

**INTERNATIONAL TRADE PERFORMANCE OF
NEW ZEALAND MANUFACTURING : AN INDUSTRY
AND ENTERPRISE-LEVEL STUDY**

by

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ABSTRACT

This thesis attempts to establish the key factors influencing trade performance at both industry and enterprise-level. The underlying purpose is to consolidate the diverse literature in International Marketing as well as provide new insights. For the industry-level study, trade performance models are developed and tested to explain changes in exports and imports for a cross-section of New Zealand manufacturing industries between 1985 and 1990. Increased exports are associated with larger firm sizes, lower levels of advertising intensity and least trade protection (by either tariff or export subsidy). The largest increases in imports have been in those industries which are relatively highly concentrated, with higher R&D intensities, and higher levels of tariff protection and foreign ownership. The key to raising the export performance of manufacturing in general, seems to lie with increasing the quantity and improving the quality of product-related R&D carried out in New Zealand.

A meta-analysis of 111 studies on export performance conducted during the period 1978-1991 was done to identify the key variables at enterprise-level. A multi-case study of 12 small to medium-sized firms, six from the timber processing industry and six from the electrical industrial machinery industry, was conducted to gather data for this section. The key variables identified in the meta-analysis are confirmed. The findings show that firm size drives export growth at both industry and enterprise-level. The study provides new insights on how the export behaviour process operates. Enterprises in both industries behave in a similar manner but there are significant differences in the behaviour between exporters and non-exporters. There is considerable overlap within export strategies among the group of eight exporters thus ruling out export strategy as an explanation for export performance.

CHAPTER 1

INTRODUCTION

1.1 Objective of the thesis

The bulk of studies on the exporting behaviour and performance of firms has been done in the large industrialised countries of North America and Europe. Firms in other countries operate in different commercial environments and hence the determinants of their export performance maybe different. By conducting this research in a small, open, agriculturally-based economy such as New Zealand, an attempt is made to identify whether New Zealand firms fit an "international model" of exporting. In its efforts to improve New Zealand's international trade performance, the New Zealand government implemented trade liberalisation in 1984. Other Organisation of Economic Cooperation and Development (OECD) countries consider this to be a positive move and are themselves implementing trade liberalisation policies. Lessons can be learned from this study about the New Zealand experience as other countries pursue the path of trade liberalisation. The period 1985-1990 has been a difficult one for New Zealand firms as they adjust to operating under a more open economy. This study provides insight into how they have made these adjustments at both industry and enterprise-levels in terms of the trade performance of New Zealand manufacturers during the first five years of trade liberalisation.

The main purpose of this study is to provide a consolidation of the rather disparate literature on the exporting behaviour and performance of firms. Although Aaby and Slater (1989) reviewed the literature for the period 1978-1988 they found little if any consensus in the field. Current research in the area treats problems as two-dimensional when they are multi-dimensional. Because of these features of the current literature, an

industry-analysis and a meta-analysis have been done to provide a framework for a multi-case study analysis, thus conducting the research within the boundaries of the field. This thesis attempts to contribute to the export literature by consolidating what is known in the field.

New Zealand's economic future depends on the success of its exporting firms, in particular manufacturing firms. New Zealand's small domestic base and reliance on commodity exports cannot sustain economic growth. This study focuses on the manufacturing sector and how its trade performance can be improved at both industry and enterprise-levels. The objective of this thesis is to establish the key factors that influence international trade performance at industry-level in New Zealand and to identify which of these and other factors influence export performance at enterprise-level. At industry-level, net trade performance (NTP) and the changes in export and import performance of New Zealand manufacturing industries between 1985 and 1990 are calculated. This is a period when substantial trade liberalisation was introduced. The study, therefore, shows whether the first five years of trade liberalisation has had the desired effect. Trade performance models are developed and tested to provide industry-level explanations for observed changes in exports and imports over this period. An attempt is made to provide explanations for contradictory findings.

For the enterprise-level study, an attempt is made to validate the content of Aaby and Slater's (1989) model and to confirm the export behaviour process in Reid's (1981) model. The enterprise-level study aims to identify whether the determinants influencing export performance vary between enterprises in the same industry which exhibit "above average" export performance; "below average" export performance and those which do not export at all. Two industries were selected. These were the electrical industrial machinery industry, which is a low-export performance industry, and the timber processing industry, which is a high-export performance industry. The study includes a total of 12 small to medium-sized firms, six from each industry. Because of

the limited number of longitudinal case studies the literature fails to capture the dynamism and change within exporting firms. By using the case study method more insight will be obtained on the management processes involved in the export decision-making process.

1.2 Thesis Background

This section starts with a general background of New Zealand's economy and then explains why exporting of manufactured goods has become vital to the economy. Measures of international competitiveness and export performance are discussed to provide a background for the trade and export determinants of performance measures used in this study. A discussion of the internationalisation process is then presented. This is followed by the conceptual background for the industry and enterprise-level studies.

1.2.1 General Background of New Zealand's Economy

In 1955, New Zealand's GDP per capita ranked 8 in the world but declined to 21 in 1990 (TradeNZ, 1992). New Zealand's per capita GDP is low compared to other OECD countries and ranked 18 amongst 24 OECD countries in 1988 (OECD Economic surveys, 1990/1991). New Zealand is considered to be one of the high-income countries, with a 0.2% share of global GDP (TradeNZ, 1992). Until recently, the gap between New Zealand's GDP and that of other high income countries has been increasing. Between 1980 and 1990, real world GDP annual growth rates averaged 3.2% but New Zealand's averaged 1.9% (TradeNZ, 1992).

Most of the high-income countries generate a higher level of exports per capita than New Zealand. The average exports per capita for the high-income countries in 1990 was US\$5,560 compared to US\$2,660 for New Zealand (World Development Report

1992: World Bank). New Zealand's share of global trade has fallen dramatically from 1% in 1950, to 0.3% in 1990 (TradeNZ 1992). New Zealand has had a low growth in export volume and a declining added value of these exports.

There are various explanations for New Zealand's declining trade performance and hence, its standard of living. Its exports are predominantly low-margin commodities sold into low-growth markets. Production is mainly in primary industries that have low-entry barriers and are vulnerable to price fluctuations and competition from heavily subsidised producers. Furthermore, the New Zealand government's investment in research and development (R&D) is about 20% below the average for developed countries (TradeNZ, 1992). During the last ten years R&D in New Zealand has declined 27% in real terms. At the same time other OECD countries have increased theirs by 52% (Tradenz, 1993).

New Zealand's export structure resembles the pattern of world trade 100 years ago more than it does with present day world structures. In 1880, it is estimated that 70% of world trade was in agriculture but now it is about 8%. Some 55% of New Zealand's current exports are, however, in this sector (TradeNZ, 1992). In the 1950's, 80% of exports were wool, meat and dairy products (TradeNZ 1992). New Zealand's heavy dependence on exports of primary and semi-fabricated products persists. Of total exports for the year 1990/91, 25.4% of total exports were manufactured products (OECD Economic Survey, New Zealand, 1990/91). New Zealand manufactured exports are characterised by heavy dependence on a few commodities such as, aluminium, non-ferrous metals and casein. Imports are predominantly manufactured goods such as vehicles, machinery and equipment, aircraft, iron and steel (OECD Economic Survey New Zealand, 1990/1991). New Zealand's total exports for 1990 were valued at \$15,147.4 million and its imports were \$15,325.1 million (Overseas Trade 1990).

In the 1950's, over 80% of exports were destined for European markets. In 1991/92, however, only 18% of total exports ended in Europe (TradeNZ 1992). Prior to joining the European Community in 1973, the United Kingdom was New Zealand's major export market. In 1960, the United Kingdom absorbed 70% of New Zealand exports but in 1990 it absorbed only 12% of exports (Overseas Trade, 1990). When the United Kingdom joined the European Community (EC), New Zealand had to seek alternative markets for its products. Australia has now become New Zealand's major trading partner and for the year 1991/92, exports to Australia were 19%; Europe, 18%; East Asia, 18%; and to Japan, 16%. In 1990/91, Australia was also New Zealand's principal supplier (TradeNZ, 1992). Australia is now considered to be an extension of the domestic market because of preferential access under the Closer Economic Relations Agreement (CER), (TradeNZ, 1992). New Zealand's strongest export growth is in East Asia which was 14% in 1992/93 (Tradenz 1993).

Table 1.1 overleaf shows that during the period 1968-1989, New Zealand increases in GDP per capita were less than the OECD average. Despite the drive to boost exports, increases in exports have been less than the OECD average. Although there is a move towards value-added in manufacturing in New Zealand, the average year to year increase in real added value in manufacturing for the period 1979-1989 has been 1.3%, compared to the OECD average of 2.8% for the same period (OECD Economic Outlook, 1960-1989, Paris, 1991). According to the Trade Development Board, New Zealand's value-added ratio in exports has been declining slowly for years (TradeNZ 1992). According to Table 1.1 overleaf, New Zealand's increases in imports are higher than the OECD average for the period 1973-1989.

TABLE 1.1: NEW ZEALAND'S TRADE PERFORMANCE

AVERAGE RATES OF CHANGE

	1968-73	1973-79	1979-89
GDP per Capita			
OECD Average	3.5	1.9	2.1
New Zealand	3.4	-0.2	1.1
Exports			
OECD Average	9.3	5.0	5.0
New Zealand	4.1	4.5	3.0
Imports			
OECD Average	9.8	3.5	4.9
New Zealand	11.5	0.2	4.8
Value Added in Manufacturing			
OECD Average	5.8	2.2	2.8
New Zealand	-	-	1.3
Source: OECD Economic Outlook, Historical Statistics 1960-1989			

Prior to trade liberalisation in 1984, New Zealand governments made extensive use of import licensing and quotas which insulated the domestic economy from internationally competitive prices and costs. Until 1984, New Zealand probably had the highest tariffs on imported manufactured goods of any OECD country. By 1981/82, import-competing manufacturing industries received nominal tariff protection equivalent to 28% of their unassisted output. The export sector, however, obtained support equal to 10% (Wong and Brooks, 1989). As Wong and Brooks point out, once the price effects are allowed to work through the domestic economy, the true rate of tariff protection falls to 3% (on average). Exporters, therefore, see their nominal 10% drop to a true -11%, that is, to an effective tax on their output. So, removing protection would have little real effect on imports but the export sector would benefit, by removing the unintended tax.

In recent years, the New Zealand government has been making concerted efforts to improve the country's trading performance. In order to improve New Zealand's international competitiveness, the government has made major structural changes to New Zealand's economy. In 1984, the most comprehensive economic programme undertaken by any OECD country in recent decades was introduced in New Zealand. This included abolishing import controls (licenses and quotas), reducing tariffs substantially, abandoning export subsidies and allowing the exchange rate to float. The aim of trade liberalisation was to force New Zealand businesses to be competitive at home and overseas at the prevailing world price level. Despite significant cuts since 1984, New Zealand tariff rates still remain high and well above the OECD average. These tariffs are concentrated on industries where New Zealand has limited comparative advantage such as, textiles, footwear and passenger motor vehicles (OECD Economic Surveys, New Zealand, 1990/91).

Businesses, therefore, face new international threats from imports and opportunities for exports. There has been concern about the export performance of New Zealand

businesses. By OECD standards, New Zealand's manufacturing sector remains weak. According to "Manufacturing for New Zealand's Prosperity and Growth" report (Trustbank Viewpoint, December, 1992) only 5%-10% of New Zealand manufacturers were performing strongly in international markets. Most of these companies were formed prior to deregulation in 1984. They, therefore, managed to restructure their firms to accommodate the economic changes since that period.

At present, however, there are signs that New Zealand's economy is improving as a recent article in the Economist shows:

The government is in the unusual position of forecasting annual inflation of less than 2% over the next three years coupled with real economic growth continuing at around the current rate of 3% a year. At the same time, the budget deficit is expected to fall from 3.1% of GDP in 1992-93 to 1.3% in 1995-96. Government expenditure is also falling, from 41.6% of GDP two years ago to 38.8% in 1992-93. The forecast for 1995-96 is 35.8%

For a country that has been an economic also-ran for most of the past half-century, this is something of a change. It represents the fruit of nine years of what has probably been the most thorough going economic reform in the OECD. (Economist, 10 July 1993)

Between 1986 and 1990, the most significant change in New Zealand business activity was a 68% rise in the number of import-only businesses (up from 6,856 to 11,520: New Zealand Business Patterns, Department of Statistics, Wellington, 1990). In the same period the number of export-only firms rose by only 12%, from 6,045 to 6,747. As was also the case with import-only firms, this increase was due to increased numbers of new and smaller firms (those with fewer than 50 employees). In 1990, 75% of manufacturers and 92% of non-manufacturers were neither importers nor exporters. Moreover, by threatening the domestic base of established exporters,

import penetration (post-liberalisation) had undermined their export response, as the following extract seems to confirm:

For a significant number of companies, many of them with a substantial background in exporting and dominance in the NZ market, the impact of import deregulation has been (or is becoming) extremely serious....Managers felt that with their NZ base eroded and unstable and without the financial support (especially cash flow) from the NZ market, their exporting operations would become unstable and vulnerable (NZ Trade Development Board, 1990, p. 58).

The predominance of import strategies over export strategies has had a great impact on the balance of payments, exchange rates, and living standards. This response to liberalisation highlighted the importance of understanding how and why firms become successful exporters, in particular, small firms in sectors such as manufacturing where there is the potential for value-added production.

Only 13% of New Zealand manufacturer's with less than 50 employees are currently exporting (New Zealand Business Patterns, 1990). As 82% of manufacturers in New Zealand employ less than 50 employees (New Zealand Business Patterns, 1990) export growth can be stimulated in this sector. New Zealand's recent experience suggests that industries which small and medium-size firms can enter offer prospects for future export growth. In the year February 1992 exporting businesses increased by 10%. This is equal to the increase in the number of exporting businesses over the previous five years (Tradenz, 1993). In the global context, there is some general support:

In a broad range of industries, powerful forces are moving against big companies. New technology has spread around the world, trade barriers have come down, financial markets have been deregulated and consumer tastes have converged across borders. All these changes

were once expected to give big firms even more scope to flex their muscles. Instead they have granted business opportunities to thousands of small and medium-sized companies, and shown the bodies of many corporate behemoths to be mostly flab (The Economist, April 17, 1993, p.11).

1.2.2 Measures of International Competitiveness

Measures of international competitiveness are presented here to provide a general background to the issues involved in measuring trade performance. This study does not measure international competitiveness as such but attempts to identify the key factors influencing trade performance at industry-level and export performance at enterprise-level. In this study the changing levels of exports and imports are used to measure net trade performance at industry-level. At enterprise-level, export intensity, the proportion of exports to total sales, is used as the measure of export performance. Since the main purpose of this study is to consolidate the disparate literature on the export behaviour and performance of firms, the most common method of measuring export performance in the literature which is export intensity is used in this study. One of the weaknesses of the Aaby and Slater (1989) model is that the determinants of export performance are home based.

In an attempt to improve measures of international competitiveness, Buckley, Pass and Prescott, (1988) suggest that measures of competitiveness reach further than parent company boundaries as well as further than single measures. In their examination of the literature on competitiveness, Buckley, Pass and Prescott (1988) identify various ways of measuring performance. The first method of measuring performance is export market share by industry (Lipsev and Kravis 1987, Kirpalani and Balcome 1987). Export market share at firm-level is also frequently used as a measure of performance. One problem with this measure is that firms can use underpricing to increase international market share. The second method of measuring performance is percentage share of world manufacturing output. The underlying assumption here is

that a decline in the percentage share of world manufacturing indicates a decrease in competitiveness. The third method of measuring performance is percentage share of domestic manufacturing in total output. The assumption here is that a country improves its competitiveness by being strong in manufacturing and not services (Krugman and Hatsopoulos, 1987). The fourth method of measuring performance is balance of trade which has limitations as a reduced demand for manufactured goods internationally can result in a trade deficit even though the firms in a particular country remain competitive (Krugman and Hatsopoulos, 1987). The fifth method of measuring performance is to use export measures at firm level. Competitive performance can be measured through export sales growth and export dependency (ratio of exports to total sales). The sixth method of measuring performance is profitability which Buckley, Pass and Prescott (1988) assert is the most important measure of competitive success. Profit objectives can be firm specific but when firms of different sizes are compared it can become complex. Buckley, Pass and Prescott (1988) suggest that more sophisticated measures of international competitiveness incorporate the changing composition of exports and imports. They conclude that the dynamics of international competitiveness cannot be identified by any one measure of competitiveness. Their recommendation is that the main quantitative outcome measure should be profitable market share. They also suggest that measures of competitiveness need to specify whether the level of analysis is at national, industry, firm or product level. These measures should also incorporate competitive performance, competitive potential and the management of the competitive process.

1.2.3 Determinants of Export Performance of Small and Medium-Sized Firms

Until recently determinants of export performance have focused on mainly company and market-related variables and manager characteristics (Holzmüller and Kasper, 1991). Research in this area has underemphasised the importance of the organisational environment for export-centred decisions and export performance. Holzmüller and

Kasper (1991) attempt to overcome this deficiency by integrating variables regarding organisational culture and decision makers perspective towards formal organisation. They developed a comprehensive framework for the determinants of export performance which includes the following groups of variables as determinants of export performance. First, organisational characteristics which include the demographic features of a firm. There are several empirical findings regarding this set of variables (see review in Miesenböck, 1988, pp. 46). Second, organisation culture which determines what the firm regards as being of crucial importance to the firm, what it considers to be positive or negative for the firm, how it judges its environment and how people in the firm perceive one another. Third, similar to previous research efforts (see Wiedersheim-Paul et al., 1978; Dicht et al., 1983; Burton/Schlegelmilch, 1987), Holzmüller and Kasper (1991) emphasise the decision-maker's role. They believe that organisational restructuring depends on the executive's predetermined ideas on what the structure of the organisation should be. This set of variables includes psychostructural conditions and emphasis is placed on the manager's foreign orientation. Entering the pre-export phase does not rely solely on economic issues as psychological variables are also important (Olson and Wiedersheim-Paul, 1978 and Dicht, Köglmayr and Müller, 1984). Fourth, environmental variables and these include qualitative judgement of export consultancy that public institutions (government, Federal Chamber of Trade and Industry) and banks provided. Environmental variables such as, type of industry and location, were indirectly included in the measurement.

Aaby and Slater's (1989) model which is used in this study focuses mainly on firm and market related variables which includes firm competencies, firm characteristics and export strategies as determinants of export performance. One limitation of this model is that it excludes what Holzmüller and Kasper (1991) define as non-cognitive variables such as attitudes, value systems and norms.

1.2.4 Processes of Internationalisation

The internationalisation process can take many forms. It can take the form of foreign subsidiaries, international joint ventures, licensing agreements, and exporting. This study focuses on exporting which is only one stage of the internationalisation process and only one segment of International Marketing.

The traditional method of describing the internationalisation process is the stages model. The Uppsalla School in Sweden was the first to introduce the stages model of internationalisation. One of the most frequently quoted models is that by Johanson and Vahlne (1977) in which they developed different stages for the internationalisation process of a firm. According to the stages model of internationalisation foreign market entry proceeds through a sequence of stages from a specific firm-based advantage in the domestic market, through export enquiries, licensing, branches and eventually foreign direct investment. Johanson and Vahlne (1977) regard the internationalisation process as perpetually acquiring and absorbing knowledge about overseas markets. As the firm progresses through the stages it commits more resources to its overseas markets.

Johanson and Vahlne (1990) highlight two patterns that emerge in the stages model. The first pattern is that a firm goes through a sequence of stages in its internationalisation process. Initially the firm is not involved in regular exporting. During the next stage exporting is conducted through independent representatives, later through a sales subsidiary and eventually through foreign direct investment. The second pattern to emerge is that firms enter markets which have a greater psychic distance than their previous ones (Johanson and Vahlne, 1990). Vahlne and Wiedersheim-Paul (1973) use aspects such as language, culture and political systems to define psychic distance. Empirical research based on traditional microeconomic and

marketing theory about internationally competitive Swedish firms has been used to develop the process model (Carlson 1966, 1975). Research in several other countries have supported this model (Bilkey, 1978, Cavusgil, 1980; Denis and Depelteau, 1985; Johansson and Nonaka, 1983). The model's propositions that commitment and experience and psychic distance are the main explanations for international business behaviour are confirmed by these studies (Johanson and Vahlne, 1990).

Dunning (1980, 1988) provides an alternative view to the internationalisation model which is the 'eclectic paradigm' (Melin, 1992). The eclectic paradigm is rooted in economic theory and its main explanatory variables are transaction costs and factor costs. It also assumes that international firms involved in foreign direct investments are rational in their decision-making (Melin, 1992). Dunning (1988) uses the eclectic paradigm to explain the extent, form and pattern of international production which depends on three sets of advantages. The first set is ownership-specific advantages. Dunning (1988) differentiates the advantages that result from structural and transactional market imperfections. The former emerges because of the firm's superior technology or multinationality. The latter implies that the multinational organisation benefits from lower transaction costs. The second set of advantages, internalisation advantages, refer to the multinational enterprise's ability to transfer ownership-specific advantages internationally within its own organisation rather than benefiting from its sale. The third set of advantages are locational advantages, of which there are two types. The former covers differences in factor costs while the latter covers "enhanced arbitrage and leverage opportunities". (Dunning, 1988). Buckley (1990, 1991) argues that the problem with the eclectic paradigm is that it provides explanations for the existence of the multinational enterprise instead of the process of internationalisation. The internationalisation process model, however, explains internationalisation as a distinct pattern of growth (Johanson and Vahlne, 1990).

In this study the stages model of internationalisation is used for the enterprise-level study as it is considered to be appropriate for describing the internationalisation process of small to medium-sized firms. Reid's (1981) version of the stages model of internationalisation is used as a framework for the enterprise-level study.

The internationalisation process model has its weaknesses and some of these have been accepted by Johanson and Vahlne (1990). These weaknesses include that the model is too deterministic, it only applies to the early stages of the internationalisation process, psychic distance decreases in importance as the world becomes more homogenous. Melin (1992) argues that since this model is deterministic and sequential it excludes other strategic options as firms may not go through all these stages. Firms quite frequently skip certain stages (Hedlund and Kverneland, 1984; Bjorkman, 1989; McKiernan, 1992). Empirical support for these firms comes mainly from studies on the initial stages of the internationalisation process. The model fails to explain the internationalisation process in experienced international firms (Melin, 1992). McKiernan (1992) argues that the stages approach does not explain the dynamics of progressing from one stage to another. Dichtl et al. (1983) criticize the stages model for oversimplifying a complex process. Forsgren (1990) asserts that the internationalisation process model ignores acquisition as an internationalisation path. Indeed, studies by Sharma, (1991) and Luostarinen (1991), however, indicate that acquisition of a foreign competitor is one method that domestic market based firms use to internationalise. McKiernan (1992) postulates that stage models are inadequate to explain current internationalisation processes.

Johanson and Vahlne (1990) have done a comparison of the eclectic paradigm and internationalisation model. A summary of this comparison is as follows; first, the eclectic paradigm predicts that firms establish their production where they experience benefits. The internationalisation model, however, predicts that firms initially establish themselves in countries that are culturally similar. Second, they confirm that the

internationalisation model explains the early stages of the internationalisation process, while the eclectic paradigm explains the internationalisation process of global firms. Third, the internationalisation model is rooted in behavioural theories but the eclectic paradigm's theoretical base assumes that decision makers have perfect information. Fourth, the main difference between the two frameworks is that the internationalisation model recognises that transaction costs change over a period of time. The eclectic paradigm, however, assumes that when decision makers initiate the internationalisation process they are rational and knowledgeable. Fifth, the eclectic paradigm is static in nature whereas the internationalisation model is dynamic. Their concluding remarks about the two approaches to internationalisation are that they are inconsistent as their basic assumptions vary greatly.

1.2.5 Industry-Level Study

Trade performance models were developed and tested to explain the observed changes in exports and imports over a cross-section of New Zealand manufacturing industries between 1985 and 1990. Net trade performance (NTP), also used by Pickering and Sheldon (1984) is used to combine both exports and imports for an industry into an index of performance. NTP values were calculated for each of 124 manufacturing industries for 1985 and for 1990. An index such as NTP, however, does not indicate the full extent of the inter-industry variation in the gross flows of exports and imports. To gain a better understanding of gross flows of exports and imports for the 1985/1990 period, possible determinants of these gross flows are discussed. These determinants represent industry structure and conduct. Structure variables include industry concentration, firm size and foreign ownership. Conduct variables include research and development intensity, advertising intensity, import tariffs and export subsidies.

1.2.6 Enterprise-Level Study

In this part of the thesis an attempt is made to identify the determinants of export performance at enterprise-level. In order to provide replication two industries were chosen for this study and these were the timber processing industry and the electrical industrial machinery industry. The timber processing industry is a high-export performer and the electrical industrial machinery industry is a low-export performer. The study looks at whether the determinants of export performance varied between industries and amongst firms within the same industry.

A meta-analysis of the literature on export performance at the enterprise-level was conducted. This included a total of 111 studies conducted during the period 1978-1991. Through meta-analysis the key variables in Aaby and Slater's (1989) model that influence export performance are identified. These key variables form the framework for discussing the enterprise-level findings. Two conceptual models were used for the enterprise-level study. First, Aaby and Slater's (1989) model based on a literature review of studies on export performance during the period 1978-1988. Second, Reid's (1981) model on the processes of export behaviour.

Although several studies have been done on export performance, only one (Sharma and Johanson, 1987) uses the case study method. Most of these studies are concerned with content rather than process and have been based on a cross-section of industries. As a result of the limited number of longitudinal case studies the literature fails to capture the dynamism and change within exporting firms. It is not clear from the literature why two firms in the same industry who have similar characteristics will react differently to exporting. Only one may choose to export, yet if both export and have a similar export strategy they might perform differently. Since researchers have focused on the decision-making process and behaviour of exporters, they have neglected to

study non-exporters. In addition, information about management processes in exporting firms remains limited.

In order to overcome these inadequacies and to develop a managerial process model of export performance, a multi-case approach was used. Since most of the existing research has been exploratory in nature, in-depth case studies would provide more insight into the nature of causal relationships and the export decision-making process.

1.3 Thesis Structure

This thesis consists of eight chapters. Chapter 2 develops and tests models intended to explain observed changes in exports and imports over a cross-section of New Zealand manufacturing industries between 1985 and 1990. Chapter 3 reviews the literature for export performance at enterprise level. It includes a meta-analysis of the export literature for the period 1978-1991. Chapter 4 explains the research methodology and justifies why the case study method is used. Chapter 5 uses the multi-case study method to test the validity of the content of Aaby and Slater's (1989) model. Two propositions are tested to validate the content of the model. The export behaviour process is elucidated in Chapter 6 by using Reid's (1981) model of the export process and a narrative explanation of a case study. In Chapter 7 the findings and implications of Chapters 2, 5 and 6, and the original contributions of this thesis within international marketing are discussed. In addition, policy recommendations and implications for managers of New Zealand companies wishing either to commence exporting or to expand on existing export sales are presented. The thesis ends with Chapter 8 where the conclusions, limitations of research and ideas for further research appear.

CHAPTER 2

THE INTERNATIONAL TRADE PERFORMANCE OF NEW ZEALAND MANUFACTURING, 1985-1990

2.1 Introduction

This chapter focuses on an analysis of changes in the export and import flows of New Zealand manufacturing firms at industry-level during the period 1985-1990. This period comprises the first five years when substantial trade liberalisation was introduced in New Zealand. The purpose of this chapter is to determine how New Zealand industries fared during these first five years of a deregulated economy. The question to be asked is; has trade liberalisation achieved the aims it has set out to achieve, such as improved export growth and lower import penetration? A total of seven determinants which were derived from the literature were used to explain changes in export and import growth. These determinants are categorised into structure and conduct variables. Structure variables include industry concentration, firm size and foreign ownership. Conduct variables include research and development intensity, advertising intensity, rates of import tariff and export subsidies. Explanations are provided for why some industries have performed better than others.

New Zealand's economic future depends on the country's success as a net exporter of value-added products, a process in which the manufacturing sector has a key role to play. These results provide an insight into how the manufacturing sector can improve its trade performance by identifying the key determinants of trade performance. The expected results pertaining to each determinant were compared with the actual results. Explanations are provided for any discrepancies that occurred. The discussion begins with an introduction of trade data that are used in

an assessment, albeit preliminary, of how New Zealand manufacturers have responded to trade liberalisation. This is followed in section 2.3 by a discussion of the determinants of export and import performance at the industry level. The models which emerge from this discussion are estimated and discussed in sections 2.4 and 2.5. General conclusions are set out in Section 2.6.

2.2. An assessment of net trade performance

These analyses of the New Zealand situation would not have been possible without the help of Department of Statistics staff. The crucial step was the Department's ability to convert data on imports and exports of manufacturing industries into the New Zealand Standard Industrial Classification. This is the basis on which other industry data such as concentration ratio and advertising intensity are available. The trade data made available were as follows:

Export values (FOB) by 5-digit manufacturing industry for the September years 1985, 1987, and 1990;

Import values (CIF) by 5 digit manufacturing industry for the same three years;

Total industry sales (inclusive of exports) by 5-digit manufacturing industry for the 1987 year only.

Net trade performance (NTP) has been used by others (e.g., in Pickering and Sheldon, 1984) to combine both exports and imports for an industry into a single index of performance. If X is used for the annual value of exports and M for imports, then for each industry, $NTP = (X-M)/(X+M)$. The NTP value will be +1.00 for an industry which exports but does not import, and -1.00 for an importing industry with no exports. The data allowed NTP values to be computed

for each of 124 manufacturing industries for 1985 and for 1990. The results of this are summarised in Table 2.1.

TABLE 2.1					
NET TRADE PERFORMANCE OF NEW ZEALAND MANUFACTURING,					
1985 - 1990					
Net Trade Performance 1985	Net Trade Performance 1990				
	1.000\ 0.501	0.500\ 0.001	0.000\ -0.500	-0.501\ -1.000	Total
1.000\0.501	14	8	3	2	27
0.500\0.001	1	9	4	5	19
0.000\ -0.500	0	0	9	9	18
-0.501\ -1.000	1	2	6	51	60
Total	16	19	22	67	124

Movements within Table 2.1 can best be assessed in relation to the main diagonal, the one stretching from top left to bottom right. Elements on this diagonal represent those industries whose NTP was in the same range in both 1985 and 1990. Improved performance would be revealed by more industries appearing below the diagonal than above. In fact, between 1985 and 1990, 10 industries moved below the diagonal but 31 moved in the opposite direction. By 1990, 89 of these industries had negative trade balances compared with 78 in 1985. This provides evidence that the net trade performance of manufacturing has tended to worsen over this period of time.

2.3 Determinants of export and import performance

The preceding analysis provided a summary insight into how manufacturing industries have performed between 1985 and 1990. An index such as NTP, however, does suppress the full extent of the inter-industry variation in gross export and import flows. It is these flows which constitute the main dependent variables in the subsequent analysis. This is an analysis which seeks to explain the export and import responses of industries over this initial period of deregulation. This section introduces the set of independent variables representing industry structure and conduct. It concludes by summarising models of trade performance that are then estimated on New Zealand data. Much of the empirical literature appears to have focused on exports (Auquier, 1980; Glesjer et. al. 1980; Goodman and Ceyhun, 1976; Ratnayake, 1990; Ito and Pucik, 1993) and the limited amount of theoretical work concentrates on static relationships (White, 1974). This discussion proceeds by taking each independent variable in turn and, to reiterate, the context of the discussion is dynamic. This allows industry-level explanations for the observed changes in exports and imports over the period 1985 through 1990 to be developed.

2.3.1 Structure Variables

Industry Concentration (CONC)

This variable has featured in many overseas studies (Owen, 1973; Glesjer et. al. 1980; Goodman and Ceyhun, 1976; Pickering and Sheldon, 1984; Ratnayake, 1990) and it has also been the focus of attention in New Zealand because of the relatively high levels of concentration which prevail¹. Previous research in New Zealand (Hamilton and Shergill, 1993) has confirmed that firms operating in the more concentrated manufacturing industries are more profitable. This will provide such firms with a stronger and more stable domestic base from which to mount export or import substitution initiatives in response to liberalisation. Hence, more export expansion and less import penetration is expected in the more highly concentrated industries.

Firm Size (SIZE)

The management literature (see the review by Aaby and Slater 1989, Chetty and Hamilton 1993) and related studies within industrial economics (Ito and Pucik, 1993) consistently point to a positive association between firm size and trade performance, particularly on exporting. Large size is also associated with economies of scale and learning curve effects on unit costs. In addition to scale and other volume related economies, firm size may also represent the need for critical mass needed in order to penetrate foreign markets and/or the superior lobbying ability needed to preserve some degree of import (tariff) protection. Consequently, it would be expected that those industries comprised of large firms would be in a position to respond best to the new trading environment post-1985. It is also important to include firm size among the explanatory variables. This ensures that any effect of industry concentration is not merely due to the average firm size being larger in the more concentrated industries.

Foreign Ownership (FOWN)

The rise of the multi-national enterprise requires that their impact be taken into account in studies such as this. In their well-known study of United Kingdom product markets, Utton and Morgan (1984) concluded that both export and import growth rates were positively related to the share of industry sales accounted for by multi-nationals. The rationale for this is that such enterprises possess the technological and managerial skills necessary for export success. Furthermore, when allowed to export and import as they wish, they will tend to raise the levels of both in the industry. On the other hand, as noted by Ratnayake (1990), if the motive for foreign investment is to avoid tariffs, then exporting will not be positively affected. Any impact on imports will depend on the sourcing policy of the business. If this calls for purchasing within the parent group, then imports will increase and the net trade effect would be negative. It could be argued that industries with high levels of foreign involvement will be positioned to respond the fastest to liberalisation. How industries with high levels of foreign ownership respond in terms of trading performance depends on the motives of the foreign investors. If these vary among industries, then there may not be any strong effects over the cross section.

2.3.2. Conduct Variables

Research and development intensity (RDI)

Trade performance in manufacturing depends to a considerable degree on the technological attributes embodied in the product (Audretsch and Yamawaki, 1988; Franko, 1989; Ito and Pucik, 1993). This causal relationship has featured strongly in recent statements of industry policy concerning exports (Tradenz, 1993). The expectation is that the more intensive the research and development, the greater the prospect for export growth based on technological superiority and, possibly, for import substitution. Where high levels of RDI fuels non-price competition in the

form of new product development, reciprocal imports of equally or more sophisticated products into the more sophisticated industries could be observed. Following this line of argument, however, the net trade flow should still be in favour of the R&D intensive industries. Local industries with little commitment to R&D will have consequently less scope to develop their exports. They will be more vulnerable to new imports. It is, therefore, expected the more R&D intensive industries would produce the better response in the more liberal environment prevailing in 1985-1990.

Advertising Intensity (ADI)

The ratio of advertising expenditure to industry sales is one of the more frequently-studied measures of industry conduct. It is expected that advertising intensity would be relatively high in the consumer goods industries. In particular, where there are frequent product improvements to be communicated to a large number of customers. In other words, following Finger and De Rosa (1979), high levels of ADI might be expected to be associated with those non-standardised, differentiated items which are more likely to feature in exporting. Another effect of advertising expenditures is to create and maintain customer loyalty. Consequently, an effective barrier to new entrants is erected. Since imports are in effect new entrants, the expectation is that there might be lower levels of import growth in those industries with high advertising intensities. Finger and De Rosa's (1979) theory of intra-industry trade, however, leads to an expectation of relatively high import penetration by equally or more sophisticated products produced by the export sector of competitor countries. As a result of this, the expectations for advertising intensive industries mirror those for R&D intensive industries.

Rates of Import Tariff (NTAR) and Export Subsidies (NSUB)

Rates of import tariff and export subsidies are government policy variables which are expected to have some important consequences for trade performance. Import

barriers and export subsidies have been a feature of New Zealand business since the early 1950's. Although the demise of tariffs and subsidies is often associated with New Zealand's trade liberalisation policies, these did endure throughout the period under review here. Wong and Brooks (1989) report the average nominal import tariff applied to manufacturing in 1987-88 was equivalent to 21% of the unassisted output of the import-competing sector (down from 28% in 1981-82). On the same basis, the average nominal rate of export subsidy available in 1987-88 was around 10%, down from 15% in 1981-82. Such protection from world competitive price levels, whether provided by tariff or subsidy, encourage uncompetitiveness and signify continuing vulnerability. In particular, during the initial period of liberalisation. Consequently, substantial import flows into the hitherto most highly-protected industries (e.g., clothing and footwear) would be expected. As they have the role of import-substitutors, tariff-protected industries would not be expected to be substantive exporters, quite the contrary in fact. As for industries in the subsidised export sector (e.g., textiles and paper) they would be expected to respond positively by way of increased exports. In addition, they should be sufficiently competitive in the home market to forestall substantial import growth.

These are the main independent variables which feature in the models of trade performance in this study. Wherever possible an attempt had been made to relate the discussion of them back to the extant literature. It should be stressed that there is no attempt here to devise a new general theoretical model of the trade performance of industries. This discussion is summarised in the form of Table 2.2 which contains the signs that can be expected on the estimated coefficients.

TABLE 2.2
EXPECTED SIGNS ON ESTIMATED COEFFICIENTS

Independent Variables:	Dependent Variable:	
	Export Growth 1985-1990	Import Growth 1985-1990
CONC	+	-
SIZE	+	-
FOWN	either or +	+
	0	+
RDI	+	-
ADI	+	-
NTAR	-	+
NSUB	+	-

The -, +, or 0 indicates expectations on the sign of the estimated regression coefficient.

2.4 Regression analyses of trade performance

2.4.1. Dependent Variables

All the data used to compute the dependent variables were supplied privately to the author's specification by the New Zealand Department of Statistics. The dependent variables were formulated initially as gross flows, i.e. change in exports between 1985 and 1990, i.e., (X90-X85), and change in imports between 1985 and 1990, i.e. (M90-M85).

2.4.2. Independent Variables

Most of these data were also obtained from the New Zealand Department of Statistics. In most cases the actual numbers are from the economy-wide census conducted in 1987. The measure of prior industry concentration (CONC) is the percentage share of the largest four enterprises in industry employment in 1982. These data are from the 1981-82 Census of Manufacturing (Table 2.4), published by the New Zealand Department of Statistics. The same source also gives Herfindahl Indices computed from employment shares. The industry Herfindahls were substituted for the four-firm ratios but a marked decline in explanatory power was observed. Comparable end-period data (for 1989) were also supplied. These data, however, also failed to add anything to the models over and above what CONC (1982) was providing: the correlation coefficient between the 1982 and 1989 industry concentration ratios is $r = +0.88$ and highly significant. A prior measure of industry structure was preferred. This 1982 four-firm ratio was, therefore, used in the analysis. SIZE is the average employment per enterprise in 1987. Foreign ownership (FOWN) is the percentage of enterprises in an industry with at least 25% non-New Zealand ownership (in 1987).

RDI and ADI are the 1987 amounts of the respective expenditures by each industry expressed as a percentage of industry sales in that year. The nominal tariff (NTAR) and subsidy rates (NSUB) were taken from the paper by Wong and Brooks (1989). These rates relate to 1987-88 but in relative terms they may also be taken as a proxy for the prior structure of tariffs and subsidies. The same source also gives estimated true rates of tariffs and subsidies. These rates were used in the analysis but, like Ratnayake (1990, p. 350), it was found that nominal rates provided the better explanation. The correlation matrix of the independent variables used in the analysis is in Table 2.3.

	CONC	SIZE	FOWN	RDI	ADI	NTAR	NSUB
CONC	1.00						
SIZE	0.38 ^a	1.00					
FOWN	0.33 ^a	0.43 ^a	1.00				
RDI	0.02	-0.07	0.08	1.00			
ADI	-0.05	-0.07	0.07	0.11	1.00		
NTAR	-0.23 ^b	-0.18 ^c	-0.06	0.21 ^b	0.03	1.00	
NSUB	0.11	0.18 ^c	-0.07	-0.14	-0.19	-0.66 ^a	1.00

Note: Significance levels on two-tail tests are as follows: a = 1%; b = 5%; c = 10%. Individual correlation coefficients were transformed into t-statistics and their significance levels determined using the t-distribution with (n-2) = 93 degrees of freedom.

As expected, there are several significant correlations among the set of independent variables, three of which are worth noting. First, both the extent of foreign ownership and the level of industry concentration are higher in industries with relatively large firms. Second, it has been those industries with the highest R&D intensities which have had, and continue to have, the benefit of the highest nominal tariff levels (but not the highest rates of export subsidies). Third, since industries with nominal tariff protection received no export subsidy (and vice versa), there is inevitably a high negative correlation between these variables. These relationships will of course introduce multicollinearity into the regression models. While this will not introduce bias in the values of the estimated coefficients, it will decrease the computed t-values of the estimators for the variables involved and so increase the possibility of 'Type 2' errors.

2.4.3. Model Estimation

The models summarised in Table 2.2 were estimated initially in linear form using ordinary least squares regression (MINITAB, Release 8.2). Due to gaps in the set of explanatory variables, the effective sample was reduced to 95 industries.

TABLE 2.4
REGRESSION ANALYSIS OF EXPORT AND IMPORT CHANGE 1985-1990

Dependent Variable:				
Independent Variables:	$X_{90}-X_{85}$ (unweighted)	$X_{90}-X_{85}$ (weighted by X_{85})	$M_{90}-M_{85}$ (unweighted)	$M_{90}-M_{85}$ (weighted by M_{85})
CONSTANT (t value)	35.42 (1.71)	158.53 ^a (4.49)	-22.06 (0.43)	-408.43 ^a (4.11)
CONC	-0.12 (0.56)	0.60 (1.30)	0.11 (0.20)	2.71 ^a (2.84)
SIZE	0.75 ^a (7.03)	0.84 ^a (8.55)	0.17 (0.65)	0.31 (0.79)
FOWN	-0.99 ^b (2.09)	1.09 (1.11)	0.37 (0.31)	4.19 ^c (1.71)
RDI	5.49 (0.39)	-12.81 (0.52)	70.81 ^b (2.02)	88.89 ^b (2.53)
ADI	-3.83 (1.42)	-21.45 ^a (4.41)	0.83 (0.90)	-0.18 (0.01)
NTAR	-0.99 ^c (1.80)	-6.40 ^a (6.01)	1.82 (1.34)	15.23 ^a (5.15)
NSUB	-1.45 (1.17)	-11.01 ^a (5.48)	0.19 (0.95)	12.24 (1.63)
R^2 (%)	42.4	76.1	10.1	17.0
R^2 (%)	37.8	74.2	2.9	10.3
F-statistic	9.15 ^a (7,87)	39.59 ^a (7,87)	1.40 (7,87)	10.62 ^a (7,87)
Note: Significance levels on two-tail tests are as follows: a = 1%; b = 5%; c = 10%.				

Table 2.4 contains two versions (unweighted and weighted) for each model. The reason for this is that both of these models were heteroskedastic with error term distributions which deviated substantially from normality². Although heteroskedasticity is a fairly serious though common problem in cross-section models, there is no generally accepted method of testing for it. The effect of heteroskedasticity is to overestimate the t-values of ordinary least squares estimators and so increase the possibility of 'Type 1' errors. In an effort to identify the cause of the problem a procedure derived from Park (1966) was applied. This is a test which continues to be advocated in modern texts, for example, in Studenmund and Cassidy (1987, pp. 253-56). In the export flow model, the logarithm of the squared residuals from the unweighted version proved to be significantly positively related to the absolute level of exports in 1985. Similarly in the import flow model, there was a significant positive relationship with the 1985 level of imports. These respective 1985 values were used to compute the weighted regression models which are also reported in Table 2.4. The residuals of the weighted regressions appeared homoskedastic. The hypothesis that these errors are normally distributed could not be rejected at the 5% level in the case of the export model and at the 10% level for imports. Finally, there are three technical points to note. First, it was decided not to remove the effect of multicollinearity because (a) many of the t-values are significant in any case and (b) dropping explanatory variables would invite greater problems in terms of coefficient bias than are being created here by multicollinearity. Second, the full unweighted regressions have been reported while conceding the overall insignificance (F-statistic = 1.40) of the estimated import model. Third, the R^2 values of unweighted and weighted regressions cannot be strictly compared because of the change to the specification of the dependent variable.

2.5 Discussion of Findings

The largest increases in export flows appear, as expected, to be associated with industries comprised of large firms. This finding is likely to relate to the same set of large New Zealand firms which others have identified as being at the forefront of what is currently perceived to be an export-led recovery (Campbell-Hunt, Harper and Hamilton, 1993, pp. 136-37; TRADENZ, 1993, p.60). Neither the level of industry concentration nor that of foreign ownership had a significant positive effect on export changes, although it is important to bear in mind the effect of multicollinearity among these structure variables. Indeed in the unweighted model, the level of foreign ownership is in fact negatively associated with export increases. This is similar to what Ratnayake (1990) found for Australia. As expected, both tariffs and subsidies are associated with poorer export performance under liberalisation. Export flows appear to have been markedly lower for those industries with high advertising intensities, an outcome that may well reflect their adoption of a strong domestic market focus. There is no evidence here to support the expected positive association between R&D intensity and export performance. This particular finding will be returned to later in the discussion.

The results on import changes are disappointing but useful nonetheless bearing in mind the paucity of microeconomic research on the determinants of import performance. In general terms an effective barrier to import penetration has not been identified. The main findings are that, import flows tend to be much larger where levels of protection, particularly tariffs, have been higher. It is the inflows of imports (and not exports) that have tended to increase with the level of foreign ownership. There are various explanations for an increase in foreign ownership. One explanation is that such ownership positions are intended to circumvent import controls (now embodied in tariff levels). Other explanations for an increase in foreign ownership are to reduce production and transaction

costs and to improve the marketing services provided in the foreign market (Klein, Frazier and Roth, 1990). There is also a suggestion here that imports have flowed in greater volumes into the more highly concentrated industries. This is contrary to expectation but suggests that imports can provide competition where it is most needed within the domestic economy. The main finding on imports, however, must be that they have flowed much more strongly into those New Zealand industries with the highest R&D intensities. By and large, these industries were also those which had most to lose by New Zealand's liberalisation of import protection (see the correlation matrix Table 2.3).

Recent work by the New Zealand Trade Development Board (TRADENZ, 1993) places considerable stress on the intention to increase product related R&D expenditure in order to expand exports. R&D intensity does indeed hold the key to successful export growth in the future. The evidence here, however, shows that the opposite has been the case in 1985-1990. These findings, therefore, require further explanation. A strict application of the theory of comparative advantage would have industries either exporting or importing but not doing both. Yet, observation of New Zealand's trade flows (see Appendix 1) confirms that there are a number of manufacturing industries which operate increasingly as exporters and importers of products. In other words they engage in intra-industry trade (ITT). Following Ratnayake (1990, p.349), the theory is that large (R&D sophisticated) countries export their flows of new products to all other countries but only import similar products from countries at least as sophisticated as themselves. The less sophisticated countries are the net importers of the sophisticated products. Hence, trade overlap (Finger and De Rosa, 1979) is observed. This is to the net trade benefit of the sophisticated exporter (exports always exceed imports) but comes at the net trade cost of the less sophisticated producers. The latter being unable to compete with the more sophisticated. The less sophisticated producers are destined to end up with imports and little in the way of exports to show for their attempts to be sophisticated. The evidence

presented here is consistent with this theory and casts New Zealand in the role of a technologically less-sophisticated nation. The little R&D that is actually done in New Zealand (the mean 1987 level of RDI in the manufacturing industries covered in this study was only 0.3%) has not been sufficient to create the sophisticated products that rich countries are willing to buy from New Zealand. Instead, New Zealand buys its sophisticated products from them³.

2.6. Conclusions

This chapter shows that increased exports are associated with larger firm sizes, lower levels of advertising intensity, and least trade protection (by either tariff or export subsidy). The largest increases in imports have been in those industries which are relatively highly concentrated, with higher R&D intensities, and higher levels of tariff protection and foreign ownership. On the whole, New Zealand manufacturing has come off second best against the rest of the world in these first five years of liberalised trading. In 1990, 70% of manufacturing industries had negative trade balances compared with 63% in 1985. There have, however, been some successes in the larger companies who have made significant increases in the amount exported. Nevertheless, much more needs to be done. The key to raising the export performance of manufacturing in general, seems to lie with increasing the quantity and improving the quality of product-related R&D carried out in New Zealand. This is the rationale for the present government's moves to reform how research, science, and technology operates in New Zealand. This chapter merely underlines the importance of doing things better in an area which is important to the country's long-term goal as a net exporter of value-added products.

Having identified the key determinants of trade performance at industry level, in Chapters 3 and 5, an attempt is made to identify the key variables influencing export performance at

enterprise level. By studying trade performance at both industry and enterprise-level, any overlap in determinants between the two levels can be recognized. This will also help to identify and explain any paradoxes that occur in the industry and enterprise-level results. By conducting an enterprise-level study, inter-firm comparisons can be done and this will provide an understanding as to why some firms are more successful at exporting than others. It also provides an insight into how firms have adjusted to trade liberalisation and can be compared to the industry-level findings.

The identification of the key determinants at the enterprise-level starts with a review of the current literature on export performance at enterprise-level. Aaby and Slater's (1989) literature review covers the period 1978-1988, so the literature is updated to include studies on export performance for the period 1978-1991. Meta-analysis is used to determine the key variables influencing export performance at enterprise-level and to confirm the content of Aaby and Slater's (1989) model. After these key variables have been identified a multi-case study approach is used to study 12 firms in two industries. The case study method was chosen because it was considered to be suitable for the purpose of this study which was to study causality. Aaby and Slater's (1989) model and Reid's (1981) model are used as the conceptual framework for the enterprise-level study. The study aims to validate the content of Aaby and Slater's (1989) model and to clarify the export decision-making process by using Reid's (1981) model. The study, therefore, combines a quantitative approach at industry level with a qualitative approach at enterprise-level. By mixing the two approaches a rich, in-depth analysis is presented on trade performance.

CHAPTER 3

FIRM-LEVEL DETERMINANTS OF EXPORT PERFORMANCE: A REVIEW OF THE LITERATURE 1978-1991

3.1 Introduction

The advance of knowledge and understanding in any area of inquiry requires periodic assessment of the current "state of the art", that is, some answers to the question: What do we already know? The work reported here attempts to assess current knowledge and understanding of the main influences on the export performance of firms. It was stimulated by the conclusions of previous reviewers, Aaby and Slater (1989, p. 23), that, in fact, very few solid conclusions could be drawn from the large quantity of published research in this area.

This chapter begins by presenting a profile of the firm-level export performance literature for the period 1978 through 1991 with the caveat - one also extended to Aaby and Slater - that some of the most recent works may not have been included. Then, accepting Aaby and Slater's (1989) "strategic export model" - reproduced as Figure 3.1 overleaf - concerns are raised regarding their approach to evaluating this literature. This is followed by an outline of the statistical properties of the meta-analytic vote-counting procedure used here. This method, when applied to the results of works published in the period 1978 through 1991 inclusive, does provide some rather solid support for the main constructs of Aaby and Slater's (1989) export model. The chapter concludes by drawing out the implications of this for researchers and practitioners.

3.2 A Profile of the Literature

In Table 3.1, the number of empirical studies of firm-level export behaviour published between 1978 and 1991 are presented. Studies of firms from North America and other areas such as Europe and South America are noted.

Year of Publication	North America	Other	Total
1978	2	2	4
1979	3	1	4
1980	3	0	3
1981	4	2	6
1982	7	5	12
1983	3	0	3
1984	11	0	11
1985	12	2	14
1986	4	3	7
1987	4	5	9
1988	8	2	10
1989	4	4	8
1990	8	7	15
1991	4	1	5
Totals	77	34	111

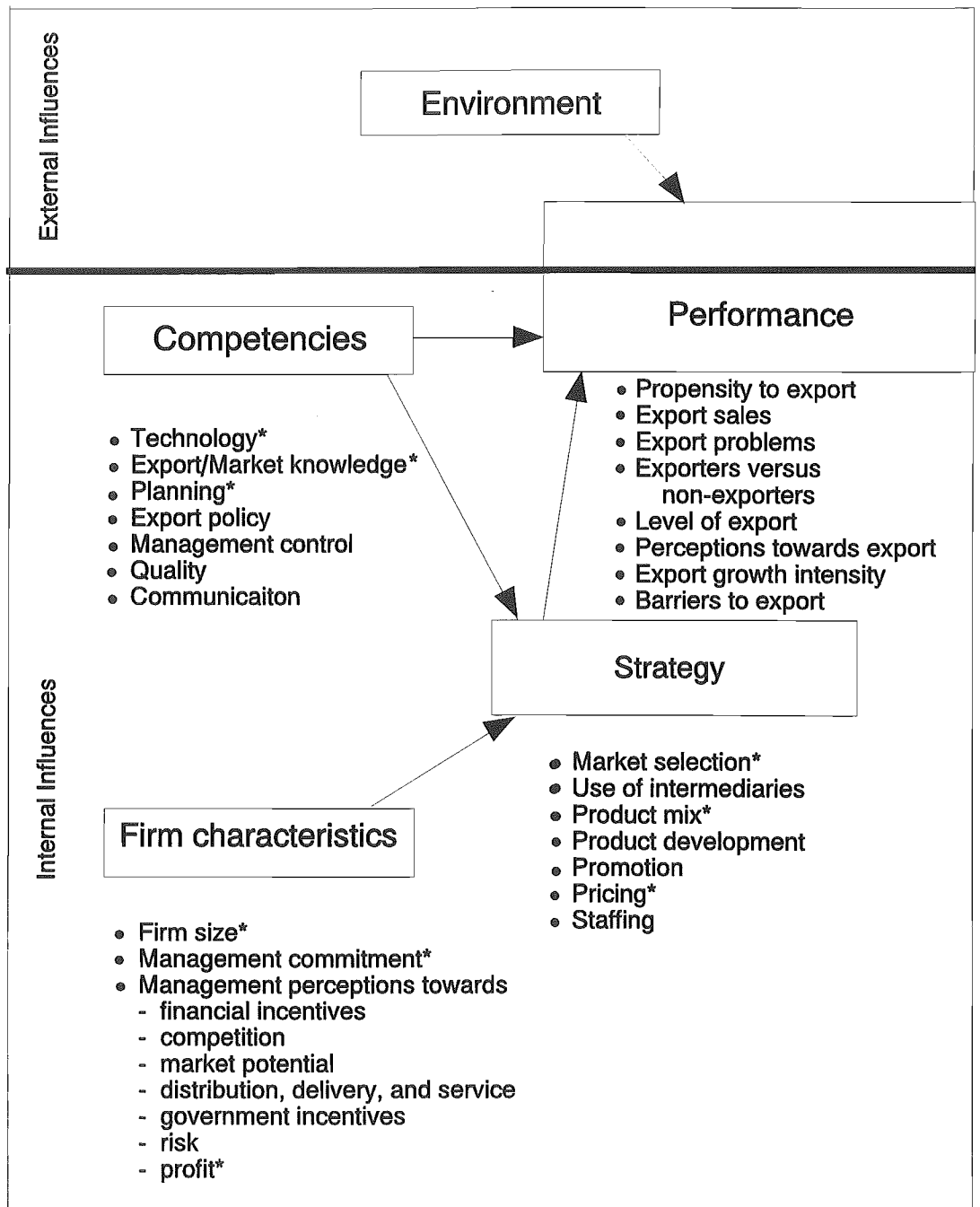
There are three points regarding the studies identified in Table 3.1. First, among 83 studies published during 1978-88, 55 were included in Aaby and Slater's (1989) review of that period. Of the 28 omitted studies, however, 17 were from the final three years of that period. This is a reflection of how difficult it can be to locate every relevant piece of work. Second, in recent years - say, since 1987 - there has been an increase in the amount of published research from outside of North America. Third, although not revealed in Table 3.1, only 11 of these 111 studies have sought to explain the exporter/non-exporter dichotomy (Burton and Schlegelmilch, 1967; Cavusgil and Kaynak, 1982; Cavusgil and Naor, 1987; Cavusgil and Nevin, 1981; Christensen et al., 1987; Gotto and McMahon, 1988; Keng and Jiuan, 1989; Malekzadeh and Nahavandi, 1985; Roy and Simpson, 1981; Schlegelmilch, 1986; Yaprak, 1985). Accepting the impossibility of including every single piece of work in an exercise such as this, the assumption is that the domain of studies is sufficiently complete for valid conclusions to be drawn. Primary data are set out in Appendix 3 using the same layout and abbreviations as Aaby and Slater (1989).

3.3 Extending Aaby and Slater (1989)

Aaby and Slater (1989) provides a commendable conceptual review of the literature on firms' export performance and the intention here is to build on their foundation. Their integrative framework involving Firm Characteristics, Competencies, Strategy, and Export Performance, is reproduced here in Figure 3.1.

Figure 3.1

A general model for assessing export performance and variables
(reproduced from Aaby and Slater, 1989, p.9.)



* Most frequently studied variables.

The main concern with their article is that its traditional narrative style of review is known to be the least efficacious in identifying those solid conclusions which they sought from the assembled evidence (see Glass, 1976). The approach adopted here is that this assessment of current knowledge and understanding should be done in such a way as to either validate or disconfirm this entire framework. Thus, the review method had to be capable of embracing all the likely variables and coping with research designs which continue to be both rather simple (Aaby and Slater, 1989, p. 23) and heterogeneous in terms of the statistical methods used.

Meta-analytic techniques were invented to summarise research results in the psychological sciences. They were applied to sets of studies with high levels of agreement on both the measurement scales of variables and statistical method. Neither of these conditions apply within the export marketing literature, so much so that some may reasonably take the view that meta-analysis ought not to be applied to this literature. These techniques are, however, gaining acceptance within the wider management field (Capon et al., 1990; Boyd, 1991). Provided they are used with due caution and with limitations explicitly elaborated, they also have a contribution to make within export marketing.

A range of meta-analytic techniques is available to synthesise the findings from any set of studies and to provide an estimate of "effect size", i.e., the strength of the association between an dependent and independent variable. The more powerful methods of meta-analysis come into play when, in all or most of the studies, an "effect size" can be calculated for each variable. These individual "effect sizes" may then be weighted by effective sample sizes in order to produce a single measure (weighted average) of the strength of the relationship under scrutiny. While such an approach might be feasible in some areas of this overall framework, the diversity of measurement scales and data analysis techniques used by previous researchers does inhibit wide-spread application at this point in time. A substantial number of the

papers under review here used, as their main analytic technique, cluster analysis, factor analysis, multiple discriminant analysis, and/or simple tabulations, methods which do not readily permit the computation of individual "effect sizes".

Given this diversity and the intention of assessing an entire framework of relationships (rather than the strength of any single association), a vote-counting approach, as advocated in Hedges and Olkin (1980), was adopted. This compromise on method, however, does have some associated costs. It is important that these be made clear. First, as a method it does not require that an individual "effect size" be calculated for each study; instead it simply assumes that "effect sizes" are constant across studies. Second, while the method does take into account the number of studies of a particular relationship, it does not permit specific allowance for differences in sample sizes among studies. Third, the method operates on "votes" of statistical significance. It does not concede, however, that a study which adopted a multivariate statistical technique is more likely - due, for example, to the effect of multicollinearity - to produce a nonsignificant result for a particular variable than is a study which employed a univariate design involving the same variable. One consequence of these defects is that the resulting confidence intervals for individual "effect sizes" will be wider than would have been the case with a more powerful technique. Nevertheless, Hedges and Olkin's (1980) method is a valid one and sufficient for the task of establishing the general tendencies of a diverse body of empirical literature.

Empirical studies of firm-level determinants of export performance have typically been cross section investigations of the attributes of groups of firms with different performance levels. The results of these studies can be classified into three categories: those showing positive significant results; those showing negative significant results; and those whose findings are not statistically significant. The probability of any particular study coming up with a significant result depends, in

large part, on the true "effect size" in the population. In other words, if the true effect of firm size on export performance is indeed large and positive, then the prior expectation would be that most (but not necessarily all) findings will fall into the "positive significant" category. To understand better what is meant here by "effect size", envisage an exhaustive study of export performance in which the relevant population of firms is divided into two very large groups which can be labeled "experimental" (E) and "control" (C). The E group is expected to have experienced larger treatment effects. For example, firm size or management commitment is expected to have influenced the export performance of this group to a greater extent than the C group. The true "effect size" (q) in this population of firms, standardised to a pure number, is given by:

$$q = (M^E - M^C) / V$$

where M^E is the population mean of the E group

M^C is the population mean of the C group

and V is the population standard deviation (common to each group)

In practice of course, research is conducted only on samples of firms. Consequently, it is sample means and standard deviations which are used as the best approximation to the unknown population values. It also follows that some of the conflicting results among studies may be due to sampling error. The first part of Hedges and Olkin's (1980) method calculates how many of a set of empirical findings must fall into, say, the "positive significant" category in order to reject the null hypothesis. Assume the null hypothesis of no effect running from firm size to export performance (that is, $q = 0$), and that there are 20 studies of this effect with which to test the null hypothesis at the 1% level of significance (one-tail test). On this set of assumptions, it turns out that the probability of 5 or more of these 20 studies yielding "positive significant" findings is equivalent to around 0.3%, less

than the required 1% level of significance. Thus, if the actual number of "positive significant" findings happens to be 5 or more, the null hypothesis can be rejected at the 1% level. This is the first approach this chapter brings to the empirical literature on export marketing.

Since the proportion of significant findings within a set of studies is related to the "effect size", Hedges and Olkin (1980) also show how to transform such information into point estimates and confidence intervals for the "effect size" of individual variables. The intention here is to produce 95% confidence intervals for the true effect size. A fuller and less technical discussion of this procedure is in Hunter and Schmidt (1990, pp. 474-476). To illustrate what is involved, consider now the actual evidence relating to company size and export performance. There are in fact 29 studies of which 17 do indeed report a significant positive association between size of firm and export performance. Assume the effective sample size in each of these studies is 100 firms, 50 in each of the experimental (E) and control (C) groups. (This total sample size is close to the actual median for empirical studies in the field. The slight majority - 54% - report total sample sizes of less than 120 firms. The assumed equal split between the E and C groups is not crucial to the procedure.) From this the sample estimate of the probability of a significant result $17/29 = 0.59$. The 95% confidence interval for this probability is calculated as [0.41, 0.75]. From here Table A2 in Hedges and Olkin (1980, p. 369) transforms this interval into one relating to "effect size". With the assumed sample size of firms (100) and its equal split between the E and C groups, the 95% confidence interval for the true effect size is [0.28, 0.47]. This means that, with increasing firm size, one can be 95% confident of increases in export performance - no matter how this is measured - of between 0.28 and 0.47 standard deviation units.

3.4 The Empirical Literature 1978-1991

To ensure some degree of homogeneity in the dependent variable, the more detailed analyses and calculations reported below exclude the 11 studies which have concentrated on the exporter/non-exporter dichotomy. In fact, the robustness of these findings is such that the inclusion of these studies in the calculations does not affect the general results. Table 3.2 summarises the published literature from all parts of the world relating to the significance or otherwise of the various Firm Characteristics identified by Aaby and Slater (1989).

TABLE 3.2				
FIRM CHARACTERISTICS AND EXPORT PERFORMANCE:				
SUMMARY OF FINDINGS				
Firm Characteristic	No. of Findings Which Were*:			
	NS	+ S	-S	Total
Firm size (FS)	6	17	6	29
Management commitment (MC)	11	16	0	27
Perceptions on:				
Financial incentives (PF)	1	6	0	7
Competition (PC)	5	6	4	15
Domestic market potential (PDP)	6	7	2	15
Distribution (PD)	8	4	0	12
Delivery service (PDS)	2	2	0	4
Pricing (PP)	4	3	0	7
Government incentives (PG)	6	3	3	12
Risk aversion (PR)	3	5	3	11
Profit likelihood (PPL)	5	9	0	14
Promotion (PRO)	2	1	0	3

* Note that in this and the following tables:
NS = not significant; + S = positive significant; -S = negative significant.

The critical number of "positive significant" results required to reject the null hypothesis does depend on the total number of studies available for scrutiny. As outlined above, if there are 20 studies, the critical number is 5. Where this total is 30, then, at the same 1% significance level, the critical number is 6; for totals of 10 through 15, the critical number is 4. The reader can now impose the appropriate critical number of studies onto Table 3.2 with the caveat that, since Hedges and Olkin (1980) discussion sets 10 as the minimum number of studies, no conclusion be drawn at this stage on the minority of variables which have featured in fewer than ten studies. What is clear is that the null hypothesis can be rejected in the case of firm size and management commitment. Indeed, in all but one of the firm characteristics where there are ten or more studies, there does appear to be some influence, apparently positive, on export performance. The exception is management perception of government incentives. The null hypothesis can be rejected at the 1% level, although, this is only just the case with respect to competition, distribution, and risk aversion.

Tables 3.3 and 3.4 present the analogous evidence on those variables making up Firm Competence and Export Strategy. The same set of critical numbers apply to each of these tables. As regards Table 3.2, no conclusions are drawn where there are fewer than ten studies on the variable. In Table 3.3, the null hypothesis can be rejected for all the eligible variables. On the whole, the null hypothesis appears to be more strongly rejected for the Table 3.3 variables than was the case in Table 3.2. This observation is consistent with Aaby and Slater's assessment that "competencies are probably more important than firm characteristics" (Aaby and Slater, 1989, p. 21). The summary in Table 3.4 refers to the components of Export Strategy. For the four variables under close scrutiny here, the null hypothesis can once again be rejected. This is most strongly with respect to market selection and pricing.

TABLE 3.3
FIRM COMPETENCE AND EXPORT PERFORMANCE:
SUMMARY OF FINDINGS

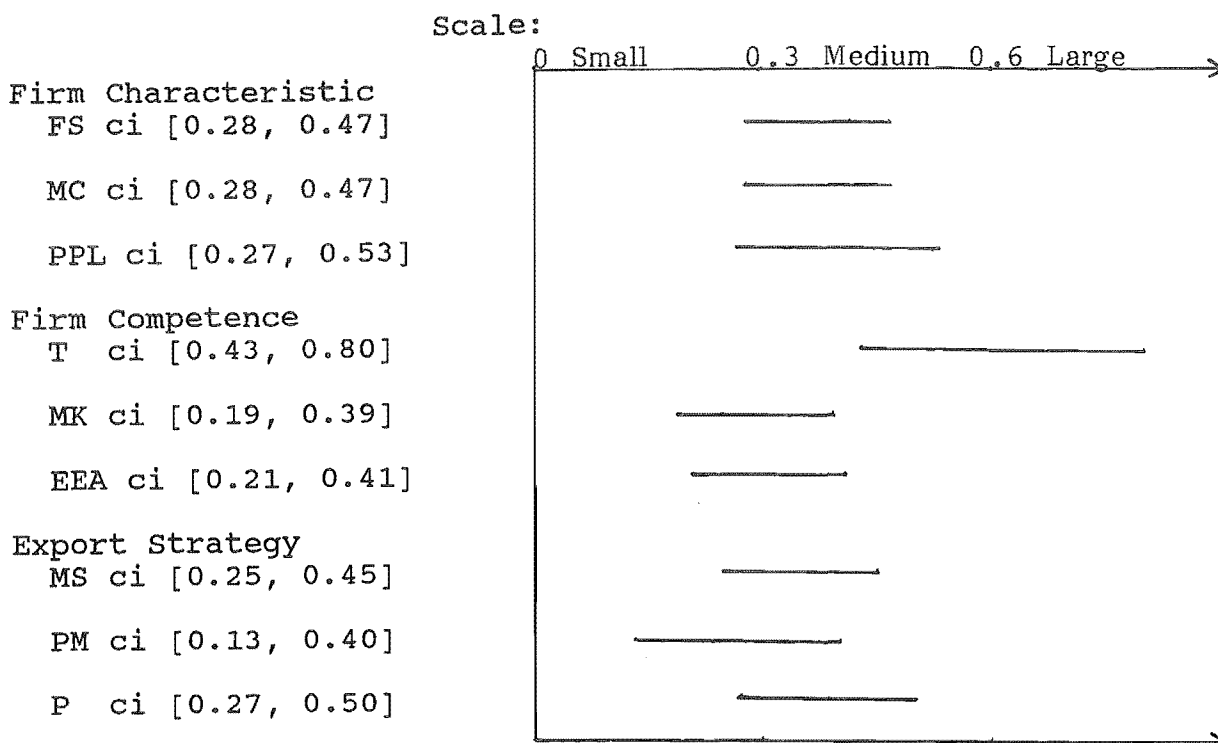
Firm Competence	No. of Findings Which Were:			
	NS	+S	-S	Total
Technology (T)	1	13	0	14
Market knowledge (MK)	15	11	0	26
Market planning (MP)	2	8	1	11
Export exploration analysis (EEA)	11	11	2	24
Export policy (EP)	1	10	0	11
Management control systems (MCS)	2	0	0	2
Quality control (QC)	2	6	0	8
Communications ability (CA)	5	3	0	8

TABLE 3.4
EXPORT STRATEGY AND EXPORT PERFORMANCE:
SUMMARY OF FINDINGS

Export Strategy	No. of Findings Which Were:			
	NS	+S	-S	Total
Market selection (MS)	10	13	1	24
Use of intermediaries (UI)	7	5	1	13
Product mix (PM)	8	5	0	13
Product development (PD)	3	4	2	9
Promotion (PRO)	2	6	0	8
Pricing (P)	7	11	0	18
Staffing(S)	0	3	0	3

As noted above, Aaby and Slater (1989) concluded, in terms of export performance, that competencies (Table 3.3) are probably more important than firm characteristics (Table 3.2). The statistical procedures developed by Hedges and Olkin (1980) permit a more formal test of this conclusion. Detailed calculations are now confined to the three most frequently researched, most significant variables in each segment of their model as follows: Firm Characteristics - firm size, management commitment, and perceptions of profit likelihood; Firm Competence - technology, market knowledge, and export exploration analysis; and Export Strategy - market selection, product mix, and pricing. It should be noted that, following Hedges and Olkin (1980), standardised "effect sizes" in the range zero to 0.30 are referred to as "small"; from 0.31 to 0.60 as "medium"; and 0.61 and above as "large". The 95% confidence intervals for the "effect size" of each of these nine variables are presented in Table 3.5. Bearing in mind the weaknesses of this form of meta-analysis, it is emphasised that these confidence intervals will be over-estimated.

Table 3.5
 95% confidence intervals (ci) for the effect size of
 frequently studied determinants of export performance



For the variables in Table 3.5, the majority of "effect sizes" lie in the "medium" range with the exception of the technology variable where particularly "large" effects are indicated. Note, too, that none of these confidence intervals encompass zero. Consequently, within the limits of the method used in this study, there can be a fair degree of confidence that these are indeed significant effects. While these findings on their own are not sufficient to substantiate Aaby and Slater's (1989) conclusion on the relative importance of firm competencies, they do offer rather solid support for their general model of export performance.

3.5 Conclusions

The findings of this research have implications for researchers and for practitioners. This chapter provides considerable support for Aaby and Slater's (1989) conceptual model of export performance by confirming, through meta-analysis, both the validity and relative importance of a number of key variables in each part of the general model. In the case of some of their variables, such as, management control system, perception of competition, and use of intermediaries, the impact on export performance remains to be confirmed by further research carried out within this framework. In advocating further replication, it is also suggested that the Student's *t* or *F* statistic be reported, wherever possible, in testing the significance of differences between group means. Even when differences are not significant, it is important that the test statistic be reported. This, in due course, would make possible the use of more sophisticated meta-analytic methods. While such work will further inform and define the content of the model, it remains important to develop theory in this area which focuses on the causal processes which give rise to variations in export performance among firms. The same conceptual framework will suffice but new methodologies will be needed. The efforts in this study towards theory-building seek to account for inter-firm variations in export performance (including non-exporting) within the same industry. A longitudinal

case study methodology is being used with particular emphasis on establishing the causal connections among the sub-set of variables which has been validated in this review. Some of the results of this current work are anticipated in addressing the practical implications of these results.

Aaby and Slater (1989, p. 21) were unable to identify any "clear-cut formula" for export success. This chapter did not seek to produce such a formula but its findings do enable a movement in this direction. First, it is very important to note that all facets of the framework - firm characteristics, competence, and export strategy - contribute to export performance. It would be inappropriate to claim that one was of greater practical importance than the others. Investing in market knowledge and a well-defined export strategy will together prove insufficient if key managers lack sufficient commitment to exporting. Firm size is itself important although cross-section studies do not resolve if this is a cause or a consequence of successful exporting. The case studies in this research confirm that size is indeed a causal factor in export success. This has a range of implications, from the encouragement of co-operative behaviour among small businesses to enhance their export prospects through to providing a *prima facie* case in favour of mergers and acquisitions predicated, in whole or in part, on enhanced export performance.

Management commitment is also essential. This current work indicates that a high level of commitment by senior managers may need to be maintained over many years before they experience export success. Indeed, management commitment must underlie a number of firm competencies in as much as it requires sustained commitment to build up the market knowledge and planning which have also been confirmed here as concomitants of successful exporting. Consequently, there is some case for adding another directional linkage within the Aaby and Slater (1989) framework.

The technology competence accruing from a sustained commitment to research and development is also a key feature of successful exporters. In further support of Aaby and Slater (1989, p. 18), however, technical "know-how" *per se* is not sufficient for export success. Such "know-how" has to be capable of conversion into a competitive advantage by an export-oriented management team. There also remains the complication, identified in Reid (1986), that associations between technological expertise (research and development) and exporting success may be distorted. The reason being that the studies have been done on technology-intensive industries where the presence of multi-national companies will be likely to give rise also to substantial intra-company trading across frontiers. This finding also raises questions for export-oriented managers in industries where relatively low levels of research and development expenditure per dollar of sales are the norm. It was for this reason that the case study project included such industries. To conclude on an optimistic note, there are indeed some very successful exporters to be found in industries (for example, timber processing) which have never been known for their technological sophistication or for their attractiveness to multi-national companies.

CHAPTER 4

RESEARCH METHODOLOGY FOR THE ENTERPRISE-LEVEL STUDY

4.1 Introduction

The case study method was chosen because it was considered to be suitable for the purposes of this study which were to study processes and causal relationships. To date, research on exporting has been exploratory and of a quantitative nature. Consequently, there are certain limitations in the current literature in particular on causality between export behaviour and export performance. The bulk of the export literature is comprised of studies concerned with content rather than process, and these are based mainly on cross-sectional designs. Aaby and Slater (1989) put it well, as follows:

The majority of export studies reviewed here utilise cross-sectional research designs. Provided we would want to make statements about causation of export performance, longitudinal research may facilitate stronger conclusions....Given the quantity of published research on export practice it is surprising that so few solid conclusions are available (Aaby and Slater, 1989, p.23)

Because of the limited number of longitudinal case studies, the literature fails to capture the dynamism and change within exporting firms. By using the case study method, an insight into the management processes involved in the export decision-making process is obtained. Traditionally, the case study method was considered to be appropriate for exploratory research only. To justify why the case study research method was chosen, a detailed explanation is given for why it was considered to be

appropriate for this study. The strengths and criticisms of case study methodology in general are highlighted. The discussion includes the debate on the single versus multi-case study approach. The multi-case approach was chosen for this study as it permits both literal and theoretical replication.

This chapter is divided into four sections: first, the limitations of current research in exporting; second, the key features of the case study method; third, a discussion on how and why the case study method was used in this study; fourth, general conclusions drawn. The works of Strauss and Corbin (1990) on grounded theory procedures and techniques; Eisenhardt (1989, 1991) on building theories from case study research; Dyer and Wilkins (1991) critique of Eisenhardt's (1989) work; Yin's (1989) description of the design of case study research; and Miles and Huberman's (1984) discussion of techniques for analysing qualitative data, have been drawn on extensively to develop the methodology for this study.

4.2 Limitations of Previous Research in Exporting

None of the 55 studies included in Aaby and Slater's (1989) review article on export literature during the period 1978-1988 has used the case study approach. Of the 111 articles reviewed in Chapter 3, only one (see Sharma and Johanson, 1987) used the case study method. To date research on exporting has been mainly exploratory (Amine and Cavusgil 1986; Cavusgil and Naor 1987; and Namiki 1988). The majority (35) of studies in a literature review of 56 articles on export behaviour and performance during the period 1977-1991 used mail surveys with a response rate ranging from 8.7% to 79% (average 33.1%). In several studies, the low response rates meant small sample sizes, thus limiting the extent to which the findings could be generalized (Cavusgil and Naor 1987; Namiki 1988; Keng and Juan, 1989) and any understanding of inter-causal relationships (Hedland and Kverneland, 1985). In addition, a number of researchers conclude that because of inherent weaknesses in

their research methods, their findings cannot be generalised (Madsen 1989; Lee and Yang, 1990; Daniels and Robles, 1982). Rosson and Ford (1980) have concluded that the export marketing literature "is empirically barren". Writing nine years later, Siefert and Ford (1989) report that this situation persists. Miesenböck (1988) in his literature review of small businesses and exporting, argues that the literature based on empirical studies is inconsistent and there is no conclusive theory on internationalisation of small business firms. Bonaccorsi (1992) challenges some widely held assumptions in the export marketing literature.

Current research on export behaviour and export performance suffers from methodological limitations. Quite frequently, a cross-section of industries has been used to gather data, and this has created distortions since industries differ in their export behaviour and export performance (Amine and Cavusgil, 1986; Keng and Juan, 1989; Namiki, 1988). Amine and Cavusgil's (1986) study of the British clothing industry shows that conditions for export success are industry specific. In addition, the statistical methods used to analyse these data have come under criticism. Amine and Cavusgil (1986) have noted the limitations of statistical analysis such as bivariate analysis for export behaviour and export performance when there are more than two variables involved. For example, measurement of company characteristics, policies and performance is frequently confined to the use of single variables, thus leading to conflicting interpretation of results.

Another example from their study was that analysis was restricted to the two-way interaction of policy and performance variables but excluded another variable of interest which was company characteristics. Bradley (1987) criticises the tendency in the export marketing literature to see problems as two-dimensional whereas they are multi-dimensional. He argues that the "matrix models" are unable to predict outcomes in complex, turbulent environments which characterise exporting.

Several writers (Cavusgil and Naor, 1987; Gripsrud, 1990; and Lee and Yang, 1990) suggest that the exporting literature could be strengthened by using in-depth and longitudinal studies to investigate the causality between export behaviour and export performance. As a result of the lack of longitudinal studies, it is difficult to generalise about the dynamism and change within exporting firms. For example, it is not clear from the literature why two firms in the same industry with similar characteristics behave differently to exporting. In some cases, only one may choose to export, and if both do export and have a similar export marketing strategy, they might perform differently. Furthermore, most studies fail to differentiate between firms with high and low-export commitment (Schlegelmilch, 1986). In addition, the distinctive attributes of non-exporters who would be able to survive if they entered international markets have not been identified.

Although various variables, such as, marketing strategy and firm size, have been shown to be correlated with export behaviour and performance, the causality question remains unanswered (Cavusgil and Naor, 1987). Since most of the existing research has been exploratory in nature, in-depth studies such as case studies would provide more insight into the nature of causal relationships and the decision-making process involved in exporting.

4.3 Key Features of the Case Study Method

In identifying the key features of the case study method, Yin's definition of a case study will be used (Yin, 1981a; 1981b; 1989). Yin defines a case study as an empirical inquiry that :

- . investigates a contemporary phenomenon within its real life context; when

. the boundaries between phenomenon and context are not clearly evident; and in which

. multiple sources of evidence are used.

Case-based studies can involve either single or multiple cases.

Traditionally, case studies were considered to be appropriate only for the exploratory phase of an investigation. Yin (1989), however, points out that some of the best and most famous case studies have been both descriptive, for example, Whyte's "Street Corner Society", 1943 and explanatory, such as, Allison's "Essence of Decision Making: explaining the Cuban Missile Crisis", 1971). Eisenhardt (1989) identifies still other uses for the case study method to provide description (Kidder, 1982), test theory (Pinfield, 1986; Anderson, 1983), or generate theory (e.g., Gersick, 1988; Harris and Sutton, 1986).

Single case studies have been used frequently in the past. It is only recently, however, that multiple cases have become popular. Multiple case studies have been mentioned by Yin (1989) and Corbin and Strauss (1990) but it is Eisenhardt (1989) who has written in detail about their theory-building properties. She conducted a study using the multi-case study approach (Eisenhardt and Bourgeois (1988) mid - range theory of politics in high velocity environments). The multi-case approach encourages the researcher to study patterns between cases and theory and to avoid chance associations (Eisenhardt, 1991).

Strauss and Corbin (1990) writing about grounded-theory procedures and techniques which are similar to theory- building from case studies, assert that the purpose of

grounded-theory research is to develop theory. In grounded-theory, research data is collected to determine how literature and data compare. There is a constant interplay between the literature and data to develop theory. Grounded-theory questions are based on action and process. Consequently, it is an ideal method to study causality.

There are two approaches to using the case study method. Yin's (1989) approach is to use case studies to test theory while Eisenhardt (1989) uses case studies to develop theory. In this study Yin's approach is used. According to Yin (1989) the initial step in the case study approach is developing theory, followed by case selection. Each case is looked at as a stand-alone entity. This enables unique patterns to emerge and to generalise patterns across cases. This also allows cross-case comparisons to take place. Cross- case comparisons force researchers to go beyond initial impressions and to take a more in-depth, structured approach with the data. When analysing the data, each case is compared to the theory. There is, therefore, continuous interaction between the theoretical issues being studied and the data collected. The case study data is continually matched to theory and not analysed to make statistical generalisation. Cross-case questions are also asked to determine the similarities and differences between cases. According to Strauss and Corbin (1990) ..."the discovery and specification of differences among and within categories, as well as similarities, is crucially important and at the heart of grounded theory."

A major strength of case study data collection is that various sources of evidence can be used. These include documentation, archival records, interviews, direct observation, participant-observation and physical artifacts. In this study documentation, archival records, interviews, direct observation and physical artifacts are used. Multiple-data collection methods allow an investigator to conduct a more thorough examination of each firm than if a quantitative study was done. While surveys focus on verbal information, case studies measure and record actual behaviour (Yin, 1989). Since multiple sources of evidence are used in case studies this allows an

investigator to address a broader range of historical, attitudinal and observational issues than survey research (Yin, 1989). The evidence may be qualitative or quantitative data or both. Since any finding or conclusion in a case study can be supported by a chain of multiple evidence based on several different sources of information, it tends to be more convincing and accurate.

During case study data collection, the information has to be interpreted as it is collected. To avoid subjective bias, multiple evidence has to be provided to justify conclusions. The case reports are reviewed by the respondents thus increasing the construct validity of the case study method. In this study, the case reports were sent to the respondents to review. After feedback from respondents, only a few minor changes had to be made to the case report. This review by informants enhances the overall quality of the case study evidence. The case study method allows research to flow in the less common direction from data to theory. It is, therefore, particularly useful in an area like export marketing where theoretical and conceptual frameworks are inadequate.

A common criticism of the case study approach is that it has little basis for scientific generalisation, but Yin refutes this by asserting that "...case studies, like experiments, are generalisable to theoretical propositions and not to populations or universes." Yin continues his argument by stating that the case study should be treated like the experiment, as it does not represent a "sample". With the case study method, the investigator aims to expand and generalise theories (analytic generalisation) and not to enumerate frequencies (statistical generalisation) (Yin, 1989).

The multi-case approach has been criticised by Dyer and Wilkins (1991) who suggest that the single-case method is a better way of forming theories. They argue that the multi-case approach is a hybrid form of case research which is paradoxical because it claims to generate theory but includes many characteristics of hypothesis- testing

research (e.g., sampling, controls). Dyers and Wilkins (1991) have this to say about the multi-case approach:

it delivers, almost ready to test hypotheses based on rich qualitative insights about the cases, but it focuses so much on the constructs developed and their measurability that we often miss the context, the rich background of each case. As a result we fear that this form of case research will not create an exemplar, that is, a story against which researchers can compare their experiences and gain rich theoretical insights.

Dyer and Wilkins (1991) propose that good story telling about a single case would provide better theoretical insights than multi-case research based on creating good constructs. They focus on the fact that Eisenhardt (1989) did not stress the importance of single-case studies.

Eisenhardt (1991), in her response to the critique, asserts that Dyers and Wilkins have grossly misread the classic case studies. Eisenhardt (1991) emphasises that the similarities between single and multiple cases far outweigh the differences between these two methods. Eisenhardt (1991) continues to support multiple cases by asserting that it is not a question of whether a single case or multiple cases are better but the appropriate number of cases depends on existing knowledge. It also depends on the topic and the extent to which further information can be obtained from incremental case studies.

Eisenhardt (1991) asserts that: "Multiple cases are a powerful means to create theory because they permit replication and extension among individual cases." By replication, she means that individual cases can be used to corroborate specific propositions. She defines extension as the use of multiple cases to develop elaborate theory. Eisenhardt (1991) also justifies why she stressed the importance of precise and measurable constructs because it was from such constructs that powerful theory was generated.

On the whole, Dyer and Wilkins' critique does not offer any substantial contribution to the case study method. If the multi-case approach is ignored because of its perceived limitations, then the theoretical progress in exporting may suffer.

4.4 How and Why the Case Study Method was used in this Study

Since "how" and "why" questions are being addressed, case studies are more suitable than large surveys. The reason for this is because they tend to be explanatory and deal with events over a period of time rather than frequencies. Furthermore, because of its ability to test and generate theory, the case study approach will be more suitable than survey research to establish the validity of the content and the causal links in Aaby and Slater's (1989) model. By using the case study approach, the reasons why certain decisions were made, how they were implemented and with what result, can be identified.

For the purposes of this research, the multi- case approach is ideal, as it allows theoretical and literal replication to be used. Each case has been carefully selected so that it either predicts similar results (literal replication) or produces different results for expected reasons (theoretical replication). According to Eisenhardt (1989) and Yin (1989), replication logic enables researchers to identify the subtle similarities and differences between cases and intergroup similarities and differences. It encourages researchers to go beyond initial impressions. These forced comparisons allow new categories and concepts to be identified. By using the multi-case approach, it is expected that a better understanding of a firm's export decision-making process and export performance will be attained. This improved insight can lead to developing prescriptions for export success.

A qualitative study overcomes the problem of conducting research in a small country such as New Zealand. As a result of the small sample base, there may not be enough firms to justify using statistical generalisation. In addition, firms have complained about being overly researched. One firm mentioned that they had received ten mail questionnaires in one year. Previous studies on international marketing in New Zealand using the mail survey have had a low response rate, Akoorie and Enderwick (1990) had a response rate of 20.2%. This is lower than the average response rate of 33% for the 56 articles reviewed in Chapter 3.

To add to the existing literature on export behaviour and export performance at enterprise level, an attempt was made to identify the specific factors which distinguish average or better exporters from below-average export performers, and exporters from non-exporters. The unit of analysis was the enterprise. Eisenhardt (1989) asserts that when using the multi-case approach there is no ideal number of cases. She, however, suggests that a number between four and ten cases usually works well. With less than four cases, it becomes difficult to generate theory and with more than ten cases, it becomes difficult to cope with the volume of data. For the purposes of this research, a total of 12 firms in two manufacturing industries in the Canterbury region were interviewed. These consisted of six firms from the timber processing industry and six firms from the electrical industrial machinery industry. These two industries had similar concentration ratios (relatively low) but different technological sophistication. One manufacturing industry was chosen from the set of "high" export performers and the other from a set of "lesser" performers. Within each industry six firms were selected from three categories:

1. Successful exporters - those with a ratio of exports to total sales greater than or close to the industry's average, referred to as average or better exporters;

2. Exporters with a ratio of exports to total sales strictly below the industry's average, referred to as below-average exporters;

3. Non-exporters.

Each firm was chosen using replication rather than sampling logic. In other words, the sample was chosen because they could be used for literal and theoretical replication rather than because they were a proportional representation of the population. By using theoretical sampling, cases were chosen to fill polarised theoretical categories. This allowed the theory to be replicated or extended. According to Pettigrew (1988), by studying extreme situations and polar types, items of interest will be more apparent. The aim is to look for within- group similarities and inter-group differences. The multi- case approach of pair-wise comparison within each industry allows the similarities and differences between each pair to be explored. This allows replication logic to be followed. This treats multi- cases as a series of experiments. Each case confirms or refutes the findings of previous ones.

A general model of firm-level export performance which has no industry-specific differences is proposed. The method of analysis for content uses what Yin (1989, p.109) refers to as "pattern-matching logic" applied to a set of nine independent variables. These variables were the most frequently studied variables in Aaby and Slater's (1989) model which were identified through meta-analysis. To test the content of Aaby and Slater's (1989) model, two propositions were drawn. First, similar results within the three categories are expected. This is referred to by Yin (1989) as literal replication. Firms within the same category would be expected to behave the same way. Second, systematic differences between each category are expected. This is referred to by Yin (1989) as theoretical replication. Firms in each category would be expected to behave differently because their export performance is different.

To establish the causal relationships in Aaby and Slater's (1989) model, what Yin (1989, p.113) describes as "explanation building" is used. Theoretical propositions about causal relations are developed by asking "how" and "why" questions. For the competencies / export strategy associations, "how" questions are asked, namely how are competencies and export strategy related? In the case of competencies and firm characteristics the key question is "why" namely, why are competencies and firm characteristics related? These propositions allow the analysis to be focused on specific data, thus overcoming the major problem with the case study approach which is the huge volume of data that is generated. In this study, the transcribed interviews alone come to about 400 double-spaced pages. If the secondary sources of data are included then this involves an enormous amount of data.

The work of Miles and Huberman (1984) was drawn on extensively for methods of analysing case study data. As a result of the interest in qualitative research, a computer programme (NUDIST-non-numerical, unstructured data indexing, searching and theorising) has recently been developed to analyse qualitative data. The data for this study were analysed both manually and by using the NUDIST programme. NUDIST classifies and categorises data to build linkages between variables. These linkages help to identify patterns that emerge from the data. NUDIST provides information on how many times a certain variable is mentioned in the text. This enables the investigator to identify the topic that the respondent focused on the most during an interview. In its output, NUDIST indicates the location of the text in the case study. This allows the text to be easily found in the case study report if clarification is needed.

One of the problems with NUDIST is that it is sensitive to coding errors. Consequently, it is possible to code incorrectly and miss out on valuable information. Even if the data is coded, a large amount of duplicated information has to be sifted through when analysing the data. For example, when pricing was requested, data pertaining to market selection, R&D and quality appeared in the output. As a result

of this duplicated information, the output from the NUDIST programme, provides an overwhelming amount of data and the analysis can run into many pages. By using the NUDIST programme the case study is not seen as a whole but as blocks of variables. Thus, the problem which emerges is that the flow of the interview and underlying assumptions can be lost when using NUDIST. In this study a better understanding of the case was obtained by analysing the data manually. This showed that NUDIST is not sufficient as a replacement for manual analysis.

Since case study research is in its early stages of development and open to much scepticism, care should be taken when analysing the data. Relying solely on a relatively new qualitative computer programme to analyse the data can create errors and lead to the wrong conclusions. This could open the case study method of research to further criticism. To gain a thorough understanding of the case studies, it is advisable to use a combination of analysing the data manually and using NUDIST until a more effective programme has been developed.

By using case study research, the following problems were encountered. First, it was difficult finding firms to fit the study's narrowly defined categories. It took a long time and much effort and assistance from outside organisations to find these firms. Second, respondents were reluctant to spend a large amount of time in an interview. Consequently, they had to be replaced by those willing to be interviewed for longer periods. Once respondents agreed to be interviewed, they were very forthcoming with information. Third, the time spent collecting and transcribing data took much longer than expected. The time period for this stage of the research had to be extended. Fourth, since the case study method generates masses of information, it is useful to have a conceptual framework to focus on when analysing the data. Without Aaby and Slater's (1989) model as a focus, it would have been difficult to determine what data to include and what to discard.

4.5 Conclusion

The case study method allows management processes and causal relationships to be studied. Furthermore, export performance can be studied from multiple perspectives rather than the influence of a single variable on export performance. By studying multi-case studies across two industries, it can be determined whether there are differences between industries or similarities. This allows pattern-matching logic which compares an empirically based pattern with a predicted one to be used. Consequently, both literal and theoretical replication are conducted.

Multiple-data collection methods allow a more thorough examination of each firm than a narrowly defined quantitative study. Since the sample base in New Zealand is small, survey research generates problems such as size of sample, cross-industry biases and low response rate. In the New Zealand context, as firms become overly researched they are increasingly reluctant to participate in interviews, so the case study method is ideal. As far as exporting research is concerned, case studies do have an important role to play and should not be dismissed as merely anecdotal.

The next chapter provides an analysis of the twelve case studies that were done for this research. Two conceptual models are used as a framework to base this discussion. First, Aaby and Slater's (1989) model to discuss the content of export performance. The main elements of content are those which emerged from a meta-analysis of the literature as presented in Chapter 3. The method of analysis for content uses what Yin (1989, p. 109) describes as "pattern matching logic". The second conceptual model was Reid's (1981) model which was used to discuss the export behaviour process. Reid's (1981) model refers to what is happening through time in exporting. In order to understand how the model works, what Yin (1989, p.113) describes as "explanation-building" is used. This is done by first, using the stages of Reid's (1981) model and then in a narrative which tries to maintain a number of theoretical propositions. Unlike

the existing literature Chapter 6 provides an analysis of exporting as a dynamic process rather than a static event.

CHAPTER 5

EXPORT PERFORMANCE AT ENTERPRISE-LEVEL: A MULTI-CASE STUDY APPROACH

5.1 Introduction

This chapter is based on a study that used the multi-case study approach to confirm the content in Aaby and Slater's (1989) model of export performance (see Figure 3.1). This model was developed from empirical studies during the period 1978-1988 and has not yet been tested. The multi-case study method was chosen to test these two models because the methodologies typically used in international marketing research were considered to be unsuitable for studying processes and causation. This study was conducted at enterprise-level and included a total of 12 small to medium-sized firms. An attempt is made to find the key determinants of export performance at enterprise-level. The study identifies how competitive strategies vary between enterprises in the same industry which exhibit "average or better" export performance, "below average" export performance and those which do not export at all. The 12 firms were selected from each of these three categories in two industries. Six were chosen from the electrical industrial machinery industry (a low-export performer) and the other six were from the timber processing industry (a high-export performer). By choosing the sample in this way similarities and differences between and within industries could be identified.

The chapter starts with an explanation of the research methodology and how and why the 12 firms and two industries were chosen. It then proceeds to discuss the findings. In the analysis and results section, an attempt was made to identify the specific factors which distinguish "average or better" from "below average" export performers, and exporters from non-exporters. The purpose was to provide an

understanding of how firms could become successful exporters. The chapter ends with general conclusions.

5.2 Research Methodology

5.2.1 Objective

The objective was to understand both the exporter/non-exporter dichotomy and different levels of export performance (measured by the ratio of exports to total sales) within and between industries. This was done by studying selected cases where these outcomes were known to be different (see Yin, 1989, p.105). The research design began with a particular focus on the most-frequently studied internal competencies and firm characteristics associated with export performance, as identified by Aaby and Slater (1989, p.9). These variables can be seen in Figure 3.1. This model provided a satisfactory structure for Aaby and Slater's (1989) review of the literature. The first task in this study was to confirm the content of international strategies. This was a pre-requisite to elucidating the causal processes involved. A discussion of causal processes is done in Chapter 6.

5.2.2 Choice of Industries

Industries were carefully selected so that the findings could be generalised across other industries. Two industries were chosen and these were comparable in terms of their concentration ratios (relatively low) but different in technological sophistication. There were three reasons for this choice of two low-concentrated industries. First, the recent New Zealand experience suggests that industries in which small and medium-sized firms can enter, offer prospects for future export growth. Second, the management processes related to international strategy might be more conspicuous within smaller businesses. Third, more populous industries

would provide better access to both owners and senior managers. In addition, it would be easier to include non-exporters who are predominant in the business population and, therefore, a key part of the overall design.

The industries selected were the "Planing, Preserving, and Seasoning Timber" industry (NZSIC number 33112) and "Electrical Industrial Machinery and Apparatus" industry (NZSIC number 38310). The first of these is a traditional resource-based New Zealand industry. In this industry, technological sophistication is unlikely to be particularly important in understanding export strategy and performance. It is also a "high" export industry which exported 60% of its total sales in 1987. In contrast, the "Electrical Industrial Machinery and Apparatus" industry exported only 20% of total sales in 1987. It is not based on an indigenous resource, but exporters are expected to have at least some level of technological sophistication.

5.2.3 Choice of Firms

In order to build sufficient replication opportunity into the study, six firms in each of these industries (12 in all) were selected for this study. These firms were spread evenly among the following three categories:

1. Successful exporters those with a ratio of exports to total sales greater than or close to the industry's average, referred to as average or better exporters,
2. Exporters with a ratio of exports to total sales strictly below the industry's average, referred to as below average exporters, and
3. Non-exporters.

Candidate firms with activities confined to one or other of the chosen industries were selected solely on the basis of their export to total sales ratio. This information was obtained from responses to a small-scale postal survey and from contacts provided by the local Chamber of Commerce, Trade Development Board and other respondents in this study.

Individual firms have been given codes so that they can remain anonymous. Firms A through F are in Timber Processing; firms G through L are in Electrical Industrial Equipment. Firms in the first three categories (high exporters) are given the prefix 'H'. Those in the second category, 'L'; and those in the third group, 'N'. So, for example, HA and HB are the superior export performers in timber processing and NK and NL are non-exporting manufacturers of electrical industrial machinery. Table 5.1 reports the 1991 exports as a percentage of sales for each of these companies.

TABLE 5.1 EXPORT PERFORMANCE OF SELECTED COMPANIES IN 1991					
Timber Processing			Electrical Industrial Machinery		
Company	Exports (\$ m)	Exports/ Sales (%)	Company	Exports (\$ m)	Exports/ Sales (%)
HA	17.4	58	HG	22.3	55
HB	6.5	54	HH	n.a.	25
LC	1.7	15	LI	0.3	6
LD	0.15	10	LJ	0.2	15
NE	0.0	0	NK	0.0	0
NF	0.0	0	NL	0.0	0

It should be noted that some of the percentages in Table 5.1 were estimated by the executives involved who did not want to reveal the value of their total sales.

5.2.4 Procedure

Structured interviews were tape-recorded in all 12 firms. Each firm had either one or two respondents. If there were two respondents then they were interviewed separately. In every case, at least one interviewee was a part-owner of the business. This was a consequence of focusing on smaller firms. Initial interviews with exporting firms (categories 1 and 2) lasted between two to three hours, that is, up to six hours per firm. The interview duration for non-exporters (category 3) was less. The interview results were then combined with other documentary evidence provided by the firm to produce a detailed case study report on each one. These reports were then sent back to the interviewees to be checked for accuracy. When accuracy was confirmed, the case evidence was deemed suitable for analysis.

5.3 Analysis and Results

The evidence in these case studies was used to confirm the content of the export model proposed by Aaby and Slater (1989) and adopted here (see Chapter 3, Figure 3.1). The main elements of content are those which emerged as significant from a meta-analysis of the literature (see Chapter 3). There is the prospect, however, that other important variables might emerge which may be specific to the New Zealand context.

The method of analysis for content uses what Yin (1989, p.109) refers to as "pattern-matching logic" applied to a set of nine independent variables. These variables were the most frequently studied variables in Aaby and Slater's (1989) model which were identified through meta-analysis. Consequently, similar results

within the three categories of export performance (four firms in each category) are expected, that is, literal replication following Yin (1989, p. 53). Systematic differences between each category are also expected, what Yin (1989, p. 53) refers to as theoretical replication. To begin with a general model of export performance with no industry-specific differences in model content is being proposed. The summary of this discussion is presented in Table 5.2 overleaf. The following set of codes were used to create the expected and actual patterns:

- + + strong positive influence (on export performance)
- + positive influence
- 0 no influence
- negative influence

TABLE 5.2: FIRM-LEVEL DETERMINANTS OF EXPORT PERFORMANCE

Determinants	Expected patterns			Actual Patterns											
	H*	Firms: L*	N*	HA	HB	HG	HH	LC	LD	LI	LJ	NE	NF	NK	NL
<u>Internal Competencies</u>															
Technology (T)	++	+	-	++	+	++	++	++	+	++	+	-	-	-	-
Market Knowledge (MK)	++	+	-	+	+	+	+	+	+	+	0	-	+	-	-
Planning (P)	++	+	0	0	+	+	+	+	0	+	-	-	0	-	0
<u>Firm Characteristics</u>															
Firm Size (Sales, \$m)	Large ----->Small			30	12	40	na	11	2	5	1	.1	.3	.3	.5
Mang. Commitment (MC)	++	+	-	++	++	++	++	++	++	++	+	-	+	-	-
Profit Perception (PPL)	++	+	-	+	+	-	0	-	-	0	+	-	+	0	0
<u>Export Strategy</u>															
Market Selection (MS)	++	+		+	+	++	++	++	+	+	+				
Product Mix (PM)	++	+		+	+	++	++	+	0	++	++				
Pricing (P)	++	+		+	+	++	+	+	++	+	-				

Two propositions on export performance have been developed and each of these will be discussed in detail.

Proposition 1

Similar results within the three categories of export performance (literal replication) are expected.

Table 5.2 shows that the group of non-exporters conform closely to the expected pattern, that is, they provide literal replication. The one exception is firm NF, a non-but incipient exporter. This firm was motivated by the perception that "export markets are more profitable than the domestic market". It was, therefore, committing a certain amount of its resources to becoming an exporter. All four non-exporters were the smallest firms in the sample and, of the four, only NF was actively exploring export markets. In terms of the other independent variables, the non-exporters emerged much as expected. For example:

Technology

NE *"We are a bit behind as far as technology goes."*

NK *"We are in a mature industry so technological innovation is not so important."*

Planning

Only two had formal marketing plans. One (NE) conceded that *"nothing that we did was planned"*.

Management Commitment

NE Not committed as they perceive they cannot be competitive.

NK Not committed to exporting because of limited resources.

NL No resources for exporting; still getting started.

Profit Perception Likelihood

NE *"Exports are not profitable."*

NK *"Have not thought about profits from exporting".*

In general, non-exporters are very small firms who perceive exporting to be an unprofitable venture. This expectation could be correct given their lack of technological sophistication and limited resources. The successful exporters are much larger than non-exporters. In addition, they testify to the strong influence of technology and management commitment on their success. For example:

Technology

HA *"Some of our production equipment are probably the most modern in the southern hemisphere."*

HG *"We are in the leading edge of technology with this company at the moment."* [Spends 3% of sales on R&D, well-above the New Zealand average which is less than 1%.]

Market Knowledge

HA Very familiar with export markets. *"We make up to a dozen overseas visits a year."*

HG conducts thorough market research before exporting. *"Top management travels extensively to overseas markets."*

Planning

HB *"We formally review our strategic plans twice per year."*

HH *"We prepared an export plan and strategy after visiting markets."*

Management Commitment

HA *"We are committed exporters."* [Restructuring so that the Marketing Manager can spend more time in export markets.]

HG *"We are totally committed to exporting."*

The four successful exporters have much more in common with each other (literal replication) than they have with non-exporters. This similarity, however, does not apply to profit perception likelihood, as neither electrical machinery exporters (HG and HH) report this perception as a positive bearing on their exporting:

HG *"Profits from the domestic market are higher than profits from export markets."*

HH *"Profits from exports are roughly the same as in the domestic market."*

This may be due to relative domestic market shares working through profit margins. Firm HG, with annual sales in excess of \$200 million, is the largest firm included

in this study and one which would be expected to have a significant share of the local market. In other respects, there is great overlap among the attributes of successful exporters in these industries. It can, therefore, be concluded that the expected literal replication has occurred.

Proposition 2

Systematic differences between each category (theoretical replication) are expected.

Firms in each category are expected to behave differently because their export performance is different. Table 5.2 confirms this proposition by showing that there is a distinct difference between exporters and non-exporters but only a slight difference between average or better exporters and below-average exporters. In terms of technology, management commitment, and the components of export strategy, below-average exporters are similar to average or better exporters. There are, however, two key differences which explain why below-average exporters are less successful exporters. First, while larger than non-exporters, they are typically much smaller than successful exporters. Second, and with the exception of LJ ("profits from exports are higher than the domestic market"), these share a rather low expectation of the profitability of exporting:

LC *"Profits from exporting are not higher than in the domestic market".*

LD *"Exports generate very low profits".*

LI *"Profits from exports are much the same as in the domestic market."*

This finding is not unexpected in the Electrical Machinery Industry where only firm LJ had a positive expectation on export profitability. There is, however, a distinct pattern difference (in the expected direction) on perceived profit likelihood, between successful timber exporters (HA and HB) and their less successful counterparts (LC and LD). Both HA and HB disclosed that they made more profit in export markets than in the domestic market. Export volume is likely to be influential here: HA and HB together exported more than 13 times the combined volumes of LC and LD.

It is important to note that there is also considerable overlap within export strategies among the group of eight exporters. They all export to Australia and elsewhere; they all offer products customised to overseas markets; and all apply market-based pricing policies. The exception is LJ which persists with cost-plus pricing. This provides evidence to exclude export strategy as an explanation for differences in export performance. The key factors that determine success among exporters are, therefore, firm size and profit perception likelihood.

Compared to exporters, non-exporters are small in size, have a low level of technology, have limited market knowledge and do not have much planning. One reason for this could be that they do not have the resources to invest in these competency variables. Non-exporters also have a lower level of management commitment to exporting than exporters. This section provides sufficient evidence to conclude that theoretical replication has occurred.

One variable that was omitted from Aaby and Slater's (1989) model but was constantly referred to by respondents in this study as being important was "networks". This included the relationships a firm had with its customers, intermediaries, suppliers and competitors. Networks were a crucial success factor in both domestic and export markets. Established large firms have strong networks as they are entrenched, and have had the time to develop these relationships. Small

start-up firms such as the two non-exporters (NK and NL) in the electrical industrial machinery industry had weak relationships as they were still trying to get established and had to break into tight knit groups. The importance of these networks have also been observed by Bonaccorsi (1992) amongst small manufacturing firms in Italy.

5.4 Conclusions

On the whole, these findings confirm the content of Aaby and Slater's (1989) model but an additional variable "networks" has been identified. The key factors that influence export performance at enterprise-level are firm size, R&D intensity and perception of profit from exporting. Firm size has a positive impact on trade performance at industry-level but R&D intensity had a negative impact on trade performance at industry-level. In Chapter 7, explanations are provided for any overlap and contradictions that appear between the industry and enterprise-level findings.

The findings do not support Aaby and Slater's (1989) conclusion that competencies are more important than firm characteristics. By probing deeper, it can be seen that if the firm is large in size and if its management is committed to exporting, then it will invest its resources into developing its competency variables such as technology and acquiring market knowledge. This invariably influences export performance. Firm characteristics are, therefore, of fundamental importance in determining export performance.

Having established the essential content of the exporting process, the causal processes will now be examined in Chapter 6. Reid's (1981) model on the export behaviour process is used as a framework for the discussion. A narrative explanation is also used to provide insight into the causal process.

CHAPTER 6

THE EXPORT BEHAVIOUR PROCESS

6.1 Introduction

Having established the essential content of the exporting process in Chapter 5, the causal processes will now be examined. It is this dimension which lies at the heart of any prescriptions that come from the export marketing literature, and yet very little attention appears to have been paid to it. It is unclear whether size is a prerequisite for successful exporting or *vice versa* or, most likely, if both processes are at work. In other words, the survey-based methodologies which have dominated the literature have been able to establish association but not causation.

The data for this section comes from the 12 in-depth case studies that were mentioned in Chapter 5. This section begins with a background to show the limitations in the literature as regards causal processes and to define the stages in Reid's (1981) model. It then goes on to discuss the export process by using Reid's (1981) model as a framework. It also provides a narrative explanation on causal processes. The section ends with general conclusions.

6.2 Background

Most empirical research on exporting has been static, often involving no more than the univariate statistical analysis of some element of the set of competencies or characteristics, and export performance. While Aaby and Slater also connect competencies and characteristics to performance indirectly (via export strategy), their framework is also static and not intended to represent causal processes. Changes in the economic environment, for example, import deregulation, also affect

exporting, but there have been few attempts (eg., Kaynak and Kang-yen Kuan, 1993) to assess how such changes impact on exporters and non-exporters.

There have, however, been some efforts to unravel parts of the exporting process. Several studies (O'Rourke, 1985; Walters, 1985; Samiee and Walters, 1990; Ali and Swiercz, 1991; Koh, 1991) have established direct links flowing from each element of firm characteristics to competencies, in particular to the planning/analysis capability. Other studies (Cavusgil, 1980; Daniels and Robles, 1985; Gripsrud, 1990; Klein and Roth, 1990) have identified the opposite causation running from investment in competencies (knowledge of markets; advanced technology) to firm characteristics (management commitment to exporting; perception of profit from exporting). Such findings are sufficient to confirm the interactive and non-static nature of the exporting process. Then, as Aaby and Slater (1989) indicate export strategy is indeed influenced by both competencies (Abdel-Malek, 1978; Kaynak and Kothari, 1984; Denis and Depelteau, 1985; Hedland and Kverneland, 1985; Klein and Roth, 1990) and by firm characteristics (Cavusgil, 1980; Reid, 1981; Seifert and Ford, 1989; Klein and Roth, 1990). However, many of these relationships have been derived or deduced from cross-section surveys of firms and have been accompanied by calls for the more intensive case study research (Reid, 1981; Samiee and Walters, 1990; Koh, 1991; Kaynak and Kang-yen Kuan, 1993).

The most useful attempt to understand export behaviour as a causal process is that developed in Reid (1981). Reid did not base his model on the study of actual firms but was able to deduce a plausible process model from the available literature. His model involved five stages of exporting which are defined below:

Export awareness Recognising foreign markets as a solution to problems in the domestic market or new growth opportunities.

Export intention Motivations, attitudes, beliefs, expectations form which are supportive of exporting.

Export Trial Commences export development on trial basis perhaps as a response to an unsolicited order.

Export Evaluation If the trial produces stable sales volumes and profitability, exporting is maintained and may be expanded. Otherwise exporting may be abandoned as unprofitable.

Export Acceptance Exporting adopted as an important part of what the firm does.

In contrast to that in much of the extant literature, the language of Reid's model is clearly not static: he refers to what is happening through time in exporting. This research will endeavour to incorporate the richer language of this literature (environment, characteristics, competencies, strategy and performance) into the process context provided by Reid. The question of causal process, that is, how the model works, is approached using what Yin (1989, p. 113) describes as "explanation-building". This is done by first using the stages of Reid's (1981) model and then in a narrative which seeks to maintain a number of theoretical propositions.

6.3 A Stages model of the exporting process

Export Awareness The evidence relates in detail to eight firms, one of whom started exporting during the 1920s; six commencing in the 1960s or 1970s; and one who started as recently as 1985. All the average or better exporters with the

exception of HA started exporting because of their need to expand. They were thus proactive exporters. For the rest the external environment provided the stimulus to export thus making them reactive exporters. This confirms the proactive/reactive distinction in Samiee, Walters and DuBois (1993) and also supports their finding that proactive exporters tend to be more successful than reactive ones. Many exporters also had high domestic market shares prior to exporting, particularly so the electrical machinery manufacturers. Non-exporters can be propelled into exporting by different stimuli, a point which can be illustrated by contrasting the two non-exporting timber processors. One of these (the larger, NF) finds the domestic market to be intensely competitive, so much so that he employs currently only 20% of his capacity. NF is understandably keen to enter exporting but lacks the competencies. The smaller counterpart (NE), facing the same domestic market for processed timber, declined an unsolicited export order from a larger local competitor who needed help to fill an export order. NE viewed the export opportunity as too risky in relation to expected profit and, in response to the situation in the timber market, NE has diversified into other local industries (engineering and concrete mixing).

Export Intention Reid (1981) claims that a supportive set of attitudes and beliefs has to form in the mind-set of the decision-maker if the exporting process is to continue. This must be the case at the outset unless it is believed that firms would enter exporting and expect to be worse off as a result. On the basis of this evidence three further points can be made. First, the expectations which are formed are relative to the domestic experience. Second, such pro-export attitudes can be based on little or no hard information about export prospects: the contrasting expectations (and actions) of NE and NF are both based on considerable ignorance of their export prospects. Third, these prior expectations are frequently unfounded: only three out of eight exporters (see Appendix 5) reported that exports were actually more profitable than domestic sales.

Export Trial Reid (1981, p. 105) stresses the lack of foreign market knowledge as the main obstacle to the first export deal. The corollary of this is that the best-known market, the one closest in 'psychic distance' is most likely to be entered first. The fact that seven of the eight New Zealand exporters made their first export shipments to Australia proves this. The eighth began trading into the Pacific Islands. When firms start exporting to Australia they do not really see it as an export market but an extension of the domestic market. This reduces the perceived risk of exporting. Exporting to Australia does not need investment in additional resources. When deciding to enter the Australian market formal market research is not conducted to the extent that it is in other markets. None have been propelled into exporting by unsolicited orders.

Export Evaluation The evidence suggests a less than objective evaluation by exporters of exporting. As Appendix 5 illustrates, all the exporters in particular the below-average exporters are increasing their commitment to export markets by ongoing investment in modern plant, research and development, and market knowledge. Yet, for most of these same firms, the financial returns from exporting have been poor (as reflected in their profit expectations). Indeed one firm (LD) ceased exporting between 1984 and 1989 because the appreciation of the New Zealand dollar at the beginning of this period was sufficient to erode the low margins on exports. This firm has now re-entered exporting in a joint venture relationship and is again committing resources to increased exports. All exporters are seeking increased export volumes suggesting that this is their perceived solution to poor profitability. There is some basis for this but only among the timber processors where it is the largest exporters (HA and HB) who report the best profit experiences. During this stage exporters have gained experience and confidence in exporting and tend to seek other export market opportunities. They do not focus on one market for too long but tend to diversify their markets fairly quickly.

Export Acceptance All the exporters were now very committed to exporting as an important and expanding part of their business despite the rather mixed profit perceptions that continue to be held. Investment in competency variables persists and they actively seek new markets. Since the below-average exporters are committed to increasing their exports they have progressed to the acceptance stage and behave the same way as the high exporters. They are all engaged in exporting customised products to a wide range of markets in addition to Australia.

6.4 A narrative explanation

The export behaviour process can be best explained by operating from the vantage point of firm NF, a small (annual sales \$NZ 250,000) timber processing firm and a non-exporter. From an early stage in the research this very small firm was labelled an 'incipient exporter' because its owner-manager had adopted a strategic intent to enter export markets. The sole basis for this perception, one not held by any other non-exporter, was that "export markets are more profitable than the domestic market" (see Appendix 5). This perception was not based on sufficient objective knowledge of export markets but rather on experiencing that the domestic market was too competitive so exporting had to be better. This positive perception of exporting was justified by the export successes of other timber processors. The owner-manager knew he was operating with outdated production equipment in an industry where successful exporters (HA and HB) already had in place some of the most modern production equipment available. Despite the older plant, NF was the only non-exporter operating with formal quality control standards. Recognised quality standards (ISO 9000 and above) are now prerequisites for any exporting activity in New Zealand and NF has embarked on building this necessary competence. The firm's rather modest resources were being used to explore market opportunities but no export market(s) had yet been finally identified. It is a perception based on hope

which has given rise to strategic intent which, in turn, defines minimum competencies (product quality and market knowledge) and hence market selection. When the export market has been selected, then an export strategy can be made specific.

Entry into exporting may not happen for some time and only after personal knowledge and credibility have been built up by time (and money) invested in prospective markets. The evidence confirms the achievement of a minimum level of profitable domestic business, sufficient to fund the necessary investment in overseas markets. Final entry will not be made any easier by the fact that the majority of the exporters were themselves intent on increasing their own export sales. When the first export sale is made it is likely to involve relatively small shipments. This is to permit the customer(s) to test the credentials of their new supplier. If export sales remain small, their profitability will be marginal and efforts will be made to increase export volumes. All the below-average exporters were striving to do this, even in the timber processing industry despite generally negative perceptions of export profitability (firms LC and LD). Profit perceptions are more positive among the below-average electrical machinery exporters (LI and LJ) and the reported R&D intensities of these firms are greater than those of the average or better exporters (HG and HH: see Appendix 5). If these trial efforts are not successful, negative perceptions will endure, and, following Reid (1981), firms may exit from exporting.

For the more successful firms the next objective is to become an average or better than average exporter. The most successful exporters were clearly distinguished within each industry by their relative technological sophistication and by their overall size (see Appendix 5). Even within a traditional and rather low technology industry such as timber processing, relative sophistication is important. The case study evidence confirms that these firms had to become technically advanced in

what they did in order to export. It is their technological strengths relative to others in the same industry which drives export sales and, hence, increases in firm size. With R&D expenditures generally being budgeted on a percentage of sales basis, larger sales mean a sustained commitment to R&D and hence to exporting. Size of firm at a point in time becomes a factor when it represents a superior ability to raise and risk larger amounts of capital in specialised plant and equipment. A secure domestic market position underpins the entire process by providing the financial and managerial base from which export strategies are launched and have to be maintained.

This is the interpretation of behaviour relating to exporting at the level of the individual firm that has been drawn from the evidence in this study. It is one which begins with a positive perception of export profitability relative to prospects in the domestic market. This perception may be unfounded, which evokes in the decision-maker a strategic intent to enter exporting. The necessary minimum competencies (market knowledge, quality standards, and technical sophistication) must then be developed, perhaps over a number of years. In due course an export market (or markets, but most begin with a single market) is selected. Only then can the detail of an export entry strategy (price, promotion, intermediaries) be put in place. Initial export orders are obtained but volumes are likely to be low at the outset. The building of export volume is critical but will only happen if there is the ability to invest large sums in modern plant and equipment and to maintain an above-average commitment to research and development. It is in this respect that a strong domestic market environment is conducive to successful exporting.

6.5 Conclusions

This study contributes to the International Marketing literature by providing new insights into the export behaviour process. The export process begins with a positive perception of export profitability relative to that in the domestic market. The firm then develops its competency variables such as, market knowledge, quality standards and technical sophistication. The firm initially chooses a single export market (usually Australia) but as it gains confidence and experience in exporting diversifies into other export markets. Size is a key factor in determining causality. Large firms have a strong domestic financial base and are, therefore, able to raise and risk capital for exporting.

The study confirms that becoming a successful exporter is indeed an expensive, risky and lengthy process involving a complex amalgam of perceptions, intentions, competencies and characteristics. The question to be raised now is: how does all this impact on managers and policy review? The next chapter discusses in detail the implications of this study for managers who want to make their export debut and for those who want to increase their export sales and for policy review.

CHAPTER 7

DISCUSSION OF FINDINGS AND IMPLICATIONS

7.1 Introduction

The key findings and implications of both the industry and enterprise-level studies will be discussed in this chapter. These findings have implications for management education, government, manufacturing firms, banks and industry associations. An attempt will be made to link the industry and enterprise-level findings and to discuss any paradoxes that occur. The discussion will be divided into three sections. First, the original contributions of this study to International Marketing and its implications for both academics and practitioners. Second, the implications for government policy in the light of these findings includes issues such as industry concentration, R&D incentives, export subsidies and import tariffs. Suggestions are given on what type of policies will provide the desired outcomes. Third, the study's specific implications for managers of New Zealand companies wishing either to commence exporting or to expand on existing export sales are discussed. These focus on how and why some enterprises are more successful at exporting than others. The key factors influencing export behaviour are presented. This information will be of use to those involved in management education such as tertiary institutions, industry associations and professional bodies.

7.2 Major Contribution to International Marketing and its Implications

7.2.1 Industry-Level

For the industry-level study an attempt has been made to identify what overall effect trade liberalisation has had on New Zealand manufacturing in terms of the net trade performance (NTP) of individual industries. The results show that NTP has deteriorated for the period 1985 to 1990. The obvious conclusion is that NTP has deteriorated because of trade liberalisation. It is, however, too soon to determine the benefits of trade liberalisation, as industries are still making the necessary adjustments to compete in a more open economy. The removal of import controls also coincided with monetary and fiscal policies which combined to have a deflationary effect on the domestic economy. Although the government's aim was export-led growth, trade liberalisation initially encouraged firms to adopt import strategies. The current export-led recovery in New Zealand, however, indicates that the positive impact of liberalisation on exports may be beginning to show. It is possible that liberalisation has stimulated exports because of the concurrent slow growth in the New Zealand economy and increased import penetration thus forcing manufacturers to export. Increased domestic competition has propelled manufacturers into exporting as, for example, in the case of NF.

In this study, NTP is not the only method of determining trade performance as it suppresses the full extent of the inter-industry variation in gross export and import flows. To provide better insight into gross flows of exports and imports for the 1985/1990 period, possible determinants of gross flows are discussed. These variables are categorised into structure and conduct variables. Structure variables include industry concentration, firm size and foreign ownership. Conduct variables include

research and development intensity, advertising intensity, import tariffs and export subsidies.

In order to identify the determinants influencing trade performance, models have been developed and tested using multi-variate analyses. The results show increased exports are associated with larger firm sizes, lower levels of advertising intensity and least trade protection (by either tariff or export subsidy). The largest increases in imports have been in those industries which are relatively highly concentrated with higher R&D intensities and higher levels of tariff protection and foreign ownership. The findings in this study confirm those in Aaby and Slater's (1989) literature review that firm size and export performance are positively linked. Large companies have made significant increases in exports. Industries with a high advertising intensity have poor export performance thus reflecting their strong domestic focus and perhaps brand loyalty. The results show that the greatest amounts of post-1985 import growth have taken place in those large industries which are R&D intensive (RDI) and which continue to benefit from tariff protection (NTAR).

This contradicts the expectation that the R&D efforts of large New Zealand industries act as an entry barrier for imports. Trade overlap theory (Finger and De Rosa, 1979) can be used to interpret this finding. This means that the R&D conducted in New Zealand is not producing products that can be sold in developed countries. New Zealand, however, buys its products from these developed countries. As a result of tariff protection these industries have become complacent and have produced high cost, poor quality products. They are, therefore, unable to compete in world markets and are vulnerable to imports. By reducing protection the rationale for R&D was undermined. Firms probably divert their resources to overcome increasing competition. R&D is the first to be reduced in a recession. According to a Tradenz report R&D investment at enterprise-level has declined and is less compared to OECD

countries when measured as a share of GDP or as a percentage of sales. In 1981 New Zealand spent about 1.4% of GDP on R&D, which was similar to the OECD average. Ten years later the OECD investment in R&D increased to 1.7% of GDP, while New Zealand's investment was reduced to 0.9% of GDP (Tradenz, 1993). During the 1980's the New Zealand Government's investment in R&D increased from 60% to 62% as business investment declined more rapidly than the government's (Tradenz, 1993).

Industry concentration levels have no effect on export flows but are associated with stronger import flows. It could be argued that imports have a disciplining effect on domestic monopoly as they play a role in deconcentrating industries. Overseas competitors see these highly concentrated industries as most profitable and so choose to enter them. This creates competition where it is most needed in the domestic economy. The findings show that firm size drives export growth at both industry and enterprise-level. This need not mean that all firms need to become large in size as they can obtain some of the benefits of being large by participating in joint action groups and other forms of export-oriented networks.

The industry and enterprise-level findings on the impact of R&D intensity on trade performance contradict each other. At industry-level, the findings show that high R&D intensity industries have a high import-growth rate which is contrary to expectations. In addition, high industry R&D intensity is not related to export growth. But at enterprise-level, the high export performers were the firms with high R&D intensity. One explanation for this difference between the industry and enterprise-level findings could be that the industry-level figures cover a cross-section of firms which includes a large number of non-exporters. It could be argued that the non-exporters distort the impact of R&D on export performance. The enterprise-level study highlighted intra-industry differences in R&D. Within an industry the more an enterprise invested in R&D the better its export performance. The inter-industry

analysis in Chapter 2, however, involves an implicit comparison of industry R&D intensity in New Zealand against that for the rest of the world. The relativities are different between the industry and enterprise-level studies but it can be claimed that increased R&D by firms appears to lead to private benefits for these firms at least in terms of enhanced exporting performance. This means that investment by such firms in R&D is not a public good as they will get a return. The macro problem, however, persists as quality and quantity of New Zealand based R&D is well behind the major OECD countries (see Tradenz, 1993).

7.2.2 Enterprise-Level

The enterprise-level study provided an empirical test to validate the content of Aaby and Slater's (1989) conceptual model and the processes in Reid's (1981) model. Since the bulk of studies on export performance have been on content rather than process (see Bilkey, 1978; Aaby and Slater, 1989) and have been based on quantitative studies, the findings in this study provide some major contributions to International Marketing for both academics and practitioners. By using the case study research method, the management processes involved in export decision-making are clarified.

When analysing the data, Yin's (1989, p.109) "pattern-matching logic" was applied to a set of nine independent variables. These variables were identified through meta-analysis as the most frequently studied variables in Aaby and Slater's (1989) model. The key variables that were identified in this study were: firm size, strong domestic market, technology, management commitment and perception of profits. The meta-analysis showed that all aspects of Aaby and Slater's (1989) framework - firm characteristics, competencies and strategy- had a significant effect on export performance. The implication for practitioners is that it is incorrect to assume that one

aspect is more important than another. Investing in market knowledge and a well-defined export strategy is inadequate if management is not committed to exporting.

Firm size, and strong domestic market were variables that were crucial at both industry and enterprise-levels. An additional variable, that was not mentioned by Aaby and Slater (1989) but was constantly mentioned by respondents as being important in influencing export performance was "networks". HG had this to say about networks:

You have to go out there and do it yourself. You cannot sit in New Zealand or Christchurch and try to export. You have to get onto a plane and start travelling. You have to get out and meet people. It takes years to develop these markets. It boils down to relationships.

The study confirms that non-exporters have quite different attributes from exporters. The implication for practitioners is that if they want to start exporting then they need to have similar attributes as exporters. Non-exporters were much smaller in size than exporters thus confirming the benefits of size in successful exporting. Non-exporters perceive exporting to be unprofitable. This is a valid perception given that they have a low level of technology and domestic market sales which cannot sustain them in export markets. Below-average exporters have more in common with superior exporters in terms of technology, management commitment and profit perception than with non-exporters. One of the reasons for this is that while larger than non-exporters, they are generally smaller than successful exporters.

The evidence from this study was used to draw the following profile of average or better exporters, below-average exporters and non-exporters. By including non-exporters in the survey, two issues are addressed: why do non-exporters remain non-exporters, and what factors initiate non-exporters to export? Thus, implications for business and government policies aimed at improving export performance are derived.

Average or better exporters

Firms in this category had the following attributes: level of management commitment is high; management style is proactive; investment in technology and R&D is high; products are innovative; product range is diversified; domestic market is strong; export markets are wide; new markets are aggressively sought; relationships with intermediaries are close; size is large; exporting has occurred for a number of years; and internal factors motivated them to export.

Below-average exporters

Firms in this category have similar attributes to average or better exporters but differ in these respects: size is smaller than average or better exporters; proactive and reactive exporters and both are included; exporting is motivated by both internal and external factors.

Non-exporters

The evidence in this study shows that non-exporters have these attributes: risk averse; small in size; perceive exporting to be unprofitable, lack financial and other resources; narrow product range; concentrated domestic market; are either interested or uninterested in exporting; compete on the basis of price; and have low overheads.

Non-exporters make the commitment to export when they perceive that they will make a higher profit in export markets. Once they commit themselves to exporting they start building up their competency variables such as quality, technical sophistication and

acquiring market knowledge. Developing these competency variables can take several years. The factors that initiate non-exporters to export can be divided into internal and external factors. The internal factors (controllable variables) include, first, the firm might introduce a new product and at the same time identify its export potential. For example, NF has developed a housing module for which it has identified an export market. Second, it might have excess production capacity.

We started exporting in order to get rid of surplus production. (LC)

Third, the size of the domestic market might restrict it from exporting:

We started exporting because the domestic market was too small for us to expand. (HG)

We had high local market share and in order to grow we had to export. (HH)

The external factors (uncontrollable variables) that propel a firm towards exporting are intense domestic competition, an unsolicited order, and government policies and incentives that encourage firms to export. NF had this to say about why it has decided to export:

We are thinking of exporting because of the downturn in the domestic economy and intense domestic competition. (NF)

Non-exporters gave various reasons for not exporting as the following responses show:

They are early start-ups who still needed to establish themselves in the domestic market.

I suppose we are still starting out and trying to establish ourselves...We are not really in a position to start exporting at the moment because of our size and we have just started the business. (NK)

They lacked confidence in their ability to succeed in international markets.

We have been asked to export but we refused. The price is so competitive that we find it hard to compete. (NE)

NE was concerned about payment:

Most of the sawmills have had problems with getting paid. The worst thing that worries you is that you don't get paid until it has landed in Australia or wherever you are exporting to.

Non-exporters manufactured products that had no export potential.

I don't think there is a great deal of exporting in the industry. The product is very specialised. (NK)

Other reasons for not exporting included their small size, lack of finance and other resources, complacency and lack of management commitment, being risk averse, and

preference to diversify into other industry sectors rather than export. Since most of these barriers are internal to the firm, it can be concluded that the real barriers to a firm's involvement in export marketing are internal rather than external to the firm. A firm will only be ready to make its export debut when these internal barriers have been removed. This has important implications for practitioners who frequently blame the external environment such as government policy and competition as their barriers to exporting. Practitioners need to realise that the main barriers to exporting are internal to the firm. They have control over these barriers and can, therefore, eradicate them if they wish to start exporting.

The variable "networks", one not included in Aaby and Slater's (1989) model, was frequently stressed by respondents as an important factor in determining performance in both export and domestic markets. Indeed, empirical research on industrial networks has shown that firms establish and maintain long lasting relationships with other businesses (Håkansson, 1982; Turnbull and Valla, 1986; Hallén et al., 1987). Networks were considered to be crucial in both export markets and the domestic market. The strength of a firm's networks in the domestic market depends on how long it has been in existence, and in the export market, on how long it has been exporting. Networks can take various forms. First, exporters co-operate with competitors in export markets. Tradenz is aware of the benefits of these co-operative relationships and is encouraging manufacturers to form Joint Action Groups (JAG) for various industries. The aim of JAG is to encourage firms within industries to co-operate with each other in export markets.

One example of this is the New Zealand Radiata Pine Remanufacturers Association (NZRPRA) which was formed to encourage radiata pine processors to co-operate when exporting. NZRPRA also conducts R&D and promotion for the industry. As an association, NZRPRA participates in international trade fairs where all radiata pine processors share a stall. Individual members are unable to bear the costs of having

their own stall at an international trade fair. Another example of firms co-operating in export markets is the recently formed Southern Timber Industries Co-operative (STIC) which is an exporting co-operative for the timber processing industry. STIC was formed by several small timber processors who wanted to export but did not have the volume to fill an export order on their own. By being members of STIC, they are able to contribute towards filling the required export volume.

Second, building trust and nurturing relationships with customers and intermediaries. In order to do this, managers pay regular visits to their export markets. It was senior management who visited these markets as they believed that their international customers wanted direct contact with the decision-makers. Firms which operated in a wide range of markets believed that relationship-building and trust were more important in South East Asia than in their other markets. HG had this to say about the importance of relationship-building in S.E. Asia:

In Asia, product is not necessarily very important. You need trust and long-term relationships that are important. Once you have achieved that trust you have achieved it forever, unless you do something to breach that trust.

Networks also took the form of co-operating with customers in product development. All exporters were producing customised products and, by working closely with their customers in product development, they were able to manufacture products that were of mutual satisfaction. Input from customers is important as manufacturers were able to develop new product ideas which they would have never been able to do on their own. Third, through their JAG, firms improved their skills by holding seminars to improve their knowledge about export markets and they conducted joint research and promotion. Fourth, as a JAG exporters benefited from government assistance through Tradenz. For example, for every dollar that firms spend on trade missions they get a

dollar from Tradenz. Similarly, research and promotion conducted by JAG are partly funded by Tradenz.

The implication for academics with the enterprise-level study is that it empirically tests and confirms the content of Aaby and Slater's (1989) model and the processes in Reid's (1981) model. In contrast to the existing literature, Reid's (1981) model is not static but refers to what is happening through time in exporting. This study, therefore, provides a better understanding of the export behaviour process. By using the case study method across two industries, pairwise comparison was possible. This allowed the study to compare and contrast firms with different levels of export performance across two industries. The study clarifies the causal relationships in export performance, an area which to date has been under researched. The study identifies the importance of networks, a variable that has been either ignored or considered to be of minor importance in the International Marketing literature.

Studies on performance tend to be either at industry- level or at enterprise-level but not both. By linking the study at both industry and enterprise-level an attempt has been made to consolidate existing knowledge in this area. In addition, the key determinants of performance that overlap have been identified. These include firm size and R&D intensity. Most studies on export development have focused on exporters and neglect to study non-exporters. This study includes explanations as to why non-exporters choose to remain so. In addition, the study provides insight into the pre-export decision-making process. By comparing average or better exporters and below-average exporters, more insight is obtained about the differences between these two groups. Furthermore, it helps to comprehend why two firms in the same industry with the same export strategy perform differently.

7.3 Implications for Policy Review

The implications for policy review are mainly in the areas of R&D intensity, tariff protection and export subsidies. There is no doubt that the rates of R&D intensity need to improve in order to make New Zealand firms internationally competitive thus boosting exports. The key to raising the export performance of manufacturing in general, seems to lie with increasing the quantity and improving the quality of product-related R&D carried out in New Zealand. This is the rationale for the present government's moves to reform how research, science and technology operates in New Zealand. Recent work by Tradenz (Tradenz, 1993) emphasises the intention to increase product-related R&D expenditure in order to increase exports. R&D intensity does indeed hold the key to successful export growth in future. Tariff protection and export subsidies do not have the desired impact on import and export flows at industry-level. As regards industry concentration there does not appear to be a strong case for allowing increases in concentration to boost exports. Import flows are occurring in highly concentrated industries and are thus de-concentrating them.

As regards foreign ownership, the expectation is that this would have a positive impact on export increases, but the results prove otherwise. There are various possible explanations for foreign investment in New Zealand industries. One is that such ownership can be used to circumvent tariffs and not to boost exports from New Zealand. Other explanations include the foreign firm's motivation to reduce production and transaction costs, to improve its marketing services and to have more control over its operations in New Zealand. Any government policy to encourage foreign investment to boost exports must consider the motivation of the foreign investor.

At enterprise-level, respondents reactions to export incentives were mixed. All exporters benefited from export incentives which were in existence when they first

started exporting. At present, however, attitudes towards export incentives are mixed. Some respondents suggested that export incentives would help them, while others disapproved of export incentives as they believed in survival of the fittest. Those in support of export incentives mentioned that they never would have made their export debut without export incentives. The following are some of the responses to the question on export incentives:

We benefited from export incentives and many other companies did so too. (HG)

LC benefited from export incentives:

Back in 1977, there were export incentives. We benefited from these because exports have very low profits. (LC)

But later commented:

The worst thing is to give export incentives; without them only the efficient will survive.

The results also show that tariff protection is detrimental as industries recording the lowest rates of export growth are the group of import competing industries which continue to receive tariff protection. This finding supports Crocombe et al.'s. (1991) assertion that import tariffs protect industries from competition thus weakening their international competitiveness. The implications for government policy from these findings is to encourage competition and to avoid having too much control over the business environment. In support of Crocombe et. al. (1991) a competitive

environment will encourage firms to improve and be innovative. The findings in this study support Crocombe et al.'s (1991) recommendations that government reduce its controls over the economy and that New Zealand firms take responsibility for upgrading their own competitive advantage. Since the main barriers to exporting are internal to the firm, no amount of protection and subsidies is going to encourage firms to export if these internal barriers remain. The fact that non-exporters are much smaller in size than exporters has an important implication for government and export assistance programmes which encourage small firms to export. The fact is that some firms might be too small and without a minimum level of profitable domestic business to support them in export markets. If they start exporting prematurely, then they might become disillusioned and withdraw from exporting altogether.

7.4 Implications for Managers of New Zealand Companies Wishing Either to Commence Exporting or to Expand on Existing Export Sales.

The key factors that influence export performance at enterprise-level are firm size, R&D intensity, management commitment and perception of profit from exports. The size of the firm is a pre-requisite for successful exporting. Both the industry and enterprise-level study confirm this. The industry-level study shows that large firms with a large domestic base are making great increases in their export sales. At the enterprise-level if a firm is large enough in size then it will have enough resources to develop its competency variables. The higher its sales, the higher its investment in R&D which is usually a percentage of sales investment. Higher profits also mean more money is available for market research. If managers perceive that the likelihood of profits from exporting are high, then they will commit themselves to exporting, thus increasing their chance of success. Exporters evaluation of exporting is not very objective. They are increasing their commitment to export markets yet their financial returns from exporting is poor. One explanation for this could be that by exporting

they increase their credibility and sales in the domestic market. There is evidence that proactive exporters are more successful than reactive ones.

There is considerable overlap within export strategies among the group of eight exporters thus ruling out categories of export strategy as an explanation for differences in export performance. The four high- exporters in both industries have more in common with each other (literal replication) than they have with non-exporters. Non-exporters have a lower level of management commitment to exporting than exporters. Indeed, management commitment is crucial for export success. If management is committed to exporting then they will invest resources in developing competency variables such as technology, quality, and acquiring market knowledge. These competencies are developed over a period of years and need persistent management commitment to do so. LC which has committed itself to increasing exports had this to say:

We have invested \$3 million to upgrade our plant which will be finished in March. We expect to double production.

To increase its export sales to Japan, LD has formed a joint venture with a Japanese company. Since LD is committed to exporting, it is willing to share ownership, and to spend time and money on export market exploration:

We looked at markets around the world and we decided that Japan is probably the best market. The Japanese are very large users of packaging timber. The Japanese economy is strong and it has a stable government.....We commissioned Coopers and Lybrand to do a feasibility analysis on the Japanese market. I visited Japan to get some idea of the market. So I had some information too. This gave me an idea of what our sawmill should do. I talked to some

major customers to see whether they were keen to invest in my company and they seemed keen.

HH is committed to exporting and its managers make frequent trips abroad to keep in touch with customers.

We have less than a hundred substantial customers. We make a lot of personal visits. We visit Australia every six weeks. Pacific Islands twice a year, United States and Japan once a year.

Exporting does not provide immediate profits and can, therefore, be risky. The implications for managers are that they have a strong domestic base and financial resources to support their initial export efforts. LI had this to say about export risk:

You cannot go into a country and expect to get immediate returns. After 2 or 3 years you start seeing some benefits. In the domestic market our return on investment takes a short time but in the international market it is a longer time period. The product modification requires a big investment. So all these things make exporting a riskier business.

R&D intensity has a positive impact on export performance at enterprise-level. Exporters had a high R&D intensity and those who wanted to increase their export sales were increasing their R&D intensity to become internationally competitive. As the following comment shows their R&D involves new product development and keeping up to date with technology:

Our mission statement is to provide reliability through technology....Our commitment is to our customers. We don't want to copy competition. We keep an eye on what we are doing. Because

of our size if we copy them we will remain a secondary industry. (HH)

The technology we have is right on the leading edge at the moment. (HG)

In order to succeed in exporting, quality of products is becoming increasingly important and firms are now implementing formal quality control standards.

We are going down the road to TQM with the view that 3 years from now we can get credited to ISO 9000. (HB)

We have changed our product quite dramatically over the last 10 years. Quality control is becoming extremely important...We have just installed a new quality control system called TELARC. This is used to monitor and set up quality control system. We are probably the only sawmill in the South Island to do this. (LD)

The quality of our product is higher in both the domestic market and the international market compared to our competitors. We used German industry specifications and standards because we were exporting to Germany. We also use Japanese standards. We use German and Japanese standards in other markets because their standards are very high and this gives us a competitive advantage. (LC)

Contrary to Crocombe et al.'s (1991) assertion that New Zealand firms typically employ cost-based strategies to exploit its natural factor advantages, all exporters apply market-based pricing policies with the exception of LJ which persists with cost-plus pricing. The following is a typical pricing strategy:

We look at existing market prices and ways of cutting costs. We work backwards to see what we can get for the same product. We work out a profitable price. We try to extend the service by having better quality and further processing to get a higher price. (LD)

The findings in this study show the importance of networks for export success. Established large firms have strong networks as they are entrenched and have had the time to develop these relationships. Small start-up firms, such as the two non-exporters (NK and NL) in the electrical industrial machinery industry, had weak relationships as they were still trying to get established and had to break into tight-knit groups. The following firms have spent time building their networks and believe them to be an important factor in determining their export success.

We built up contacts and went into markets. We have very loyal customers in our export markets. (HA)

One exporter regarded his poor networks as a limitation:

Our weakness is our lack of overseas contacts. (LJ)

Of all the competency variables, planning was the least important as the following responses show:

Market planning is more gut feeling that comes with years of experience. (HA)

We want to lean with the wind. Marketing plans are constraining. (LJ)

This section shows that the key factors that influence export success are firm size, R&D intensity, quality and management commitment. Firm size plays an important role in determining export success. Small firms can benefit from size by using the various forms of networks described earlier on. Contrary to expectation, planning did not emerge as a key factor in influencing export performance.

7.5 Conclusions

In this chapter, an attempt has been made to draw the industry and enterprise-level studies together and to explain any paradoxes that occur. In addition, the implications of this study for government policy and for managers wishing to make their export debut or who want to increase their export sales are discussed. The original contributions of this study to the International Marketing literature are also presented. The industry-level findings show that increased exports are associated with larger firm sizes, lower levels of advertising intensity and least trade protection (by either tariff or export subsidy). The largest increases in imports have been in those industries which are relatively highly concentrated, with higher R&D intensities and higher levels of tariff protection and foreign ownership. R&D intensity does not have the expected impact on trade performance but at enterprise level high R&D intensity was related to high export performance. Explanations are provided for the industry-level contradiction. As policy makers and managers are aware R&D plays an important part in increasing exports.

The implication from this study for managers is that they need to realise that most of the barriers to exporting are internal to the firm and these are variables that they have control over. If managers wish to start exporting or increase their export sales, they can eradicate these barriers. The importance of networks in creating export success

was emphasised. Managers, therefore, need to invest their time and resources in building these networks. As the findings show success in exporting cannot be attributed to a single variable. It involves a complex set of variables each interacting with the other. The export manager needs to have the ability to manipulate these variables in order to achieve export success.

CHAPTER 8

CONCLUSIONS

8.1 Introduction

This study attempts to determine the factors that influence trade performance at industry and enterprise-level in New Zealand. The underlying purpose of this study was to provide a synthesis of a rather disparate literature particularly on International Marketing. Although Aaby and Slater (1989) have done a review of the literature for the period 1978-1988 there is no consensus in the literature. This thesis attempts to consolidate existing knowledge by doing an industry analysis and a meta-analysis to create a framework for the case study research, thus conducting this research within the boundaries of the field. It contributes to International Marketing by consolidating this diverse literature and by providing new insights.

At industry-level, net trade performance (NTP) was calculated and an attempt was made to provide explanations for changes in import and export levels for 1985 and 1990 by developing and testing models through multi-variate analyses. These calculations were made from trade data obtained from the Department of Statistics. A meta-analysis was done to identify the key variables influencing export performance at enterprise-level. At the enterprise-level, a multi-case study approach, of 12 small to medium-sized firms, was used to identify how export behaviour varies between enterprises in the same industry which exhibit "above average" export performance, "below-average" export performance, and those which do not export at all. The 12 firms were selected from each of these three categories in two industries. Six were chosen from the electrical industrial machinery industry (a low-export performer) and the other six were from the timber processing industry (a high-export performer). These two industries have similar concentration ratios but different levels of

technology. Aaby and Slater's (1989) model and Reid's (1981) process model were used as a conceptual framework for the enterprise-level study. The aim was to validate the content in Aaby and Slater's (1989) model and to elucidate the process in Reid's (1981) model.

8.2 Overall Findings

8.2.1 Industry Level

- (i) Net trade performance (NTP) of New Zealand manufacturing industries has deteriorated for the period 1985 to 1990, a period when substantial trade liberalisation was introduced.
- (ii) Increased exports are associated with larger firm sizes, lower levels of advertising intensity and least trade protection by either tariff or export subsidy.
- (iii) The largest increases in imports have been in those industries which are relatively highly concentrated, with higher R&D intensities and higher levels of tariff protection and foreign ownership.
- (iv) Neither the level of industry concentration nor that of foreign ownership had a significant impact on export levels.
- (v) Industries with tariff protection and export subsidies have poorer export performance under trade liberalisation.

(vi) Export flows appear to have been markedly lower for industries with high advertising intensities. Perhaps this reflects their adoption of a strong domestic market focus.

(vii) There is no evidence to support the expected positive association between R&D intensity and export performance.

8.2.2 Enterprise-Level

The enterprise-level findings will be discussed under two headings and these are content and process.

Content

(i) The study confirms the content of Aaby and Slater's (1989) model.

(ii) Average or better, and below-average exporters in both industries had common attributes but were very different from non-exporters.

(iii) The average or better exporters in both industries were large in size, had a strong domestic base, and invested more in R&D than below-average exporters and non-exporters.

(iv) Non-exporters have a low level of technology, are small in size, perceive exporting to generate low profits and have a low level of management commitment to exporting.

Process

(i) Entry into exporting may not happen for some time and only after personal knowledge and credibility have been built up by time (and money) invested in prospective markets.

(ii) Many exporters, in particular, the electrical machinery manufacturers had high domestic market shares before they started exporting.

(iii) In order to start the export process the decision maker has to have a positive attitude towards exporting.

(iv) All firms made their export debut by exporting to Australia. They believed they already had the competencies to handle this market as they considered it to be part of the domestic market. By exporting to Australia, New Zealand firms gained their export experience in a market with a close psychic and geographic distance.

(v) New exporters are generally below-average exporters but gradually with time, experience and investment in competency variables they become better than average exporters. If export sales remain small, then they try to increase exports as all below-average exporters in this study were trying to increase exports even though they had negative perceptions of their profitability. If they are unsuccessful, then it is possible that they might not expand exports or might even decide to return to non-exporter status.

This study tried to address the fact that, since the New Zealand economy was liberalised in the mid 1980's many more New Zealand firms have opted to import rather than export. These findings confirm that becoming a successful exporter is

an arduous task as it is expensive, risky and a lengthy process involving a complex combination of perceptions, intentions, competencies and characteristics. The success of exporters depends on them having a strong domestic base and on the strength of the domestic market in general. In New Zealand, removal of import controls coincided with monetary and fiscal policies which together reduced the level of domestic economic activity. By introducing trade liberalisation, the government aimed for export-led growth but the policies made it easier for firms to adopt import strategies.

8.3 Limitations of this research

(i) Since the case study method of research was used for the enterprise-level study, it was confined to two industries.

(ii) The choice of the electrical industrial machinery industry, which covers a diverse product range, may present certain limitations. The electrical industrial machinery industry manufactures products that range from highly sophisticated technological products, such as electronic motor controls, to rather standard products such as switchboards. Consequently, some firms in this industry might have a product that has export potential while others may not. In fact, in this study non-exporters in the electrical industrial machinery industry tended to produce standard products.

8.4 Future Research

Research on international trade performance and export performance is highly relevant, especially at this time in New Zealand's development. Research such as this provides a thorough examination of how industries and firms have performed since the implementation of trade liberalisation. Consequently, more informed

policies and management decisions can be made. The industry-level study has been exploratory and as these findings show, it indicates an area that needs to be developed through research. There is considerable scope for further research in industry and enterprise-level studies and the following suggestions for future research are offered:

(i) The trade performance models that were developed for this study could be tested in other countries, especially those economies that are not as open as New Zealand's. What is the net trade performance (NTP) in such economies, and are the key determinants of trade performance the same as New Zealand? Studies in such diverse settings could provide more information on the export behaviours that evolve in these environments. Furthermore, such studies would provide an environmental dimension and show the influence of the economic, political and cultural environment on a firm's export performance.

(ii) The same study could be repeated in New Zealand in five years time to determine the delayed effects of trade liberalisation. Does NTP improve? How does increased R&D intensity, lower industry concentration and lower tariffs and export subsidies influence trade performance?

(iii) The same enterprise-level study could be replicated for other manufacturing and service industries in New Zealand. Do they have the same determinants that influence export performance? Is their export behaviour process the same? This will provide further insight into differences between industries.

(iv) As a follow-up to this research it would be useful to study the impact of import penetration on industry profitability and business closure rates in the electrical industrial machinery and timber processing industry. How many of the exporting firms in these industries adopt import strategies? How do they react to

increased import penetration? What strategies do they use to protect themselves from this competition?

(v) As a result of the limited number of studies on the differences in behaviour between exporters and non-exporters such research needs to continue. In particular a longitudinal case study would make it possible to study how non-exporters evolve towards exporter status. In five years time an in-depth study could be done on the four non-exporters in this study. How many of them have started exporting? A detailed analysis could be done of the process from non-exporter to exporter status.

(vi) Although networks are considered to be important in influencing export performance, very little research has been done in this area. This provides research opportunities for addressing two key questions: why are networks important and how do they operate? A study could be done of the networks used by a cross-section of industries. What forms do these networks take and are they industry specific? What motivates enterprises to form networks?

(vii) It would be useful to study the impact of joint action groups (JAG) on the export performance of its members. What motivates enterprises to form JAGS? Do the dynamics of the industry change when JAG's are formed? Do JAGS maintain a balance between competition and co-operation or do they stifle competition and innovation? Do these JAGS provide the benefits of size to small companies? How effective are JAGS in improving an industry's export performance? What types of conflict emerge in JAGS?

(viii) Future research could focus on how small non-exporters form their expectations of the profitability of exporting. To what extent are these expectations being met? The experiences of former exporters could be included in order to develop an understanding of the basis and timing of the export exit decision.

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APPENDIX 1

INTRA-INDUSTRY TRADE

A direct measure of intra-industry trade (ITT) was calculated, using industry export and import flows for 101 manufacturing industries, in the form of a Grubel and Lloyd index as follows:

$$ITT = \frac{(X + M) - |X - M|}{(X + M)} \quad (\text{as } \%)$$

The following ITT values were computed:

	1985	1987	1990
Mean	37.34	39.02	43.52
Median	30.23	36.84	38.79
Standard Deviation	29.92	28.30	29.49

APPENDIX 2

FOOTNOTES FOR CHAPTER 2

1. In New Zealand in 1981/82, the median 4-firm sales concentration was 64.4% and 57 out of 119 (48%) manufacturing industries had ratios of at least 70% (Census of Manufacturing, 1981-82, Table 4, Wellington, New Zealand Department of Statistics). In contrast, the 1979 median 5-firm sales concentration ratio for 119 UK manufacturing industries was only 48.6%, with 26 (22%) with ratios of at least 70% (Business Monitor, PA1002, 1979, Table 14; London, HMSO)

2. The MINITAB test for normality is a correlation test which is essentially equivalent to the Shapiro-Wilk test.

3. According to TRADENZ (1993, p. 71) total R&D expenditure in New Zealand actually fell by 27% during the course of the 1980's at a time when other OECD countries were increasing their expenditures by an average of 52%. By 1991, New Zealand was spending 0.9% of GDP on R&D compared with 1.7% for the rest of the OECD. For another assessment of New Zealand's R&D efforts, see Campbell-Hunt et. al. (1993, pp. 48-53).

APPENDIX 3**SUMMARY OF STUDY FINDINGS**

This Appendix summarises the findings of empirical studies, additional to those reviewed in Aaby and Slater (1989). The majority were published after 1988 but some earlier works, not picked up by Aaby and Slater, are also included and have an asterisk (*) attached to their year of publication.

The key to the abbreviations used here is as follows:

Firm Characteristics

Firm size (FS)

Management commitment (MC)

Perceptions on:

Financial incentives (PF)

Competition (PC)

Domestic market potential (PDP)

Distribution (PD)

Delivery service (PDS)

Pricing (PP)

Government incentives (PG)

Risk aversion (PR)

Profit likelihood (PPL)

Promotion (PRO)

Firm Competence

Technology (T)

Market knowledge (MK)

Market planning (MP)

Export exporation

analysis (EEA)

Export policy (EP)

Management control

system (MCS)

Quality control (QC)

Communications ability (CA)

Export Strategy

Market selection (MS)

Use of intermediaries (UI)

Product mix (PM)

Product development (PD)

Promotion (P)

Pricing (P)

Staffing (S)

Note that a '+' following any of the above abbreviations indicates positive significant findings; a '-' means negative significant; otherwise findings are not significant.

Study reference	Sample size	Country	Population/ industry	Analytical approach	Dependent variable	Summary of conclusions related to:		
						FIRM CHARS.	FIRM COMPTS.	EXPORT STRAT.
Abdel-Malek (1978*)	154	Canada	small/large manufacturing firms	chi-square	export orientation	FS- MC PDP		
Alexander (1990)	26	UK	international retailers	-	inter- nationalisation	PDP-	EEA+	
Ali and Swiercz (1991)	195	USA	cross-section	MANOVA	firm size and export behaviour	FS-	MS+	
Amine and Cavusgil (1986*)	48	UK	clothing	bivariate correlation	export success		EEA+ EP+ S+	MS+ PRO+
Anderson and Coughlan (1987*)	94	USA	semi- conductors	regression, MDA	distrib. channels	PD+ PP+	MK+	
Ayal (1982*)	65	Israel	manufacturing exporters	regression analyses	ind export performance		MS+ P+	
Ayal and Hirsch (1982*)		Israel	manufactured goods	correlation analyses	export success	FS PDP	T+ QC	P
Aydin and Madlav (1990)	71	USA	service industry	-	inter- national franchising	FS+, PC PDP+ PR-		

Cavusgil and Naor (1987*)	310	USA	cross-section	MDA	export/ non-export	FS+,MC+ PD+,PR+	T- EEA+	UI+
Culpan (1989)	210	USA	technology intensive firms	MDA,chi- square	export behaviour	FS+ PF+ PG+	MK+ EP+	MS-
Czinkota and Johnston (1981*)	237	USA	small/medium manufacturing firms	ANOVA, MANOVA	export segments	PG PD	EEA	
Davidson (1984*)	83	USA	long-lived firms	cross-tabs performance	inter- national	FS+	MP+	
Dichtl, Koeglmayr and Mueller (1990)	353	Germany Finland Japan S Korea S Africa	exporters and non-exporters	regression, cluster analysis	export success	PC PD PG PR	MK EEA	
da Rocha, Christensen and da Cunha (1990)	45	Brazil	furniture industry	MDA	aggressive vs passive exporters	MC+	MP+ EP+ QC+	MS+ PD+
Fenwick and Amine (1979*)	48	UK	clothing industry	MDA	export policy and performance	MC		MS PM P
Fraser and Hite (1990)	110	USA	export manufacturers analyses	regression, correlation	export performance			PRO+

Ganitsky (1989)	18	Israel	exporting organisations	-	innate vs adoptive exporting	MC+ PDP+	T+ EEA+ QC+, CA+	MS+ PM+
Gomez-Mejia (1988*)	388	USA	manufacturing firms	factor analysis, stepwise regression	export performance	MC+ PPL+	T+	PRO+
Gripsrud (1990)	114	Norway	fishery products	MDA, regression	export attitudes	FS+ PP+	QC+	P+
Hedlund and Kverneland (1985*)	18	Sweden	manufacturing firms	-	mkt entry and growth strategies	FS+	T+ MK+	UI+ PD+
Holzmuller and Kasper (1990)	110	Austria	manufacturing companies	MDA, cluster analysis	export activity	MC	MK EEA	
Holzmuller and Kasper (1991)	110	Austria	small/medium size firms	regression, factor analysis	export performance	FS, MC	MK+ EEA+	
Hook and Czinkota (1988*)	288	USA	cross-section	cross-tabs activities and plans	export	PG+		PM+
Karafakioglu (1986*)	108	Turkey	manufacturing firms	cross-tabs	export motivators	FS+, PG- PDP+, PF+ PC-	MK+ EEA+	UI+ P+ PRO+
Kaynak, Ghauri and Olofson	86	Sweden	small/medium size firms	cross-tabs	export behaviour		QC	MS UI

Kedia and Chhokar (1986*)	96	USA	small/medium exporters and non-exporters	-	export perform. inhibitors	FS PC+	MK+ EEA+	P
Keng and Jiuan (1989)	156	S'pre	small/medium manufacturers	chi-square	export/non-export	PC+, PP+ PDP+ PD+	MK+ EEA+	PRO+ P+
Klein and Roth (1990)	477	Canada	manufactured exports	logit analysis	export channels	PR+	EEA+	UI
Koh (1991)	233	USA	industrial products	t-test chi-square	export performance	MC+	EEA+	UI P
Koh and Robicheaux (1988*)	233	USA	export of ind products	ANOVA	export performance	PPL+	ED+	P+ UI- PD-
Lee and Yang (1990)	52	USA	high-tech industries	ANOVA	export performance	PPL+	EP+	MS+
Leonidou (1989)	55	Cyprus UK	consumer goods	one sample sign test	exporter/importer relations		MK EEA	UI
Madsen (1989)	82	Denmark	cross-section manufacturing	ANOVA regression	export performance	PC+ PPL+	MK+ QC+	MS+ P+
Malekzadeh and Rabino (1986*)	131	USA	manufacturers	-	export behaviour			
Marr (1987*)	500	USA Germany Benelux	cross-section of exporters and importers	ANOVA	increased competitiveness			S+

Moon and Lee (1990)	52	S Korea	electronics manufacturers	MDA	export stages	MC+ PPL+		
Namiki (1988*)	393	USA	computer manufacture	ANOVA; factor & cluster analyses	export strategies	FS PDP MP+	QC+ T+ P+	PD+ PRO+
Namiki (1989)	106	USA	semi-conducto manufacturers	ANOVA cluster/ regression analyses	export performance	PC+	T+ EP+	MS+ PM+ PD+
O'Rourke (1985*)	304	USA	exporters of agricultural products	cross-tabs	export policies	FS+ PG-	EEA	UI
Rao, Erramilli and Ganesh (1989)	195	USA	cross-section of export manufacturers	ANOVA, chi-square	export market behaviour	PDP+ PDS+ PR+	EP+	MS+ P+
Rao, Kreighbaum and Hawes (1983*)	104	USA	manufacturing firms	cross-tabs	export propensity	MC PDP		
Roth and Morrison (1990)	147	USA	cross-section manufacturing industry	ANOVA, cluster analysis	global competition	PC+		
Ryans (1988*)	129	Japan/ Canada	manufacturers exporters to Japan	regression analysis	market share growth	PPL PC		MS+
Samiee and Walters (1990)	145	USA	cross-section of industries	t-test, chi-square	export planning performance	FS+ PR+	MK+ MP+ EEA+	MS+

Seifort and Ford (1989)	65	USA	manufacturing industries	ANOVA, cross-tabs	marketing mix	FS+		PRO+ P+
Seringhaus (1987*)	113	Canada	manufacturing	cross-tabs	export mkt entry	PG, PC MC	MK, CA EEA	
Seringhaus and Mayer (1988*)	113	Canada	industrial manuf. firms	quasi-experimental	foreign mkt. entry	PG MC	MK EEA	MS, P PRO
Sharma and Johanson (1987*)	2	Sweden	technical consultancy	case study	inter-nationalised services	PS+	PR+	
Sullivan and Bauerschmidt (1990)	62	Austria Finland Sweden Germany	forest products	factor analysis	incremental inter-nationalisation	MC, PC PG	MK	
Terpstra and Yu (1990)	65	USA	strategic alliances	-	foreign mkt entry	PF+ PD+	MK+ EEA+	MS+ PM+
Thach and Axinn (1991)	101	USA Canada	machine tool industry	ANOVA, cross-tabs	export success	MC+ PP		
Walters (1985*)	30	US	forest products	chi-square MDA	propensity to plan exports	FS MC+	MP+ ED	
Walters and Samiee (1990)	145	USA	manufacturing firms	factor analysis, stepwise regression	export performance	FS MC+ PPL	T+ EEA- MP+	
Whitelock (1987*)	10	UK	bed linen	cross-tabs	product standards	PPL	MK	PD

Wiedersheim-
Paul, Olson,
and Welch
(1978*)

75

Australia manufacturing -
firms

pre-export PF
activity PG

EEA
CA

Williamson
(1991)

462

USA UK exports -
to USA

export
strategy

MP+

MS
P

APPENDIX 4

DEFINITION OF ENTERPRISE-LEVEL VARIABLES THAT INFLUENCE EXPORT PERFORMANCE

This section provides a definition of the key variables in Aaby and Slater's (1989) model. These variables are defined according to Aaby and Slater's (1989) use of them but discretion had to be used when their definitions were ambiguous. The key variables were identified through meta-analysis and include competencies, firm characteristics and export strategy. Each of these variables includes a sub-set of variables. An additional variable "networks" which was frequently mentioned by respondents as being important in influencing export performance, is included in this definition of variables. Each of these variables will be discussed in detail below.

Competencies

Technology

In their definition of technology, Aaby and Slater (1989) include technology intensiveness and specialised knowledge but no mention is made of R&D. Since respondents in this study placed great importance on R&D, it was included under technology.

Market Knowledge

In order to acquire market knowledge, management aggressively seeks information about export markets by conducting market research and formal export exploratory

analysis by reading relevant articles about export markets and by visiting intermediaries and customers in export markets.

Planning

Implementation of a process for formal planning.

Quality

Quality is the extent to which a firm implemented quality control procedures. This ranged from formal quality control procedures to more informal methods of quality control. Although quality control was not identified as a key variable in the meta-analysis, the response in this study showed that it was important. It was, therefore, included as a key variable.

Firm Characteristics

Firm Size

According to Aaby and Slater's (1989) definition, sales turnover, assets and number of employees are used to measure the size of the firm. In this study, only sales turnover was used as a measure of firm size.

Management Commitment

Management commitment is measured by whether the firm has set exporting objectives and goals, and management's willingness to commit resources for exporting. It also includes the extent to which management visits export markets

and whether they spend time reading magazines, newsletters and other related material in connection with exporting.

Profit Perception Likelihood

Management perception of profits from exports and whether they expected to obtain more profits from export markets than the domestic market.

Export Strategy

Market Selection

Market selection was determined by whether firms chose to have a narrow or a broad market coverage, nearest neighbour or world orientation, and markets in less developed countries or developed countries.

Product Mix

The extent to which the product has unique attributes and in addition, whether the firm chose to have standard or adapted products, and a multiple or narrow product line.

Pricing

When deciding on its export pricing strategy, a firm would consider competitive prices, internal costs and hurdle rates.

Other Variables

Networks

There were various forms of networks which included: first, building and nurturing of relationships with customers and intermediaries; second, co-operating with competitors rather than competing with them in both domestic and export markets; and third, co-operating with customers to develop and manufacture products that were of mutual satisfaction.

APPENDIX 5: FIRM PROFILES

FIRM CHARACTERISTICS

Firm	Firm Size (FS) Sales (\$M)	Management Commitment (MC)	Profit Perception Likelihood (PPL)
HA	30	Committed to exports, want to increase them. Restructuring so MD can spend more time in export markets.	"Export profits are higher than domestic markets ... depends on exchange rates."
HB	12	"We are committed exporters." Restructuring so that Marketing Manager can spend more time in export markets.	Make more profit in export markets than in domestic market.
HG	40.5	"We are totally committed to exporting."	"Profits from the domestic market are higher than profits from export markets."
HH	N/A	Diverted effort and resources into exporting. Increased production capacity for export sales.	"Profits from exports are roughly the same as in the domestic market."
LC	11.3	"We have only now made a commitment to export." Has invested in doubling production for exports.	"Profits from exports are not higher than in the domestic market."
LD	1.5	Committed resources to increase exports. Formed a joint venture to increase exports.	"Exports generate very low profits."
LI	5	Target for exports is between 20-25% of sales.	"Profits from exports are much the same as in the domestic market."
LJ	1.3	"Future goal is to increase exports although it is difficult to do so."	"Profits from exports are higher than the domestic market."
NE	0.112	Not committed as perceive they cannot be competitive.	"Exports are not profitable."
NF	0.250	Committed to the idea of exporting. Diverting effort and resources to exploring export markets.	"Export markets are more profitable than the domestic market."
NK	0.280	Not committed to exporting because of limited resources.	"Have not thought about profits from exporting."
NL	0.517*	No resources for exporting, still getting started.	"Have not thought about it."

* Approximate Sales

APPENDIX 5: FIRM PROFILES			
EXPORT STRATEGY			
Firm	Market Selection (MS)	Product Mix (PM)	Pricing (P)
HA	Main market is Australia. Also exports to New Caledonia, Taiwan, Malaysia, Singapore and Korea.	"Product had to be changed to suit the export market." Exports 5 different products.	"We negotiate our prices so we get what people are prepared to pay. Cost plus went out of the window 5 years ago."
HB	Australia main market also exports to Taiwan, Thailand & Philippines.	Exports 3 different products. Product is customized.	Price higher than competitors. Negotiate prices in S.E. Asia.
HG	Australia main market. Exports to Europe, S E Asia, South America, Africa.	Very wide range of products. Product is customized.	Export price strategy is based on cost of manufacturing and competitors' pricing.
HH	Australia, Pacific Islands, Japan and United States.	Very diverse range of products. Products are customized.	"We try to match competitors' prices." "Biggest hurdle in exporting was that price was the hardest to match."
LC	Australia main market. Exports to UK US Taiwan & Germany.	Exports 4 different products. Products are customized.	"Charge slightly below competitors' price in order to get into the export market. Once the product is accepted and quality and service is approved then the price is raised."
LD	Australia main market and exports to Japan.	Exports only packaging timber. Product is customized.	"Consider existing market prices and ways of cutting costs. We try to extend the service to get a better price."
LI	Australia, Singapore, Malaysia, Thailand, Philippines, Brunei, Indonesia, Hong Kong, Samoa, Fiji and Nuer.	Wide range of products. Products are customized. "None of us can afford to carry a narrow range of products."	"Our price is higher... we look at the market price."
LJ	Australia, US and Canada.	Only produces according to customer order. Each customer has a specific product need, so highly customized product.	Uses cost plus pricing.

APPENDIX 5 FIRM PROFILES

COMPETENCY OF FIRM		EXPORT STRATEGY		
		Market Selection (MS)	Product Mix (PM)	Pricing (P)
Market Knowledge	HA	Study a market carefully before selecting it.	Is introducing new product to overcome competition.	Studying profitability of the market. In some markets price is very important and in others quality is very important.
	HB	Before selecting a market conducts detailed study. Looks at statistical data and conducts a market survey by locals in that particular market.	Before entering a market find out whether they are actually using a product.	Need to have good bargaining skills in some markets.
	HG	Before they enter an export market they research that market thoroughly.	Conducts intensive market research to find out what products are required.	Identified Asia as having the lowest cost structure. Have factories in Malaysia to remain price competitive.
	HH	"In Japan more formal market research because it is so different." Must understand a market before you enter it.	Prepared product mix after visiting the market.	"We look at what competitors are doing and it is easy for us to judge their costs."
	LC	Has actively explored market opportunities to select suitable ones.	Studied market and identified opportunities for value added radiata pine.	Consider the costs of production and distribution and what the market will bear.
	LD	Conducted thorough market research before entering Japanese market. Australia just talked to potential customers.	Studies customers needs and then produces product.	Price the same as competitors. Look at existing market prices and ways of cutting costs to get a profitable price.
	LI	Focuses on markets he knows well.	Has thorough knowledge of market. Introduces new products and new models all the time.	Look at market price when determining export pricing strategy.
	LJ	Chooses markets that have a close psychic distance.	Focuses on speciality manufacturing equipment for markets that are similar to New Zealand.	Uses cost plus pricing. Need to know the market if want to change price structure.

APPENDIX 5 FIRM PROFILES				
COMPETENCY OF FIRMS		FIRM CHARACTERISTICS		
		Firm Size	Management Commitment	Perception of Profit
Planning	HA	N/A	Plans to increase exports to Europe so have committed themselves by making a trial shipment to this market.	Plan to increase exports because perceive it will be profitable.
	HB	N/A	Have planned to increase their export intensity. Formally review strategic plan twice a year.	Pricing is included in their marketing plans.
	HG	N/A	N/A	Plan to open a factory in Malaysia because cost of production is cheaper there.
	HH	N/A	N/A	N/A
	LC	A public listed company so have formal marketing plans.	Management plans to increase export intensity so have committed resources to do so.	Plan to increase their profits by capitalising on the opportunities for added value radiata based pine.
	LD	N/A	Planned to export to Japan and have committed their resources to do so.	Perceive that Japanese market is profitable so plan to export there.
	LI	N/A	Plans to increase exports so committing resources to do so.	N/A
	LJ	N/A	N/A	N/A
	NE	N/A	N/A	N/A
	NF	N/A	Plans to start exporting so is committing his resources to do so.	Perceives that export markets are more profitable than the domestic market so plans to export.
	NK	N/A	Plan to increase their customer base so are committing resources to do so.	Plan to increase their customer base because they perceive that they can be more profitable than they are now.
	NL	N/A	Plan to increase their customer base so are committing resources to do so.	Plan to increase their customer base because they perceived that they can be more profitable than they are now.

APPENDIX 5 FIRM PROFILES

COMPETENCY OF FIRM		EXPORT STRATEGY		
		Market Selection (MS)	Product Mix (PM)	Pricing (P)
Planning	HA	N/A	Plan to manufacture more added value products for new markets.	N/A
	HB	N/A	Includes product mix in annual marketing plans.	Pricing is included in annual marketing plans.
	HG	N/A	Plan to diversify and expand the product range.	N/A
	HH	Prepared export plan and strategy after visiting markets.	"We try to be structured and think before we act." Sales people share their ideas with product design people.	N/A
	LC	When drawing up strategic plan realised that there was no opportunity for growth in the domestic market so had to export.	Plan to increase production of added value radiata pine based products.	Plan to be price competitive.
	LD	N/A	Plan to produce products for the Japanese market.	N/A
	LI	N/A	Plan to have products in a defined area.	N/A
	LJ	N/A	N/A	N/A

APPENDIX 5 FIRM PROFILES

COMPETENCY OF FIRMS		FIRM CHARACTERISTICS		
		Firm Size	Management Commitment	Perception of Profit
Technology	HA	N/A	N/A	N/A
	HB	Are a medium sized industry and their technology is lower than the large producers but higher than the small producers.	N/A	N/A
	HG	3% of sales spent on R&D so the larger the turnover the more spent on R&D.	You don't get and keep 80% - 90% market share if you don't develop products.	"We have been able to keep our market share because we have a range of products that are superior."
	HH	Have to be innovative. "Because of our size if we copy competitors we will remain a secondary industry." Spends about 1.5% of sales on R&D.	Management has to be committed to divert resources into developing technology.	To remain profitable have to be innovative.
	LC	To increase its export sales, firm is expanding its production capacity and investing in new technology intensive production equipment.	Management has to be committed to divert resources into expanding its production capacity.	Have identified opportunities in export markets for value added radiata pine based products so prepared to invest in new technology.
	LD	N/A	N/A	N/A
	LI	5% of sales spent on R&D.	Management is committed to divert resources into technology.	"Our product is of better quality, we manufacture from better materials."
	LJ	5% of sales spent on R&D.	Management is committed to divert resources into technology because they are selling an extremely technical product.	Perceived strength of the organisation is technical ability and quality of product.
	NE	N/A	N/A	"Compared to the other mills we are a bit behind as far as technology goes, which makes it difficult for us to compete price wise."
	NF	N/A	N/A	N/A
	NK	N/A	N/A	N/A
	NL	N/A	N/A	N/A

APPENDIX 5 FIRM PROFILES

COMPETENCY OF FIRM		EXPORT STRATEGY		
		Market Selection (MS)	Product Mix (PM)	Pricing (P)
Technology	HA	"Initial export decision meant that we had to install more sophisticated equipment."	"When we enter export markets we consider the one with which we can produce a product."	N/A
	HB	"When they built the sawmill it was the biggest in the Southern Hemisphere. It was built with export in mind."	Had to improve product quality when they started exporting.	"New techniques of production were introduced more to do with cost savings."
	HG	Highly technical and specialised products so sold throughout the world.	Emphasis on R&D. Bulk of sales are made up of new models, products which are 5 years old or less.	When developing new products aim is to recover their costs in two years.
	HH	Products are based on European engineering standards so easier to sell products in former British colonies such as Singapore.	N/A	"We need to establish a quality and price balance."
	LC	Upgraded its technology after identifying opportunities in export markets.	Each market has a specific moulding requirement and profiles made for the domestic market cannot be sold in the US.	Anticipate that new production equipment will reduce their cost structure.
	LD	Japanese product specifications are so precise. Don't have technology to manufacture some of these products.	Specializes in packaging timber. For export markets timber has to be processed in another way and into different sizes. Changed product dramatically over last 10 years as quality of product is becoming very important.	"Japanese processing costs are much higher than ours."
	LI	Diverse range of highly specialized technologically intensive product sold worldwide.	"We only go for a very technical product."	Financial risk with exporting. "The extra costs of redeveloping and redesigning the products for exports".
	LJ	Exports to markets where customers are looking for sophisticated machines that are not mass produced. Technology suits Canada, US and Australia.	Diversified range of specialized machinery.	N/A

APPENDIX 6 : EXPORT PERFORMANCE AT ENTERPRISE-LEVEL: CASE STUDIES

Introduction

The enterprise-level study focused on two industries. These were the timber processing industry (NZSIC 33112) and electrical industrial machinery industry (NZSIC 38310). The reason for choosing these industries is that the timber processing industry is a high-export performing industry with an export intensity of 60% in 1987. The electrical industrial machinery industry, was selected because it is a low- export performing industry. In 1987, it had an export intensity of 21%. To allow for literal (similar results within the three categories) and theoretical replication (systematic differences between each category) to occur, 12 firms were selected, six from each industry. Firms were selected from the following three categories:

1. Successful exporters with a ratio of exports to total sales greater or close to the industry's average
2. Exporters with a ratio of exports to total sales strictly below the industry's average
3. Non-exporters.

A summary of each case study is presented in this appendix. The key variables in Aaby and Slater's (1989) model identified through meta-analysis (see Chapter 3), are used as a framework for each case study. An additional variable "networks", which respondents said was important in influencing export performance, is also

included. For each case study a general background is first presented followed by evidence for the key variables.

The NZSIC Classification for the timber processing industry is 33112 and titled Planing, Preserving and Seasoning Timber. This industry included planing and moulding timber, the manufacture of dowelling when separable from sawmills, preserving timber with chemicals by diffusion, impregnation and pressure impregnation, and seasoning of timber by air and oven drying. Products include dowell manufacture, planing-mill operation, timber moulding, timber preserving and timber seasoning (New Zealand Standard Industrial Classification, Department of Statistics).

The NZSIC classification for the electrical industrial machinery industry is 38310 and titled Electrical Industrial Machinery and Apparatus. This industry includes the manufacture, renovation and repair of electric motors, generators and complete turbine-generator and engine-generator sets; electrical transmission and distribution equipment, electrical industrial control devices, such as motor starters and controllers, and electric timing and positioning devices. Products include armature manufacture, winding, repairing, automotive electric equipment, electric motors, electric welding apparatus, electromagnetic clutches and brakes, industrial rectifiers, switchgear and switchboard apparatus, and transformers. (New Zealand Standard Industrial Classification, Department of Statistics).

For reasons of confidentiality, firms had to remain anonymous. They were, therefore, given the following codes:

Timber Processing Industry

HA and HB = high exporters

LC and LD = low exporters

NE and NF = non-exporters

Electrical Industrial Machinery Industry

HG and HH = high exporters

LI and LJ = low exporters

NK and NL = non-exporters

CASE STUDIES IN THE TIMBER PROCESSING INDUSTRY

INDUSTRY EXPORT INTENSITY :60%

Case Study:HA

Export intensity: 58% (\$17.4m)

Respondent: General Manager

General Background

HA is a private company established in 1927 when it bought and sold coal. In 1965, HA bought its first sawmill. HA has continued to diversify its business and now owns timber processing businesses, a wholesale business allied to the building trade, a building construction company and two aluminium window factories. HA started exporting in 1966 as it wanted to expand but found the domestic market too small. HA benefited from export incentives which were then available. The average age of HA's management is 43 years. HA's general manager has a technical background. His highest level of formal education is school certificate

and he has done a correspondence course. He has been involved in international business for 12 years.

1. Firm Characteristics

Firm Size

HA has 115 employees and a sales turnover of \$30m in 1991.

Management Commitment

HA's management consider themselves to be strongly committed to exporting and are thinking of expanding their export sales by entering new export markets. In order to do this, they are restructuring their organisation to increase production and are recruiting additional personnel so that the marketing manager is able to spend more time in export markets.

Profit Perception Likelihood

HA's management believes that in order to survive, timber processors need to export. HA's export profits are higher than those for its domestic market. The general manager had this to say about export profitability and exchange rates:

Exchange rates can go against you. I have seen exchange rates in the last 5 years almost dollar for dollar. I have seen them as low as 52 cents. It depends on when you sell and how you will get paid for it. Your exchange rates will affect profits dramatically.

2. Competencies

Technology

HA does not spend much on R&D but acquires information on new technology and new product developments from the Forestry Research Institute. The general manager believes that HA has the most modern production equipment in the southern hemisphere.

Market Knowledge

HA's management consider themselves to be very familiar with their export markets and believe that they know their customers quite well. HA's management make regular visits to their export markets. These can be up to a dozen times a year. They also stay informed about foreign trade through newsletters they receive from the Trade Development Board.

Planning

HA plans to increase its export sales and to manufacture more added-value products for new markets. According to the general manager, their market planning is based on "gut feeling" acquired through years of experience.

Quality

HA implements the timber industry quality assurance system. The general manager believes that quality control depends on having the right people:

*Without good people we have nothing.
Maintaining quality assurance and quality
control you need good people.*

3. Export Strategy

Market Selection

HA's initial export market was Australia because it was cheaper to export to Australia than it was to ship products to the North Island. HA now exports to New Caledonia, Taiwan, Malaysia, Singapore and Korea. Australia remains its main export market with 90% of their sales. HA plans to export to Europe and has recently made a trial shipment there.

Product Mix

HA produces a wide range of products and has to modify its products to suit export markets. HA exports treated and untreated timber products. These include packaging and house framing timber, outdoor furniture, fencing and dowells. HA has experienced some difficulties, with exporting these products such as quarantine regulations in Australia. In countries such as Taiwan, the product is affected by climatic changes as it is produced in a colder climate but exported to a warmer one.

Pricing

HA's export pricing is higher than the domestic market and is negotiated. The products are priced cost, insurance and freight (CIF) in every country but Australia.

4. Networks

HA has strong ties with its customers and distributors in its export markets, and its management spend a large amount of time maintaining these networks. HA is also a member of the Trade Development Board's Joint Action Group for the timber processing industry. The general manager believes in building long-term customer relationships and loyalty. He made the following comment about this:

We built up contacts when we went into new markets. We are still dealing with companies that we were dealing with way back then. We have very loyal customers in our export markets. Then again we are very loyal to them in terms of support. One of their competitors comes and wants our product. We may not make it available to them.....We spend an enormous amount of time in the marketplace down to the end - user level. We find out what they want. Their perception was that we are just a timber company in New Zealand sending them a heap of timber. That was the first obstacle we had to overcome.

Case Study: HB

Export Intensity: 54% (\$6.5m)

Respondents: Marketing and Production Managers

General Background

HB is a private company and was established in 1923. It currently owns three sawmills. In its growth phase, HB diversified into various other products such as manufacturing joinery, aluminium windows and hardware. It has now decided to focus on processing radiata pine. HB has been exporting since the early 1920's. HB has one major advantage over other mill owners: it has three mills that can depend on each other's stock to satisfy customer orders. The average age of HB's management is 37 years. The marketing manager has 7 years international business experience. His highest level of formal education is secondary school certificate.

1. Firm Characteristics

Firm Size

HB has 120 employees and, in 1991, had a sales turnover of \$12m.

Management Commitment

HB plans to increase their exports and has committed resources and restructured their organisation to do so. HB has recruited additional personnel to allow the marketing manager to spend more time in export markets. HB has participated in trade missions to identify potential export markets.

Profit Perception Likelihood

HB believes that the domestic market potential is limited. HB's profits from exports are higher than their domestic market. HB have created a superior image for their export products and charge a premium price for them.

2. Competencies

Technology

HB is a medium-sized company. Their level of technology is lower than the large timber processors but higher than the small timber processors. HB spends very little money on R&D.

Market Knowledge

HB learns about their market through their JAG. The marketing manager also stays informed by travelling extensively to export markets. HB receives and reads Australian and United States newsletters and journals about the timber processing industry. Before HB selects an export market, it conducts market research.

Planning

HB has formal strategic plans which are reviewed twice a year. HB has an outside facilitator help draw up these plans. HB's future plans are to increase exports and to focus on one product.

Quality

HB had to improve their product quality when they first started exporting. HB believes that their current product quality is better than their competitors. HB plans to implement ISO 9000 series in three years time.

3. Export Strategy

Market Selection

Before selecting a market, HB conducts detailed market research. HB's main criteria in choosing an export market is to determine the demand for a particular product. HB believes that Thailand, Malaysia, Indonesia and mainland China offer them great potential and this is where the future of the company lies. At present, 60% of HB's sales go to Australia, 30% to Taiwan, 5% to Thailand and 5% to the Philippines. HB previously exported to Japan and the United States, but decided to withdraw from these markets.

Product Mix

HB exports customised products such as structural treated timber, export furniture and soft packaging timber.

Pricing

HB's marketing manager complained about New Zealand companies undercutting each other's prices in export markets. He recommends that New Zealand firms improve their negotiation skills when bargaining for prices, especially in South East Asia. Export price quotation is usually CIF.

4. Networks

In order to increase its exports, HB has become a member of the Trade Development Board JAG. By being a member of a JAG, HB has started co-operating with their competitors in export markets. HB's marketing manager mentioned that since the formation of JAG's the dynamics of the domestic market for timber processing have changed. HB maintains a close relationship with its agents and trading houses in South East Asia and believe that it is important to build trust in these relationships. In order to help develop personal contacts, HB's marketing manager has done a course at Massey University to learn to speak Mandarin.

Case Study: LC

Export Intensity: 15% (\$1.65m)

Respondents: Managing Director and Marketing Manager

General Background

LC was established in 1912 and became a public-listed company in 1986. LC was initially involved in construction and joinery, then diversified into timber processing. It has now restructured its organisation to focus on timber processing. LC has a total of 161 employees in five business units. These business units include timber mills, distribution outlets and a timber processing plant. This case study focuses on the timber processing plant. LC started exporting 17 years ago to get rid of surplus products. LC now wants to expand. It realises that the only way it can do this is by increasing export sales. The average age of top management is 40 years. Their educational background and work experience is a combination of technical and commercial subjects. LC's management regard this combination as a strength in what they perceive to be a highly skilled management team.

1. Firm Characteristics

Firm Size.

LC employs 60 people. The timber processing plant is undergoing expansion with a \$3 million bank loan. In its timber processing plant, LC had a sales turnover of \$11.3 million for 1991.

Management Commitment

LC's management are committed to expanding export sales. They are increasing their production capacity by 50% and are actively seeking new export markets.

Profit Perception Likelihood

LC has identified opportunities in export markets for value-added radiata products. These products are mainly related to furniture components as opposed to building construction. Although there is some potential to market radiata-based products in the domestic market, LC has decided that export markets are more lucrative, offering more opportunities for profit than the domestic market.

2. Competencies

Technology

LC upgrades their production equipment every 10 years, compared to some timber processors who have 30-year old machinery. In its current expansion programme, LC is striving for efficiency in production by installing a highly automated production system with the latest technology.

Market Knowledge

LC started exporting to Australia without researching the market as they believed they already knew the market. At present, however, LC's managers attempt to keep well-informed about their export and domestic markets by travelling extensively. LC's management also stays informed about market conditions through their six domestic sales representatives and their export agents. In addition, LC gets information about export markets through the New Zealand Radiata Pine Remanufacturer's Association, of which it is a member. Through NZRPRA, LC has participated in trade missions and trade shows.

Planning

LC has formal strategic plans and an outside facilitator helps them develop these plans. LC now plans to increase their exports by 50%.

Quality

Although LC places a strong emphasis on quality they have no formal quality control procedures. LC perceives its competitive advantage to be the quality of its product and the quality of radiata pine. LC's marketing manager had this to say about the quality of their product:

The quality of our product is higher in both the domestic market and the international market compared to our competitors. We use German industry specifications and standards because we were exporting to Germany. We also use Japanese standards. We use German and Japanese standards in other markets because their standards are very high and this gives us a competitive edge.

3. Strategy

Market Selection

LC started exporting to Australia, as it was considered to be an extension of the domestic market. In some markets (United States and Australia), LC has actively looked for export opportunities, while in others (United Kingdom, Germany, Taiwan and Korea), it has entered passively by fulfilling unsolicited orders. LC is actively seeking new export markets by participating in trade missions and attending trade fairs, mainly in the United States and Europe. LC has identified Australia, United States, and United Kingdom as the areas which offer them the most potential.

Product Mix

LC's exports are mainly radiata pine-based products which make up 95% of exports. The rest are either rimu or beech. LC manufactures a wide range of products which are made according to customer specifications. Furniture components are exported to Australia, United Kingdom and Taiwan. Curtain rods are exported to Australia and Germany. Mouldings are exported to Australia and the United States, and dowells are exported to Australia.

Pricing

When LC first enters an export market, it charges slightly below their competitor's price in order to penetrate the market. Once the export market accepts the product and the quality and service is approved, then the price is raised. In the domestic market, it charges a higher price than their competitors as it perceives its products to be of better quality. When pricing its products LC considers the costs of production and distribution and what the market will bear. Export price quotation is mainly CIF but FIS is used when exporting to Australia.

4. Networks

LC has managed to establish some of its networks through NZRPRA. NZRPRA helps develop export markets, organises participation in trade shows for its members, finances advertisements in trade journals, educates its members about technical issues, conducts research, and organises and finances publications and advertising material. LC co-operates with its competitors in export markets to participate in trade shows and to promote its products. It keeps in close touch with its distributors and agents.

Case Study:LD

Export intensity: 10% (\$0.15m)

Respondent: Managing Director

General Background

LD was established in 1962 as a sawmill. In 1983, LD built a new sawmill in order to satisfy export orders from Australia. In order to increase its export sales, LD is forming a joint-venture with a Japanese company so that it can enter the Japanese market. LD is expanding its production capacity by 50% because it does not currently have the volume to fill an export order. As far as LD's managing director is concerned, the only way to expand is to export. LD has been exporting intermittently since 1983. At one stage, LD was totally reliant on the Australian market and had to withdraw when the exchange rate became unfavourable. The managing director is 39 years old and has 10 years international business experience. His highest level of formal education is sixth form.

1. Firm Characteristics

Firm Size

LD has 18 employees and its sales turnover for 1991 was \$1.5m.

Management Commitment

LD has been actively seeking export markets and has identified export potential in Japan. LD is expanding its production facilities so that it can cope with increased export orders. Forming a joint venture with Japanese partners proves that LD is committed to exporting.

Profit Perception Likelihood

LD regards the domestic market to be highly volatile with little room for expansion. LD believes that it has the opportunity to make profits in Japan.

2. Competencies

Technology

LD's production equipment is about 8 years old. LD's managing director had this to say about technology:

It is very difficult to keep up with technological changes. There has been a dramatic change in technology over the last few years. We keep up to date with whatever is available by reading every available magazine.

Market Knowledge

Before entering the Japanese market, LD conducted market research. LD gets information about the Japanese market from their joint venture partners and through

regular visits by the managing director. LD's managing director also gets information about export markets through the Trade Development Board. By reading magazines about export markets regularly, LD's managing director hopes to stay informed about them.

Planning

Planning is done informally as LD is expanding because it wishes to increase exports.

Quality

LD regards quality control to be very important and it has recently installed TELARC. The managing director believes that, by installing formal quality control standards, LD has a competitive advantage.

3. Strategy

Market Selection

LD's initial export market was Australia because it was considered to be an extension of the domestic market. When it first started exporting, LD took advantage of export incentives which were then available. LD has now decided to enter the Japanese market and has already sent a trial shipment there. LD's managing director made the following comment about the Japanese market:

We looked at markets around the world and decided that Japan is probably the best market. The Japanese are very large users of packaging timber. It has a strong economy and stable government.

Product Mix

LD specialises in packaging timber and exports customised packaging timber to Australia mainly for the horticultural industry. LD intends exporting sawn timber to Japan. The Japanese have strict specifications for sawn timber and the quality and presentation have to be of a high standard. To meet these specifications, LD had to invest in new production equipment.

Pricing

LD's managing director had this to say about their pricing strategy:

We look at existing market prices and ways of cutting costs. We work backwards to see what we can get for the same product. We work out a profitable price. We try to extend the service by having better quality and further processing to get a higher price.

4. Networks

In order to establish contacts in Japan, LD's managing director has learnt a little Japanese. His Japanese joint venture partners also help him develop contacts in Japan. He makes regular visits to Australia and Japan to keep in touch with his customers.

Case Study: NE

Respondent : Managing Director

General Background

NE was established in 1952 as an engineering workshop. It was bought by its present owners in 1965 and now operates as a private company. NE has diversified and owns four business activities namely, a general engineering workshop, ready mix concrete, timber processing and constructing log cabins. NE

has received an unsolicited export order but did not respond as it did not have the confidence to succeed in export markets. NE's strategy is to increase its sales turnover by identifying opportunities in the domestic market and by diversifying into other business activities rather than focusing on one product and relying on exporting to increase its sales turnover. When one business activity contracts, NE diverts its efforts and resources into the others. For example, at the moment the timber processing industry is slack, so NE is diverting its attention to concrete mixing. As long as it has the resources and the skill NE's management are willing to enter any industry. NE's managing director has very little formal education and was a farmer before he bought this business.

1. Firm Characteristics

Firm Size

NE has 8 employees and sales turnover in 1991 for the timber sector was \$112,500. For the whole business turnover is \$450,000.

Management Commitment

NE's management is not committed to exporting as they do not have the confidence that they will succeed.

Profit Perception Likelihood

NE's management perceives that there are more opportunities for profit in the domestic market than in export markets. NE believes that they cannot be price competitive in export markets because of their small size and their level of technology.

2. Competencies

Technology

NE's management assemble most of their production equipment themselves. NE's managing director made this comment about their technology: "Compared to the other mills, we are a bit behind as far as technology goes which makes it difficult for us to compete price-wise."

Market Knowledge

NE has a small concentrated market and they know their customers and the market conditions very well. NE has been a member of the sawmiller's association and stays informed about market trends through them. NE's managing director has decided to resign because this association has increased its membership fees and produces outdated information.

Planning

The only form of plan that NE has, is a budget of which the managing director had this to say:

*There is so much guesswork that goes into it that you don't really know.....
Nothing that we did could you say was planned. Its all been on supply and demand. Somebody needed a particular thing so you turn around and do it.*

Quality

NE has no formal quality control procedures. According to NE's managing director their employees do the best they can.

3. Strategy

Market Selection

NE's market is a small concentrated area outside Christchurch. NE has attempted to distribute its products in Christchurch but stopped because the market was too competitive.

Product Mix

NE produces log cabins, farm fence posts, structural timber and residential fencing. The timber is both treated and untreated and NE produces both standard and customised products.

Pricing

When pricing their product, NE considers market prices.

4. Networks

NE regards its close relationship with customers as a major strength. NE's managing director believed that customers valued talking directly to the owner about their product needs and complaints.

Case Study: NF

Respondent: Managing director

General Background

NF was formed in 1982 as a portable sawmill. NF now consists of a building supplies wholesale store and a sawmill. At present, NF is utilising only 20% of its production capacity. Its managing director realises that it cannot rely on the domestic market to increase its sales. NF's managing director is actively exploring export opportunities as he believes that it is the only way NF will survive. He has

recently identified an export agent (through a business expo in Christchurch) who is willing to distribute his products. NF has also approached TradeNZ for advice on exporting. NF's managing director is 40 years old. He has diverse work experience which includes being a fitter and turner, shearer, carpenter, sawmiller and retailer.

1. Firm Characteristics

Firm Size

NF has two permanent employees and employs seasonal labour which can go up to 5. NF's sales turnover in 1991 was \$250,000.

Management Commitment

NF is committed to exporting and has recently employed a manager who could run the day to day affairs while the managing director explores export opportunities and produces a suitable product for the export market. Despite its limited resources, NF's management is willing to invest resources into export exploration.

Profit Perception Likelihood

NF believes that there are more opportunities for profits in the export market than in the domestic market.

2. Competencies

Technology

NF has some outdated production equipment. One dates back to 1926, but it is in good working order. NF's managing director is spending a large amount of time on R&D as he is trying to develop a housing module for export. He does not consider the time spent on R&D as a cost but as a hobby.

Market Knowledge

NF's managing director is spending a considerable amount of time acquiring information about overseas markets. He has already sought advice from an export agent and the Trade Development Board. As regards his domestic market knowledge, he believes he knows his small concentrated market very well.

Planning

NF has no formal plans but at an informal level, plans to start exporting soon.

Quality

NF believes that it has a better quality product than their competitors. NF's managing director stated the following about their quality control:

The quality of our product is generally superior. Our services are probably not as good as they should be as it is only me that is doing it. We do have quality control, we have principles laid out in milling operations.

3. Strategy

Market Selection

In the domestic market, NF is distributing its products in a small concentrated area. NF is exploring the possibility of exporting its housing modules to Samoa and Tonga. NF's managing director believes that because of persistent cyclones in these areas there will be steady demand for NF's products. The houses that NF plans to produce are relatively cheap and easy to assemble.

Product Mix

NF produces log cabins, packaging spud bins, and trusses. NF is in the process of developing a suitable housing module that is suitable for its export markets. It is preparing a video on how to assemble them.

Pricing

When pricing its products, NF considers cost of production, distribution and market prices. In order to attract customers in a highly competitive market, some products are priced as "loss leaders".

4. Networks

In its initial stages, the managing director's contact with farmers during his sheep shearing days helped get the business established. Since NF has taken an interest in exporting, NF's managing director has been trying to establish the right networks to propel NF towards exporting.

Electrical Industrial Machinery Industry

Industry Export Intensity : 21% (1987)

Case Study:HG

Export intensity:55%

Respondents: Chairman and Commercial Director

General Background

HG was established in 1938 and initially produced plumbing equipment. In 1947, it was taken over by the current chairman who then started producing electrical equipment. HG has been a public listed company since 1973 and has six business units. These business units include electrical accessories, plastics, packaging,

electronic motors, electric fans and a distribution company. HG is, therefore, involved in three industries and these are electrical goods, plastics and distribution. This case study focuses on the electrical goods sector. HG started exporting in 1962 because it wanted to expand its sales. The average age of top management at HG, excluding the chairman who is 78 years old, is 35 years. All members of the top management team have tertiary qualifications in either technical or commercial subjects. They believe that their management team is strong because of this technical and commercial combination.

1. Firm Characteristics

Firm Size

HG has 84 employees and a sales turnover in 1991 of \$40.5 million.

Management Commitment

HG's management regard themselves to be strongly committed to exporting and they plan to increase their exports. HG is also involved in direct foreign investment in Malaysia where it has two factories. HG has won several awards for exporting successes.

Profit Perception Likelihood

HG believes that domestic market opportunities for profit are limited but that South East Asia offers them new opportunities for profit. Despite these beliefs HG's domestic market profits are more than their export market.

2. Competencies

Technology

HG considers new product development to be a critical success factor and invests 3% of its annual sales on R&D. HG employs 97 people in its new product development area. HG's competitive strategy is to be innovative and to introduce unique and high quality products. One of the areas which HG sources new product ideas from is international trade fairs.

Market Knowledge

HG conducts market research before it decides to enter a country and both management and technical staff are involved in conducting this research. After researching the market, which can take up to 5 years, HG develops a product to satisfy the market. HG's top management travels abroad extensively in order to keep in touch with their export markets. HG also stays informed about export markets by reading newsletters from the European Community, ASEAN, Malaysia and Singapore, and magazines relevant to the industry.

Planning

HG has flexible marketing plans and each one has to suit a particular region. HG plans to constantly develop new products.

Quality

HG has implemented ISO 9002 standards of quality control. When exporting to the United States, HG needs to pay huge product liability insurance premiums. The following comment by HG's commercial director shows the importance of quality:

At the end of the day I would say that price as a determinant in exporting will decline. Price is becoming less and less

important and quality is becoming very important.

3. Export Strategy

Market Selection

Since HG was manufacturing electrical products it was exporting to regions that used the same voltage in their electrical products as New Zealand. HG exports to about 40 countries including such diverse markets as Hong Kong, Singapore, Malaysia, Thailand, Indonesia, Philippines, Pacific Islands, Spain, Portugal, United Kingdom, France, Germany, Argentina, South Africa and Chile. Australia is HG's largest export market. Between 60%-70% of HG's export sales are made there. HG believes it has vast potential in the South East Asian market and has decided to focus there.

Product Mix

HG's electronics subsidiary produces a wide range of customised products. These products include motor speed controllers, centrifugal pumps and fans, motor soft starters, remote control units, speed indicators, dynamic brakes, signal converters, switch speed control, speed select unit, tacho controller, position synchroniser, crane control, PI controllers and shaft encoders. The commercial director made this comment about their product strategy:

We research the markets first and then we go back and develop products for those markets. That's the key to it. What a lot of exporters try to do is that they develop a product for New Zealand and they think they can go and sell the product internationally.

Pricing

In the domestic market HG regards itself to be a price leader and charges a higher price for its products than its competitors. HG charges a lower price in its export markets than it does in New Zealand. HG's export price strategy is based on cost of manufacturing the product and competitor's pricing. Export price quotation is usually FOB but FIS in Australia.

4. Networks

HG's commercial director believed that in South East Asia relationship building and trust were more important than product quality. HG's management travels abroad extensively to establish contacts with distributors and customers and to participate in trade fairs and trade missions. HG's commercial director emphasised the importance of building relationships:

You have to go out there and do it yourself. You cannot sit in New Zealand or Christchurch and try to export. You have to get onto a plane and start travelling. You have to get out and meet people. It takes years to develop these markets. It boils down to relationships.

Case Study: HH

Export intensity: 25% (n.a.)

Respondent: Managing Director

General Background

HH was formed in the 1950's and has two manufacturing units. One unit produces sheet metal fabrication for a diverse range of products from mail boxes to

electronics goods. The other produces street lighting. This case study will focus on the street lighting business. HH started to export because it wanted to expand. HH is a private company. It is owned by a family trust and three individual shareholders including the managing director. The managing director is 36 years old and holds a degree in electrical engineering and a postgraduate diploma in business administration. He has also attended the Trade Development Board's seminars and workshops on international business. The average age of HH's top management is 35 years.

1. Firm Characteristics

Firm Size

HH has 55 employees. For confidentiality reasons the managing director did not disclose the sales figure.

Management Commitment

Management at HH are committed to increasing their exports. HH is actively seeking new customers and new markets. Because HH is experiencing problems with its Australian distributors it plans to set up its own sales outlet there.

Profit Perception Likelihood

HH's managing director believes that in order to make profits HH will have to export. HH profits from exports are roughly the same as they are in the domestic market.

2. Competencies

Technology

HH regards its technology to be better than its competitors. When questioned about its efforts to keep up with latest technology the managing director responded in this way:

Our commitment is to our customers. We don't want to copy competition so we keep an eye on what we are doing. Because of our size if we copy them we will remain a secondary industry.

HH's mission statement is to provide reliability through technology. HH invests between 1%-2% of total sales on R&D. HH believes that in order to be profitable it has to export.

Market Knowledge

HH's managing director perceives that it should be conducting more marketing research than it is currently doing. To keep in touch with its markets, at least one member from HH's management team visits Australia at least every six weeks; the Pacific Islands twice a year; and the United States and Japan at least once a year. HH's customers from the United States and Japan make frequent visits to Christchurch. HH conducts more market research in Japan than other markets because it perceives Japan to be very different. HH's management also update their market knowledge through newsletters about foreign trade received through the Trade Development Board.

Planning

HH prepares its export plan and strategy after visiting its markets. As far as HH's management is concerned, each market is different and has to have different plans.

Quality

HH's managing director regarded their product quality to be better than their competitors. HH uses ISO 9002 quality assurance system. According to the managing director HH needs to establish a balance between quality and price.

3. Export Strategy

Market Selection

HH considers Australia to be part of its domestic market. Two-thirds of its export sales are there, with the remainder to the Pacific Islands, Japan, and the west coast of the United States.

Product Mix

HH produces customised street lighting for its export markets. Street lighting is exported to Australia and the Pacific Islands, and fabricated metal is exported to the United States, Pacific Islands and Japan. HH plans to introduce new products into its export markets. Product liability issues in the United States deter them from exporting certain products there.

Pricing

In some markets, export pricing is the same, while in others, it is slightly higher than domestic market pricing. HH's managing director gave this account of their pricing strategy:

We look at what competitors are doing and it is easy for us to judge their costs.

*We try to match competitors pricing.
Often the pricing difference between us
and our competitors is just a dollar.*

4. Networks

HH's management make regular visits to their export markets to establish contacts with their distributors and customers.

Case Study: LI

Export Intensity: 6% (\$300,000)

Respondent: Managing Director

General Background

LI was established in 1914 as an importing company. In the 1950's, LI manufactured household appliances such as electric heaters and washing machines. It also produced electric panels for power stations. LI stopped manufacturing household appliances because it was becoming unprofitable and now concentrates on electrical industrial equipment. LI has been exporting intermittently for 40 years but in 1986 the firm was sold. The new owner decided to increase export intensity. During these six years, export intensity has increased from 1% to 6%. The managing director of LI has a postgraduate commerce qualification and is 42 years old. He has had extensive international business experience. LI's managing director was critical of his employees and believed that their attitude and efficiency was the major obstacle for New Zealand companies.

1. Firm Characteristics

Firm Size

LI employs 20 people and sales turnover for 1991 was \$5m.

Management Commitment

LI's management is strongly committed to increasing export sales and because of this commitment, LI's management makes an average of 3 or 4 trips a year. During these overseas visits, they contact suppliers, participate in trade shows and attend seminars. Furthermore, LI's managing director has participated in three trade missions. Two of these trade missions were to ASEAN countries and one to the United States.

Profit Perception Likelihood

LI's managing director perceives profits from exports to be about the same as the domestic market. He had this to say about export profits:

You cannot go into a country and expect to get immediate returns. After 2 or 3 years you start seeing some benefits. In the domestic market our return on investment takes a short time but in the international market it is a longer time period. The product modification requires a big investment. So all these things make exporting a riskier business.

2. Competencies

Technology

LI perceives its technology to be better than its competitors. LI sources technology from around the world by stripping its competitors' product to see how it is made, then improves on it. LI invests 5% of total sales on R&D.

Market Knowledge

LI's management keeps informed about overseas markets during regular visits there. They also subscribe to several trade and engineering magazines. LI has participated in export workshops which were run by the Trade Development Board and the Export Institute. In addition, LI receives foreign trade newsletters from most embassies.

Planning

LI's managing director considers one of its strength's to be its ability to plan ahead and, because of this, nothing happens by accident. LI plans to increase its export intensity to about 20% to 25%.

Quality

In order to export, LI had to improve its quality standards. It now regards its products to be of a high quality and its policy is zero defects. LI perceives its product to be of better quality than its competitors. LI is in the process of getting ISO 9002 accreditation.

3. Export Strategy

Market Selection

LI's export policy is to focus on markets they know well. LI's initial export market was Australia. At present, 70% of exports go to ASEAN countries. LI exports to Australia, Singapore, Malaysia, Thailand, Philippines, Brunei, Indonesia, Hong Kong, Samoa and Fiji. LI considers countries with the greatest potential to be ASEAN countries followed by Australia and then the United Kingdom.

Product Mix

LI manufactures a wide range of customised products and is constantly introducing new models and new products. It manufactures industrial and commercial heaters, electronic motor controls, electrical industrial machinery for the timber processing, pulp and paper, and engineering industry, sauna stoves, and a medical pump.

LI's managing director has this to say about the product mix of New Zealand companies:

Most New Zealand firms have this peculiarity (referring to a company's diverse product range). None of us can afford to carry a narrow range of products. Because of the size of the New Zealand market we have to carry a wide range of products unless it is a single product company set up for a specific purpose.

Pricing

LI has the same pricing strategy in both the domestic market and export markets. When pricing, LI considers the market price. LI's export price quotation is either FOB or CIF.

4. Networks

The managing director of LI belongs to various business organisations in order to build networks and to stay informed about market trends. LI's success in ASEAN countries can be attributed to his numerous personal contacts there, as he is an immigrant from Singapore. LI's management makes regular visits to its export markets to build on these relationships.

Case Study: LJ

Export Intensity: 15% (\$400,000)

Respondent: Managing Director

General Background

LJ is a small private family- owned company, established in 1946 by an airforce engineer. The company initially produced press tools and then diversified into plastic moulds and eventually into speciality machinery. LJ started exporting 20 years ago because there were not enough opportunities in the domestic market. LJ's managing director has a science degree and has between 25 to 30 years of international business experience. Other members of management also have international business experience. The average age of top management, if the managing director (65 years old) is excluded, is 40 years.

1. Firm Characteristics

Firm Size

LJ has 19 employees and a sales turnover of \$1.3 million in 1991.

Management Commitment

LJ has attended trade shows, workshops on exporting and has participated in overseas trade missions. LJ is committed to exporting and its future goal is to increase its exports.

Profit Perception Likelihood

Although LJ perceived profits from exports to be higher than the domestic market, according to the managing director exporting was no easy task:

Exporting has been frustrating, intermittent, interesting and financially we have not made much from exporting but we are still in business.

2. Competencies

Technology

LJ perceives its strengths to be its technical ability and quality of product. LJ keeps up with the latest developments in technology through involvement with the engineering faculty at Canterbury University. LJ's managing director is an industry representative on the faculty board of the engineering school at Canterbury University. LJ spends 5% of total sales on R&D.

Market Knowledge

LJ receives newsletters about foreign trade, trade journals and reports from the Trade Development Board. LJ has received assistance from the New Zealand Trade Commissioner in the United States to explore export opportunities for certain products.

Planning

LJ plans to increase its exports. LJ has a flexible approach to marketing as the following comment by the managing director shows:

We want to lean with the wind. We have no marketing plans as such.

Quality

LJ's managing director regards its product quality to be very good. He was negative about formal quality control standards and made the following comment about them:

We are not on ISO standard. We have not completed it and we have no intention to. It is not financially worth it and it is a ridiculous idea.

3. Export Strategy

Market Selection

LJ chose to export to Australia first because it was physically the closest and shares a common language. Canada is LJ's major export market followed by the United States and then Australia. LJ prefers to export to markets with a close psychic distance. LJ has, however, exported to Poland, France, England, Fiji, Singapore and Malaysia. LJ has experienced problems with import tariffs in Poland and France. LJ believes that its greatest export potential lies in Canada.

Product Mix

LJ focuses on speciality manufacturing equipment for markets that are similar to New Zealand. LJ has 20 patents. LJ manufactures customised products which include speciality machines, harvesting machines and speciality conveyor belts for the food industry. LJ's goals and aspirations are to continue to expand their market

both domestically and overseas in quality technology products that are not mass produced.

Pricing

Pricing is the same in the domestic and export markets. LJ uses cost- plus pricing and quotes prices on a CIF basis.

4. Networks

If the managing director wants to know about the Canadian market, he has a friend there who he writes to. LJ's management travel extensively in order to keep in touch with their customers. LJ's lack of overseas contacts deters it from increasing export sales.

Case Study: NK

Respondent : Managing Director

General Background

NK is a private company established in 1989. NK's managing director joined his major customer to form this business as a partnership. NK's managing director used to work for a large firm producing a similar product but he decided to resign and establish NK. While working in this large firm, he met his business partner who was also an employee. This business partner has also left the organisation and set up another business of his own. NK's former employer is its major competitor but also supplies them with components for manufacturing. NK's managing director is 50 years old and has a Higher National Certificate in electrical engineering from the United Kingdom. He was in the merchant navy for five years and has been working for the electrical contracting industry ever since.

1. Firm Characteristics

Firm Size

NK has two employees and an annual turnover of \$280,000 in 1991.

Management Commitment

Since NK is an early start-up firm and is still getting itself established. Management currently have no plans to export in the near future. The following comment by the managing director shows that he is realistic about their export potential:

*If I get export work I would jump into it
but I don't really see the product we
produce as being exportable.*

NK is using its limited resources to increase domestic market sales. In order to do this, NK has participated in two trade shows held in Christchurch.

Profit Perception Likelihood

NK is small in size and does not believe that it could make profits in export markets. In addition, nothing is unique about its product to give it competitive advantage in export markets.

2. Competencies

Technology

NK does not invest any money in R&D because it is manufacturing a mature product with little opportunity for innovation. NK's level of technology is the same as its competitors.

Market Knowledge

The managing director of NK keeps informed about market trends through trade magazines.

Planning

NK has no formal planning.

Quality Control

NK has no formal quality control procedures but has informal measures, of which the managing director had this to say:

I do checks myself and rely on employees to check the standards.....We take a lot of trouble to ensure that our product is suitable. We make sure it does the job it was supposed to do properly. It might cost a few extra dollars.

3. Market Strategy**Market Selection**

NK relies mainly on one Christchurch customer to whom it sells 75% of its product. NK is trying to diversify its customer base and has recently started distributing its product nationally.

Product Mix

NK manufactures two main products and these are customised control panels and switchboards.

Pricing

NK's pricing strategy is to make the product as competitive as possible by keeping overheads low and labour costs down. On average its prices are lower than its competitors. NK competes mainly on the basis of price.

4. Networks

The managing director believed that personal contacts were crucial for NK to succeed as it relies on electrical contractors to offer it jobs. He mentioned that as a small start-up firm in a competitive industry, it was difficult to establish these contacts. Strong networks already existed and it was difficult for newcomers to break in. NK's managing director believed that one of the most difficult aspects of exporting was to make contact with distributors and customers.

Case Study: NL

Respondent: Manager

General Background

NL is a non-exporter in the electrical industrial machinery industry. NL was established in December, 1991. The manager worked in the engineering section at Southpower for eighteen years. After he was made redundant, he set up NL with his redundancy payment. To get NL started as a business, Southpower granted it a two-year contract. Southpower remains NL's sole customer. At present, NL's production equipment is being underutilised. NL has recently been sold and has become a subsidiary of a plastics and waste oils company. The manager was concerned whether the business would survive as it was still trying to get established in a saturated and highly competitive market. NL's manager is 55 years old and entered the workforce after completing two years at high school.

1. Firm Characteristics

Firm Size

At one point, NL had five employees but decided to reduce this number because the demand for their product has been declining. They now have only two employees. The physical space for factory and warehousing facilities is small compared to other firms in this survey. NL's turnover in 1991 was less than \$400,000.

Management Commitment to Exporting

NL did explore export opportunities in Australia but nothing materialised from this. Although NL believed that there might be export opportunities in the Pacific Islands, it has not committed itself to exporting.

Profit Perception Likelihood

NL's perception is that because their product has no unique attributes it offers limited opportunities for export profits. Other deterrents to exporting are that NL is small in size, and it has other uses for its limited resources.

2. Competencies

Technology

NL manufactures its products according to Southpower's specifications. Although NL's manager said that he did not spend much on R&D, he did spend a large amount of his spare time developing a new product. He has not really worked out the cost of producing this product.

Market Knowledge

NL is an early start-up firm, and the manager believed that it still has a lot to learn about the market. Although he reads magazines to keep in touch with market trends, he feels that this is inadequate.

Planning

NL has no formal marketing planning but plans to promote its products and to diversify its product mix.

Quality of product

NL does not have any formal quality control procedures but believes its product is better than its competitors.

3. Market Strategy**Market Selection**

NL's market is confined to the Christchurch area. NL has tried to expand nationally but this did not materialise because most powerboards in the North Island have their own workshops. There are, however, opportunities for NL to expand its market in the South Island.

Product Mix

NL produces three types of customised powerboards. NL plans to diversify its product mix in order to acquire more customers but has not finalised what this product mix will be.

Pricing

NL has a contract to sell its product to Southpower at a fixed price.

4. Networks

NL has found it very hard to break into the market as the established firms already have their networks. NL's manager has tried to form a network with a foundry but this has not been very successful because the foundry produces very different products. NL has difficulty expanding its customer base because of its limited networks. NL's manager made the following comment about networks:

I have been warned that it is very hard to break in when you are a new person. Established people have their little modules of people. They have been together since they started up. An example is that in Rangiora, there is a motor mechanic, a car upholsterer, an autoelectrician and a panel beater. They all work together. They are all separate businesses. They are a sort of a little corporate.

APPENDIX 7

QUESTIONNAIRES AND LETTERS RELATING TO THE SURVEY

ISSUES TO BE ADDRESSED WHEN CONDUCTING CASE STUDIES WITH EXPORTERS

(A) Ownership and Background of Firm

Type of business/industry

Size/number of employees

Year business was established

How was it established?

What product did it initially produce if changed, why?

What instigated export?

Who initiated the export? company or unsolicited order?

Briefly describe the export decision-making process.

Describe the stages of the internationalisation process.

Which stage are you in now?

What major changes (if any) to the operation/ finances, etc. did this decision to export create?

Number of years exporting

Firm's history of exporting

Proportion of export sales to total sales

Firm ownership (foreign versus domestic)/details

Is the firm a division or subsidiary of another company?

Range of industries the firm competes in.

Do many of your competitors export? About what %?

What other business is the firm involved in?

What is your perception of the industry you are in?

Amount of excess capacity.

Domestic market share before exporting.

Geographical market coverage before exporting.

Is the firm eligible for tax incentives, grants and government support for exporting?

Employee size before exporting/after.

Number of years in exporting.

Which department is responsible for exporting?

Size of section responsible for exporting.

Will this increase/decrease?

What are the critical factors to your firm's success?

Is your firm involved in importing?

If yes, to which countries?

Membership of industry organisations.

Perceived strengths of the organisation.

Perceived weaknesses of the organisation.

(B) Nature of Markets

Volatile or stable competitive environment.

Perceptions of domestic market potential.

Are profits from exports higher than domestic market?

Which was the first export market?

What were the biggest hurdles you had to overcome when you first started exporting?

Areas to which exporting in order of importance.

Which countries/regions do you feel have the greatest export potential and why?

Entry barriers

Approximate proportion of sales in each country.

Are new customers/ new markets actively sought?

Average number of transactions with foreign buyers each month.

Average amount in \$ of these transactions.

How do you keep informed about current trends in your export markets?

(E)Export Strategy

Export market entry strategy

Market selection

Use of marketing concept in exporting.

Marketing versus selling orientation versus product orientation.

Is the same orientation used in the domestic market as the international market?

Level of market segmentation.

Extent of market planning used - what method?

Commonality of brand name worldwide.

Similarity of service standards and procedures worldwide.

Target markets/ niche marketing.

Competitive strategies adopted in export markets.

Nature and usage of marketing research information.

Extent of advertising and promotion overseas compared to domestic market.

Extent to which client's personnel is trained to handle international marketing tasks.

R&D spending as a % of sales.

Export support activities, including: export marketing planning efforts, export exploration procedures, use of external information sources and level of foreign visits.

Relationship between export intensity and export strategy

Demand uncertainty.

Customer sophistication and bargaining power.

Participation in : foreign trade shows, trade missions, workshops on how to export?

Newsletters about foreign trade?

(i) Product

Nature of product exported/location of production facilities for components and end products.

Which product is exported where?

Did you have to modify the product when you first started exporting?

Has product changed to suit export market?

Diversified/expanded product range

Stage in product life cycle

Introduction of new products to the export market

Sequence of product introductions around the world.

Level of technological changes for product production equipment.

How often have you had to change/ modify your product in the past five years?

Number of firm's patents

Perceived technological/ product advantages of firm compared to competitors.

Compared to your major competitors, are your products

less competitive /evenly or more?

Technology

price

quality of product

related services

Extent of quality control.

Is demand for product growing rapidly?

Amount of added value to the product.

Extent of sourcing basic technology from around the world, through licensing.

How many licensing agreements do you have?

(ii) Distribution

Export markets, nearest neighbour versus world/ number of export markets

Is there a co-ordinated strategy to operate in these markets?

Has number of export markets increased/decreased / size of initial exports?

Any new approaches to distribution.

What type of distribution system is being used in the domestic market?

How similar is the export distribution system to the firm's domestic system?

What types of channel intermediaries are actually being used by firms in their export markets?

Types of distribution channels in each country e.g. commission agents, country-controlled buying offices, export merchants, purchasing agents, sales representatives, export distributors, export brokers and trading companies.

Level of satisfaction with the distribution system/ according to type, for example, commission agent, export broker etc.

How did the firm go about identifying potential agents/distributors/ importers etc.?

How did you evaluate these distributors?

Level of marketing support to these distributors.

How familiar are you with local conditions in your export market?

Any complexities involved in distributing the product e.g. technical/legal.

Do you provide after-sales service such as repairs and warranty?

Are there any constraints on the physical distribution of your products in your export markets?

(iii)Pricing

Export pricing relative to the price of the same product sold in the N.Z.. market (lower, equal or higher).

Determination of export price strategy (N.Z. price list, cost - plus basis, or separate costing/competitive strategy.

Export price quotation (free on board/free alongside or cost, insurance and freight/ cost and freight basis)

Are current exchange rates beneficial or disadvantageous to you?

(D)Management perceptions, goals and aspirations towards exporting

Did the firm have any export skills before it started exporting?

How did the firm acquire these skills?

What market research did you do before entering the overseas market?

Managerial perceptions of market conditions, including perceptions of the level of competition in the main markets.

Export barriers and intentions regarding direct foreign investment.

Goals and aspirations, including; expectations for exports, corporate growth goals; and corporate goals regarding security of investment.

Export expectations/ living abroad of management/ foreign languages spoken.

What do you perceive as your firm's competitive advantage?

What are the perceived restrictions, if any, on your export sales?

What efforts do you make to keep up with latest technology advances/ overseas competition etc.?

What would be your advice to businesses looking at exporting for the first time?

What do you perceive to be your major barrier to exporting?

Export related communication problems.

(E) Decision-Maker Characteristics

How many years of international business experience have you personally had?

Top management educational background (technical or commercial).

Top management international business training/experience.

If responsible for export marketing, how long have you worked for this firm?

Title of respondent

Highest level of formal education

Have you attended any courses related to international business?

Average age of top management

ISSUES TO BE ADDRESSED WHEN CONDUCTING CASE STUDIES WITH NON-EXPORTERS

(A) Ownership and Background of Firm

Type of business/industry

Size/number of employees

Year business was established

How was it established?

What product did it initially produce, if changed, why?

Sales turnover for 1991.

The firm's domestic market share compared to the average for manufacturers in the same industry.

How many competitors do you have in New Zealand?

Firm ownership/details

Is the firm a division or subsidiary of another company?

Range of industries the firm competes in.

What other business is the firm involved in?

How many business units do you have?

Briefly describe the industry you are in.

Amount of excess capacity.

What do you perceive as the firm's competitive advantage?

What are the firm's perceived strengths and weaknesses?

Do you import any products?

If yes, from which countries?

(B) Attitudes towards exporting

Have you ever been involved in exporting?

If yes, details

Why have you stopped exporting?

Will you resume exporting?

If you have never exported, have you ever explored the possibility of exporting?

How have you conducted this export exploratory research?

If you have explored the possibility of exporting, why didn't you start exporting?

Do you have the potential to export?

Do you plan to export in the near future?

If firm has never considered the possibility of exporting, why?

Have you ever received an unsolicited export order?

How did you respond to this order?

What factors do you consider to be the most difficult in exporting?

If all these barriers were removed would you export?

What would encourage you to export?

What is top management perception of exporting?

What is your perception of exporting?

Are you interested in exporting in the future?

If you decide to export, which country would you start exporting to, why?

What is your perception of the experience other companies have had at exporting?

What do you consider to be the main barriers, pitfalls and advantages of exporting?

What assistance are you aware of to help businesses to export?

Has your firm participated in: foreign trade shows, trade missions, workshops on how to export?

Do you receive any newsletters about foreign trade?

If you had a purchase enquiry from overseas would you have the administrative skills to handle it?

Will your bank give you financial support if you wanted to export?

Do you have the production capacity, financial capability and manpower to start exporting?

Would you form a strategic alliance to help you in the export process?

Give details

(C) Nature of Markets

Do many of your competitors export?

How many and about what percentage of their total sales are exported?

Volatile or stable competitive environment.

Customer sophistication and bargaining power.

Key competitor traits/include firm's competitive behaviours and rates of technological innovation.

Extent of competition from imports.

How do you keep informed about current trends?

(D) Marketing Strategy

Any new approaches to marketing

Marketing versus selling orientation versus product orientation

Extent of market planning used - what method?

To what extent is market strategy focused?

Target markets/ niche marketing

Perceived advantages of the firm, including: product advantage, price advantage, distribution advantage, advertising/promotion advantage.

Perceived weaknesses of the firm.

On average what proportion of your budget do you spend on promotion.

Do you provide after sales service such as repairs and warranty?

(i) Product

What advantage (if any) do you see your product having compared to local/overseas competition?

Stage of your product in the product life cycle.

How often have you had to change/modify your product in the past five years?

Number of firm's patents

Perceived technological /product advantages of firm compared to competitors.

Compared to your major competitors are your products

Less competitive/evenly or more ?

technology

price

quality of product

related services

Is demand for product growing rapidly?

Amount invested in R&D

Do you market your product nationally or only in a few areas?

Are there more opportunities for you to expand your domestic market?

Your perception of the domestic market.

Demand for your product overseas.

Can the product be exported as it is or does it have to be modified?

Do you experience much competition from imported products?

More information about production system.

Quality control

Extent of sourcing basic technology from around the world.

How many licensing agreements do you have?

(ii) Distribution

Distribution strategy

Any new approaches to distribution

Distribution system used

Level of satisfaction with the distribution system/ according to type, for example, commission agent, export broker, etc.

Level of marketing support to these distributors.

Constraints on physical distribution of the product.

Any specific needs for distributing the product.

(iii) Pricing

Pricing strategy used

Price compared to competitors in New Zealand.

Decision Maker Characteristics

Top management international business training.

Title of respondent

Highest level of formal education

Average age of top management

Education background (technical or commercial)

Highest level of formal education.

Work experience of top management.

Goals and aspirations of the firm.



Department of Management

University of Canterbury

Private Bag 4800
Christchurch New Zealand
Telephone: 03-364 2606
Fax: 03-364 2020

6 December 1991

Dear

I am currently conducting a study of manufacturing firms in New Zealand. This study examines factors affecting the export performance of enterprises in New Zealand. A case study approach is used to identify how marketing strategies vary between enterprises in the same industry which exhibit "above average" export performance; and those which do not export at all. By including non-exporters two issues will be addressed; why do non-exporters remain non-exporters and what factors initiate non-exporters to export? Thus, implications for business and government policies aimed at improving export performance are derived.

I have selected certain industries for my study and your firm has appeared in my sample.

In order for me to pursue my research further I need to obtain additional information from your firm. I would be grateful if you could provide this information on the questionnaire on the reverse side of this letter and return it to me in the enclosed envelope. I would like to emphasise that this information would be kept confidential.

I thank you in advance for this information and if you have any queries regarding this research please do not hesitate to contact me.

Yours sincerely

A handwritten signature in cursive script, appearing to read 'S Kamalkhani'.

Sylvie Kamalkhani
Lecturer, Department of Management

Enclosure

**Department of Management**

University of Canterbury Private Bag 4800
Christchurch New Zealand
Telephone: 03-364 2606
Fax: 03-364 2020

16 December 1991

Dear

On 6 December 1991 a questionnaire was sent to you from the Department of Management, University of Canterbury, requesting information about whether your company exported or not. This is an important piece of research on New Zealand manufacturers and the information you supply will provide valuable data for this research. I am aware that this is probably a busy time of year for you, and apologise for the inconvenience caused.

I would be very grateful if you could fill in the questionnaire even if you do not export, and return it to me at your earliest convenience.

If you have any queries about this research please do not hesitate to contact me. I look forward to hearing from you in due course.

Yours faithfully,

A handwritten signature in cursive script, appearing to read 'S. Kamalkhani'.

S. Kamalkhani
Lecturer



NEW ZEALAND TIMBER INDUSTRY FEDERATION INCORPORATED

219 THORNDON QUAY
WELLINGTON 1
NEW ZEALAND
POST OFFICE BOX 308
WELLINGTON
TELEPHONE 0-4-473 5200
FAX 0-4-473 6536

3 February 1992

Ms Sylvie Kamalkhani,
Lecturer,
Department of Management,
University of Canterbury,
Private Bag,
CHRISTCHURCH.

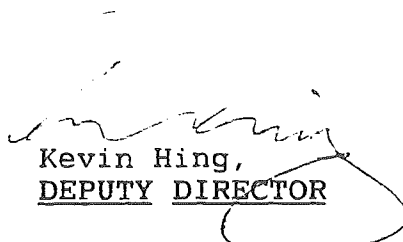
Dear Ms Kamalkhani,

Thank you for your letter of 30 January regarding your study of exporters.

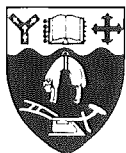
I regret we cannot help you as we have not conducted any studies into individual companies' export strategies. As a comment one of the major factors, if not the major factor, driving sawmillers to export is the smallness of the domestic market and its limited prospects for growth. The amount of resource (trees) available for processing and the installed capacity of the sawmilling industry makes exporting a necessity for most sawmills. Forestry as a whole, since plantation forestry began, has been an export oriented industry in the same vein as our wool, meat, dairy and other agricultural industries.

I trust this comment is helpful.

Yours sincerely,


Kevin Hing,
DEPUTY DIRECTOR



**Department of Management**

University of Canterbury Private Bag 4800
Christchurch New Zealand
Telephone: 03-364 2606
Fax: 03-364 2020

6 May 1992

Stuart McGeorge
Trade Development Board
P.O. Box 1001
Christchurch

Dear Stuart,

As discussed over the phone, I am currently conducting a study of manufacturing firms in New Zealand. This study examines factors affecting the export performance of enterprises in New Zealand. A case study approach is used to identify how marketing strategies vary between enterprises in the same industry which exhibit "above average" export performance, and those which do not export at all. By including non exporters two issues will be addressed; why do non-exporters remain non-exporters and what factors initiate non-exporters to export? Thus, implications for business and government policies aimed at improving export performance are derived.

The two industries that have been selected are the timber processing industry and electrical industrial equipment. Within each industry six firms will be selected from three categories:

1. Those with above-average export performance
2. Those with below-average export performance
3. Those with no exports at all

Yours sincerely,

A handwritten signature in cursive script, appearing to read 'S. Chetty'.

Sylvie Chetty
Lecturer: Department of Management



Department of Management

University of Canterbury Private Bag 4800
Christchurch New Zealand
Telephone: 03-364 2606
Fax: 03-364 2020

31 July 1992
The Director
Canterbury Manufacturer's Association
Mr. I D Howell
P.O. Box 13152 Armagh
Christchurch

Dear Mr. Howell,

I am currently conducting a study of manufacturing firms in New Zealand. This study examines factors affecting the export performance of enterprises in New Zealand. A case study approach is used to identify how marketing strategies vary between enterprises in the same industry which exhibit "above-average" export performance; "below average performance and those which do not export at all. By including non-exporters two issues will be addressed; why do non-exporters remain non-exporters and what factors initiate non-exporters to export? Thus, implications for business and government policies aimed at improving export performance are derived.

I have chosen two industries for the study. These are: timber processing industry and electrical industrial machinery and apparatus. I have difficulty locating non-exporters in the electrical industrial machinery and apparatus industry. I would be grateful if you could suggest some non-exporters in this industry who I would interview for about an hour. As participants in the interview they will be provided with copies of the finished report.


I have the New Zealand Standard Industrial Classification from the Department of Statistics for the electrical industrial machinery and apparatus industry which is described as follows:

Manufacture, renovation and repair of electric motors, generators and complete turbine-generator and engine generator sets; electrical transmission and distribution equipment, electrical industrial control devices such as motor starters and controllers, electronic timing and positioning devices.

*Armature manufacture, winding, repairing
Automotive electric equipment
Electric motors
Electric welding apparatus
Electromagnetic clutches and brakes
Industrial rectifiers
Switch-gear and switchboard and apparatus
transformers*

I would gratefully appreciate your assistance in this matter and look forward to hearing from you in due course.

Yours sincerely


Sylvie Chetty
Lecturer



Department of Management

University of Canterbury Private Bag 4800
Christchurch New Zealand
Telephone: 03-364 2606
Fax: 03-364 2020

31 July 1992
Chris O'Reilly
Canterbury Development Corporation
P.O.Box 2962
Christchurch

Dear Mr. O'Reilly,

I am currently conducting a study of manufacturing firms in New Zealand. This study examines factors affecting the export performance of enterprises in New Zealand. A case study approach is used to identify how marketing strategies vary between enterprises in the same industry which exhibit "above-average" export performance; "below average performance and those which do not export at all. By including non-exporters two issues will be addressed; why do non-exporters remain non-exporters and what factors initiate non-exporters to export? Thus, implications for business and government policies aimed at improving export performance are derived.

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Automotive electric equipment
Electric motors
Electric welding apparatus
Electromagnetic clutches and brakes
Industrial rectifiers
Switch-gear and switchboard and apparatus
transformers*

I would gratefully appreciate your assistance in this matter and look forward to hearing from you in due course.

Yours sincerely


Sylvie Chetty
Lecturer

**Department of Management****University of Canterbury**

Private Bag 4800
Christchurch New Zealand
Telephone: 03-364 2606
Fax: 03-364 2020

24 November 1992

Dear

Thank you for participating in the interview conducted a few months ago on manufacturing firms in New Zealand. I appreciate the time you gave for these interviews. As you may recall I tape-recorded the interview. I have already transcribed the data collected during the interview.

I am sending you a copy of the transcript and would be grateful if you could read through this and comment whether it is an accurate account of your company. Please inform me of any corrections or additions which need to be made.

Once again thank you for your co-operation in these interviews.

Yours sincerely,


Sylvie Chetty