strategy process, is the inclusion of the competency management and firm structure and resources management factors. These support the emphasis on the process and dynamics of export sales performance, since these factors are concerned with the way that competencies and firm structure and resources are managed and utilised for current export business, as well as the way that they are leveraged for
future performance. These factors and their constituent variables are included in various categorisations in other models of export performance, but they generally omit various aspects relating to their management. Some of the management issues, such as manpower (Diamantopoulos and Schlegelmilch, 1994), are addressed under management factors in other models, but the direct management aspects associated with the two factors and their variables in the conceptual model are not reported elsewhere. A future orientation towards management of competencies and firm structure and resources also appears to have been largely overlooked, except for indirect consideration of future management perspectives of export performance noted in some studies (e.g. Axinn et al, 1996; Souchon and Diamantopoulos, 1997).

The three most central concepts in the conceptual model, Competency Management, Export Strategy Implementation, and Investment, appear not to be of central importance in other export performance models. Apart from investment and, indirectly, Export Strategy Implementation, they have not drawn attention as individual factors or variables at all. It could be argued that they are implicit in these models, but the key finding in this study is their very explicit and central involvement. Competency Management and Export Strategy Implementation are notable in helping to explain the process (the how and why, rather than just the content, or what) of export sales performance, as discussed earlier. The general absence of these concepts, or other process- or causal-related factors, from other models may well explain why the models have been unable to achieve consistent results, or to adequately explain export performance, as criticisms in the literature highlight (Chapter 2).
Access to detailed underlying qualitative data, utilisation of the mapping process, and development of key multi-variable relationships within the conceptual model, enabled a contingency view of export sales performance. Such a perspective is supported by export performance models of Cavusgil and Zou (1994) and Yeoh and Jeong (1995). In contrast to these models, however, the impact of changes in potential contingent variables (such as external environment) in the conceptual model can be readily analysed. This is possible because the mapping software documents the multiple linkages involved in the model, and re-analyses the model in the light of changes in factors, variables and indicators and their links. Notwithstanding that the conceptual model is subjectively based, it allows deeper investigation of contingency effects of variables, or concepts, than is currently possible in other export performance models.

While some of these distinctive aspects are evident in other models of export performance, none appear to incorporate all the elements in a single model of export performance. This has important implications because the distinctive aspects are interdependent and mutually reinforcing in the conceptual model. The distinctive aspects are, in summary, the strategy process as a backbone of export sales performance, the qualitative level of understanding of the construct, the importance of multivariate relationships, the strong management influence, and the contingency basis of the conceptual model. The overall differences noted above distinguish the conceptual model from other models of export performance reported in the literature.

4.4 Summary of Chapter

This chapter has described the qualitative analysis relating to Stage 1 of the study. By utilising a process of coding and pattern matching, the NUD-IST analysis identified
the key factors, variables and indicators influencing export sales performance, and supported these with detailed underlying case study data. The factors, variables and indicators were mapped as consequences, using Decision Explorer software, to produce a conceptual model, which is a tentative causal model of export sales performance.

The conceptual model provides a perspective on the process and dynamics of export sales performance by determining the interrelationships between the concepts in the model, providing some insights into question (d), outlined earlier. Key distinctive aspects of the conceptual model which distinguish the model from other export performance models, have been described in this chapter.

Stage 2 of the study includes both successful and unsuccessful exporters, and thus enables the model to be tested and the concepts and linkage polarities to be determined. In addition, the influence of time on the conceptual model is assessed in the longitudinal component of Stage 2.
5.1 Introduction

The purpose of Stage 2 was to investigate export sales performance in a wider group of exporters than in Stage 1, and to seek to differentiate between successful and unsuccessful exporters, on the basis of export sales performance. The investigation aimed to assess the generalisability of the conceptual model developed in Stage 1, using quantitative and qualitative approaches. The dynamics of export sales performance were studied using longitudinal analysis. Specifically, Stage 2 addressed the research questions (e), (f), (g), (h) and (i). Questions (e), How are successful and unsuccessful New Zealand exporting firms characterised, in terms of firm and management characteristics, and products and markets? and (f), Are there significant differences between the two groups of exporters (successful and unsuccessful)? are addressed at each phase of Stage 2 in the sections on Firm Characteristics. (Management characteristics are noted only for Phase 1 (1989). Question (g), What are the similarities and differences between successful and unsuccessful firms with regard to the variables, and their interrelationships, that influence export sales performance, and how do these relate to the model of export sales performance developed in Stage 1? is similarly addressed at each phase, in the sections on the Top15 concepts. Question (h), How do the variables, and their interrelationships, associated with export sales performance, change over time, in relation to exporters' changing export sales performance patterns? relates to the longitudinal analysis, and
is addressed in the latter part of this chapter. **Question (i)**, *What changes, if any, are required to the export sales performance model developed in Stage 1, to reflect changes in firms’ export sales performance-related activities and the associated variables and interrelationships over time?* is concerned with applicability of the results to the conceptual model and is discussed in the concluding section of the chapter.

The focus of the Stage 2 analysis was on the assessment of the conceptual model developed in Stage 1, and therefore, on the Top15 concepts. Firm characteristics, while important in the analysis, were presented in summary form, but discussed in depth where relevant. The relationships between firm characteristics and the Top15 concepts and export sales performance, in the context of the international literature, have been discussed at length in Chapter 4. For Stage 2, results and the literature are compared only where they differ from the findings in Stage 1. This chapter discusses the Stage 2 results primarily in relation to the conceptual model.

Stage 2 analysis involved a sample of 60 exporting firms, as detailed in Chapter 3. These firms represented two categories of export sales growth: those that had a trend of growth in export sales, and those that had not shown a growth trend in export sales, as detailed in Chapter 3. In this chapter, these two categories are referred to as ‘export growth firms’ and ‘no export growth firms’ respectively. The Stage 2 firms were investigated on three occasions over a six year period. The results are presented for each of these time periods, and then analysed longitudinally for the entire six year period. Over the six years, 13 firms left the study, 11 ceasing operations, and two withdrawing. For analytical purposes, these firms were removed from the cohort.
Some firms were also unavailable at the time of interviewing: 4 in period 2, and 9 in period 3. These were included in the analyses as 'missing cases'. The actual sample sizes for the three periods were: Phase 1: 60 firms; Phase 2: 50 firms (4 missing); Phase 3: 38 firms (9 missing).

The discussion for each period comprises a brief review of the situational context of the firms. Descriptive statistics are presented for the Top 15 concepts (hereafter called "Top15") from the conceptual model. As discussed in Chapter 3, firms were assigned category ratings representing their performance or managerial perceptions relating to the concepts. Relationships between the Top15 concepts and export sales performance were analysed at the case- and concept-level (case-oriented and variable-oriented approaches, respectively). Three export sales performance measures were used, as discussed in Chapter 3: export sales trend - Trend(ES); export intensity, categorised - ExIntCat; and trend in export intensity - Trend(EI). The longitudinal analysis involved comparison of all three time periods in relation to firm characteristics, Top15 and export sales performance data, and using time as the dependent variable, as discussed in Chapter 3. Since the data contained interval, ordinal and nominal data, a combination of parametric and nonparametric statistical methods were used (see Table 3.5).

Reference to the qualitative data, captured and analysed on the NUD-IST database, is made throughout the presentation of the Stage 2 analysis. It is beyond the scope of the project to present the full qualitative analysis, as discussed in Chapter 3. However, qualitative data is used and presented throughout the Stage 2 analysis to
enrich the interpretation and understanding of the analysis (Miles and Huberman, 1994).

5.2 Phase 1: 1989

Interviews for Phase 1 occurred five years after the start of major economic restructuring in New Zealand. Multiple case analysis of the NUD-IST data showed that 92% of the study firms perceived the New Zealand environment as unfavourable and a constraint to export growth. Particular constraints were exchange rates and interest rates, the latter also affecting investment cost and availability of investment finance (Table 5.1). Notwithstanding this, the majority of firms (61%) also perceived the domestic market to be important, suggesting, as for Stage 1 firms, that risk was perceived to be greater for export than local business. Firms may have responded this way because they were vulnerable to external pressures.

Table 5.1
Perceived Constraints to Export Growth (1989)
N=60

<table>
<thead>
<tr>
<th>Constraining Factor</th>
<th># of firms N=60</th>
<th>% of firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>High and volatile exchange rates</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>High interest rates</td>
<td>27</td>
<td>45</td>
</tr>
<tr>
<td>Lack of investment</td>
<td>21</td>
<td>35</td>
</tr>
<tr>
<td>Trade Barriers</td>
<td>17</td>
<td>28</td>
</tr>
<tr>
<td>Import deregulation</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>Unfavourable domestic infrastructure</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>Lack of skilled staff</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Transport costs</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Overseas competition</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Growth transition</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Head Office culture</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Most firms, however, positively identified competitive advantages for their export business, a characteristic noted by Katsikeas (1994) of high involvement exporters. These included quality, technology, design, unique products, personal contact, and
service, with quality being the most common. This result indicated that firms were still able to maintain an international advantages/s even though their financial resources were deemed inadequate for development. This contextual understanding, noted by Cavusgil and Zou (1994) and Yeoh and Jeong (1995), in their co-alignment and contingency concepts, respectively, contributed to the interpretation of the analysis, to follow. Descriptive statistics and analysis for firm characteristics follow.

### 5.2.1 Firm Characteristics

Firm characteristics were divided into those represented by interval data and those represented by nominal and ordinal data. Table 5.2 shows the descriptive statistics for the firm characteristics indicated.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Variable Code</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export Intensity</td>
<td>ExpInt</td>
<td>33.38</td>
<td>25.72</td>
<td>60</td>
</tr>
<tr>
<td>Export Sales ($M)</td>
<td>ExpSales</td>
<td>3.81</td>
<td>9.15</td>
<td>47</td>
</tr>
<tr>
<td>Number of Employees</td>
<td>No.Emp</td>
<td>67.47</td>
<td>118.5</td>
<td>57</td>
</tr>
<tr>
<td>Total Sales ($M)</td>
<td>TotSales</td>
<td>7.98</td>
<td>13.71</td>
<td>47</td>
</tr>
<tr>
<td>Years Before Exporting</td>
<td>YrsBetExp</td>
<td>15.65</td>
<td>23.99</td>
<td>60</td>
</tr>
<tr>
<td>Years in Business</td>
<td>YrsInBus</td>
<td>27.30</td>
<td>27.37</td>
<td>60</td>
</tr>
<tr>
<td>Years in Exporting</td>
<td>YrsInExp</td>
<td>11.55</td>
<td>8.78</td>
<td>60</td>
</tr>
</tbody>
</table>

The mean results show that the firms were relatively young with short-medium periods of time in exporting, according to definitions of Das (1994). However, standard deviations for all characteristics were large, reflecting wide variation across the firms.

Relationships between these characteristics were tested using the Pearson Correlation Coefficient. Significant correlations are shown in Table 5.3.
All the significant correlations are positive. Firm size, measured as Number of Employees (NoEmp), appears to be the characteristic correlated with most other characteristics. Years in Business, Years in Exporting and Years Before Exporting are significantly correlated with each other, perhaps supporting the published view that younger firms spend less time before exporting than older firms (e.g. Rennie, 1993). The significant result between ExpInt and ExpSales suggests that these may both be indicators of export sales performance - this is examined in more detail throughout the chapter. These results directly address the part of research question (e) regarding firm characteristics of the study firms. Question (f), regarding differences between successful and unsuccessful exporters is addressed as follows.

Relationships between firm characteristics with interval data and export sales performance were tested, using the two performance measures Trend(ES) and ExIntCat as dependent variables. An independent, 2-sample t-test (2-tailed) and ANOVA were used respectively, with Trend(ES) having two data groups and ExIntCat having three data groups. (It is noted that export intensity is used in the
analysis as both a dependent and independent variable, since data was available in both interval and categorical form (see Chapter 3). This enabled relationships between export intensity and both interval and categorical data to be tested. Table 5.4 shows the significant results from these analyses.

Table 5.4
Firm Characteristics and Export Performance (Interval Data) (1989)
N=60

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>N=</th>
<th>Test</th>
<th>Independent Variable</th>
<th>Means</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trend(ES)*</td>
<td></td>
<td>t-test</td>
<td>Export Intensity (%)</td>
<td></td>
<td>t=2.209*</td>
</tr>
<tr>
<td>'export growth'</td>
<td>37</td>
<td></td>
<td></td>
<td>38.99</td>
<td></td>
</tr>
<tr>
<td>'no export growth'</td>
<td>23</td>
<td></td>
<td></td>
<td>24.37</td>
<td></td>
</tr>
<tr>
<td>ExpIntCat</td>
<td></td>
<td>ANOVA</td>
<td>Export Sales ($M)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;60%</td>
<td>9</td>
<td></td>
<td></td>
<td>12.94</td>
<td>F=7.441**</td>
</tr>
<tr>
<td>20%-60%</td>
<td>22</td>
<td></td>
<td></td>
<td>2.57</td>
<td></td>
</tr>
<tr>
<td>&lt;20%</td>
<td>16</td>
<td></td>
<td></td>
<td>0.38</td>
<td></td>
</tr>
<tr>
<td>ExpIntCat</td>
<td></td>
<td>ANOVA</td>
<td>Total Sales ($M)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;60%</td>
<td>9</td>
<td></td>
<td></td>
<td>18.17</td>
<td>F=3.708</td>
</tr>
<tr>
<td>20%-60%</td>
<td>22</td>
<td></td>
<td></td>
<td>6.90</td>
<td></td>
</tr>
<tr>
<td>&lt;20%</td>
<td>16</td>
<td></td>
<td></td>
<td>3.74</td>
<td></td>
</tr>
</tbody>
</table>

Significance: **(0.01) *(0.05)

The significant results for Trend(ES) and Export Intensity suggest that they may be equivalent export sales performance measures, though later results question this assumption. The relationship between ExIntCat and Total and Export Sales is not surprising, given that the export intensity measure is derived from these characteristics.

Other firm characteristics, represented by nominal and ordinal data were analysed against Trend(ES) and ExIntCat, using Pearson Chi-Square analysis and Spearman Correlation. These characteristics were: first market (Australia vs others) - 1stMkt; domestic market share - NZMktSh; greater than ten foreign markets - >10Mkts; Ownership (private vs public) - ownership; trend in employee numbers - Trend(Emp);
and trend in total sales Trend(TS). Trend(ES) and ExIntCat were also tested against each other. The significant results are shown in Table 5.5.

<table>
<thead>
<tr>
<th>Firm Characteristics and Export Performance (Categorical Data) (1989)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=60</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Crosstabs</th>
<th>Pearson chi-square</th>
<th>Spearman Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Trend(ES) vs:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trend(Emp)</td>
<td>.000**</td>
<td>.626**</td>
</tr>
<tr>
<td>Trend(TS)</td>
<td>.000**</td>
<td>.628**</td>
</tr>
<tr>
<td><strong>ExIntCat vs:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;10Mkts</td>
<td>.001**</td>
<td>.352**</td>
</tr>
<tr>
<td>Trend(TS)</td>
<td>.045*</td>
<td>.319*</td>
</tr>
</tbody>
</table>

Significance (two-tailed): **(0.01) *(0.05)

Key: >10Mkts: greater than ten foreign markets; Trend(Emp): trend in employee numbers; Trend(TS): trend in total sales; Trend(ES): trend in export sales; ExIntCat: export intensity (categorised).

The strong positive association between Trend(ES) and Trend(Emp) supports the earlier correlation noted between the two actual values, ExpSales and NoEmp (Table 5.3), and suggests a dynamic relationship between them. Trend(TS) was positively associated with both Trend(ES) and ExIntCat, supporting earlier qualitative results and indicating the importance of export sales in overall business performance. The positive association of ExIntCat with >10Mkts is consistent with the higher levels of exports expected when firms export to many foreign markets (though this does not distinguish between spread or concentration market development strategies (Piercy, 1981).

In this analysis, Trend(ES) and ExIntCat were not significantly associated. This contrasts with the significant result obtained in the t-test analysis of Trend(ES) and Export Intensity (included as an interval variable) Table 5.5 shows the chi-square
analysis, which used the export intensity measure in its categorised form, and this may explain the different results.

Given recent interest in the born global phenomenon, and the fact that 27% of the study firms qualified as born global in terms of time before exporting (two years or less), analyses were conducted to determine associations between these firms, export sales performance and various firm characteristics. Data for the variable, Years Before exporting (YrsBefExp), were categorised as follows to enable chi-square analysis to be conducted: 1= <and including 2 years, 2= 3-20 years, 3= >20 years. When compared with New Zealand Market Share (NZMktSh) and Greater Than 10 Foreign Markets (>10 markets), and with Trend(ES) and ExIntCat, no significant associations were found. There was little in this results or the NUD-IST data to suggest that these firms actually behaved as born globals.

In summary, an analysis of Firm Characteristics indicated that few characteristics were associated with export sales performance, using the measures Trend(ES), ExIntCat or ExpInt, supporting the views about ‘fixed’ characteristics of Bijmolt and Zwart (1994). In other words, in response to research question (f), there were few differences in firm characteristics between successful (growth) and unsuccessful (no-growth) exporters. Notable exceptions were the firm size variables, Number of Employees (NoEmp) and Trend(Emp), though the literature is equivocal about the relationship between firm size and export performance (Aaby and Slater, 1989). The relationships between Trend(ES) and ExIntCat/ExpInt are probably significant, but uncertain; the equivalence of these as measures of export sales performance is not conclusive, as noted by others (e.g. Matthyssens and Pauwels, 1996).
5.2.2 Top15 Concepts

Relationships between the top15 concepts and export sales performance were tested. In addition, mean ratings for all the concepts, on a case-wise basis, were analysed for associations with export sales performance (see later). Mean ratings for all the concepts were also compared (Table 5.6). Chapter 3 provides an explanation of the ratings for each concept.

Table 5.6
Top15 concept means (in order of decreasing rating) (1989)
(N=60)

<table>
<thead>
<tr>
<th>Concept</th>
<th>Abbreviation</th>
<th>Mean Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Productivity</td>
<td>Productivity</td>
<td>1.52</td>
</tr>
<tr>
<td>Quality</td>
<td>Quality</td>
<td>1.77</td>
</tr>
<tr>
<td>Marketing</td>
<td>Marketing</td>
<td>1.80</td>
</tr>
<tr>
<td>Competency Management</td>
<td>CompMgt</td>
<td>1.83</td>
</tr>
<tr>
<td>Relationships/Personal Contact</td>
<td>Rel/PC</td>
<td>1.83</td>
</tr>
<tr>
<td>Management</td>
<td>Mgt</td>
<td>1.88</td>
</tr>
<tr>
<td>Structure and Resource Management</td>
<td>S/ResMgt</td>
<td>1.88</td>
</tr>
<tr>
<td>R&amp;D/Technology</td>
<td>R&amp;D/Tech</td>
<td>1.97</td>
</tr>
<tr>
<td>Export Strategies</td>
<td>ExpStrat</td>
<td>1.97</td>
</tr>
<tr>
<td>Market Selection</td>
<td>MktSel</td>
<td>1.97</td>
</tr>
<tr>
<td>Export Strategy Implementation</td>
<td>ExpStratImp</td>
<td>2.02</td>
</tr>
<tr>
<td>Export Strategy Formulation</td>
<td>ExpStratForm</td>
<td>2.08</td>
</tr>
<tr>
<td>Market Research</td>
<td>MktRes</td>
<td>2.10</td>
</tr>
<tr>
<td>Investment</td>
<td>Investment</td>
<td>2.12</td>
</tr>
<tr>
<td>External Environment</td>
<td>ExtEnv</td>
<td>2.83</td>
</tr>
<tr>
<td><strong>Overall Mean</strong></td>
<td></td>
<td><strong>1.97</strong></td>
</tr>
</tbody>
</table>

Productivity was the best rated concept, followed by quality and marketing. NUD-IST data were consulted to help explain these results. Most Managers felt that improved productivity was a necessity for survival in the economically restructured New Zealand environment, which, in this analysis, 83% of firms perceived as unfavourable (mean rating: 2.83). For most firms, however, productivity improvements appeared to result largely from reductions in employee numbers. There was little investment in new equipment or processes to support long-term sustainable
improvements in productivity, with firms clamming lack of availability, or high cost, of funds. Investment was the second worst rated concept (mean 2.12).

Most firms perceived high quality to be essential for competing successfully overseas. Overseas Relationships and Personal Contact (Rel/PC) with customers, and R&D and Technology (R&D/Tech) were thought by many firms to have been compromised by lack of investment. Other concepts with medium-low rating means appeared to relate more to internal than external constraints. For example, Export Strategies (ExpStrat), Market Selection (MktSel), Export Strategy Formulation (ExpStratForm), and Market Research (MktRes) were all areas, which reflected informal processes and relatively unskilled approaches. The overall mean rating of 1.97 indicated medium/average performance and perceived favourability of the Top15 concepts.

The combined case-wise Top15 concepts were analysed for relationships with export sales performance, using a Mann-Whitney test for Trend(ES) (2 groups) and Kruksal-Wallis test for ExIntCat (3 groups). The Mann-Whitney test produced a significant result at the 0.01 level (Z = -3.785) indicating a significance difference between the overall mean ratings for the two groups of firms (export growth and no export growth). Thus, the combined Top15 concepts are related to export sales performance, using export sales growth as a performance measure. In response to research question (g), this result indicates significant differences between successful and unsuccessful exporters in relation to the Top15 concepts, when these are regarded as a whole. The Kruksal-Wallis test did not attain a significant result (chi-square 0.135), indicating no significant difference between the three export intensity categories; thus, there was no significant relationship between the top15 concepts and export intensity.
In order to ascertain potential differences between concepts, they were tested individually against Trend(ES) and ExIntCat, using chi-square analysis, and Spearman Correlation. Table 5.7 shows the significant results.

### Table 5.7
**Relationships Between Top15 Concepts and Export Performance (1989)**

<table>
<thead>
<tr>
<th>Performance Measure</th>
<th>Concept</th>
<th>Concept Code</th>
<th>Pearson Chi-Square</th>
<th>Spearman Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trend(ES)</td>
<td>Competency Management</td>
<td>CompMgt</td>
<td>12.020**</td>
<td>.440**</td>
</tr>
<tr>
<td></td>
<td>Export Strategies</td>
<td>ExpStrat</td>
<td>6.067*</td>
<td>.317**</td>
</tr>
<tr>
<td></td>
<td>Investment</td>
<td>Invest</td>
<td>7.154*</td>
<td>.344**</td>
</tr>
<tr>
<td></td>
<td>Management</td>
<td>Mgt</td>
<td>9.552**</td>
<td>.399**</td>
</tr>
<tr>
<td></td>
<td>Marketing</td>
<td>Mkig</td>
<td>7.810*</td>
<td>.360**</td>
</tr>
<tr>
<td></td>
<td>Market Research</td>
<td>MktRes</td>
<td>6.651*</td>
<td>.330**</td>
</tr>
<tr>
<td></td>
<td>Relationships/Personal Contact</td>
<td>Rel/PC</td>
<td>10.674**</td>
<td>.421**</td>
</tr>
<tr>
<td></td>
<td>Quality</td>
<td>Quality</td>
<td>12.496**</td>
<td>.388**</td>
</tr>
<tr>
<td></td>
<td>R&amp;D/Technology</td>
<td>R&amp;D/Tech</td>
<td>14.423**</td>
<td>.472**</td>
</tr>
<tr>
<td></td>
<td>Structure and Resource Management</td>
<td>S/ResMgt</td>
<td>11.530**</td>
<td>.405**</td>
</tr>
<tr>
<td>Export Strategy</td>
<td>Implementation</td>
<td>ExpStratImp</td>
<td>13.641**</td>
<td>.475**</td>
</tr>
<tr>
<td>External Environment</td>
<td></td>
<td>ExtEnv</td>
<td>7.459**</td>
<td>.353**</td>
</tr>
<tr>
<td>Productivity</td>
<td></td>
<td>Productivity</td>
<td>4.785*</td>
<td>.282**</td>
</tr>
<tr>
<td>ExIntCat</td>
<td>Relationships/Personal Contact</td>
<td>Rel/PC</td>
<td>17.963**</td>
<td>.322*</td>
</tr>
<tr>
<td></td>
<td>Market Research</td>
<td>MktRes</td>
<td></td>
<td>.279</td>
</tr>
<tr>
<td></td>
<td>Productivity</td>
<td>Productivity</td>
<td></td>
<td>.277</td>
</tr>
<tr>
<td></td>
<td>Export Strategy</td>
<td>ExpStratImp</td>
<td></td>
<td>.265</td>
</tr>
</tbody>
</table>

Significance: *(0.01) **(0.05)

13 of the Top15 concepts showed a significant positive association with Trend(ES), indicating that high positive ratings for these concepts were significantly associated with export sales growth, and vice versa. These results provide a response to research question (g), from the perspective of individual concepts. The concepts not significantly associated with Trend(ES) were Market Selection (MktSel) and Export Strategy Formulation (ExpStratForm). From the qualitative analysis, it was evident
that very few firms, including the more successful, used systematic methods for market selection, relying on informal and random processes. Likewise, export strategy formulation was a predominantly informal and intuitive process for nearly all firms. These explanations are supported by the low ratings for these two concepts in Table 5.6.

The only Top15 concept significantly associated with ExIntCat was Relationships/Personal Contact (Rel/PC), indicating that the more widespread and developed the relationships in export markets, the higher the overall level of exports. In qualitative terms, managers perceived relationships and personal contact to be very important, and invested significant amounts of time for their development and maintenance. There were weak correlations between ExIntCat and Market Research (MktRes), Productivity and Export Strategy Implementation (ExpStratImp), though the importance of this result is unclear. These results indicate that ExIntCat is not a good discriminator of firms’ export sales performance relating to the Top15 concepts, in contrast to Trend(ES).

In summary, Phase 1 (1989) results showed a clear distinction between export growth and no export growth firms in relation to the combined, case-wise Top15 concepts, and to all but two of them individually. Other than significant results for Number of Employees (NoEmp) and Trend in Total Sales (Trend(TS)), relationships between export sales performance and Firm Characteristics were limited, supporting Bijmolt and Zwart’s (1994) concern that (constant) Firm Characteristics are not good discriminators of export performance. ExIntCat appears not to be a good
discriminator for either firm characteristics or the Top15 concepts, and may not, therefore, be a useful measure of export sales performance.

5.3 Phase 2: 1991

The impacts of economic restructuring in New Zealand at this time were still very evident. For many businesses, it had taken the seven years since the start of economic reforms for the impacts to be fully realised. For example, many firms had responded by improving efficiency and shedding labour, but were unable to build or maintain the businesses through lack of investment. The attrition rate of SME manufacturing firms over the period 1989-1991 was estimated to be 20% (personal communication, The Manufacturers Federation). For the study firms, this figure was only 7%, with four firms having gone out of business, or been re-absorbed back into their parent organisations. With four missing cases, and two withdrawn from the study, the total sample size for 1991 was 50 firms.

Most New Zealand firms in the early 1990s had achieved high levels of efficiency and were seeking to build and develop their business on a new lean base. However, the dominant constraint to exporting perceived by the study firms was the unavailability of investment (Table 5.8).

The elevation of this constraint to top position probably reflects the reduced exchange- and interest rates in comparison with 1989, but may also indicate a changing priority of the firms towards investment for export development. The analysis of Phase 2 is interpreted in light of this environment.
5.3.1 Firm Characteristics

Two characteristics not included in Phase 2 data were Total Sales and Export Sales, because data were available for only a few firms; these characteristics were, therefore, abandoned from the study.

Two additional firm characteristics with ordinal data were included in the 1991 study. These were New Zealand Market Sales Trend (NZMkTr), that is, sales trend in the domestic market, and Trend in Export Intensity (Trend(EI)), as detailed in Chapter 3.

Because export intensity is a ratio of domestic and export sales, it does not detect the impact of individual changes in these components on export sales growth, and this may be why ExIntCat was not significantly related to Trend(ES) in Phase 1. For example, some firms displaying a decrease in export intensity showed an increase in

<table>
<thead>
<tr>
<th>Constraining Factor</th>
<th># of firms</th>
<th>% of firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of investment</td>
<td>21</td>
<td>39</td>
</tr>
<tr>
<td>Declining domestic business</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>Lack of skilled staff</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Growth transition</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Operational restructuring</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>High cost and risk of exporting</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>No constraints</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>High interest rates</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Unfavourable domestic infrastructure</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Competition in overseas markets</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Poor availability of raw materials</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Insufficient capacity</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Poor management skills</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Self-imposed growth limit</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>High cost/ unavailability of technology</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Harmful industry activities</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Lack of strategy</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Head Office culture</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
both domestic and export sales, but with export sales being proportionally less than domestic sales. The additional firm characteristics provided indications about the status of the firms’ domestic market sales performance, alongside export sales growth performance, and export intensity movements. Trend(EI) was included as an export performance measure in order to provide additional information about these complex relationships.

Descriptive statistics for firm characteristics with interval data are presented below (Table 5.9). Because the study had advanced three years, the time-related variables had increased proportionally, but this was not apparent because different numbers of firms were involved.

<table>
<thead>
<tr>
<th>Characteristic (Variable)</th>
<th>Variable Code</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export Intensity</td>
<td>Expint</td>
<td>35.9</td>
<td>29.13</td>
<td>50</td>
</tr>
<tr>
<td>Number of Employees</td>
<td>NoEmp</td>
<td>48.1</td>
<td>87.4</td>
<td>50</td>
</tr>
<tr>
<td>Years Before-Exporting</td>
<td>YrsBefExp</td>
<td>14.2</td>
<td>140.0</td>
<td>50</td>
</tr>
<tr>
<td>Years in Business</td>
<td>YrsInBus</td>
<td>27.5</td>
<td>148.0</td>
<td>50</td>
</tr>
<tr>
<td>Years in Exporting</td>
<td>YrsInExp</td>
<td>13.3</td>
<td>39</td>
<td>50</td>
</tr>
</tbody>
</table>

As before, the standard deviations were large, indicating a wide range of values for these firm characteristics. The 50 firms in the 1991 study had slightly higher export intensity, fewer employees and slightly fewer years before exporting than the 1989 data showed, although some of these values may be distorted because of missing cases.
Pearson Correlation Coefficient was used to examine relationships between the characteristics. Two relationships were noted at the 0.01 significance level: Years Before Exporting (YrsBefExp) with Years in Business (YrsInBus) ($r = .939$) and Years In Exporting (YrsInExp) with Years In Business (YrsInBus) ($r = .475$). These relationships confirm Phase 1 results, although, in contrast, there was no correlation with Number of Employees (NoEmp) (this may be a result of missing data).

Relationships between these firm characteristics and export sales performance measures (Trend(ES), ExIntCat and Trend(EI)) were tested, using the independent two sample t-test (2-tailed) and ANOVA. Results are shown in Table 5.10.

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Variable Code</th>
<th>Dependent Variables</th>
<th>Trend(ES) t-value</th>
<th>Trend(EI) t-value</th>
<th>ExIntCat F-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export Intensity</td>
<td>ExpInt</td>
<td></td>
<td>3.033**</td>
<td>3.759**</td>
<td>(211.07)**</td>
</tr>
<tr>
<td>Number of Employees</td>
<td>No.Emp.</td>
<td></td>
<td>2.374*</td>
<td>1.652</td>
<td>.669</td>
</tr>
<tr>
<td>Years Before Exporting</td>
<td>YrsBefExp</td>
<td></td>
<td>.851</td>
<td>2.374*</td>
<td>2.445</td>
</tr>
<tr>
<td>Years In Business</td>
<td>YrsInBus</td>
<td></td>
<td>.679</td>
<td>2.209*</td>
<td>3.301*</td>
</tr>
<tr>
<td>Years In Exporting</td>
<td>YrsInExp</td>
<td></td>
<td>.218</td>
<td>.309</td>
<td>1.336</td>
</tr>
</tbody>
</table>

Significance: ** 0.01, * 0.05
( ) = expected significance because same data source

As before, Trend(ES) was significantly related to Export Intensity (ExpInt), supporting their possible equivalence as export sales performance measures.

ExIntCat was significantly related to Years in Business (YrsInBus) (0.05 level), a relationship not noted in the 1989 study. This may indicate that the older firms had developed a greater focus on exporting than before. Missing cases were unlikely to
have distorted the results as their ages fell within the sample range. Trend(EI) was positively related to Export Intensity (ExpInt), suggesting that firms with an increasing Trend In Export Intensity (Trend(EI)) were those with high export intensities. The converse relationship is possible, though there was no evidence for it in the Phase 2 qualitative analysis. The result for Trend(EI) and Years In Business (YrsInBus) supports earlier arguments.

A notable observation from these results is that each export sales performance measure showed significant results with different firm characteristics, casting doubt on two fronts: one, about the relationships between firm characteristics, as noted by Bijmolt and Zwart (1994), and, two, about the comparability of the export sales measures (noted by others, e.g. Das, 1994).

Other firm characteristics were also analysed against the export sales performance measures, using Pearson Chi-Square and Spearman Correlation analyses (Table 5.11). The significant association and high correlation between Trend(ES) and New Zealand Market Trend (NZMktTr) suggest that domestic and export sales increased together over the previous three years. This is supported by the strong positive relationship between Trend(ES) and Trend(TS). Trend(EI) also increased for export growth firms over this period, suggesting that export sales growth was greater relative to NZ sales growth in these firms. These relationships demonstrate the important interplay between domestic and export sales and their combined impact on export performance.
Table 5.11
Firm Characteristics and Export Performance (Categorical Data) (1991)
N=50

<table>
<thead>
<tr>
<th>Crotstab</th>
<th>Trend (ES)</th>
<th>ExInt Cat</th>
<th>Trend (EI)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pearson chisquare (df=2)</td>
<td>Spearman Correlation</td>
<td>Pearson chisquare (df=4)</td>
</tr>
<tr>
<td>NZMktSh</td>
<td>4.865</td>
<td>.284*</td>
<td>10.454*</td>
</tr>
<tr>
<td>NZMktTr</td>
<td>7.825*</td>
<td>.394**</td>
<td>4.844</td>
</tr>
<tr>
<td>&gt;10Mkts</td>
<td>1.887</td>
<td>.194</td>
<td>2.764</td>
</tr>
<tr>
<td>Ownership</td>
<td>.415</td>
<td>-.091</td>
<td>.792</td>
</tr>
<tr>
<td>Trend(EI)</td>
<td>11.286**</td>
<td>.475**</td>
<td>13.631**</td>
</tr>
<tr>
<td>Trend(Emp)</td>
<td>2.333</td>
<td>.187</td>
<td>6.701</td>
</tr>
<tr>
<td>Trend(TS)</td>
<td>29.032**</td>
<td>.762**</td>
<td>7.728</td>
</tr>
<tr>
<td>ExIntCat</td>
<td>12.96**</td>
<td>.444**</td>
<td>NA</td>
</tr>
</tbody>
</table>

Significance: ** 0.01, * 0.05
NA=Not Applicable
Key: NZMktSh: New Zealand Market Share; NZMktTr: New Zealand Market Trend; >10Mkts: More Than 10 Markets; Ownership: Ownership; Trend(EI): Trend In Export Intensity; Trend(Emp): Trend in Number of Employees; Trend(TS): Trend In Total Sales; ExIntCat: Export Intensity – Categorised.

ExIntCat was not related to New Zealand Market Trend (NZMktTr) or Trend in Total Sales (Trend(TS)), but was related to Trend(EI) and Trend(ES), suggesting that growth was predominantly export-led. Trend(EI) was significantly related to Trend(TS) highlighting the interdependence of the domestic, export and total sales situation in exporting firms. The significant results for ExIntCat and New Zealand Market Share (NZMktSh) at the 0.05 level, and with Trend(ES), adds weight to this argument. Overall, however, the results provide an indeterminate answer to research questions (e) and (f) in regard to the Phase 2 study.

5.3.2 Top15 Concepts

The Top15 concepts were analysed for concept means, and Pearson Chi-Square and Spearman Correlation analyses were conducted to determine their association with export sales performance. Table 5.12 shows the mean ratings for each concept and the overall rating for the 1991 study.
Table 5.12
Top 15 concept means (in order of decreasing rating) (1991)
(N=50)

<table>
<thead>
<tr>
<th>Concept</th>
<th>Abbreviation</th>
<th>Mean Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Productivity</td>
<td>Productivity</td>
<td>1.38</td>
</tr>
<tr>
<td>Quality</td>
<td>Quality</td>
<td>1.38</td>
</tr>
<tr>
<td>Structure and Resource Management</td>
<td>S/ResMgt</td>
<td>1.56</td>
</tr>
<tr>
<td>Management</td>
<td>Mgt</td>
<td>1.58</td>
</tr>
<tr>
<td>Relationships/Personal Contact</td>
<td>Rel/PC</td>
<td>1.64</td>
</tr>
<tr>
<td>Competency Management</td>
<td>CompMgt</td>
<td>1.70</td>
</tr>
<tr>
<td>R&amp;D/Technology</td>
<td>R&amp;D/Tech</td>
<td>1.74</td>
</tr>
<tr>
<td>Marketing</td>
<td>Marketing</td>
<td>1.76</td>
</tr>
<tr>
<td>Export Strategy Implementation</td>
<td>ExpStratImp</td>
<td>1.92</td>
</tr>
<tr>
<td>Export Strategies</td>
<td>ExpStrat</td>
<td>1.98</td>
</tr>
<tr>
<td>Export Strategy Formulation</td>
<td>ExpStratForm</td>
<td>1.98</td>
</tr>
<tr>
<td>Investment</td>
<td>Investment</td>
<td>2.02</td>
</tr>
<tr>
<td>Market Research</td>
<td>MktRes</td>
<td>2.04</td>
</tr>
<tr>
<td>Market Selection</td>
<td>MktSel</td>
<td>2.06</td>
</tr>
<tr>
<td>External Environment</td>
<td>ExtEnv</td>
<td>2.36</td>
</tr>
<tr>
<td>Overall Mean</td>
<td></td>
<td>1.81</td>
</tr>
</tbody>
</table>

The overall mean rating was slightly higher than in 1989, suggesting an overall increased performance or perceived favourability of the concepts by the study firms. Productivity and Quality remained the top-rated concepts, and the qualitative data showed that firms considered them to be pre-requisites for sustainable export business. At this time, firms were recognising a need for growth strategies after a long period of cost-cutting and efficiency improvements. Many Managers of surviving firms, in hindsight, perceived the period of economic restructuring to have been beneficial to the achievement of efficiency.

The higher rating for Export Strategy Implementation supported the emerging focus of firms on export development. External Environment continued to have the worst rating. Investment continued to have a low rating, though higher than expected, given its number one ranking among constraints to exporting (Table 5.8). Investment was required for growth activities, such as increased capacity, market developments, and
new equipment. Many firms did not have the track records demanded by investors or lenders because of their low age and/or mediocre performance over the late 1980s. The investment climate was not assisted by the 1987 sharemarket crash, with investment criteria becoming stricter and finance availability reduced, presenting serious problems for many firms.

A Mann-Whitney test for significant differences between the combined, case-wise Top15 concepts and export sales performance gave significant results for both (Trend(ES) and Trend(EI) (Table 5.13), though the difference was more significant for Trend(ES). The relationship between the combined, case-wise Top15 concepts and ExIntCat was tested using the Kruksal-Wallis test; a significant difference was noted, as shown in Table 5.13.

<table>
<thead>
<tr>
<th>Group Variable</th>
<th>Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trend(ES)</td>
<td>Mann-Whitney</td>
<td>Z=-3.647**</td>
</tr>
<tr>
<td>Trend(EI)</td>
<td>Mann-Whitney</td>
<td>Z=-2.401*</td>
</tr>
<tr>
<td>ExIntCat</td>
<td>Kruksal-Wallis</td>
<td>Chi-square=11.27**</td>
</tr>
</tbody>
</table>

Significance: * (0.05) ** (0.01)

For all these export measures, therefore, firms could be discriminated on the basis of performance/perceived favourability of the Top15 concepts. Because these tests examined the Top15 concepts as a combined set, Pearson Chi-Square, and Spearman Correlation analyses were conducted on individual concepts against export sales performance to determine which concepts contributed to the differences and which did not (Table 5.14).
Trend(ES) was significantly associated and correlated with one more concept than ExIntCat, but overall, Trend(ES) had higher levels of significance. Trend(EI) was significantly associated with only three concepts, and significantly correlated with these and two others. Trend(ES) was the best indicator of performance or favourability of the individual Top15 concepts, with ExIntCat close second. Trend(EI) was not a good indicator.

Concepts with no significant association with Trend(ES) were Investment, Quality, R&D/Technology (R&D/Tech), Structure and Resource Management (S/ResMgt), Export Strategy Formulation (ExpStratForm) and Productivity. As noted in Table 5.9, Investment was the most frequently cited constraint on export sales performance, and its low concept rating was shared by most firms, regardless of export sales performance. The lack of significant association between Quality and Trend(ES) is surprising at face value, given the high mean rating for Quality. However, the almost universally high performance in Quality reflects the qualitative data suggesting that firms were increasingly regarding quality as a necessity rather than a competitive advantage. (The weak significant correlations indicated a minimal discriminating influence of Trend(ES) with quality). A similar argument carries for productivity, which rated highly for all firms, and achieved the highest mean rating overall.

R&D/Technology (R&D/Tech) received less commitment from firms across the study sample; firms stated limited investment as the reason. Likewise, Structure and Resource Management (S/ResMgt) was perceived to be affected by lack of
### Table 5.14
Top 15 Concepts and Export Performance (1991)

N=50

<table>
<thead>
<tr>
<th>Crosstab Concepts</th>
<th>Concept Code</th>
<th>Trend Pearson Chi-square</th>
<th>(ES) Spearman Correlation</th>
<th>ExInt Pearson Chi-square</th>
<th>Cat Spearman Correlation</th>
<th>Trend Pearson Chi-square</th>
<th>(EI) Spearman Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competency Management</td>
<td>CompMgt</td>
<td>12.129**</td>
<td>.492**</td>
<td>10.542*</td>
<td>.330*</td>
<td>5.335</td>
<td>.326*</td>
</tr>
<tr>
<td>Export Strategies</td>
<td>ExpStrat</td>
<td>8.652*</td>
<td>.406**</td>
<td>13.225**</td>
<td>.472**</td>
<td>4.279</td>
<td>.290*</td>
</tr>
<tr>
<td>Investment</td>
<td>Investment</td>
<td>1.858</td>
<td>.124</td>
<td>9.715*</td>
<td>.033</td>
<td>1.714</td>
<td>.123</td>
</tr>
<tr>
<td>Management</td>
<td>Mgt</td>
<td>15.659**</td>
<td>.559**</td>
<td>9.037</td>
<td>.344*</td>
<td>3.816</td>
<td>.273</td>
</tr>
<tr>
<td>Marketing</td>
<td>Mktg</td>
<td>16.318**</td>
<td>.536**</td>
<td>11.165*</td>
<td>.388**</td>
<td>2.691</td>
<td>.229</td>
</tr>
<tr>
<td>Market Research</td>
<td>MktRes</td>
<td>8.813*</td>
<td>.419**</td>
<td>16.959**</td>
<td>.455**</td>
<td>3.621</td>
<td>.237</td>
</tr>
<tr>
<td>Relationships/Personal Contact</td>
<td>Rel/PC</td>
<td>14.140**</td>
<td>.457**</td>
<td>11.017*</td>
<td>.426**</td>
<td>12.465**</td>
<td>.408**</td>
</tr>
<tr>
<td>Quality</td>
<td>Quality</td>
<td>5.741</td>
<td>.334*</td>
<td>6.917</td>
<td>.320*</td>
<td>2.020</td>
<td>.171</td>
</tr>
<tr>
<td>R&amp;D/Technology</td>
<td>R&amp;D/Tech</td>
<td>2.730</td>
<td>.125</td>
<td>2.767</td>
<td>-.025</td>
<td>.986</td>
<td>.136</td>
</tr>
<tr>
<td>Market Selection</td>
<td>MktSel</td>
<td>10.845**</td>
<td>.434**</td>
<td>9.275</td>
<td>.429**</td>
<td>4.712</td>
<td>.249</td>
</tr>
<tr>
<td>Export Strategy Implementation</td>
<td>ExpStratImp</td>
<td>8.120*</td>
<td>.402**</td>
<td>14.662**</td>
<td>.384**</td>
<td>6.360*</td>
<td>.314*</td>
</tr>
<tr>
<td>External Environment</td>
<td>ExtEnv</td>
<td>7.206*</td>
<td>.372**</td>
<td>2.736</td>
<td>.179</td>
<td>7.288*</td>
<td>.321*</td>
</tr>
<tr>
<td>Productivity</td>
<td>Productivity</td>
<td>4.089</td>
<td>.281*</td>
<td>2.832</td>
<td>.125</td>
<td>1.011</td>
<td>.112</td>
</tr>
</tbody>
</table>
Pagination
Error
investment, for such areas as more effective utilisation, or renewal of plant and equipment. Export Strategy Formulation (ExpStratForm) had no significant association or correlation with Trend(ES) for the same apparent reasons as in 1989.

A number of firms stated that the environment was too uncertain for strategy formulation to be useful, reflecting significantly reduced confidence in future opportunities. The significant association (but not correlation) between Export Strategy Formulation (ExpStratForm) and ExIntCat may indicate that a subset of firms were engaged in this process. In contrast to 1989, Market Selection (MktSel) was strongly associated and correlated with Trend(ES), and strongly correlated with ExIntCat. This may be consistent with a refocusing of the firms towards export growth. Table 5.14 results address research question (h), in suggesting that Trend(ES) and, to a lesser extent, ExIntCat are useful measures of export sales performance for discriminating firms on the basis of performance or favourability of most of the Top15 concepts. Trend(EI) appears to have less value in this regard.

5.4 Phase 3: 1995

By 1995, the New Zealand economy was said by commentators to have emerged from economic restructuring, displaying strong economic indicators and a positive business outlook. One consequence of this, inspired by overseas confidence in the economy, was a rising exchange rate, which had a direct (mostly negative) impact on exporters. Managers in the study perceived this as the greatest constraint to export performance, followed by investment and an unfavourable New Zealand infrastructure (Table 5.15). However, many firms had increased optimism about export competitiveness, as a result of the earlier economic restructuring, and were investing for growth. On the
other hand, seven firms had gone out of business between 1991 and 1995. With 9 missing firms, 38 firms participated in Phase 3.

Table 5.15
Perceived Constraints to Export Growth (1995)
N=38

<table>
<thead>
<tr>
<th>Constraining Factor</th>
<th># of firms</th>
<th>% of firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>High and volatile exchange rates</td>
<td>11</td>
<td>23</td>
</tr>
<tr>
<td>Lack of investment</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>Unfavourable domestic infrastructure</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>Declining domestic business</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Lack of skilled staff</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>High cost and risk of exporting</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Poor management skills</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Growth transition</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Operational restructuring</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>High interest rates</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Poor availability of raw materials</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Insufficient capacity</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Self-imposed growth limit</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>High cost/ unavailability of technology</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

In general, firms were embarking on growth activities directed at export and domestic business. This was indicated in the earlier discussion of the results relating to New Zealand Market Trend (NZMktTr) and Trend(TS).

5.4.1 Firm Characteristics

Descriptive statistics were applied to the firm characteristics with interval data, as shown in Table 5.16.

Table 5.16
N=38

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Variable Code</th>
<th>Mean</th>
<th>Std Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export Intensity</td>
<td>ExpInt</td>
<td>42.51</td>
<td>30.38</td>
</tr>
<tr>
<td>No. of Employees</td>
<td>NoEmp</td>
<td>80.60</td>
<td>122.60</td>
</tr>
<tr>
<td>Years Bef-Exporting</td>
<td>YrsBefExp</td>
<td>17.18</td>
<td>26.11</td>
</tr>
<tr>
<td>Years in Business</td>
<td>YrsInBus</td>
<td>34</td>
<td>29.00</td>
</tr>
<tr>
<td>Years in Exporting</td>
<td>YrsInExp</td>
<td>17.3</td>
<td>9.05</td>
</tr>
</tbody>
</table>
In comparison with the 1991 study, the firms had higher mean export intensity and fewer employees. There were no extreme values in the missing cases, so it can be assumed that little distortion of results occurred.

Results of a Pearson Correlation Coefficient analysis showed only two significant correlations (0.01 significance level), the same as those in 1989 and 1991: Years Before Exporting (YrsBefExp) with Years in Business (YrsInBus) ($r=0.951$), and Years In Exporting (YrsInExp) with Years in Business (YrsInBus) ($r=0.460$). It is difficult to reconcile these results with the literature because of conflicting evidence about firm age and exporting. However, the consistently similar Stage 3 result suggests that older firms tend to have greater export experience, and spend longer in the domestic market before exporting.

The relationship between these characteristics and export performance was investigated, as before, using the independent two sample t-test (2-tailed) and ANOVA (Table 5.17). Dependent variables were Trend(ES), Trend(EI) for the t-test, and ExIntCat for ANOVA.

Table 5.17 shows no significant differences, except for a negative relationship between Trend(EI) and Years in Business (YrsInBus). This relationship was also significant in 1991, but was positive. Growth in export intensity, therefore, appeared to be experienced by younger, rather than older firms. Since Years in Business (YrsInBus) was not significantly related to Trend(ES) or ExIntCat, the result implies that the younger firms may have been building export business from a relatively small base, but more slowly than their domestic business.
Table 5.17
Firm Characteristics and Export Performance (Interval Data) (1995)
N=38

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Variable Code</th>
<th>Dependent Variable Code</th>
<th>Trend(ES) t-value</th>
<th>Trend(EI) t-value</th>
<th>ExIntCat F-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export Intensity</td>
<td>ExpInt (%)</td>
<td></td>
<td>1.569</td>
<td>1.600</td>
<td>(115.12)**</td>
</tr>
<tr>
<td>No. of Employees</td>
<td>No.Emp.</td>
<td></td>
<td>1.698</td>
<td>-.183</td>
<td>.495</td>
</tr>
<tr>
<td>Years Before</td>
<td></td>
<td></td>
<td>.893</td>
<td>-1.989</td>
<td>.360</td>
</tr>
<tr>
<td>Exporting</td>
<td>YrsBetExp</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years in Business</td>
<td>YrsInBus</td>
<td></td>
<td>1.195</td>
<td>-2.435*</td>
<td>.176</td>
</tr>
<tr>
<td>Years in</td>
<td></td>
<td></td>
<td>1.233</td>
<td>-1.870</td>
<td>.176</td>
</tr>
<tr>
<td>Exporting</td>
<td>YrsInExp</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Significance: **0.01, *0.05
( )= expected significance because same data source

This is, in part, consistent with the qualitative data, which indicated that firms experiencing recent poor performance focused on building domestic and export business, but emphasised domestic sales growth.

The lack of relationship between Trend(ES) and Export Intensity contrasts with previous time periods. This indicates that export growth occurred across firms with a range of export intensities, not just high. A variety of growth scenarios were evident from the qualitative data. For example, many firms were building exports from a low export base; some were building both domestic and export business, at different rates; and others had high export intensities, but were not increasing export sales. In these situations, it is evident that the three measures of export sales performance would give quite different results, depending on the firms' balance of domestic and export growth, and the export intensity base from which the firms build.
Pearson Chi-Square and Spearman Correlations analyses of the other firm characteristics (nominal and ordinal data) produced significant results only for Trend(ES), as shown in Table 5.18.

Table 5.18
Firm Characteristics and Export Performance (Categorical Data) (1995)
N=38

<table>
<thead>
<tr>
<th>Crosstabs (Codes)</th>
<th>Pearson Chi-square (df=2)</th>
<th>Spearman Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Zealand Market Share</td>
<td>8.379*</td>
<td>.440**</td>
</tr>
<tr>
<td>New Zealand Market Trend</td>
<td>5.188</td>
<td>.371*</td>
</tr>
<tr>
<td>More Than Ten Markets</td>
<td>8.050**</td>
<td>.460**</td>
</tr>
<tr>
<td>Ownership</td>
<td>.753</td>
<td>-.141</td>
</tr>
<tr>
<td>Trend in Export Intensity</td>
<td>5.735</td>
<td>.276</td>
</tr>
<tr>
<td>Trend in No. of Employees</td>
<td>1.580</td>
<td>.137</td>
</tr>
<tr>
<td>Trend in Total Sales</td>
<td>22.679**</td>
<td>.766**</td>
</tr>
<tr>
<td>Export Intensity - Categorised</td>
<td>3.227</td>
<td>.294</td>
</tr>
</tbody>
</table>

Significance: **0.01, *0.05

The significant associations and correlations were all with aspects of export or domestic market growth, reinforcing their interdependent nature in relation to export sales performance (Trend(ES)). The apparent lack of sensitivity of the other export performance measures suggest that they should only be used in conjunction with Trend(ES) and interpreted within the context of both domestic and export business.

In response to research questions (e) and (f), it appears that, in terms of firm characteristics, the distinction between successful and unsuccessful exporters depends on the interplay between measures of both export and domestic performance; as before, Trend(ES) remains the most powerful discriminator.
5.4.2 Top 15 Concepts

Mean values for Top 15 concepts were determined and the case means tested against the three export sales performance measures, using Mann-Whitney, and Kruskal-Wallis tests, and Pearson Chi-Square, and Spearman Correlation analyses. Table 5.19 shows the means ratings for the Top 15 concepts.

Table 5.19
Top 15 concept means (in order of decreasing rating) (1995)
(N=38)

<table>
<thead>
<tr>
<th>Concept</th>
<th>Abbreviation</th>
<th>Mean Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality</td>
<td>Quality</td>
<td>1.29</td>
</tr>
<tr>
<td>Productivity</td>
<td>Productivity</td>
<td>1.42</td>
</tr>
<tr>
<td>Relationships/Personal Contact</td>
<td>Rel/PC</td>
<td>1.47</td>
</tr>
<tr>
<td>Management</td>
<td>Mgt</td>
<td>1.50</td>
</tr>
<tr>
<td>Investment</td>
<td>Investment</td>
<td>1.50</td>
</tr>
<tr>
<td>Competency Management</td>
<td>CompMgt</td>
<td>1.53</td>
</tr>
<tr>
<td>R&amp;D/Technology</td>
<td>R&amp;D/Tech</td>
<td>1.53</td>
</tr>
<tr>
<td>Structure and Resource Management</td>
<td>S/ResMgt</td>
<td>1.55</td>
</tr>
<tr>
<td>Marketing</td>
<td>Marketing</td>
<td>1.74</td>
</tr>
<tr>
<td>Export Strategy Implementation</td>
<td>ExpStratImp</td>
<td>1.74</td>
</tr>
<tr>
<td>Export Strategy Formulation</td>
<td>ExpStratForm</td>
<td>1.76</td>
</tr>
<tr>
<td>Market Selection</td>
<td>MktSel</td>
<td>1.79</td>
</tr>
<tr>
<td>Market Research</td>
<td>MktRes</td>
<td>1.92</td>
</tr>
<tr>
<td>Export Strategies</td>
<td>ExpStrat</td>
<td>1.95</td>
</tr>
<tr>
<td>External Environment</td>
<td>ExtEnv</td>
<td>2.05</td>
</tr>
<tr>
<td>Overall Mean</td>
<td></td>
<td>1.64</td>
</tr>
</tbody>
</table>

The overall mean of 1.64 is higher than the previous two studies, and each concept also scored a higher rating, indicating an overall improvement in performance and perceived favourability of the concepts. The only concept with a low rating was External Environment, but this was markedly improved from previous periods, and was not far away from a neutral rating. This indicates that firms perceived the external environment to be less constraining than in previous years. Investment moved up markedly to the fourth best rated concept, reflecting the relative improvement in availability of investment finance noted from the qualitative data, and also indicated in the list of constraints shown in Table 5.15.
Mann-Whitney and Kruksal-Wallis test results for significant differences between the case means for the top 15 concepts and export sales performance are shown in Table 5.20.

### Table 5.20
Top 15 Concept Means and Export Performance (1995)

<table>
<thead>
<tr>
<th>Group Variable</th>
<th>Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trend(ES)</td>
<td>Mann-Whitney</td>
<td>Z=-3.285**</td>
</tr>
<tr>
<td>Trend(EI)</td>
<td>Mann-Whitney</td>
<td>Z=-1.275</td>
</tr>
<tr>
<td>ExIntCat</td>
<td>Kruksal-Wallis</td>
<td>Chi-square=2.083</td>
</tr>
</tbody>
</table>

Significance:
***(0.01)

Only Trend(ES) had a significant relationship with the concept case means. In contrast to 1991, ExIntCat and Trend(EI) appear to have no discriminating role. This is probably explained by the changing dynamics between export, domestic and totals sales growth observed with the 1995 firms.

Results of individual Top 15 concepts tested against export performance, are shown in Table 5.21. Trend(ES) was significantly related to 10 of the top 15 concepts. Of note was the relationship with Investment, not previously found because the majority of firms perceived investment unfavourably. As investment availability improved over the period 1991-1995, the higher performing firms no longer found it a constraint, in contrast to lower performing firms, which continued to have limited access to investment. Thus, in 1995, Investment perceptions were significantly different for high and low performing exporters. Export Strategy Formulation (ExpStratForm) also showed a significant result, not previously noted. Export growth firms appeared to recognise the need to formulate export strategy more explicitly; neither growth nor no-growth firms had done so previously. This result reflects a more strategic
Pagination
Error

P374
<table>
<thead>
<tr>
<th>Crosstab Concepts</th>
<th>Crosstab Variable Codes</th>
<th>Trend Pearson chi-square</th>
<th>(ES) Spearman Correlation</th>
<th>ExInt Pearson chi-square</th>
<th>Cat Spearman Correlation</th>
<th>Trend Pearson chi-square</th>
<th>(EI) Spearman Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competency Management</td>
<td>CompMgt</td>
<td>4.222</td>
<td>.303</td>
<td>5.291</td>
<td>-.173</td>
<td>1.173</td>
<td>-.027</td>
</tr>
<tr>
<td>Export Strategies</td>
<td>ExpStrat</td>
<td>8.300*</td>
<td>.463**</td>
<td>3.095</td>
<td>.187</td>
<td>5.457</td>
<td>.015</td>
</tr>
<tr>
<td>Investment</td>
<td>Investment</td>
<td>9.304**</td>
<td>.399*</td>
<td>.972</td>
<td>-.064</td>
<td>2.110</td>
<td>.235</td>
</tr>
<tr>
<td>Management</td>
<td>Mgt</td>
<td>.742</td>
<td>.138</td>
<td>4.514</td>
<td>.166</td>
<td>2.397</td>
<td>-.142</td>
</tr>
<tr>
<td>Marketing</td>
<td>Mktg</td>
<td>10.138**</td>
<td>.511**</td>
<td>2.853</td>
<td>.022</td>
<td>1.148</td>
<td>.110</td>
</tr>
<tr>
<td>Market Research</td>
<td>MktRes</td>
<td>6.010*</td>
<td>.389*</td>
<td>4.468</td>
<td>.309</td>
<td>6.573*</td>
<td>.335*</td>
</tr>
<tr>
<td>Relationships/Personal Contact</td>
<td>Rel/PC</td>
<td>11.255**</td>
<td>.535**</td>
<td>8.697</td>
<td>.327*</td>
<td>1.900</td>
<td>.099</td>
</tr>
<tr>
<td>Quality</td>
<td>Quality</td>
<td>2.844</td>
<td>.274</td>
<td>1.165</td>
<td>.104</td>
<td>.320</td>
<td>-.092</td>
</tr>
<tr>
<td>R&amp;D/Technology</td>
<td>R&amp;D/Tech</td>
<td>10.302**</td>
<td>.516**</td>
<td>5.388</td>
<td>.135</td>
<td>4.222</td>
<td>.329*</td>
</tr>
<tr>
<td>Market Selection</td>
<td>MktSel</td>
<td>6.659*</td>
<td>.386*</td>
<td>6.970</td>
<td>.308</td>
<td>5.973*</td>
<td>.343*</td>
</tr>
<tr>
<td>External Environment</td>
<td>ExtEnv</td>
<td>7.908*</td>
<td>.456**</td>
<td>8.094</td>
<td>.003</td>
<td>2.369</td>
<td>.238</td>
</tr>
<tr>
<td>Export Strategy Formulation</td>
<td>ExpStratForm</td>
<td>9.747**</td>
<td>.424**</td>
<td>4.143</td>
<td>.323</td>
<td>1.782</td>
<td>.162</td>
</tr>
<tr>
<td>Productivity</td>
<td>Productivity</td>
<td>1.117</td>
<td>.171</td>
<td>.400</td>
<td>.104</td>
<td>.077</td>
<td>-.045</td>
</tr>
</tbody>
</table>

Significance: **0.01  *0.05

Table 5.21
Top15 Concepts and Export Performance (1995)
N=38
orientation to exporting by the higher performing firms. Quality remained a necessary competency for export business among all firms, shown by the lack of a significant relationship with export performance, and a high concept rating (Table 5.21).

Similarly, none of Management, Structure and Resource Management (S/ResMgt), Productivity or Competency Management (CompMgt) showed a significant result, but their concept ratings were moderate to high (Table 5.19). Firms were thus performing well on these competencies, regardless of export sales performance. Implications of these results are discussed in the section on Longitudinal Analysis.

There were very few significant relationships between the Top15 concepts and the other export performance measures, ExIntCat and Trend(EI), reinforcing earlier observations concerning the impact of export and domestic sales dynamics on these measures. Overall, Table 5.21 indicates that Trend(ES) is the most appropriate export performance measure by which to discriminate high and low performance or favourability of the Top15 concepts. With regard to research question (g), the results show the ways in which the concepts differ in relation to Trend(ES).

5.5 Multiple Regression Analysis of Stage 2

Multiple regression analysis was conducted on the three phases of Stage 2. The dependent variables were the same as those used for the chi-square analysis; this is, Trend in Export Sales (Trend(ES)), Export Intensity (Categorised) (ExIntCat), and Trend in Export Intensity (Trend(EI)). Three separate analyses, one for each dependent variable, were conducted at each of the three phases of the Stage 2 study. The independent variables were the Top15 concepts, and Firm Strategy, which was concluded, from the earlier analysis, to be an important concept in the model; this
became particularly evident on analysing each time point in relation to the firms’ situational contexts. Various elements of the multiple regression results, outlined below, were examined.

(a) **Pearson Correlations**

Pearson Correlations between the independent variables were examined in order to assess the strength of the relationships between the individual independent variables. Strong correlations indicated a high degree of association between the variables, which might make the individual contribution to the variance of the dependent variable difficult to analyse (SPSS Manual p. 355). Correlations between the individual independent variables also give a preliminary indication of the relative importance of the variables in explaining the variance in the dependent variable.

(b) **Collinearity**

The degree of association between the independent variables was also assessed by measuring collinearity statistics, in particular, the tolerance and VIF values (SPSS p. 355). A low tolerance and correspondingly high VIF indicate a high degree of multiple collinearity between the variables concerned. This may help to explain a low-level involvement of a variable in a regression equation, or even its exclusion from the equation, because it is highly correlated with other variables. Correlation and collinearity results are not shown, but are discussed for each phase in relation to their possible influence on the multiple regression results.

(c) **Multiple Regression Model**
The regression equation and model, with all the independent variables entered at the beginning of the analysis, provided information about the significance of the equation in explaining the variance in the dependent variable, through the significance level of the F-value. The $R^2$ results in the model provide an indication of the percentage of the variance in dependent variable explained by the equation (SPSS Manual p. 338).

(d) Stepwise Regression Analysis

The regression equation and model, with the independent variables entered into the equation in a stepwise fashion, indicated the most important explanatory independent variables, in order of importance. This process excluded those independent variables not reaching entry-level criteria of the equation (SPSS Manual p. 350).

Independent variables that were not significant, either singly, or collectively, according to Beta value significance results, were not examined further, regardless of the positive or negative signs of the Beta values. Because the possible importance of Firm Strategy in the conceptual model of export sales performance became evident in the earlier analysis of Stage 2, this variable was included in the multiple regression analysis. This analysis utilised scores for Firm Strategy that were derived in a similar way to the scores for other variables (Chapter 3). In order to check on the impact of including the Firm Strategy variable, it was deliberately excluded from the multiple regression analyses in which independent variables were all entered together at the start. The difference in results was minimal for all three phases, so the results excluding Firm Strategy are not shown.
Four sets of analysis, described above, were conducted using the dependent variables stated. The analyses were Pearson correlation and collinearity, in order to show the levels of association between the independent variables and between these and the dependent variable; multiple regression using a multiple entry method, in order to ascertain whether or not the set of independent variables could significantly account for variance in the dependent variable; and multiple regression, using a stepwise entry method, in order to determine the most important variables, in terms of their acceptance in the regression equation and their significance.

The results of the multiple regression are presented in order for each phase of the study, with three separate analyses for each of the three dependent variables used to represent the export sales performance construct. Trend(EI) was not available for Phase 1 because there were no trend data available at that time point.

5.5.1 1989 Results

The results of a multiple regression analysis of the 1989 (Phase 1) data are outlined below.

5.5.1.1 Dependent Variable = Trend(ES): Trend in Export Sales

The following discussion outlines the findings from the multiple regression analyses using the dependent variable, Trend(ES). Earlier chi-square analysis showed Trend(ES) to be a more significant indicator of export sales performance than the other indicator, Export Intensity (Categorised).

Correlations and Collinearity

Correlations between the independent variables were generally strongly and positively significant. Significance levels were at the $p=.01$ level, except for seven relationships.
Of these seven relationships, all but three were significant at the $p=.05$ level, and the remaining four were insignificant (but within the $p=.10$ level). This result indicates very strong association between the independent variables, and this is supported by the collinearity statistics for the sample (low tolerance and high VIF statistics).

Individual correlations between the independent variables and the dependent variable, Trend(ES), were all, except one, strongly and positively significant, with all, but one, at the $p=.01$ level. The exception, Export Strategy Formulation, was insignificant. This suggests that, individually, the independent variables strongly influenced Trend(ES), as noted with the chi-square analysis in the earlier Stage 2 analysis. However, the collective influence of the independent variables was a key issue, and this was addressed by the multiple regression analysis.

**Multiple Regression Analysis: Multiple Entry Method**

The regression coefficients ($B$), the independent variables, and the constant for the regression equation are shown in Table 5.22. The $R^2$ for the equation is .385, indicating that 38.5% of the variance in the dependent variables, Trend(ES) is explained by the variables in the regression model. However, the $F$ value shows that the model is not significant at, or above, the $p=.05$ level. This result suggests a lack of ability of the multiple independent variables to explain the construct, export sales performance, when measured as Trend(ES). However, because the high level of collinearity may have created difficulty in separating out the effects of the individual variables, a stepwise procedure for the multiple regression was conducted.
Table 5.22
Multiple Regression Statistics for Stage 2

<table>
<thead>
<tr>
<th>Phase</th>
<th>Dependent Variable</th>
<th>( R^2 )</th>
<th>% explained</th>
<th>F-value</th>
<th>Significance</th>
<th>Independent Variables</th>
<th>( R^2 )</th>
<th>% explained</th>
<th>F-value</th>
<th>Significance</th>
<th>Equation, with regression coefficients (B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 1989</td>
<td>Trend in Export Sales (Trend(ES))</td>
<td>.385</td>
<td>38.5</td>
<td>1.684</td>
<td>.088</td>
<td>- Export Strategy Implementation</td>
<td>.225</td>
<td>22.5</td>
<td>16.836</td>
<td>.000**</td>
<td>.535 + .215 Export Strategy Implementation</td>
</tr>
<tr>
<td></td>
<td>Export Intensity (Category) (ExIntCat)</td>
<td>.296</td>
<td>29.6</td>
<td>1.233</td>
<td>.285</td>
<td>- R&amp;D/Technology - Combined variables - Relationships/Personal Contact</td>
<td>.122</td>
<td>11.2</td>
<td>7.349</td>
<td>.009**</td>
<td>1.522 + .370 Relationships/Personal Contact</td>
</tr>
<tr>
<td></td>
<td>Export Intensity (Categorised) (ExIntCat)</td>
<td>.443</td>
<td>44.3</td>
<td>1.593</td>
<td>.128</td>
<td>- Export Strategies</td>
<td>.216</td>
<td>21.6</td>
<td>12.970</td>
<td>.001**</td>
<td>1.073 + .530 Export Strategies</td>
</tr>
<tr>
<td></td>
<td>Trend in Export Intensity (Trend(EI))</td>
<td>.259</td>
<td>25.9</td>
<td>.722</td>
<td>.753</td>
<td>- Relationships/Personal Contact</td>
<td>.130</td>
<td>13.0</td>
<td>7.189</td>
<td>.010**</td>
<td>1.158 + .270 Relationships/Personal Contact</td>
</tr>
<tr>
<td>3 1995</td>
<td>Trend in Export Sales (Trend(ES))</td>
<td>.683</td>
<td>68.3</td>
<td>2.822</td>
<td>.014*</td>
<td>- Export Strategy Implementation</td>
<td>.428</td>
<td>42.3</td>
<td>26.947</td>
<td>.000**</td>
<td>.587 + .435 Export Strategy Implementation</td>
</tr>
<tr>
<td></td>
<td>Export Intensity (Categorised)</td>
<td>.553</td>
<td>55.3</td>
<td>1.544</td>
<td>.178</td>
<td>- Export Strategy Implementation</td>
<td>.148</td>
<td>14.8</td>
<td>6.062</td>
<td>.019*</td>
<td>1.466 + .406 Export Strategy Implementation</td>
</tr>
<tr>
<td>(ExIntCut)</td>
<td>.547</td>
<td>54.7</td>
<td>1.586</td>
<td>.159</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>------------</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trend in Export Intensity (Trend/EI)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Competency Management</td>
<td>.133</td>
<td>13.3</td>
<td>6.278</td>
<td>.017*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Management</td>
<td>.087</td>
<td>8.7</td>
<td>4.560</td>
<td>.040*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Relationship/Personal Contact</td>
<td>.082</td>
<td>8.2</td>
<td>4.754</td>
<td>.037*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Combined variables</td>
<td>.450</td>
<td>45.0</td>
<td>6.535</td>
<td>.001**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- R&amp;D/Technology</td>
<td>.111</td>
<td>11.1</td>
<td>4.495</td>
<td>.041*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\( ^\wedge \) = % of variance in dependent variable explained by the equation.

* = significant at \( p=.01 \) level; ** = significant at \( p=.05 \) level.
**Multiple Regression Analysis: Stepwise Entry Method**

A stepwise procedure for the regression equation isolated two significant independent variables (see Table 5.22). In order of importance, these were Export Strategy Implementation and R&D/Technology. The $R^2$ for these variables were .255 and .066 respectively, indicating that Export Strategy Implementation was able to explain 23.5% of the variance in the dependent variable, Trend(ES), and R&D/Technology explained a further 6.6% of the dependent variable. Collectively, the two independent variables explained 29.1% of the variance. The variables were highly significant ($p=.01$) in their collective influence on Trend(ES). The regression coefficients (B) for the variables in the equation are shown in Table 5.22. Collinearity statistics for the two variables indicated low levels of association (high tolerance and low VIF).

5.5.1.2 **Dependent Variable = ExIntCat: Export Intensity (Categorised)**

The following discussion outlines the findings from the multiple regression analyses using the dependent variable, ExIntCat. Earlier chi-square analysis showed ExIntCat to be a less significant indicator of export sales performance than the other indicator, Trend(ES).

**Correlations and Collinearity**

Pearson correlations between the independent variables and collinearity are as outlined for Trend(ES). Correlations between each independent variable and ExIntCat were considerably fewer and less significant than those for the dependent variables, Trend(ES). Only 6 independent variables were significantly correlated with ExIntCat, and only one of these was significant at the $p=.01$ level. These results support the earlier chi-square analyses associated with the dependent variable, ExIntCat.
Multiple Regression Analysis: Multiple Entry Method

The $R^2$ for the multiple regression model was .296, indicating that approximately 30% of the variance in the dependent variable was explained by the independent variables. However, as before, this result was not significant, as indicated by the F value in Table 5.22.

Multiple Regression Analysis: Stepwise Entry Method

Only one independent variable was significant ($p=.01$) in explaining the variance in the dependent variable, ExIntCat, when the stepwise procedure was used for the multiple regression analysis (Table 5.22). The variable was Relationships/Personal Contact, and the associated $R^2$ value of .112 indicated that only 11% of the variable in ExIntCat were explained by this variable. None of the other variables were significant in explaining the variance in the dependent variable.

5.5.2 1991 Results

The results of a multiple regression analysis of the 1991 (Phase 2) data are outlined below.

5.5.2.1 Dependent Variable = Trend(ES): Trend in Export Sales

The following discussion outlines the findings from the multiple regression analyses using the dependent variable, Trend(ES). Earlier chi-square analysis showed Trend(ES) to be a more significant indicator of export sales performance than the other two indicators, Export Intensity (categorised) and Trend(EI).

Pearson Correlation and Collinearity

Correlations between the independent variables were, in general, strongly positive. Significance was mostly at the $p=.01$ level, with a few correlations at the $p=.05$ level.
The least correlated variables were Investment, External Environment, Relationships/Personal Contact, and R&D/Technology, each with two non-significant relationships with other variables, including some of these with each other. Overall, however, the results suggest a high level of association between the independent variables. This is supported by collinearity statistics for the sample, showing low-medium level tolerance and medium-high VIF values.

Individual correlations between the independent variables and the dependent variable, Trend(ES), showed strong positive correlations at the p=.01 level for all but five of the independent variables. Three of these were significantly correlated at the p=.05 level, and two (Investment and R&D/Technology) were insignificant.

**Multiple Regression Analysis: Multiple Entry Method**

The regression coefficients (B) for the independent variables and the constant for the regression equation are shown in Table 5.22. The $R^2$ for the equation was .486, indicating that 48.6% of the variance in the dependent variable, Trend(ES), is explained by the variables in the regression model. However, the F value shows that the model is not significant at the p=.01 level, but is only just outside the p=.05 significance level (p=.052). This result suggests that the independent variables (Top15 and Firm Strategy) are predictors of the dependent variable, Trend(ES), only just outside normally accepted significance levels. The equation is significant at the p=.10 level. It is likely that the high level of collinearity of the independent variables may have made independent variable effects difficult to measure in the regression analysis, and thus may contribute to a lower significance level than might have been the case were they not highly correlated. In order to separate out the effects of
individual independent variables, a stepwise procedure for the multiple regression was conducted.

**Multiple Regression Analysis: Stepwise Entry Method**

A stepwise procedure for the regression analysis isolated two significant independent variables (Management and Firm Strategy) explaining collectively, 36.3% of the variance in the dependent variables, Trend(ES) – see Table 5.22. The $R^2$ for the complete equation was .306, with a significance level of $p=.01$. The individual contributions of these independent variables was as follows: Management accounted for 30.6% of the variable in the dependent variable, and Firm Strategy only accounted for an additional 5.7% of the variance. Regression coefficients (B) and the constant for the regression equation are shown in Table 5.22. Thus, in entering the independent variables into the regression analysis in a stepwise fashion, the analysis rejected fourteen of the sixteen variables concerned. The analysis indicates that most of the variance in the dependent variable was explained by the Management variable. It is interesting to note that Firm Strategy does, in fact, play a significant, albeit small, role in explaining export sales performance at this time point, as concluded in the earlier chi-square analysis and in Chapter 4.

**5.5.2.2 Dependent Variable = ExIntCat: Export Intensity (Category)**

The following discussion outlines the findings from the multiple regression analyses using the dependent variable, Export Intensity (category).

**Pearson Correlation and Collinearity**

The correlation and collinearity between the independent variables were similar to those outlined above. The additional correlation result between the independent variables and the dependent variables, ExIntCat, showed that six independent
variables were not significantly correlated with ExIntCat, two were significantly correlated at the p=.05 level, and eight were significantly correlated at the p=.01 level. The numbers of significantly correlated variables were less than those observed for the dependent variable, Trend(ES), and this is in keeping with earlier results of the chi-square analysis, and qualitative findings outlined in Chapter 4. In accordance with these results, the collinearity statistics showed a mix of high and relatively low collinearity, according to the tolerance and VIF statistics, depending on the variables concerned.

**Multiple Regression Analysis: Multiple Entry Method**

The regression coefficients (B) for the independent variables, and the constant for the regression equation are shown in Table 5.22. The R² for the equation was .443, indicating that 44.3% of the variance in the dependent variable, ExIntCat was explained by the variables in the regression model. However, the regression model was shown not to be significant (F value = .128). These results suggest that the independent variables as a group were unable to explain the construct, export sales performance, when measured as Export Intensity (category). The medium-high level of collinearity of the independent variables, however, is likely to have made separation of their individual effects difficult; a stepwise multiple regression procedure was thus conducted.

**Multiple Regression Analysis: Stepwise Entry Method**

A stepwise procedure for the multiple regression analysis isolated one significant independent variable, accounting for 21.6% of the variance in the dependent variable, Export Intensity (category) (p=.01). The regression coefficients for the variable and the constant are shown in Table 5.22.
5.5.2.3 Dependent Variable = Trend (El): Trend in Export Intensity

The following discussion outlines the findings from the multiple regression analyses using the dependent variable, Trend (El): Trend in Export Intensity.

Pearson Correlation and Collinearity

The correlation and collinearity between the independent variables were similar to those outlined above. The additional correlation results between the independent variables and the dependent variable, Trend(EI), showed that eight independent variables were not significantly correlated with ExIntCat, six were significantly correlated at the $p=.05$ level, and two were significantly correlated at the $p=.01$ level. The numbers of significantly correlated variables were less than those observed for the dependent variables, Trend(ES) and ExIntCat. This is in keeping with earlier results of the chi-square analysis, and qualitative findings outlined in Chapter 4. In accordance with these results, the collinearity statistics showed a mix of high and relatively low collinearity, according to the tolerance and VIF statistics depending on the variables concerned.

Multiple Regression Analysis: Multiple Entry Method

The regression coefficients (B) for the independent variables, and the constant for the regression equation are shown in Table 5.22. $R^2$ for the equation was .259, indicating that 25.9% of the variance in the dependent variable, Trend(EI) was explained by the independent variables in the regression model. However, the regression model was shown not to be significant (F value = .753). These results suggest that the independent variables, as a group, were unable to explain the construct, export sales performance, when measured as Trend in Export Intensity. The medium-high level of collinearity of the independent variables, however, is likely to have made separation
of the their individual effects difficult; a stepwise multiple regression procedure was thus conducted.

**Multiple Regression Analysis: Stepwise Entry Method**

A stepwise procedure for the multiple regression analysis isolated one significant independent variable, accounting for only 13% of the ($R^2 = 0.130$) of the variance in the dependent variable, Trend(EI), ($p = 0.01$). The regression coefficients for the variable and the constant are shown in Table 5.22.

### 5.5.3 1995 Results

The following discussion outlines the results of a multiple regression analysis of the 1995 (Phase 3) data.

#### 5.5.3.1 Dependent Variable = Trend(ES): Trend in Export Sales

The following discussion outlines the findings from the multiple regression analyses using the dependent variable, Trend(ES). Earlier chi-square analysis showed Trend(ES) to be a more significant indicator of export sales performance than the other two indicators, Export Intensity (categorised) and Trend(EI).

**Pearson Correlation and Collinearity**

Correlations between the independent variables were less highly correlated than earlier phases, although a large number of variables were still correlated in a strongly positive way. Significance was mostly at the $p = 0.01$ level, with quite a large number at the $p = 0.05$ level. The least correlated variables were Productivity (7 insignificant relationships), Quality (6 insignificant relationships), Firm Structure and Resource Management (5 insignificant relationships), Market Selection and R&D/Technology (each with 4 insignificant relationships), and Management and Firm Strategy (each
with 3 insignificant relationships). Overall, the results suggest a relatively high level of association between the independent variables, with some variables, however, showing little correlation. Collinearity statistics for the sample showed generally low-medium level tolerance and medium-high VIF values, indicating a mixed level of collinearity, depending on the independent variables concerned. The low level of correlation with other independent variables shown by the variables noted above indicates that they behaved independently of other variables in the construct, Trend(ES).

Individual correlations between the independent variables and the dependent variable, Trend(ES), showed strong positive correlations at the p=.01 level for all but four of the independent variables. Two of these were significantly correlated at the p=.05 level, and two (Management and Firm Structure and Resources Management) were insignificant. The poor correlations between other independent variables and Productivity and Quality may reflect the increasingly ubiquitous role that these variables appeared to play in export business, ceasing to be distinguishing variables for successful and unsuccessful exporters mid-way through the study (i.e. by phase 2 – 1991). Overall, the results suggest that there was a direct association between the significantly correlated variables and the dependent variable, Trend(ES), although the influence of intervening variables is not indicated in this result. The multiple regression analysis was undertaken in order to investigate the relationships between the independent variables and their overall influence on Trend(ES).

**Multiple Regression Analysis: Multiple Entry Method**

The regression coefficients (B) for the independent variables and the constant for the regression equation are shown in Table 5.22. The $R^2$ for the equation was .683,
indicating that 68.3% of the variance in the dependent variable, Trend(ES), is explained by the variables in the regression model. This represents a significant influence of the Top15 variables (and Firm strategy) on Trend(ES), both in terms of the high percentage of variance explained, and the significant F value (p=.014) of the regression model. This result suggests that the independent variables (Top15 and Firm Strategy) are predictors of the dependent variable, Trend(ES), within normally accepted significance levels. The lower levels of correlation between a number of the variables may have contributed to this significant result. A stepwise procedure for the multiple regression was conducted, in order to analyse the most important variables in the equation.

**Multiple Regression Analysis: Stepwise Entry Method**

A stepwise procedure for the regression analysis isolated only one significant independent variable (export Strategy Implementation) explaining 42.8% of the variance in the dependent variable, Trend(ES) – see Table 5.22. The R^2 for the complete equation was .428. Given the significant result for the multiple entry regression analysis, it is surprising that only one independent variables was significant, even though, by itself, it accounts for a high percentage of the variance in the dependent variable. It is, nonetheless, an interesting result, in that it supports earlier findings of the importance of Export Strategy Implementation in export sales performance. The regression coefficient (B) and the constant for the regression equation are shown in Table 5.22.

**5.5.3.2 Dependent Variable = ExIntCat: Export Intensity (Category)**

The following discussion outlines the findings from the multiple regression analyses using the dependent variable, Export Intensity (Category).
Pearson Correlation and Collinearity

The correlation and collinearity between the independent variables were similar to those outlined above. The additional correlation results between the independent variables and the dependent variables, ExIntCat, showed that eleven of the sixteen independent variables were not significantly correlated with ExIntCat, four were significantly correlated at the p=.05 level, and only one was significantly correlated at the p=.01 level. The numbers of significantly correlated variables were less than those observed for the dependent variable, Trend(ES), and this is in keeping with earlier results of the chi-square analysis, and qualitative findings outlined in Chapter 4. In accordance with these results, the collinearity statistics showed a mix of high and relatively low collinearity, according to the tolerance and VIF statistics, depending on the variables concerned.

Multiple Regression Analysis: Multiple Entry Method

The regression coefficients (B) for the independent variables, and the constant for the regression equation are shown in Table 5.22. The $R^2$ for the equation was .553, indicating that 55.3% of the variance in the dependent variable, ExIntCat was explained by the variables in the regression model. However, the regression model was shown not to be significant (F value = .178). These results suggest that the independent variables as a group were unable to explain the construct, export sales performance, when measured as Export Intensity (Categorised). The medium-high level of collinearity of the independent variables, however, is likely to have made separation of their individual effects difficult; a stepwise multiple regression procedure was thus conducted.
Multiple Regression Analysis: Stepwise Entry Method

A stepwise procedure for the multiple regression analysis isolated four significant independent variables, accounting, in total, for 45.0% of the ($R^2=.450$) of the variance in the dependent variable, Export Intensity (Categorised). All four variables were significant at the $p=.01$ level, both individually and collectively, except for the first variable in the equation, Export Strategy Implementation, which was significant at the $p=.05$ level. The regression coefficients for the independent variables and the constant are shown in Table 5.22. The four independent variables in the equation, in order of their entry, were: Export Strategy Implementation ($R^2=.148$), Competency Management ($R^2=.133$), Management ($R^2=.087$), and Relationships/Personal Contact ($R^2=.082$).

The results show that only two of the four significant independent variables in the stepwise equation were significantly correlated with Export Intensity (Categorised) in a univariate fashion. Collectively, all the independent variables were unable to explain the dependent variable, although the stepwise analysis identified four significant variables. This tends to reinforce the view that the interrelationships between variables is an important aspect of the export sales performance construct, and that intervening independent variables appear to play a role in the explanation of the construct. This conclusion is particularly noted by the absence of direct correlations between of the variables in the equation and Export Intensity (Category).

5.5.3.3 Dependent Variable = Trend (EI): Trend in Export Intensity

The following discussion outlines the findings from the multiple regression analyses using the dependent variable, Trend (EI): Trend in Export Intensity.
Pearson Correlation and Collinearity

The correlation and collinearity between the independent variables were similar to those outlined above. The additional correlation results between the independent variables and the dependent variable, Trend(EI), showed that thirteen independent variables were not significantly correlated with ExIntCat, and three were significantly correlated at the p=.05 level; none were significantly correlated at the p=.01 level. The numbers of significantly correlated variables were less than those observed for the dependent variables, Trend(ES) and ExIntCat. This is in keeping with earlier results of the chi-square analysis, and qualitative findings outlined in Chapter 4. The low levels of collinearity of the independent variables, however, is unlikely to have made separation of their individual effects difficult, and are thus unlikely to have influenced this result.

Multiple Regression Analysis: Multiple Entry Method

The regression coefficients (B) for the independent variables, and the constant for the regression equation are shown in Table 5.22. The $R^2$ for the equation was .547, indicating that 54.7% of the variance in the dependent variable, Trend(EI) was explained by the independent variables in the regression model. However, the regression model was shown not to be significant (F value = .159). These results suggest that the independent variables, as a group, were unable to explain the construct, export sales performance, when measured as Trend in Export Intensity. The low levels of collinearity of the independent variables, however, is unlikely to have made separation of their individual effects difficult, and thus are unlikely to have influenced this result. A stepwise multiple regression procedure was conducted, in order to determine whether or not any of the independent variables were able to explain the variance in the dependent variables.
Multiple Regression Analysis: Stepwise Entry Method

A stepwise procedure for the multiple regression analysis isolated one significant independent variable, accounting for only 11.1% of the (R² = .111) of the variance in the dependent variable, Trend(EI), R&D/Technology. This variable was significant only at the p=.05 level. The regression coefficients for the variable and the constant are shown in Table 5.22.

In conclusion, it appears that, for Phase 3 of the study, the independent variables, as a group, were able to explain Trend in Export Sales (Trend(ES)) more significantly than Export Intensity (Categorised) or Trend in Export Intensity (Trend(EI)). Export Intensity (Category), however, had more individual independent variables significantly involved in the regression equation, although at lower significance level than the other export sales performance measure.

5.5.4 Multiple Regression Results: Conclusion

The multiple regression results for Stage 2 showed that Trend in export Sales (Trend(ES)) was the dependent variable best explained by all the independent variables (the Top15) entered as a group. Phase 1 and 2, while not significant at the p=.05 level, were significant at p=.10 level, a higher level of significance than achieved with the other dependent variables. In Phase 3, the independent variables entered as a group significantly explained the dependent variable, Trend(ES), at the p=.05 level. These results confirm those found earlier in Stage 2, using nonparametric chi-square analysis, which also showed that Trend(ES) was the best indicator for export sales performance when assessing the Top15 concepts. With all the dependent variables used, very few of the concepts were shown to be responsible for explaining the variance of the dependent variable, when a stepwise regression analysis was used.
For example, with Trend(ES), only 2 independent variables (concepts) explained the variance in 1989 and 1991, and only 1 independent variable in 1995. In no case was the degree of variance explained particularly high, with the 1995 figure being the highest at 42.8%. The 1995 result for Export Intensity (Categorised) indicated four predictor concepts, together explaining 45.0% of the variance in the dependent variable. This suggests that Export Intensity (Categorised) may have been an important indicator for export sales performance at this time point, along with Trend in Export Sales. This is supported by the findings in the earlier part of the Stage 2 analysis, where the impact of export and total sales trends on export intensity were discussed (see earlier discussion).

Overall, the results confirm the earlier conclusion that export sales performance is a contingent construct, with different concepts (independent variables) explaining the construct over different time periods, and in relation to a firm's changing situational context. The most important concepts explaining Trend(ES), some of which recurred over time, were Export Strategy Implementation, R&D/Technology, Relationships/Personal Contact, Management and Firm Strategy. Some of these were also predictors for the other two measures of export sales performance (ExIntCat and Trend(EI)), along with two other independent variables, Export Strategies and Competency Management. In two of the three time points for Trend(ES), Export Strategy Implementation was the most important variable in the regression equation. This result confirms earlier findings in Stage 1, where the Decision Explorer analysis of the conceptual model resulted in Export Strategy Implementation being the most central (important) concept (see Table 4.14). This is particularly notable because Export Strategy Implementation is one of the concepts in the model either not, or only
indirectly, included in other models of export performance (see Chapter 2). The combined results for Stage 1 and Stage 2 (chi-square and multiple regression) indicate a threat this concept plays a very key role in explaining the export sales performance construct. It was also interesting to note that Firm Strategy was the second most important independent variable in one phase (phase 2), confirming the conclusions drawn earlier about the role of this concept in export sales performance (see earlier discussion of Stage 2 results).

While helpful in providing additional insights into the interrelationships between variables in the conceptual model, there were limitations in the use of the multiple regression analysis, technique in the study. In particular, the technique requires the independent variables to be represented by interval data, rather than categorical data, as in the study, and the sample size was small, ranging from 60 cases in Phase 1 to 38 in Phase 3. Thus, interpretation of the results must be made in relation to the other types of data analysis used, that is, the nonparametric techniques and the qualitative analysis. In this light, it was interesting to note the high level of confirmation of the results, when all three analyses were assessed. These preliminary results from the multiple regression, casting light on the multivariate influences of the independent variables in the model, can provide an impetus for the model to be analysed from new data supporting, more appropriately, the multiple regression technique, or other types of multivariate analysis.

5.6 Longitudinal Analysis

Differences in various aspects relating to firm characteristics and Top15 concepts were observed over the three Stage 2 phases, 1989, 1991 and 1995. The previous
analyses, outlined above, examined the relationships between the independent variables, with the various export performance measures used as the dependent variables. The longitudinal part of the study was incorporated mainly in order to investigate changes in the model of export sales performance, and its component variables, over time, using time as the dependent variable. Rather than use a time-series analysis, such as a repeated measures analysis, the longitudinal analysis focused on changes in the individual independent variables at each time point, in order to assess which variables changed in performance and importance ratings over time. From this, it was possible to determine the firms' responses to time-related changes, and the relative importance and priorities that firms attached to these. Thus, the longitudinal analysis involved the use of ANOVA and t-tests for interval data and Pearson Chi-Square, Spearman Correlation and Mann-Whitney Analysis for category data. In all cases, time was used as the dependent variables, since changes were being assessed in relation to time. A multiple comparison procedure, the Bonferroni test was also used for the analyses involving interval data.

5.6.1 Firm Characteristics

Years in Exporting (YrsInExp), Years in Business (YrsInBus), and Years Before Exporting (YrsBefExp) were excluded from the longitudinal study because they increased for each firm over the three time periods, and could not, therefore, be easily assessed. Remaining firm characteristics with interval data were: Export Intensity (ExpInt) and Number of Employees (NoEmp). ANOVA was conducted for these two characteristics for the three time periods, with time as the dependent variable. Results showed no significant differences for these characteristics between the three time periods (ExpInt: F=1.227; No.Emp: F=.939). Individual t-tests between each time period and a Bonferroni test for multiple comparisons confirmed this result.
Therefore, any differences observed with other variables over time could not be attributed to differences in these two firm characteristics.

Associations and correlations between the other firm characteristics (with nominal and ordinal data) and time, were determined using Pearson Chi-Square and Spearman Correlation analyses, using time as the dependent variable. Results are shown in Table 5.23.

Table 5.23
Firm Characteristics and Export Performance (Categorical Data)
N=148

<table>
<thead>
<tr>
<th>Crosstabs</th>
<th>Time</th>
<th>Pearson chi-square (df=4)</th>
<th>Spearman Correlation</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>NZMktSh</td>
<td>16.488**</td>
<td>.256**</td>
<td>NZMktSh declined over time</td>
<td></td>
</tr>
<tr>
<td>NZMktTr</td>
<td>9.884**</td>
<td>-.332**</td>
<td>NZMktTr increased over time</td>
<td></td>
</tr>
<tr>
<td>&gt;10Mkts</td>
<td>1.470</td>
<td>-.035</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ownership</td>
<td>.042</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trend(EI)</td>
<td>1.975</td>
<td>-.057</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trend(Emp)</td>
<td>22.849**</td>
<td>-.246**</td>
<td>Trend(Emp) increased over time</td>
<td></td>
</tr>
<tr>
<td>Trend(TS)</td>
<td>9.213</td>
<td>-.185*</td>
<td>Trend(TS) increased over time</td>
<td></td>
</tr>
<tr>
<td>Trend(ES)</td>
<td>7.578</td>
<td>.008</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ExIntCat</td>
<td>2.367</td>
<td>-.091</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5.23 shows that the only firm characteristics that changed over the three time periods were: New Zealand Market Share (NZMktSh), New Zealand Market Trend (NZMktTr), Trend in No. of Employees (Trend(Emp)) and, weakly, Trend in Total Sales (Trend(TS)). Because the time categories ran from 1 (1989) to 3 (1995), and the characteristics were categorised from 1 (increases) to 2 or 3 (decrease), the direction of the relationships was reversed. The right-hand column in the table explains the nature of the significant relationships. There was no change in any of the sales performance measures, indicating that the proportion of export growth and no
export growth firms remained approximately the same, as did the firms in the ExIntCat and Trend(EI) categories. Implications of these results are discussed with the Top15 concepts.

These results indicate only that change over time took place; they do not determine the time periods between which the changes occurred. A Mann-Whitney test compared each time period for the characteristics with significant results in Table 5.23. The results are shown below in Table 5.24.

Table 5.24
Mann-Whitney Analysis: Firm Characteristics (Categorical Data)
(Group Variable = Time); N=148

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Variable Code</th>
<th>Periods 1-2</th>
<th>Period 2-3</th>
<th>Period 1-3</th>
<th>Explanation (Periods across which differences occurred)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Z value</td>
<td>Z value</td>
<td>Z value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NZMktSh</td>
<td>New Zealand Market Share</td>
<td>-2.856**</td>
<td>-.068</td>
<td>-2.884**</td>
<td>1-2, 1-3</td>
</tr>
<tr>
<td>NZMkTr</td>
<td>New Zealand Market Trend</td>
<td>ND</td>
<td>-.3082**</td>
<td>ND</td>
<td>2-3</td>
</tr>
<tr>
<td>Trend(Emp)</td>
<td>Trend in No. of Employees</td>
<td>-1.274</td>
<td>-4.588**</td>
<td>-3.283**</td>
<td>2-3, 1-3</td>
</tr>
<tr>
<td>Trend(TS)</td>
<td>Trend in Total Sales</td>
<td>-.157</td>
<td>-2.629**</td>
<td>-2.624**</td>
<td>2-3, 1-3</td>
</tr>
</tbody>
</table>

Significance: **0.01 *0.05
ND=No Data

Combining results from Tables 5.23 and 5.24, the following indications are apparent. New Zealand market share for the firms decreased over the period 1989 to 1991. This is consistent with economic changes over that period, when many study firms rated declining NZ market opportunity through import deregulation as a key issue. Even though firms tended to focus on increasing domestic sales and market share between 1991 and 1995, as evidenced by the significant result for New Zealand Market Trend (NZMkTr) between these periods, they had not recovered market share to original 1989 levels, since there was still a significant difference between periods 1 and 3.
Crick and Katsikeas (1995) suggest that low profit exporters tend to focus on the domestic market, but the study results indicate that other, more complex, reasons associated with overall firm growth, are the key drivers for the domestic focus. The result for Trend in No. of Employees (Trend(Emp)) must be interpreted with caution because missing cases between Phases 2 and 3 may have biased the result, particularly for Phase 2, as discussed earlier.

Trend in Total Sales (Trend(TS)) follows the same argument as that for NZMkTr, with many firms focusing on overall (domestic and export) sales growth over the period 1991-1995. Since this trend towards overall growth occurred in the latter stages of the study, it may relate to the finding by Ogbuehi and Longfellow (1994) that firms with more experience tend to focus more on firm growth strategy. There was no change in Trend(TS) over the period 1989-1991, suggesting that, on balance, firms managed to retain overall sales performance over that time, even though there was a decline in New Zealand Market Share (NZMktSh). Some of the differences noted in Table 5.24 are likely to have arisen solely because of the removal of failed firms from the study, and this needs to be considered in the interpretation of the results.

5.6.2 Top15 Concepts

Similar analytical procedures were undertaken for the Top15 concepts as for Firm Characteristics. Table 5.25 shows the results from the Pearson chi-square and Spearman Correlation analyses, with time as the dependent variable.
### Table 5.25
Differences in Concept Means Between Phases 1-3 for the Top15 Concepts

N=148

<table>
<thead>
<tr>
<th>Concept</th>
<th>Pearson chi-square (df=4)</th>
<th>Spearman Correlation</th>
<th>Explanation (status of rating over time)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Productivity</td>
<td>5.167</td>
<td>-.095</td>
<td>Same(high all through)^</td>
</tr>
<tr>
<td>Quality</td>
<td>19.176**</td>
<td>-.341**</td>
<td>Increases</td>
</tr>
<tr>
<td>Structure and Resource Management</td>
<td>11.765*</td>
<td>-.250**</td>
<td>Increase</td>
</tr>
<tr>
<td>Management</td>
<td>13.057*</td>
<td>-.255**</td>
<td>Increase</td>
</tr>
<tr>
<td>Relationships/Personal Contact</td>
<td>8.065</td>
<td>-.230**</td>
<td>Same (high all through)^</td>
</tr>
<tr>
<td>Competency Management</td>
<td>9.811*</td>
<td>-.203</td>
<td>Increase</td>
</tr>
<tr>
<td>R&amp;D/Technology</td>
<td>15.446**</td>
<td>-.261</td>
<td>Increases</td>
</tr>
<tr>
<td>Marketing</td>
<td>3.418</td>
<td>-.050</td>
<td>Same(good-average all through)^</td>
</tr>
<tr>
<td>Export Strategy Implementation</td>
<td>4.062</td>
<td>-.153</td>
<td>Same(gradual increase from poor to average)^</td>
</tr>
<tr>
<td>Export Strategies</td>
<td>3.084</td>
<td>-.011</td>
<td>Same(average all through)^</td>
</tr>
<tr>
<td>Export Strategy Formulation</td>
<td>6.342</td>
<td>-.167*</td>
<td>Increase</td>
</tr>
<tr>
<td>Investment</td>
<td>17.361**</td>
<td>-.299</td>
<td>Increase</td>
</tr>
<tr>
<td>Market Research</td>
<td>3.844</td>
<td>-.106</td>
<td>Same(gradual increase from poor to average)^</td>
</tr>
<tr>
<td>Market Selection</td>
<td>7.506</td>
<td>-.078</td>
<td>Same(average all through)^</td>
</tr>
<tr>
<td>External Environment</td>
<td>42.345**</td>
<td>-.518**</td>
<td>Increases</td>
</tr>
</tbody>
</table>

Significance: **0.01 *0.05
^ explanation of trend, based on mean ratings

The results show a significant increase for many of the Top15 concepts over time.

For concepts remaining the same, all showed some positive change, even if insignificant. Detailed discussion of the concepts and their ratings has been presented earlier for each time period.

In order to assess differences in overall concept means for the three periods, a Kruksal-Wallis test was undertaken. This result (chi-square=15.484) indicated significant differences (0.01 level) over the period from 1989-1995. Even though individual and collective Top15 concept means increased over that period, as shown in Table 5.25, earlier results showed that there were not, proportionately, any increase in the number of export growth firms. This suggests that firms were improving performance and perceptions relating to the Top15 concepts regardless of export sales trends.
The specific periods (study phases) over which the significant changes occurred were
determined using the Mann-Whitney test (see Table 5.26).

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Z value</td>
<td>Z value</td>
<td>Z value</td>
<td></td>
</tr>
<tr>
<td>Quality</td>
<td>-3.364**</td>
<td>-0.613</td>
<td>-3.792**</td>
<td>1-3</td>
</tr>
<tr>
<td>Structure and Resource Management</td>
<td>-2.838**</td>
<td>-0.218</td>
<td>-2.691**</td>
<td>1-2, 1-3</td>
</tr>
<tr>
<td>Management</td>
<td>-2.384*</td>
<td>-0.837</td>
<td>-2.806**</td>
<td>1-2, 1-3</td>
</tr>
<tr>
<td>Relationships/Personal Contact</td>
<td>-1.616</td>
<td>-1.189</td>
<td>-2.749**</td>
<td>1-3</td>
</tr>
<tr>
<td>Competency Management</td>
<td>-1.075</td>
<td>-1.598</td>
<td>-2.407*</td>
<td>1-3</td>
</tr>
<tr>
<td>R&amp;D/Technology</td>
<td>-1.690</td>
<td>-1.758</td>
<td>-3.011**</td>
<td>1-3</td>
</tr>
<tr>
<td>External Environment</td>
<td>-4.569**</td>
<td>-2.190*</td>
<td>-6.033**</td>
<td>1-2, 2-3, 1-3</td>
</tr>
<tr>
<td>Investment</td>
<td>-0.635</td>
<td>-3.074**</td>
<td>-3.884**</td>
<td>2-3, 1-3</td>
</tr>
<tr>
<td>Means</td>
<td>-1.840</td>
<td>-2.640**</td>
<td>-3.693**</td>
<td>2-3, 1-3</td>
</tr>
</tbody>
</table>

Significance: **0.01 *0.05
No Data

Results from Table 5.26 show that all concepts with significant differences over the
total time period (Phases 1-3) had higher concept ratings in 1995 than in 1989,
suggesting that most firms recognised the need to improve. Of particular note is the
high significance for External Environment, with firms perceiving considerable
improvements from an unfavourable situation over the six year period. It has been
noted by Katsikeas (1996) that firms tend to be influenced more by internal than
external motivators as they become experienced in exporting. For example, they may
focus on technology and capabilities as export drivers, rather than reacting to external
pressures. The study results confirm this finding. Also, Pavord and Bogart (1978)
noted that negative management perceptions and attitudes towards export barriers
became more positive with export experience. A number of concepts (e.g. Quality,
Management) did not change after their 1991 improvement, but maintained their rating level.

Results from each Phase showed earlier that not all concepts were significantly related to export sales performance (Trend(ES)) at every Phase; however, they were all significantly related at some stage during the whole six year period. In considering the economic and environmental contexts over the three periods, it appeared that, as environmental changes occurred, demands for certain competencies changed. Some concepts ceased to be discriminators of export performance, instead becoming fundamental requirements for export business survival, as previously discussed. Qualitative data showed, for example, that firms moved from citing concepts such as quality and price, in 1989, to citing service, efficiency, relationships and technological superiority as key competitive advantages in the period 1991-1995.

The results showed that the Top 15 concepts were significantly related to export sales performance (Trend(ES)) over the six year period, but not together at any single time point. This is discussed further in the summary of this chapter. This section has addressed research question (h) in determining ways that the variables, and their interrelationships, associated with export sales performance change over time. The following section briefly reviews the performance pathways of the 60 firms involved in the Stage 2 study.

5.6.3 Case Study Performance Pathways (1989-1995)

A comparison of the numbers and ratios of export growth (successful) and no export growth (unsuccessful) firms present at each Phase of Stage 2 is shown in Table 5.27.
Table 5.27
Comparison of Export Growth and No Export Growth Firms at Each Phase of Stage 2

<table>
<thead>
<tr>
<th>Phase (Year)</th>
<th>No. Firms</th>
<th>(A) Export Growth N (%)*</th>
<th>(B) No Export Growth N (%)*</th>
<th>Missing Cases</th>
<th>Withdrawn Cases</th>
<th>Firm Gone Out of Business</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (1989)</td>
<td>60</td>
<td>37 (62%)</td>
<td>23 (38%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 (1991)</td>
<td>50</td>
<td>23 (46%)</td>
<td>27 (54%)</td>
<td>4</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>3 (1995)</td>
<td>38</td>
<td>25 (66%)</td>
<td>13 (34%)</td>
<td>9</td>
<td></td>
<td>7</td>
</tr>
</tbody>
</table>

A brief review of the performance pathways of the study firms is presented below in Table 5.28.

Table 5.28
Export Growth History of the Study Firms
(Comparison between 1989 and 1995 growth status)

<table>
<thead>
<tr>
<th>Export Growth Trend</th>
<th>Export-Growth Firms (N=37) (%)</th>
<th>No-Export-Growth Firms (N=23) (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase</td>
<td>Not Applicable</td>
<td>9 (39)</td>
</tr>
<tr>
<td>Same</td>
<td>16 (43)</td>
<td>3 (9)</td>
</tr>
<tr>
<td>Decline</td>
<td>7 (19)</td>
<td>3* (9)</td>
</tr>
<tr>
<td>Failed</td>
<td>3 (8)</td>
<td>8 (34)</td>
</tr>
<tr>
<td>Withdrawn from study</td>
<td>2 (5)</td>
<td></td>
</tr>
<tr>
<td>Comparison Not Available</td>
<td>9 (24)</td>
<td></td>
</tr>
</tbody>
</table>

*these firms declined from static to decreasing export growth trend

The table shows that the majority of failed firms (8 out of 11) were reporting no export growth prior to their demise. Although not evident from the table, because it only shows changes between 1989 to 1995, this was also true for the three failed growth firms; their performances declined to no export growth between 1989 and 1991, and they went out of operation between 1991 and 1995. For the two withdrawn firms, one Manager claimed to have insufficient time to participate in the study and the other firm moved operations to Australia.
Under half (43%) of the original export-growth firms continued to show growth in 1995. If this is calculated on the basis of the actual firms participating in the study (excluding the 9 missing cases), this becomes 57% - the remainder either declined in export sales performance or went out of business. Alternatively, it is evident that, of the 25 firms showing growth in 1995, 64% were original export-growth firms. While still markedly better results than those for no export growth firms, they are, nonetheless, lower than might be expected from the Top15 concept analyses. It could be postulated that the other original export growth firms concentrated on building generic competencies and domestic market growth ahead of export growth, particularly between 1991 and 1995, as discussed before. Both the qualitative and quantitative databases contain data that could help to explore this question further, but this is beyond the scope of this study.

5.7 Summary of Stage 2 Results

A number of conclusions have emerged from the Stage 2 analysis about export performance over time. Fundamentally, Stage 2 highlighted the need for export sales performance to be investigated within the context of firms’ wider environments, both external and internal. As proposed by Pettigrew (1985), this can best be achieved through longitudinal study. With this contingency in mind, the conclusions drawn from Stage 2 are as follows.

Of the export sales performance measures used, it appears that Trend(ES) (trend in export sales) is the measure that best discriminates between firms for both Firm Characteristics (although poor for all performance measures) and the Top15 concepts. Of the other measures, ExIntCat (export intensity, categorised to enable analysis)
appeared to be a better discriminator than Trend(EI) (trend in export intensity). These results contrast, to some extent, with those of Bijmolt and Zwart (1994), who found that export intensity was the best indicator of export performance, although they advocated the use of four measures together. All these measures represent different components of export sales performance and, apparently, detect, to different extents, the dynamics and interplay between export, domestic and overall sales performance of firms. In order to understand export performance and its antecedents, it is, therefore, important to consider all three measures simultaneously, and with knowledge of the external forces on the firm. For this reason, it is also helpful to investigate domestic and overall sales growth and objectives of the firms. These issues have been discussed in the previous sections.

The balance that the firm imposes on export and domestic sales growth within different external and internal environments is determined by firm-level strategy. Thus, firm level and export strategy and strategy formulation are closely interrelated, with firm-level strategy playing an important role in export sales performance outcomes. This suggests that firm-level strategy should be a much more integral part of export performance models. Other, ‘constant’ firm characteristics were, on the whole, poorly associated with export performance, with the possible exception of firm age (Years in Exporting). These results are in agreement with Bijmolt and Zwart (1994).

There were strong significant relationships between the Top15 concepts and export sales performance (Trend(ES)), over the six year period, as discussed. These were influenced by the firms’ situational context, particularly the external economic forces,
supporting the coalignment principle of Cavusgil and Zou (1994) and the contingency approach of Yeoh and Jeong (1995), both highlighting the role of external, as well as internal influences on export performance. Implications of Stage 2 findings on the conceptual model of export performance are discussed below.

5.8 Comparison of Stage 2 Results with the Conceptual Model of Export Performance and Implications

Results from Stage 2 and the longitudinal analysis support the conceptual model developed in Stage 1, but with modifications representing refinements of the relationships between certain of the key variables. These modifications are a link from Importance of Domestic Market to Export Intensity and a link from Firm Strategy to Export Intensity (Figure 5.1). The polarities (positivity or negativity) of the relationships between concepts have also been incorporated from results obtained in Stage 2. For simplicity in presentation, the polarities are represented in the map for the Top 15 concepts only. The variable polarities derive directly from the results discussed earlier, differentiating between successful (export sales growth) and unsuccessful (no export growth) firms. Incorporation of the polarities enables the model to be interpreted in terms of success or failure, as measured by export sales growth. It is important to note that interpretations of export success and failure in the literature are as diverse as those for export performance, and the use of these terms in the context of the model is made only in reference to the sales growth criterion. The Decision Explorer format for concept/variable polarities is represented in Figure 5.1 in a manner demonstrated by the following example: “Favourable External Environment … Unfavourable External Environment” where … means ‘rather than’.
The casual flow from these concepts/variables is the same as in the previous model (Chapter 4), with the two modifications mentioned above.

Notably, the conceptual model is supported by results on the Top15 concepts and firm characteristics from Stage 2, when export sales trend (Trend(ES)) is used as the measure of export performance, but less so with the other measures of export sales performance (export intensity – categorised (ExIntCat) and trend in export intensity (Trend(EI)). These latter measures, however, indirectly supported the association of firm strategy with export sales performance. The following discussion expands on these points and addresses research question (i), which is concerned with impacts on the conceptual model of changes in firm’s export-related activities over time.

The importance of domestic sales vs export sales/sales growth on export performance has been represented more explicitly in the model, as a result of the Stage 2 analysis. This is shown by the link from Firm Strategy to Export Intensity, which reflects firms’ decisions about these ratios and their relative priorities. A link between the variables, Importance of Domestic Market and Export Intensity, has also been incorporated in the model to further capture the importance of the export ratio/intensity decision. Export Intensity and Export Sales/Sales Growth also lead separately to Export Sales Performance, since their equivalence was not shown in Stage 2. Firm characteristics have no direct influence on export sales trend (Trend(ES)), as determined in Stage 2; however, the model shows indirect influences via Export Strategy Formulation, Structure and Resource Management and Export Strategy Implementation, as well as through firm strategy, as already discussed.
Figure 5.1 Revised Conceptual Model

1st level = Factors (green)  2nd level = Variables (yellow)
A comparison of the revised conceptual model (Figure 5.1) with other models of export performance shows the same key differences as those noted in Chapter 4, but with certain aspects having particular emphases. Strategy process remains a core element of the model, with export and firm level strategies playing major roles in the export sales performance outcomes. Stage 2 has emphasised the importance of firm strategy in the process, particularly in its influence on the ratio between domestic and export sales (export intensity). This was most apparent from an examination of the longitudinal aspects of the study. Competency Management and Structure and Resource Management are important variables, as before, with associated variables and their links being important influences on export sales performance as well as on other intervening variables and their links. Stage 2 supported the key role of Export Strategy Implementation and showed it to be a strong predictor variable for the export sales performance construct. Stage 2 also highlighted a contingency aspect of the model, with some variables being more important at certain time points than others. This appeared to relate to changing management perceptions of the external environment and changes in the firms’ situational contexts. This reflects a new dimension of the conceptual model, and supports the findings of Cavusgil and Zou (1994) and Yeoh and Jeong (1995).

Stage 2 confirms the earlier conceptual model of export sales performance (Chapter 4) in emphasising the wider influences of the firm on the construct, in contrast to the export market related perspectives often dominating other models. Stage 2 highlighted different relationships between independent variables and the different measures of export sales performance used, a finding not evident in the Stage 1 model.
In particular, the model was best supported with the export sales trend (Trend(ES)) measure. However, the other measures, Export Intensity – categorised (ExIntCat) and Trend in Export Intensity (Trend(EI)) were important aspects of overall firm level sales performance and firm strategy. These associations were only revealed in the study by the use of a number of methodological approaches that were different to those used in other models of export performance. In particular, the longitudinal approach, the multivariate analysis, the in-depth qualitative and associated quantitative aspects, and the inclusion of wider strategic perspectives in the model, enabled an in-depth examination of the construct, export sales performance, which contributes to the literature in the ways already outlined.

In conclusion, results of Stage 2 confirm the conceptual model of export sales performance developed in Stage 1, with the modifications, and their rationale, discussed above. Key aspects and implications of the model are discussed in Chapter 6.
This chapter discusses the ways in which the research objectives have been met and the research questions answered. Conclusions drawn from these are then discussed, using the following themes: (i) a broad comparison of the findings with the literature; (ii) the conceptual model and comparison with other models of export performance, leading towards theory development; (iii) developments in the conceptual model over time, with conclusions from the longitudinal study; and (iv) the research approach, design and method. Implications for managers and government policy-makers are considered in the light of the conclusions from the study. The overall contribution of the research to the literature on export performance, and directions for future research are then discussed. Finally, limitations of the study are presented.

As discussed earlier, the study focused specifically on sales-related measures of export performance. The operationalisation of export performance, and the export performance measures used in other studies, are often diverse, and thus, export performance is not a uniformly represented construct. For this reason, while the sales-related aspects of the export performance measures used in the study have been specified, comparison with other studies has encompassed those that reflect the diversity of measures used to represent the construct, export performance.
6.1 Conclusions

The conclusions are discussed in the context of the themes outlined above.

6.1.1 Broad comparison of the findings with the literature

Fundamentally, the findings from this New Zealand study appear to differ little from those obtained in research on other countries. Specifically, the factors and variables influencing export performance and export sales performance are similar. However, the study differed broadly from the literature in three main ways. First, it identified additional and new factors involved in export sales performance. These were related mainly to the export strategy development and implementation process. Secondly, a number of variables identified in the study related to more than one factor and/or to other variables, a result not evident in other export performance models. This result highlighted the interrelationships between the variables, moving away from the interpretation of export performance as a set of linear, bivariate relationships. Third, there was a greater emphasis in the study results on the influence of the firms' external environment than is evident in the literature. This may have been a result of the particularly acute impact of environment change being experienced at the time of the study. The actual and perceived importance of the external environment by Managers had direct implications for the study firms, particularly at the firm level, and export, strategies employed. This was evident in the relative emphasis placed on export and domestic sales. The longitudinal results indicated that firms adopted a contingency approach to exporting, based on their situational context, determined by their external and internal environments. This contingency approach is consistent with the co-alignment and contingency approaches to export performance proposed
by Cavusgil and Zou (1994) and Yeoh and Jeong (1995) respectively. Implications of these findings are discussed in a later part of this chapter.

6.1.2 The conceptual model and comparison with other models of export performance, leading towards theory development

Both the qualitative emphasis of the study in Stage 1, and the longitudinal component of Stage 2, enabled considerably more insights into the dynamics of exporting and export sales performance than has generally been reported in the literature (e.g. Aaby and Slater, 1989; Leonidou and Katsikeas, 1996). The results highlighted the complex and dynamic interrelationships between factors and variables influencing export sales performance, and provided a tentative explanation of the construct in terms of the conceptual model. The conceptual model differs from existing models of export performance in a number of key respects, detailed in Chapter 4, and summarised as follows.

While incorporating many of the factors and variables noted in the literature, the model identified a central role of strategy and strategy process in explaining ‘why’ and ‘how’ these factors and variables influenced export performance. The importance of strategy process, while acknowledged in some export performance models, is largely ignored, and this is one reason suggested for the inconclusive results evident in the literature (Aaby and Slater, 1989; Chetty and Hamilton, 1996). The inclusion of the strategy process also enabled an understanding of the mutual dependency of competencies and export strategy formulation (Bijmolt and Zwart, 1994), an important aspect of the resource-based view of strategy (RBV) in the firm (Prahalad and Bettis, 1986). In accordance with the RBV concept, the model assumes a prior
influence of firm competencies on export strategy formulation. However, both stages of the study, particularly the longitudinal component, highlighted the influence that ongoing competency development and export performance has on subsequent strategy development, at both firm- and export-level. Implications of these finding for managers and policy-makers are noted at the end of this chapter.

6.1.3 Developments in the conceptual model over time, with conclusions from the longitudinal study

The conceptual model of export sales performance was confirmed by the longitudinal results from Stage 2 results, with some modifications to reflect, in particular, the importance of firm-level strategy (discussed later in this chapter). The comparison of successful (export growth) and unsuccessful (no export growth) firms extend the representation of the model to one of export success, with the caveat that success is based only on export sales growth. The key factors and variables associated with export performance were identified as the Top 15 concepts in the conceptual model. These were External Environment, Export Strategy Formulation, Export Strategies, Competency Management, Structure and Resource Management, Investment, Productivity, Quality, Marketing, Market Selection, Market Research, Relationships/Personal Contact, Management, R&D/Technology, and Export Strategy Implementation. These were all shown to be significantly related to export performance at various times over the six year study period, but, at no time point, were they all significant. In other words, different variables (within the Top15) were important for export growth at different times and in different external situations.

This supports the both the contingency and coalignment views of Yeoh and Jeong (1995) and Cavusgil and Zou (1994) respectively. The conclusion may also be drawn that there is no single set of 'export success' variables, as Yeoh and Jeong (1995) also
concluded. This is because these appear to change in relation to the firms' situational contexts, also noted by Kamath et al (1987) and Rosson and Reid (1987). The external influences were particularly evident in this study as a result of the major economic changes occurring.

Multivariate analysis of the Stage 2 longitudinal data also highlighted the changing importance of particular variables influencing export sales performance over time. The most important independent variables, or concepts, arising from the multiple regression analysis, as well as analysis of the conceptual model in Decision Explorer, was Export Strategy Implementation. This was also supported by the qualitative data. This finding is not evident in other models of export performance, partly because the variable is not usually isolated as part of the export performance process (see Chapter 4).

The longitudinal study also identified the role of firm strategy in export sales performance. The main conclusion arising from this finding is that overall firm-level, rather than export-level, objectives and performance determines export sales performance. These objectives are influenced by the firm's situational context, and are underpinned by firm-level, rather than export-level strategy.

The influence of firm strategy became apparent in the longitudinal study through analysis of firm characteristics. The longitudinal element enabled these characteristics to be measured as trends, reflecting a dynamic, rather than static, perspective of export sales performance. Static measures of the same firm characteristics would have been unlikely to reveal the types of firm-level and export-
level relationships and dynamics identified. The study therefore contributes to an understanding of the dynamics and processes involved in export sales performance, through application of a longitudinal component. In keeping with the findings of Bijmolt and Zwart (1994), the 'constant' firm characteristics, export sales and total sales (and, in the study, domestic sales, and domestic market share), had no direct association with export sales performance, but they appeared to reflect, and influence, firm strategy. The qualitative data and multiple regression results suggested that the firm strategy variable was positively associated with export sales performance. The importance of examining trends in the underlying firm characteristics, rather than using static measures, was, therefore, highlighted.

Firms tended to respond to external changes by modifying their internal priorities and processes, either deliberately, or reactively. Significant strategic responses were firms' changes in emphasis on domestic and export business. In other words, overall sales and related growth performance were key drivers of export sales performance for these firms at certain times over the study period, relating particularly to the impacts of the external environment. Overall firm objectives appeared to override specific export-related objectives. This result may relate simply to the influence of export experience, in keeping with Ogbuehi and Longfellow's (1994) finding that experienced exporters focus more on firm-level growth strategies than less experienced exporters. On the other hand, the result may reflect a more specific situational response, in line with the contingency and coalignment principles noted earlier. Since there were no significant relationships noted with the export experience variable and export sales performance, the result is more likely to reflect the latter interpretation.
Underpinning the influence of firm-level objectives is the central role of firm-level strategy, suggesting that export strategy alone is not a significant driver of export sales performance. While some models acknowledge the role of firm-level strategy, it is seldom incorporated into the core dynamics of export performance. Interestingly, the firm strategy variable did not feature in the Top15 concepts in the model. This may be because the model was developed in Stage 1 with data from a uniformly 'successful' sample of exporters, and was a cross-sectional, rather than longitudinal study. The model was modified with an additional link between firm strategy and export intensity to indicate the importance attributed to the firm strategy factor.

For all three time points, Trend in Export Sales (Trend(ES)) was the most important measure of export performance, when compared with export intensity (ExIntCat) and trend in export intensity (Trend(EI)). However, the two latter measures, when considered alongside export, total and domestic sales trend measures, and the firms' situational contexts, helped to provide more meaningful interpretation of the overall data and results.

The Top15 concepts, however, were most significantly related to trend in export sales, suggesting that performance of firms in these concepts was most readily discriminated on the basis of this measure. In other words, export growth firms performed well in the Top15 concept ratings, and no export growth firms performed less well. In contrast to findings of Bijmolt and Zwart (1994), export intensity was found to be a less important measure of firms' export sales performance, on the basis, in this study, of the Top15 concepts. Trend in export intensity was even less useful in this regard. However, because of the impact of a firm's external environment and the interplay
between domestic and export business in overall firm performance, the three measures of export sales performance provided different interpretations of the results. In particular, the mix of export sales performance measures used, and other variables, highlighted their various contributions to the construct. These also revealed the importance of firm-level strategy and of an overall contingency approach to export sales performance.

Apart from evidence from the qualitative data, firm-level responses and objectives were determined by using variables that measured trends in total sales growth, domestic sales growth, and domestic market share. The conclusion drawn from this process is that all these measures and variables must be considered in a contingency context, in order for export sales performance to be explained.

6.1.4 Research approach, design and method:

The 2-stage, qualitatively based, case study research approach enables an in-depth understanding of export sales performance and the dynamics and interrelationships of its antecedents in a time-related fashion. The research approach provided an effective means for understanding export sales performance over time and within the context of significant external environmental change. It enabled a process of theory development, in the form of a conceptual model, application of the theory, and resulting modification of the model and theory. The process met the recommendation in the literature for new research approaches in export performance research (e.g. Aaby and Slater, 1989). Specifically, it used an integrated 2-stage approach, with each stage supporting and guiding the next and providing internal and construct validity. The study was predominantly qualitatively based, with in-depth investigation of the export sales performance construct, in a longitudinal context.
This approach also met the recommendation in the literature for more in-depth, longitudinal studies of export performance, in order to provide greater understanding of the dynamics and processes concerned (Aaby and Slater, 1989; Axinn et al, 1996; Chetty and Hamilton, 1996; Leonidou and Katsikeas, 1996).

Because the research approach was supported by the use of computer software data organisation and analysis tools, the research design was able to include the three main types of export performance research, usually done in separate settings. These were: the association of success characteristics with firms from a predetermined sample judged to be successful (Baker and Abou-Zeid, 1982; Ughanwa and Baker, 1989) (Stage 1 of the study); the proposal of a conceptual model (Stage 1 of the study), and the differentiation of successful from unsuccessful firms from a cross-sectional sample (Hooley and Lynch, 1985) (Stage 2 of the study). Stage 2 thus enabled distinctions to be made between export performance and export success, an area that is inconclusive in the literature. In addition, a longitudinal extension of Stage 2 provided additional understanding of the dynamics of export performance in conjunction with external environmental change.

The use of computer-assisted methods facilitated the organisation and analysis of qualitative data, enhancing the research process and providing a level of rigour and validity not usually possible with manual methods. The use of the CAQDAS programme, NUD-IST, facilitated the organisation and analysis of data in ways not feasible manually with the volume of data concerned. In addition, it provided a degree of rigour and cross-checking generally absent from other non-computer-based analysis systems. An important contribution of this approach comes from its
versatility. In particular, it provides the opportunity to revisit and recode data, develop further analyses, and add more data as desired, enabling evolving research interests, or new lines of inquiry, to be investigated. Similarly, the use of the conceptual mapping software, Decision Explorer, enabled a level of data organisation and analysis, and spatial representation, not easily achieved manually, to be developed. In comparison with existing export performance models, the conceptual model developed from this mapping process and analysis provided a dimension not evident in the literature. Particular aspects of this new dimension were the determination of the process-orientation and dynamic, causal relationships between the variables associated with export sales performance. The opportunity to couple these analyses with underlying qualitative data provided strong internal validity, and a measure of understanding and explanation not usually available in this type of research. As with the use of NUD-IST, the conceptual mapping tool provides the potential for ongoing testing and development of theory. The overall research approach also enabled a contingency (Yeoh and Jeong, 1995), or coalignment (Cavusgil and Zou, 1994) perspective of export performance to be explored. Aspects relating to the use of NUD-IST and Decision Explorer for future researchers are discussed in a later section of this chapter.

6.2 Implications for Managers and Policy Makers

The study investigated export sales performance predominantly in SME exporting firms. The implications discussed below have been drawn from the study results and thus apply mainly to this category of firms. However, given the diversity of views about the influence of firm size in the exporting literature, it is possible that these
implications could equally apply to export firms beyond the SME classification.

Further research would be required, however, to determine this possibility.

Managers and policy-makers have traditionally used export performance and success models in a prescriptive way, but research results have shown that outcomes are mixed and inconsistent (Aaby and Slater, 1989). Highlighted below are some key implications for managers and policy-makers, in the light of the study results.

There is a need for managers to develop a strategic orientation to exporting; in particular, they need to apply a strategy process to their export development activities. In operationalising the key export sales performance variables, managers need also to be aware of the cause/effect relationships between the variables concerned.

Ongoing assessment and in-depth understanding of the firm’s external environment, and its impacts on exporting, are critical. Managers must be prepared to change and develop the firm’s overall and export strategy in accordance with external drivers as necessary. A large element of the conceptual model is competency-based. Managers have a responsibility to ensure that these competencies are acquired and managed by the relevant people in their organisations. The competencies must be continually monitored in terms of their importance to export sales performance, and updated as necessary.

The importance and influence of overall firm-level performance and strategy on export performance must be understood, particularly as these relate to the firm’s situational context. These also impact on the interpretation of export sales
performance measures. Managers must recognise that there is no 'universal' measure of export, or export sales, performance, as different measures are likely to give different results, depending on the firm's overall strategy and its situational context. The impact of environmental and organisational change must be considered in the interpretation of results from various export sales performance measures.

Given these complexities, it is important that managers find ways to assess the impact of change on export sales performance variables and drivers, and to apply 'what if' scenarios to their export business. The Decision Explorer conceptual model enables these to be achieved. Variables and their links in the model can be added, updated, or changed to reflect 'real-time' or 'what-if' situations, and the impacts of these changes on other variables can be readily determined. The model can thus be used to facilitate decision-making about export business. In this regard, there is a need for managers to access qualitative research on exporting and export performance, in order to gain deeper understandings of the issues and processes concerned. A case-study approach, such as that used in this study, could contribute directly to this need. In addition, managers could use tools like NUD-IST to target their inquiry and enable individual and collective interpretation of data.

Government in New Zealand, and most other developed countries, has a role, albeit changing in nature and extent, in assisting exporters. Many of the implications for government policy-makers relate to their role as facilitators of the recommendations noted above for Managers, rather than implementers. Additional implications for policy-makers are noted below.
There is a need for government policy-makers to acquire a holistic understanding of exporting, where all the variables and contingencies are recognised, both internally and externally. This means that policy-makers have to work closely with exporting firms on an ongoing basis. The conceptual model provides a way to assist these understandings. A complete perspective of export sales performance would then enable policy-makers to develop and direct appropriate assistance programmes, as well as measure, qualitatively and quantitatively, their impact within the framework of a conceptual model, such as that developed in the study. Government also has a role in facilitating managers in their understanding of the export performance process and its individual elements, particularly by assisting them with access to appropriate skills and resources. Competency and strategy development are key components of successful exporting that government policy-makers can address.

Because the use of export performance measures is problematic, government policy-makers must review the ways that they assess and target firms for export assistance, particularly if current practices involve measurement of export performance. Of particular relevance is the performance of the firm within its internal and external context. This means that more inclusive measures of export performance are necessary to better reflect wider strategic, as well as financial, export performance outcomes of firms.

Since the political/economic environment provides such an important contextual element to the export performance process, government has a responsibility to communicate policies that will impact on exporting firms, and to be aware of their
effects on individual exporters. A contingency-based model of export, or export sales, performance can be helpful in this regard.

6.3 Contributions of the Study to the Literature, and Implications for Future Research

The study has examined aspects of the extant literature on export performance and presented some developments of existing performance models. These have been detailed in Chapters 4 and 5, and are summarised below.

The main contributions discussed in this chapter can be summarised as follows. Firstly, the study developed a model of export sales performance that offers developments and new perspectives to existing models of export performance. Specific differences of this model to others in the literature have been discussed in Chapters 4 and 5. Secondly, as a key, distinctive part of the model, the study identified the process-driven nature of export sales performance, with the export strategy process as the core element in the model. Thirdly, the study contributed to the literature by highlighting the importance of a firm’s situational context (its external and internal environments) in determining export sales performance. Implicit in this notion is the key role, although, in this study, indirect, played by firm strategy, a variable often overlooked in other models of export performance. Fourthly, the study addressed the recommendation from the literature in providing an in-depth, qualitative, case study-based study of export sales performance and provided a longitudinal component to further enable the achievement of this objective. Lastly, the study demonstrated the use of two qualitative data analysis software tools, which
proved to be fundamental to the outcomes of the study; this appears to be the first
time that these tools have been used together in the context of export research.

A number of implications for future research have resulted from the study. These are
discussed below. Conceptual model is a tentative explanatory model. Confirmation
and validation of the model in a variety of research settings is necessary to assess its
generalisability and specific contribution to new theory. The incorporation of
additional measures of export performance, other than sales-based measures is also
necessary in order to generalise the model to a wider interpretation of the export
performance construct. Stage 2 of the study investigated both the relationships
between the Top 15 concepts and export sales performance and relationships of the
cancepts/variables with one another in a multivariate analysis. In the context of the
three time points in the study, this provided some insight into the dynamics of the
export sales performance model. However, as discussed in Chapter 5, conditions for
the multiple regression analysis were not ideal (e.g. category data and subjective
ranking, and small sample size). Further research using multivariate analysis
techniques in more appropriate settings, would help to cast additional light on the
multivariate relationships in the conceptual model.

Further research is necessary on the impact of external environmental influences, and
their changes over time, on export performance. Issues relating to firms’ strategic
responses to external change, and their impact over time, need to be investigated
further. This study has incorporated some elements of the strategic management
discipline and literature; a more inclusive role of strategy research in an investigation
of the construct, export performance, would provide helpful insights and deeper understanding.

The research used a comprehensive, but less usual approach and design. Additional studies based on qualitative case study methods would contribute to a more in-depth understanding of export performance, in particular, to the processes involved. Likewise, the literature is very limited in terms of longitudinal studies, and further research of this kind would provide a more explicit context in which to interpret the study results. While the limitations of NUD-IST and Decision Explorer have already been discussed (Chapters 2 and 3), a number of practical aspects associated with the use these two software programmes are noted from the study. Preparation of the data for entry and analysis in NUD-IST is time-consuming. Similarly, the coding process for NUD-IST is lengthy, if done rigorously and to a level of detail that allows in-depth analysis of the case material. The text unit used for NUD-IST coding and analysis in the study was the sentence; any larger text unit would be less able to provide the detail necessary for the analysis, or identification of multiple coding opportunities from the data – part of a process in NUD-IST called system closure. NUD-IST analysis also requires frequent review of emerging codes and coded data in the process of pattern-coding and pattern matching. Themes and patterns are developed by a process of iteration and ongoing review of existing codes, until a satisfactory point of refinement has been achieved. This step, while again time-consuming, provides valuable data organisation, and enables a relatively advanced level of identification of key variables and their interrelationships to be achieved.
Decision Explorer takes this step further by spatially representing the variables and their apparent interrelationships. Because the mapping process is subjective, it relies on good in-depth data and data analysis from which to build the conceptual model, particularly if such a model aims to represent causality and contribute to theory building. This is one reason why Decision Explorer was chosen for use with the NUD-IST analysis in the study. When the degree of detail to be incorporated in the model is relatively high, as in the study, mapping the concepts/variables and their linkages is a complex and time-consuming process. It requires an in-depth understanding of the data, and the ability to justify the selection of concepts/variables and their spatial arrangements, as well as causal, or consequential, influences, directly from the data. Thus, the mapping process requires much iteration between the evolving map and the NUD-IST data, with frequent cross-checking of assumptions with these data. Input of expert opinion from an appropriate team may be helpful in the conceptualisation and cross-checking process. With complex maps that contain many variables and links, as in the study, it is important to disaggregate the map in order to more easily interpret and analyse selected parts and groups of concepts/variables. The Decision Explorer facility for creating 'sets' is very helpful in this regard.

There is a need to gain a better understanding of the ways in which export strategy and performance interact with firm-level strategy and performance, particularly in the context of a changing external environment. The importance of the external environment in export research needs to be elevated, as it is not often studied in conjunction with firm-associated variables. One reason cited for this is its complexity
(Aaby and Slater, 1989), but the study suggests that this complexity is an important reason to include the external environment in research on export sales performance. The incorporation of an analysis of the external environment and associated managerial perceptions was a significant element in determining the contingency-based aspects of the conceptual model.

The research deliberately omitted any investigation of the internationalisation process and its relationship with export performance, although the literature suggests that this relationship is important. The two strands of research, along with non-exporter/exporter studies need to be integrated to provide an overall understanding of the export process. The conceptual model, and the longitudinal perspective may provide some useful links between these strands of research.

Finally, it should be noted that the rapid and significant changes in the economic environment of New Zealand over, and immediately prior to, the six year study period, provided a unique opportunity to investigate the effects of external change on exporting firms. The field was rich with examples of these changes and associated firms’ responses. In more ‘stable’ circumstances, the same degree of organisational change might occur over a considerably longer period. The study was, therefore, fortunate in participating in these processes of change that may not be possible at any other time. While these aspects do not necessarily provide any unique New Zealand context, the contingency perspective of the export sales performance model would be interesting to study with SME exporters in other countries, similarly using a longitudinal approach.
6.4 Limitations of the Study

Limitations of the study have been discussed in Chapter 3, but they are summarised here, in the context of contributions and implications of the study, and also in relation to the role that further research may have in overcoming them. The limitations of the study are concerned mainly with the research approach and method. The key issue relates to the operationalisation of the export performance construct, and the need to utilise wider and multidimensional measures. Without some agreed definition of export performance and measures to be used in research, comparison with other studies, or generalise of results, is problematic.

The conceptual model has some limitations in its complexity and, thus, possible perceived difficulty in interpretation. The model can, however, be simplified in the Decision Explorer programme, for ease of interpretation. Because the model suggests a causal process, and has many intervening concepts and links, it is important to assess the role of the variables in a multivariate analysis. This is best facilitated by the use of quantitative methods, and the issues and limitations of the model in this respect, are discussed below.

The research approach and method provided a useful basis for gaining deeper understandings of export sales performance than is available in many other studies of export performance. However, the subjective nature of the qualitative methods used represent a limitation of the research, although a relatively high degree of qualitative rigour was applied with the use of the NUD-IST software. The qualitatively based methods used limited the extent to which the multivariate nature of the conceptual model could be investigated in the study. This could be overcome in future research
by the incorporation of more focused quantitative methods. As with any qualitative approach, it is helpful to extend the analysis and interpretation of results with quantitative data and analysis. The NUD-IST and Decision Explorer analyses, with the resulting conceptual model, provided a useful framework on which to develop further quantitative approaches, both to test the earlier conclusions and provide new insights. A more rigorous quantitative investigation applied to qualitatively based conceptual model would contribute more to the analysis and interpretation of the results, and thus, to theory building, than has been possible in this study.

It is to be expected that cases will be lost, for varying reasons, during the course of a longitudinal study. There is, however, much to learn from these cases, particularly those that ‘fail’ for any reason. In this regard, the study was limited in not achieving a complete follow-up of ‘failed’ cases, and potentially missing some important insights into the research topic.

The study was limited to New Zealand firms, and it is, therefore, difficult to generalise findings to exporting firms in other countries, without some comparative studies. This is an area for which future research might cast some light. Future research should also be directed towards designing and implementing studies of export performance that build on, take advantage of new opportunities arising from, and overcome known limitations of, existing research. In this way, studies of export performance may continue to add to the knowledge and theory associated with the construct.


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Appendix 1
Questionnaire Guidelines for Stages 1 and 2 Interviews

Stage 1 Questionnaire Guide

- Firm Characteristics (see below)
- How did you get started in exporting?
- What is necessary for your export business to remain viable? Include:
  - firm level strategy
  - export strategy
  - firm competencies
  - managerial factors
- What is necessary to be successful in exporting?
- What are the barriers and impediments to exporting?

Questions on Firm and Management Characteristics of Stages 1 and 2 Questionnaires

- Name of firm
- Product/market sector
- Ownership
- Age of firm
- Years in exporting
- Number of employees
- Trend in number of employees (5 or 3 yrs)
- Export intensity
- Export sales
- Trend in export sales (5 or 3 years)
- Total sales
- Trend in total sales (5 or 3 years)
- Trend in NZ sales (5 or 3 years)
- First market
- NZ market share (position)
- Number of export markets
- Overseas operations

Stage 2 Questionnaire Guide

- Firm/Management Characteristics (see below)
- How did you get started in exporting?
- What is necessary for your export business to remain viable? Include:
  - external environment
  - export strategy / formulation
  - export strategy implementation
  - market selection
  - market research
  - marketing
  - quality
  - firm structure and resources management
  - management
  - relationships/personal contact
  - R&D/technology
  - competency management
  - investment
  - productivity
  - firm strategy
- What is necessary to be successful in exporting?
- What are the barriers and impediments to exporting?
<table>
<thead>
<tr>
<th>Top15 Concept</th>
<th>Rating 1</th>
<th>Rating 2</th>
<th>Rating 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competency</td>
<td>(The company) has to use different marketing methods to take account of</td>
<td>Their competitive advantage is the branding in Australia, their product range and their</td>
<td>The US: they had some product there, but did not get paid. And the US customer had a special project which had problems. (the Company) sent them the product on spec, and this gave them financial problems.</td>
</tr>
<tr>
<td>Management</td>
<td>these skill differences. Their market tends to follow the developing</td>
<td>distribution.</td>
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<tr>
<td></td>
<td>countries.</td>
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<tr>
<td>Quality</td>
<td>They have QA staff in production; they have a high level of checking.</td>
<td>Australia market has been under pressure to produce good products; therefore a</td>
<td>Not good enough in TQA, but would like to improve. Doing a sufficient job, but could do better. Very aware of quality in production and a lot of pride in the work.</td>
</tr>
<tr>
<td></td>
<td>They also have QA people in the technology dept. They have a quality</td>
<td>receptive market for good products. Not a formal system but has got a system almost set up.</td>
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<td></td>
<td>philosophy throughout the company.</td>
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</tr>
<tr>
<td>R&amp;D/Technology</td>
<td>They have done large amounts of R&amp;D recently and now stopping a bit</td>
<td>New products are important, but difficult because of their size. Therefore, they copy other products.</td>
<td>Not much (R&amp;D) now. Had one person who did some, but nothing came of it.</td>
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<tr>
<td></td>
<td>to get the gains from it.</td>
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<tr>
<td>Productivity</td>
<td>Productivity has increased a great deal - they have better in-house</td>
<td>Productivity has had a slight improvement; it has increased a bit and this has been deliberate.</td>
<td>Productivity has declined because obviously the staff are not working well as a team, or reaching anything like the productivity rate they should achieve.</td>
</tr>
<tr>
<td></td>
<td>engineering and designs. [C-Dax’89]</td>
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<tr>
<td></td>
<td>Have had an large improvement in productivity (2-3 fold in the last 5</td>
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<td></td>
<td>months).</td>
<td></td>
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</tr>
<tr>
<td>Investment</td>
<td>Investment is not a constraint at the moment.</td>
<td>They may need a bit of investment for a new project.</td>
<td>The lack of confidence is inhibiting investment and this inhibits growth. There is no focus on [any] investment decision [in his company] at the moment.</td>
</tr>
<tr>
<td>Export Strategy</td>
<td>They are using a formal planning</td>
<td>Planning is done in the US (joint venture)</td>
<td>They use a fairly informal process.</td>
</tr>
<tr>
<td>Formulation</td>
<td>process. Bruce leads this planning process and they spend quite a lot of time on it.</td>
<td>In NZ, it is done informally with a group here. They need to be flexible - cash-flow can only be done for 6 months.</td>
<td>They do not really have a long-term view other than to improve products and profitability.</td>
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</tr>
<tr>
<td>Structure and Resources Management</td>
<td>The productivity drive will be new equipment, new system design (JIT etc.) and a supply strategy which is flexible, has capacity utilised to provide low cost and high customer service.</td>
<td>There is a bit of a problem for BB with quality standards and lighter grades of steel make things difficult, and a small local pool of people [with necessary skills] to draw on.</td>
<td>A lot of spare capacity. Have tried to do contract manufacturing to use the capacity (sent letter etc. to tell other manufacturers, but no response). Likely they will move manufacturing to Australia or Asia; and just have sales office in NZ.</td>
</tr>
<tr>
<td>Implementation</td>
<td>They had a NZer in the UK for 2 years to build the relationships etc. and overcome the inexperience of the agents and distributors.</td>
<td>Main inhibitory factor for growth is skilled labour; need more staff. Level of skill required is fairly high. Now making a lot of different things and needs skills more than long runs.</td>
<td>He has a lot of new products and a lot of ideas for new products, but not enough finance to get them off the ground.</td>
</tr>
<tr>
<td>Export Strategies</td>
<td>They will therefore have specialist dealer for imported product and general dealers for the family range etc.</td>
<td>They will still stay with exports to Asia and the NZ market. Australia is very difficult; they do not export there - they have not tried.</td>
<td>A successful job usually leads to repeat business and this is important, although there are often long gaps. They are product-oriented.</td>
</tr>
<tr>
<td>Marketing</td>
<td>They have always maintained contact with their competition, and they have a good defensive strategy.</td>
<td>Company still fairly production-oriented. (The Company) is therefore now trying to get to the replacement customers, rather than the OEMs because the profit is higher with these customers.</td>
<td>They have no standard line, therefore they are chasing work all the time.</td>
</tr>
<tr>
<td>Marketing Research</td>
<td>Use (TradeCom) for preliminary research; very important to do this. Will then go over to the country themselves after TradeCom have narrowed down the opportunities.</td>
<td>They do not do any formal market research, only use the TDB. Competitor information is hard to get.</td>
<td>Not very good, but does not seek it. Admits that they are not doing good job at present.</td>
</tr>
<tr>
<td>External Environment</td>
<td>None</td>
<td>Economic constraints are not affecting business. Growth will come from exporting into Australia. Measure of success is</td>
<td>The exchange rate is a problem, so they are being cautious now beyond Australia. UK sterling is also a problem.</td>
</tr>
<tr>
<td>Management</td>
<td>Achieving targets.</td>
<td>The MD and owner are not very good as managers - they prefer to work and cannot handle confrontation.</td>
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<tr>
<td>(The Company's) philosophy is a triangle, with all three parts dependent</td>
<td>Needed to develop confidence in himself and his product. Much more determined and</td>
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<td>on each other: customers, investors, and staff; they measure their</td>
<td>decisive now. Also patient; will wait for the right opportunities.</td>
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<td>performance in these areas.</td>
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</tr>
<tr>
<td>Relationships/(Personal Contact)</td>
<td>MD goes overseas about twice a year to UK. Have marketing division in NZ which</td>
<td>He should go to overseas markets more, but his family is now a tie. He goes once a year to once</td>
<td></td>
</tr>
<tr>
<td></td>
<td>looks after Australia; visits to Australia about 6 times a year including the S</td>
<td>every two years.</td>
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<td></td>
<td>Pacific Islands.</td>
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</tr>
<tr>
<td>Market Selection</td>
<td>They have made one visit [to Australia] so far [in one year of exporting there]. They</td>
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<tr>
<td></td>
<td>need to visit 3-4 times a year.</td>
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<td></td>
<td>Also, Japan is very interested in crafts. Other European markets do have potential</td>
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<td></td>
<td>with crafts. The craft business is cyclical and they are seeing a growth now.</td>
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<td></td>
<td>They would like market development assistance (selection) - they do not know how to</td>
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<td></td>
<td>do it; the process is too difficult.</td>
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</tr>
</tbody>
</table>
Appendix 3
Conceptual Map: Domain Analysis

All concepts in descending order of value

(Concept No. / Concept)

16 links around
88 Competency Management

14 links around
87 Export Strategy Implementation

12 links around
19 Management

11 links around
6 R&D/Tech
13 Market Selection
14 Relationships / Personal Contact
15 Productivity
82 Investment
86 Export Strategy Formulation
89 Firm Structure and Resources Mgt

10 links around
1 External Environment
2 Firm Strategy
4 Marketing
5 Quality

7 links around
8 Domestic Environment
72 Firm Characteristics

6 links around
3 Export Strategies
9 Foreign Market Environment
20 Competitive Advantage
52 Market Research

5 links around
24 Product
42 Employees
56 Ownership type

4 links around
16 Export Sales Performance
17 Export Intensity
32 Distribution
36 Technology focus
50 Cooperation
60 Reputation

3 links around
12 Seasonality
18 Export Sales / Sales Growth
23 Currency
43 Plant & Equipment
44 Capacity
58 Suppliers
59 Standards & Regulations
62 Constraints & Export Barriers
63 Management's Export Objectives
65 Firm Size
70 Govt Policy
11 Importance of Domestic Market
75 Existing Competencies, Structure and Resources
78 Management Commitment
81 Export Planning
90 Firm Structure

2 links around
10 Export Trigger
22 Pricing
25 Uniqueness
28 Positioning
29 Niche
30 Promotion
35 Availability of funds
41 Number of Markets
47 Competition
49 NZ Image
51 Preferred Market Entry Mode
53 Industry Contacts
54 CER
55 Growth Objective
57 Patents / Copyright
61 Service
64 Govt Agencies & Instruments (TDB / IEP)
67 Firm culture
69 Financial Control
73 Years in Export
77 Management Style
79 Costs
83 Raw Materials
84 Export Mkt Development
85 Location
Appendix 4
Linkages to and from Top15 Concepts
(first level only)
Appendix 4: Linkages to and from Export Strategy Implementation
Appendix 4: Linkages to and from Export Strategy Formulation

- 3 Export Strategies
- 86 Export Strategy Formulation
- 84 Export Planning
- 72 Firm Characteristics
- 20 Competitive Advantage
- 19 Management
- 47 Competition
- 10 Export Trigger
- 1 External Environment
- 2 Firm Strategy
- 11 Importance of Domestic Market
- 75 Existing Competencies, Structure and Resources
Appendix 4: Linkages to and from Investment
Appendix 4: Linkages to and from Competency Management

- 14 Relationships / Personal Contact
- 15 Productivity
- 57 Patents / Copyright
- 52 Market Research
- 81 Export Planning
- 83 Marketing
- 58 R&D/Tech
- 50 Cooperation
- 68 Financial Control
- 88 Competency Management
- 53 Industry Contacts
- 60 Reputation
- 20 Competitive Advantage
- 3 Export Strategies
- 73 Years in Export
- 19 Management
Appendix 4: Linkages to and from Management

85 Competency Management

86 Export Strategy Formulation

82 Investment

89 Firm Structure and Resources Mgt

62 Constraints & Export Barriers

50 Cooperation

19 Management

42 Employees

56 Ownership type

76 Management Attitude

77 Management Style

78 Management Commitment

67 Firm culture
Appendix 4: Linkages to and from Productivity

Diagram showing various factors linked to productivity, including:
- 87 Export Strategy Implementation
- 83 Raw Materials
- 88 Suppliers
- 44 Capacity
- 79 Costs
- 88 Competency Management
- 5 Quality
- 6 R&D/Tech
- 43 Plant & Equipment
Appendix 4: Linkages to and from Relationships/Personal Contact

- 87 Export Strategy Implementation
- 32 Distribution
- 5 Quality
- 53 Industry Contacts
- 14 Relationships / Personal Contact
- 60 Reputation
- 50 Cooperation
- 82 Investment
- 77 Management Style
- 46 Number of visits
- 58 Suppliers
Appendix 4: Linkages to and from Market Selection

- 84 Export Mkt Development
- 87 Export Strategy Implementation
- 13 Market Selection
- 51 Preferred Market Entry Mode
- 52 Market Research
- 9 Foreign Market Environment
- 41 Number of Markets
- 3 Export Strategies
- 12 Seasonality
- 49 NZ Image
- 38 First Market
- 40 Process
Appendix 4: Linkages to and from R&D/Technology
Appendix 4: Linkages to and from Quality
Appendix 4: Linkages to and from Marketing
Appendix 4: Linkages to and from Export Strategies

- 89 Firm Structure and Resources Mgt
- 17 Export Intensity
- 82 Investment
- 3 Export Strategies
- 86 Competency Management
- 13 Market Selection
- 86 Export Strategy Formulation
Appendix 4: Linkages to and from Firm Structure and Resources Management
Appendix 4: Linkages to and from External Environment

- 62 Constraints & Export Barriers
- 2 Firm Strategy
- 36 Technology focus
- 87 Export Strategy Implementation
- 1 External Environment
- 10 Export Trigger
- 49 NZ Image
- 86 Export Strategy Formulation
- 85 Location
- 8 Domestic Environment
- 9 Foreign Market Environment
Appendix S

Conceptual Map: List of Heads and Tails

HEADS

<table>
<thead>
<tr>
<th>Concept No.</th>
<th>Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>Export Sales Performance</td>
</tr>
<tr>
<td>57</td>
<td>Patents / Copyright</td>
</tr>
</tbody>
</table>

2 head concepts displayed

TAILS

<table>
<thead>
<tr>
<th>Concept No.</th>
<th>Concept</th>
</tr>
</thead>
<tbody>
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<td>26</td>
<td>Adaptation</td>
</tr>
<tr>
<td>27</td>
<td>Design</td>
</tr>
<tr>
<td>31</td>
<td>Trade Fairs</td>
</tr>
<tr>
<td>33</td>
<td>Selection</td>
</tr>
<tr>
<td>34</td>
<td>Type</td>
</tr>
<tr>
<td>37</td>
<td>Systems</td>
</tr>
<tr>
<td>38</td>
<td>First Market</td>
</tr>
<tr>
<td>40</td>
<td>Process</td>
</tr>
<tr>
<td>41</td>
<td>Number of Markets</td>
</tr>
<tr>
<td>46</td>
<td>Number of visits</td>
</tr>
<tr>
<td>47</td>
<td>Competition</td>
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<td>Labour Skills &amp; Access</td>
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<td>Existing Competencies, Structure and Resources</td>
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<td>Management Attitude</td>
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21 tail concepts displayed
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