Victoria University of Wellington

Faculty of Commerce and Administration

**MARKETING ORIENTATION AND EXPORT
PERFORMANCE
IN THE NEW ZEALAND MANUFACTURING INDUSTRY**

by

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ABSTRACT

Much has been said and written about the marketing concept. In brief, the marketing concept stresses customer satisfaction as a means of attaining high performance. Past studies have shown that there has been a considerable interest in the marketing concept both in academic circles and in the business world.

In spite of its popularity, little effort has been devoted to examining the validity of the marketing concept, i.e., to testing the proposition that the adoption and implementation of the marketing concept will lead to high performance, be it in domestic or export operations. Previous studies of the marketing concept were mainly focused on whether or not firms have adopted and implemented it. A handful of studies has examined the more fundamental question of the link between the marketing concept and corporate performance. However, for different reasons, the findings of these studies are limited.

Given this background, the objective of this study was twofold: to develop and empirically test a model of marketing orientation and export performance that can be applied in many settings, and then to identify which aspects of marketing orientation correlate with export performance.

The New Zealand manufacturing industry was selected as the empirical setting. A single industry was chosen so as to have a control over industrial differences. Specifically, the manufacturing industry was chosen because of its increased importance to the New Zealand economy as evidenced by the industry's contribution in areas such as export earnings, Gross Domestic Product (GDP) and employment.

A model of marketing orientation and export performance was developed. It contained three major components: the measures of marketing orientation, of export performance, and the control variables. It was hypothesized that marketing orientation would be positively related to export performance.

The data were collected through a mail survey of 356 manufacturing firms throughout New Zealand. The survey produced a net response rate of 47.6 percent. Scales were developed to measure each of the three components of the model. Cronbach alpha and factor analysis were used to test the internal consistency of the measures. The measures were also subjected to convergent, discriminant, nomological and predictive validity tests. The results showed that the measures employed in this research are both reliable and valid. Furthermore, a test for normality was administered on the dependent variable (export performance) and the results showed that the dependent variable is normally distributed. It is therefore suitable for parametric statistical analyses.

Multiple regression techniques were employed to analyse the data. The analysis was done at two main levels. At the first level the relationship between marketing orientation and export performance was explored *without* controlling the exogenous variables. At the second level, the same process was repeated but the exogenous variables were controlled.

At both levels of analysis the results gave support to the hypothesis that there is a positive relationship between marketing orientation and export performance.

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*High above all is Allah, The King, the Truth! . . . say,
'O my Lord! advance me in knowledge'. (Quran, 20:114)*

Ramadhani K Dau

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CHAPTER 1

INTRODUCTION

1.0.0 Background Information

In the late 1980s the New Zealand Labour government decided to terminate all tax incentive programmes by 1990. The government's decision was prompted by the high maintenance cost of the programmes and by international commitments which New Zealand had made toward Closer Economic Relations (CER) with Australia and to the General Agreement for Tariffs and Trade (GATT). The government claimed to recognize the importance of the export sector in economic development, so the new export policy was aimed at creating a conducive atmosphere in which market forces could operate with minimum distortions. This policy was continued by the National government after the 1990 elections.

The message and its implications are loud and only too clear. Minimum government intervention and the phasing out of tax incentives pose a big challenge to New Zealand exporters. Given the nature of the problem and the changing conditions in the export sector, traditional marketing tactics of increased advertising budgets and increased participation in international trade fairs may in themselves be increasingly inadequate. The problem is fundamental and requires more strategic rather than tactical solutions. For this and other reasons the government has challenged the exporters to be more marketing oriented so that they can not only survive the turbulences of the international marketplace, but also register a high export performance. Against this background the thesis examines the validity of the proposition that *more marketing orientation* leads to *higher export performance*.

1.1.0 Previous Research

1.1.1 *Studies of the Marketing Concept*

Much has been said and written on the marketing concept.¹ Since its introduction after World War II, countless articles have appeared in business journals and numerous conferences and other fora have been organized world-wide (particularly in the USA and Europe) to discuss different dimensions of the concept. At its heart, the marketing concept posits that long-run survival and growth of the firm is contingent upon how well the firm is satisfying the needs of consumers. To achieve this objective, the concept calls for proper structures and procedures which will facilitate integration and constant interaction between marketing and other functions in the organization.

Past studies of the marketing concept can be chiefly divided into two groups: normative and empirical studies. The former group focused on what marketing oriented firms should look like. This group constituted the majority of the studies reported on in the literature.² The latter group of studies *mainly* focused on the degree of marketing orientation of individual firms. These studies examined, among other things, the differences in the adoption and implementation of the marketing concept along with several factors such as: size of the firm, nature of operations (i.e., consumer *vis-a-vis* industrial, exporters *vis-a-vis* non-exporters, profit *vis-a-vis* non-profit making organizations) and ownership of the firm.

1 Sometimes referred to as marketing philosophy or marketing orientation.

2 See Ames (1970); Wills (1971); Kotler (1977); Michaels (1982); van Dorev and Smith (1985); Gordon (1986); Baker et al. (1986); Webster Jr (1988); Payne (1988); Berry (1988); Hayes (1988); Canning Jr (1988); Shapiro (1988).

Overall, researchers have found that the marketing concept has gained increasing acceptance in business circles.³

1.1.2 Studies of Export Performance

Past studies of export performance are divided into three major groups. The first group of studies focused on export behaviour, i.e., the internationalization of the firm.⁴ The second group examined different government export support programmes and in some cases related them to export performance of the firm.⁵ The last group consisted of studies which examined factors that are associated with high export performance.⁶ A somewhat related but distinct group of research examined how different elements of the marketing concept (taken separately) correlate with export activity.⁷

1.2.0 Research Gap and the Resulting Research Problem

A review of the literature provides sufficient evidence that researchers and business executives alike have shown considerable interest in both the adoption and implementation of the marketing concept, and in the export activities of a

3 See Hise (1965); McNamara (1970, 1972); Barksdale and Darden (1971). A somewhat limited study by Konopa and Calabro (1971) found that two-thirds of the firms surveyed had not adopted the marketing concept.

4 See Johanson and Vahlne 1977; Wiedersheim-Paul et al. (1978); Piercy (1981); Reid (1981); Cavusgil (1980, 1984b).

5 See Mayer and Flynn (1973); Welch and Weidersheim-Paul (1979); Rabino (1980); Czinkota and Ricks (1981); Rolf Seringhaus (1986); Kedia and Chhokar (1986).

6 See Chapter 2, especially section 2.4.0 and table 2.1.

7 Jackson (1981); Tookey (1964); Cavusgil (1984b); Kleinschmidt (1982); Czinkota and Johnston (1983); Sarathy (1986).

firm. What the business literature lacks are empirical studies addressing the more fundamental question of the *relationship* between the marketing concept and performance, be it in domestic or foreign operations. This study aims to fill this gap.

The logic of the marketing concept appears so eminently sensible that it has been accepted almost without question. Indeed, what would be more sensible and prudent than to satisfy consumer needs at a profit? For this reason relatively little has been written to test the *validity* of the concept. This researcher is aware of only a handful of *empirical* studies that examined the interaction between the marketing concept and company *performance*.⁸ As it will be shown in the following chapter, these studies are either dated or suffer from methodological problems, or both.

As far back as 1965, King brought this research gap to the surface in an article which extensively reviewed the marketing concept. When suggesting areas for future research, King (p. 97) noted that:

... no substantive studies have been conducted to determine (1) whether individual firms have undertaken programs of marketing concept implementation (2) the degree to which they have succeeded in doing so, where attempted, and (3) whether implementation, where it has occurred, has enabled the firm *better to achieve specific goals*. Further research, concerned with development of a scale or measure of implementation, should prove most helpful in seeking answers to these questions (emphasis mine).

This remark was echoed by Stening (1974 p. 32) when he wrote: "To date, no empirical studies have examined the relationship between the degree of adoption and implementation of the marketing concept, and export performance."

8 See Stening (1974); Lusch and Luczniak (1987); Ahie (1987); Thomas (1988); Wrenn (1989); Lynch et al. (1989); Narver and Slater (1990). An extensive review of these studies is presented in the next chapter.

Fairly recently, in a study of marketing orientation of New Zealand firms, Ahie (1987) expressed concern about the continued existence of this research gap. He writes:

... there is little empirical evidence as to how effective the [marketing] concept is in reaching its goals, that is, to assist in the successful operation of a company. Most, if not all of the literature on the subject has justified the concept on the assumption that it must logically be true, that is, on a tautological basis (p. 7).

In another recent local study of marketing orientation of New Zealand firms, Thomas (1988 p. 2) held quite similar views when he noted:

An increasing number of businesses have adopted a marketing orientation since the 1960s. Considering this there is a surprising lack of empirical evidence of the validity of the marketing concept.

Thomas further observed:

Kotler (1977) asserts that effective marketing oriented companies will enjoy stable long term growth. There is however, little empirical research as to whether this is in fact the case. Most previous research on the marketing concept has been on the adoption and implementation of the concept and *not on its relationship with success* (p. 4; emphasis mine).

In a recent doctoral dissertation, Wrenn (1989 p. 1) added weight to this concern:

Yet, despite the fact that the concept has been almost canonized in the literature, very little has been done in terms of developing a means of measuring the construct, an important step if marketing is to become more scientific in nature.

The author continued:

Given the centrality of the marketing concept to the teaching and practice of marketing management, and to the development of marketing theories of the firm, *studies which investigate the widely accepted relationship between marketing orientation (i.e., adopting the marketing concept) and organizational performance are notable by their absence* (emphasis mine; p. 8).

"What studies that have been done," observed Wrenn, "tend to either be descriptive studies indicating the degree to which companies have become marketing oriented (i.e., implemented the marketing concept) . . . " (p. 22).

Wrenn also noted:

Thus, despite the fact that many practitioners and theorists accept as revealed truth the positive relationship between marketing orientation and organizational performance, this belief does not seem to be founded on empirical investigation which establishes a means of measuring an organization's marketing orientation, and then testing the hypothesis that greater orientation is related to greater performance (p. 9).

In a recent article in the *Journal of Marketing*, Narver and Slater (1990) also expressed their concern on the continued existence of this research gap. After noting the attention given to the marketing concept, the authors observed:

. . . yet, to date, no one has developed a valid measure of it or assessed its influence on business performance. As a result, business practitioners seeking to implement a market orientation have had no specific guidance as to what precisely a market orientation is and what its actual effect on business performance may be (p. 20).

1.2.1 Exceptions

There are however, at least seven⁹ known studies that have attempted to link marketing orientation and corporate performance. However, as will be shown in the next chapter, some of these studies either used inadequate measures of marketing orientation (Stening op. cit.; Ahie op. cit.; Thomas op. cit.; and Lynch et al.; op. cit.) or were too specific (Wrenn op. cit.) or too narrow (Narver and Slater op. cit.); so much so that generalizations cannot be made from them.

9 See footnote 8.

In the last five years many changes have taken place in the New Zealand business environment. The decision by the Labour government to move toward a more market-driven economy has left New Zealand companies facing stiff competition on two fronts. At home, tariff reductions have led to an influx of cheap imports from low cost producing countries such as Taiwan and South Korea. In foreign markets, the decision to phase out tax incentives has left New Zealand exporting companies without the support needed to combat competition from both low cost producing exporters to this country and from those who continue to receive financial support from their respective governments. This state of affairs requires New Zealand exporters to have a proper understanding of the link between export performance and some marketing variables so as to be able to implement marketing programmes that will lead to success. In the light of this background a study such as the current one is not only important but long overdue.

1.3.0 Research Objectives

Specifically, this study aims

- i) to examine the nature of the relationship, if any, which exists between the adoption of the marketing concept and export performance in the New Zealand manufacturing industry¹⁰; and
- ii) to identify which aspect of marketing orientation correlates with export performance.

10 The definitions and the measurement of the marketing concept and the export performance are explained in Chapter 3.

1.4.0 Central Hypothesis

In order to achieve the above objectives this study tests the central hypothesis that

there exists a positive relationship between the adoption and implementation of the marketing concept and the export performance of New Zealand manufacturing industry.

There are two justifications for the hypothesized relationship. The first is that the marketing concept theory suggests that there is a positive relationship between marketing orientation and corporate performance. The second is that, notwithstanding their methodological limitations, most of the handful of past studies that attempted to examine the link between the two constructs did find indications of a positive relationship.

1.5.0 Organization of the Study

This study is reported in eight chapters. An extensive review of pertinent literature on export performance and the marketing concept is made and reported on in Chapter 2. The next chapter develops a theoretical framework and operational definitions of key concepts used in this study. Specifically, the chapter constructs the research model and discusses its components in detail.

Chapter 4 reports on the research design and methodology including the location of the sample and the data collection method and techniques employed to ensure a high response rate. It includes the types of statistical techniques used and the justification for their selection.

The development of reliable scales for measuring the degree of marketing orientation and export performance of the firm is one of the central issues in the current study. Chapter 5 explores these issues. It includes the building of measurement scales and testing for reliability and validity. The findings of the study are presented at two levels in Chapter 6. The first level is an analysis of the overall relationship between export performance and marketing orientation. The second level is a more detailed analysis of which aspect of marketing orientation is related to export performance.

Chapter 7 covers other findings of this study. Although in themselves they are not crucial to testing the hypothesis, these findings help to sharpen understanding of the underlying relationships between marketing orientation and export performance. Also presented in Chapter 7 is a check-list of the factors that are most important to successful exporting.

Finally, in Chapter 8, the conclusions and implications of the findings for policy makers, managers and researchers are presented, followed by suggested areas for future research. This chapter also includes a summary of important aspects of this study, including the objectives, the tested hypothesis and a summary of the major findings.

CHAPTER 2

LITERATURE REVIEW

2.0.0 Introduction

It was noted in Chapter 1 that there is a paucity of literature on studies examining the relationship between marketing orientation and export performance. This study aims to fill the gap. To achieve this, an extensive review of pertinent literature is made and presented in this chapter.

The chapter is divided into three main sections, starting with a review of different definitions of the marketing concept and then tracing the concept's evolution. Next is a review of empirical studies that have examined the relationship between the marketing concept and performance whether in export operations or otherwise. At the end of this section, different criticisms directed at the marketing concept as a business philosophy are presented, along with the rejoinders. There were two objectives to reviewing this type of literature. The first was to identify the existing gaps in the literature in order that this study may address them. The second objective was to build a sound theoretical framework and research model that would explain the interactions and relationships that might exist between export performance and marketing orientation.

Finally, in the third section, a review is made of empirical studies that have examined factors that affect the export performance of a firm. Unlike the first two sections, the

aim here is to identify exogenous variables that could distort any relationship that might exist between marketing orientation and export performance.

2.1.0 Varying Definitions of the Marketing Concept

Marketing literature has documented several (different or slightly different) definitions of the marketing concept. One such definition is

... a managerial philosophy concerned with the mobilization, utilization and control of total corporate effort for the purpose of helping consumers solve selected problems in ways compatible with planned enhancement of the profit position of the firm.¹

Central to this definition is the notion that firms should strive for growth and stability through matching the organizational resources with the needs of the consumers.

Wills (1971) defined the marketing concept as a philosophy which

... emphasizes the vital importance to effective corporate planning and control of monitoring both the environment in which an offering is made and the needs of customers, in order that the marketing process may operate as effectively as is humanly possible in a society (p. 5).

Earlier, he defined the marketing process as

... that process in a society by which the demand for economic goods and services is anticipated, or enlarged, and satisfied, through the conception, promotion, exchange and physical distribution of such goods and services (p. 1).

1 R. L. King, The Marketing Concept, In *Science in Marketing*, G. Schwartz, ed., John Wiley & Sons, Inc., 1965, p. 85.

Of all the definitions of the marketing concept which the current researcher is aware of, perhaps Wills's definition is the most unconventional. The author deliberately refrained from stating that customer satisfaction is, or should be, the primary objective of the firm. His main explanation for this deviation from the 'norm' is that business organizations are complex and have multiple objectives which are somewhat in conflict.

I challenge any businessmen [wrote the author], to show me how he can run his business simply for the customer. Business is more complex than that. There are other interests in the enterprise - the labour force and the management, the provider of finance, the distributors and so forth. There must be a corporate reconciliation of objectives and needs within the total social framework ... (p. 4).

In his book *Marketing Management: Analysis, Planning and Control*, Kotler (1980) defined the marketing concept as

... a management orientation that holds the key to achieving organizational goals (and) consists of the organization determining the needs and wants of target markets and *adapting* itself to delivering satisfactions more effectively and efficiently than its competitors.²

Whilst this definition is in many ways similar to those given by other scholars, Kotler emphasized that organizations should adapt to the needs and wants of consumers. Four years later he changed his position. Quoted in *Marketing News*,³ Kotler tried to broaden the definition of the marketing concept to include a focus not only on the customer but also other key publics as well. He argued that this could be achieved through the use of the extra two P's, i.e., political power and public opinion formation. Although Kotler's point seems to be eminently sensible, one still wonders how, for example, a small company can possibly have an influence on public opinion, and

2 Quoted from *Marketing News*, September 14, 1984, p. 1.

3 *Marketing News*, September 14, 1984, p. 1 (3).

furthermore, how it can have a leverage over its country's government to the extent of influencing changes in the trade policies with foreign countries. Another concern with Kotler's position is that it could imply that marketing orientation is not for small companies.

In his famous article entitled *Marketing Myopia*,⁴ Levitt cites several examples of industries which, due to a failure to define their businesses in generic terms, could not seize several business opportunities which were created by latent consumer needs. As a protagonist of the marketing concept, Levitt defines it in terms of a strong customer orientation. He argues that:

The view that an industry is a customer-satisfying process, not a goods-producing process, is vital for all businessmen to understand. An industry begins with the customer and his needs, not with a patent, a raw material, or a selling skill. Given the customer's needs, the industry develops backwards, first concerning itself with the physical *delivery* of customer satisfactions. Then it moves back further to *creating* the things by which these satisfactions are in part achieved . . . Finally, the industry moves back still further to *finding* the raw materials necessary for making its products (p. 164).

Levitt continued:

. . . the organization must learn to think of itself not as producing goods and services but as *buying customers*, as doing the things that will make people *want* to do business with it. And the chief executive himself has the inescapable responsibility for creating this environment, this view point, this attitude, this aspiration.

At this juncture it is worth noting that the definitions presented here and elsewhere in marketing literature have three elements in common. These are: customer satisfaction, integration, and corporate profit objective. These elements have almost been agreed unanimously by researchers as constituting the heart of the marketing

4 Reprinted in *The Marketing Imagination*, T. Levitt, The Free Press - a division of Macmillan Inc., NY: 2nd ed., 1986.

concept. Interestingly however, none of the cited scholars (and others) have given any practical suggestions as to how for example, a concern for interdepartmental relationships within the firm could be promoted, nor have they fully explained how consumer satisfaction should be measured. Should it be measured in terms of the rate or the number of re-orders? or the rate of complaints? or the number of disputes? or some other criteria?

2.1.1 Evolution of the Marketing Concept

Until the mid 1950s, many managers mistook marketing and selling for synonyms. In this traditional view of marketing, sales volume was seen as the all-important criterion for measuring performance. Every order was considered as a good order and every customer was a good customer despite the conflicting demands on the firm's limited capabilities. Management was short-term oriented and more concerned with today's products, markets and customers than with thinking about product and market expansion strategies on a long-term basis. In a nutshell, marketing activities focused on achieving short-term sales objectives by selling more of the current products rather than by focusing on the continuous development of new products.

At the end of World War II, the economies of the developed world declined sharply, leading to a general shift from a sellers' market to a buyers' market. Greater consumer mobility, rising consumer discretionary income, rising consumer sophistication due to rising levels of education, increasing leisure time, the long gestation period required to develop new products, the high failure rate of new products, increased automation of production operations and general changes in

economic conditions (King 1965) were some of the reasons which called for a new approach to marketing.

Production and hard sell orientations proved to be ineffective as they could not cope with changes in the business climate. A short-term, tactical view point had to be replaced by a long-term, strategic orientation - an orientation whose success depended heavily, not on current sales volume, but on long-term profitability through customer satisfaction. Under the new orientation, the management is preoccupied with developing plans for product, customer and marketing mixes in order to achieve profitable volume and market share within the degree of acceptable risks (Kotler 1977). A long-run analysis of trends, threats and opportunities is done, to enable the firm to offer superior value in most profitable segments of the markets. Marketing assumed a double role, namely representing the customers to the factory as well as the factory to the customers (Webster Jr 1988). Its main task changed from producing the products efficiently to selling them profitably.

2.2.0 Empirical Studies Linking Marketing Concept and Performance

In a local study on the link between marketing orientation and performance, Stening (1974) made a comparative study of New Zealand, Australia and Canada that sought to investigate the degree to which New Zealand manufacturing firms, relative to similar Australian and Canadian firms, have adopted a marketing-oriented philosophy. He also examined the relationship between marketing orientation and export performance, although this aspect was not given much prominence.

Specifically, his study focused on:

- : ascertaining the degree to which some firms were more marketing oriented than others
- : establishing why some firms were able to achieve higher export intensity than others
- : comparing the relative adoption of the marketing concept in the three countries and how it related to export performance.

The degree of adoption and implementation of the marketing concept was measured by the responses to five questions. The first four questions were taken from an American doctoral thesis.⁵ They sought information on the emphasis given to the marketing department, the title of the chief marketing executive, the functions which are directly under the responsibility of the top marketing executive, and the place in the organization hierarchy to which the chief marketing executive reports.

The fifth question consisted of five semantic differential scale questions which were set on a 7-point Likert scale ranging from 'extremely agree' to 'extremely disagree'. These questions were original and sought to establish the degree to which the marketing managers answering the questionnaire were marketing oriented. The author cautioned that

Question 5 asked for the marketing manager's *own* evaluation of the statements, *not* the firm's philosophy (p. 49).

5 McNamara (1970).

Stening conceded that the approach used did not directly measure the company philosophy but he argued that the manager's own views on marketing significantly affect the firm's marketing operations - hence the justification for using manager's perceptions as a proxy for company philosophy.

The statements (p. 218) which the marketing managers were asked to respond to were:

- (i) The success of most industries is assured primarily by an expanding and more wealthy population.
- (ii) Because mass production reduces unit costs it almost inevitably results in increased profits.
- (iii) Pricing essentially involves setting a margin on cost price that will yield a reasonable profit.
- (iv) One of the executives main tasks is to increase sales volume.
- (v) A superior product will always sell itself.

Based on responses to the questionnaire, a Marketing Concept Score (MCS) for each firm was computed. The score was used to discriminate high marketing orientation firms from low ones.

Stening argued that:

: many manufacturing firms in New Zealand had adopted and implemented the marketing concept, though to a relatively low degree compared to similar Australian and Canadian firms

- : in all three countries exporting firms were found to be more marketing oriented than non-exporting firms
- : in all three countries consumer goods firms scored a higher Marketing Concept Score than firms producing industrial goods
- : the results on relationship between size of the firm and marketing orientation were not conclusive. While in Canada larger firms had higher Marketing Concept Score (MCS) than small firms, in Australia medium-sized firms scored higher than either large or small firms. In New Zealand, no significant differences were found between the MSC and size of the firm.

Whilst Stening's attempt to examine the interaction between the marketing concept and export performance is commendable, the study suffers from some methodological limitations and measurement problems. For example, the term 'emphasis of marketing department' was not clearly defined. Does emphasis means the number of full-time employees working in the marketing department *vis-a-vis* other departments? or the budget allocation of the marketing department? or some other criterion? And even if the term were reasonably defined, one might still question the rationale of giving the marketing department more emphasis than other departments. More so, since at its heart the marketing concept calls for adoption of a customer orientation philosophy *throughout* the organization.

On the issue of the scale, the Marketing Concept Score (MCS) as defined by the author was developed in a somewhat arbitrary way. The weighting of the variables was done arbitrarily and no tests were conducted to see if the scale was both reliable and valid. Furthermore, by the author's own admission, one of the items in the scale (question 5) did not seek to measure a company's philosophy directly. The defence put forward by the author - that a manager's own views on marketing significantly

affect the firm's marketing operations - is in my view untenable. There is no reason to believe that the respondents' personal views are necessarily a reflection of the firm's philosophy, especially in situations where the respondent is relatively new to the firm in question.

Item four of Stening's semantic differential scale poses a major problem for the Marketing Concept Score. To recast the question, participating firms were asked to respond to the statement: 'one of the executive's main tasks is to increase sales volume'. According to the structure and the intent of the scale, firms that agreed to this statement were considered as low marketing oriented-firms. However, although increasing sales volume is indeed *one* of the tasks of business executives, it is not *the* only one. Nor is it inconsistent with a high marketing orientation.

In an American study, Lusch and Lucznik (1987) sought to analyze the marketing concept and stakeholder concept as theoretical constructs and to examine the perceived organizational consequences of their adoption. The study was based on a survey of 103 vice presidents of marketing and planning of *Fortune 500*.

Five concepts were central to this study: (i) the marketing concept, (ii) the stakeholder concept, (iii) the extended marketing concept, (iv) competitive intensity, and (v) organizational performance. All five concepts were based on management *perceptions of the future* up to 1995.

Of interest to the current study are the first three concepts: (1) the marketing concept (measured by consumer orientation, profit orientation, and integration throughout the organization), (2) the stakeholder concept (measured by concern for employees, good

relations with agents and distributors, and good relations with suppliers), and (3) the extended marketing concept, i.e., a combination of the first two concepts.

To achieve their objective, the authors tested the following three hypotheses:

- (i) The marketing concept and stakeholder concept are representative of a single underlying philosophical business orientation to the external environment (p. 3).
- (ii) Increased competitive intensity is associated with more emphasis on the marketing concept and stakeholder concept philosophies of business (in other words the extended marketing concept).
- (iii) Increased emphasis on the marketing concept and stakeholder concept philosophies of business (the extended marketing concept) is associated with improved organizational performance (p. 4).

In addition to the above hypotheses, the authors developed four models as an elaboration of the *first* hypothesis:

(i) *the null factor model*

this model holds that the three indicators of the marketing concept and the three indicators of the stakeholder concept are all independent of one another

(ii) *the single-factor model*

this model holds that the marketing and the stakeholder concepts are inseparable philosophies that could be labelled as the extended marketing concept

(iii) *the two independent factors model*

this model holds that the marketing and the stakeholder concepts are distinct and unrelated philosophies

(iv) *the two related factors model*

central to this model is the contention that the marketing and the stakeholder concepts are separate *but* positively correlated philosophies.

The results of statistical tests lent support to all three hypotheses and a better statistical fit was found for the single-factor model compared to the other three models. This latter finding is crucial. It suggests that the marketing concept is still evolving and that firms have realized that the orthodox marketing concept (as defined in marketing texts) is too narrow - hence the reason for extending the focus to include other publics such as employees, distributors, suppliers.

As mentioned in Chapter 1, the cited study is one of the few attempts that have been made to link the marketing concept and performance. However, a major drawback found in this attempted linkage is that all five measures of performance were based on the *future expectations* of respondents. No attempt was made to establish if the application of the marketing concept (or the extended marketing concept) had influenced *past* organizational performance using the five measures of performance proposed by the authors, or using any other measures for that matter.

Another attempt to examine a link between the marketing concept and company performance (market success) was made by Ahie (1987). The author sought to achieve two objectives, namely:

- (i) To investigate the market-orientation level of New Zealand companies and the extent to which this level varies with region and type of industry, and between public, private and government sectors.
- (ii) To test the marketing concept empirically by determining whether any relationship exists between market 'success' (determined by a number of variables) and marketing orientation (p. 2).

To achieve the second objective, the author tested two hypotheses, namely that

no relationship exists between the degree of marketing orientation and net profit margin.

And that

no relationship exists between the degree of market orientation and ROI (p. 2).

A total of 50 New Zealand companies employing more than 20 workers in the Manawatu and Wellington districts were surveyed. Market success was measured by four financial indicators. These were: (1) average net profit margin, (2) return on investment (ROI), (3) change in average net profit margin, and (4) change in average return on investment. These indicators were then correlated with Marketing Orientation Score (MOS).⁶

The findings of the study lent support to the second hypothesis, but there was no evidence to support the first. Other findings of the study are summarized below:

- (i) overall, New Zealand companies demonstrated a reasonably high level of marketing orientation. The average MOS was 22.6 out of possible 30. On Kotler's scale this is rated as 'very good'
- (ii) marketing orientation level was correlated with only *one* out of four success measures, i.e., there was a strong relationship between MOS and the net increase in profit margin. While on the one hand no relationship was found between the MOS and average profit margin and ROI, on the other hand there

⁶ The score was based on Marketing Effectiveness Audit developed by Kotler (1977).

was a small but insignificant relationship between the MOS and net increase on ROI

- (iii) of the five measures of marketing orientation, customer philosophy seem to have been given strong emphasis by the firms surveyed. This was followed by integrated marketing organization
- (iv) public companies scored significantly higher than private companies and government agencies
- (v) identical marketing orientation levels were found between the Manawatu and Wellington regions.

Noting a strong relationship between the MOS and net increase in profit margin, Ahie commented:

This result has important ramifications for the marketing concept. The assumption that by adopting and implementing the marketing concept a firm will become more profitable than if it does not, has at least been placed under statistical investigation and has seemingly proven itself with statistically significant results, at least in regard to net profit margin (p. 27).

Ahie's study is both encouraging and disappointing. It is encouraging in the sense that it is the first known local study to specifically examine the relationship between the marketing concept and performance. However, it is not free of flaws. As with Stening's (op. cit.), a major drawback of Ahie's study lies in the measurement of the two key concepts which were the subject of the investigation, i.e., the marketing concept and the market success. Starting with the marketing concept, it is sufficient to mention that the author himself admitted that Kotler's Marketing Effectiveness Audit

is not an adequate measure of the degree of marketing orientation of the firm. While on the one hand Kotler's instrument embraces all the three elements of the marketing concept (though in a somewhat unsophisticated way), on the other hand Marketing Effectiveness Audit shies away from issues such as the use of market-based measures of performance in evaluating managers, the process of generating and testing new product ideas, and the extent to which firms conduct profitability analysis based on market segments, customer groups and products. These are among the strongest of the criticisms of the marketing concept which, regrettably, Marketing Effectiveness Audit does not address itself to.

The second problem is one of measuring market success. At the theoretical level, the measures used by Ahie are very sound. However, in reality, firms are often reluctant to furnish information related to the profitability of their operations. And when they do, there is still the problem of comparability of data between firms which adopt different accounting systems. Added to the above problems, in Ahie's case there was yet another - the reliability of the financial data used in the analysis. Since the data was gathered through face to face interviews with respondents who were not accountants, one might have reason to doubt the accuracy of the data. This suspicion was confirmed by the author himself when he wrote:

Finding adequate measures of company success proved the most difficult part of the research. The two criteria for selection of such variables in this case proved to be mutually exclusive, namely the measures had to be accurate in their description of overall company performance and practical enough to be completed by respondents (who it was envisaged would not be accountants) in an interview (p. 21).

The third problem is that no attempt was made to identify and control factors which could have distorted the relationship that might have existed between the marketing concept and the four measures of the firm's performance. Implicit in this omission is

the assumption that its performance depends *solely* on the degree of its marketing orientation - an assumption which is too strong to go unchallenged.

Finally, the study is limited in that it was based on a very small sample (50 companies) drawn from only two districts, i.e., Wellington and the Manawatu.

In a fairly recent study of New Zealand retailers, Thomas (1988) wanted to examine the marketing orientation of both large and small retailers in New Zealand and to establish whether a relationship exists between the level of marketing orientation and success. Data were collected from 30 large and 20 small Palmerston North retailers through face to face interviews. The methodology employed and the measurement of variables were identical to those used by Ahie (op. cit.). The summary of the findings is presented below:

- (i) New Zealand retailers demonstrate relatively high levels of marketing orientation
- (ii) large retailers were found to be more marketing oriented than small retailers
- (iii) no relationship was found between the MOS and change in profit margin and also ROI
- (iv) there was a *strong negative* relationship between the MOS and the latest ROI at $p = 0.1$
- (v) a *negative* relationship was found between the MOS and the latest profit margin at $p = 0.22$.

Like Ahie's study, Thomas's attempt is also encouraging but his last two findings are very thought provoking. Simply stated, the implication of the last two findings is that the *more* the company is marketing oriented, the *less* it will be successful. This

observation not only questions the widely held belief of a positive relationship between the degree of marketing orientation and company success, but also contradicts Ahie (op. cit.) whose methodology was replicated by Thomas.

In addition to the reservations expressed earlier when reviewing the study by Ahie, there may be reasonable grounds to doubt the credibility of Thomas's findings because of the quality of the data used. By the author's own admission, the data were suspect either because of reluctance on the part of the respondents to reveal financial information or because of a wide variation in accounting methods between small and large firms, or both. The following two quotes explain it all:

No statistically significant relationships were found between marketing orientation and success, mainly because of the *reluctance* of retailers to reveal financial results. However, negative correlations were found between retailers' marketing orientation scores and latest profit margin and return on investment figures (p. 1; emphasis mine).

And

The financial figures obtained are also *dubious* as the accounting methods used by retailers *varied widely*. The larger retailers tended to have more detailed and elaborate accounts (p. 9; emphasis mine).

In a recently published survey of marketing attitudes and practice in the United Kingdom, Lynch et al. (1989) sought to achieve the following objectives:

- i) To isolate the better performing UK companies and to examine the contribution that marketing has made to that performance.
- ii) To identify, through profiling the better performing companies, better marketing practices.
- iii) To examine the current state-of-the art of marketing practice in the UK and make direct comparisons with the researchers' 1982 study (p. 5).

The better performing companies were defined as "Those companies that report consistently better performance than their major competitors in the financial measure of overall profit and return of investment (ROI) and on the market based measures of sales volume and market share" (p. 9). This definition resulted in 166 companies (12 percent of the sample) being termed as better performers. The data were collected through a mail survey and personal interviews with chief marketing executives. A total of 5121 questionnaires were sent and a 27 percent response rate was obtained.

The authors tested ten hypotheses of which the second is of special interest to the current study. It states:

The more successful companies adopt a clear marketing orientation in their operations (p. 12).

To test this hypothesis, the authors used two questions to measure the marketing orientation of the firms in their sample. In the first question, respondents were asked to describe the marketing approach of their respective companies by selecting one of the following three statements:

- i) Make what we can and sell to whoever will buy.
- ii) Place major emphasis on advertising and selling.
- iii) Place major emphasis on prior analysis of market needs adapting our products and services to meet them if necessary (p. 13).

The three statements were related to production, selling and marketing orientations respectively. The findings showed that 74 percent of better performing firms responded to the third statement and their variation from the rest of the firms was 15 percent.

The second question which measured the marketing orientation of the firm sought for the respondents' reactions on the statement:

Marketing is seen as a guiding philosophy for the whole organization (p. 14).

The results showed that the better performing companies which responded 'exactly' varied from the rest by 49 percent. The results obtained from the two questions led the authors to associate marketing orientation with better company performance. Other notable findings of this research is that better performers were found in all types of company - manufacturing and service, consumer and industrial, small, medium and large. However, the authors noted that there were marginally more large companies in the better performance sample than in the sample as a whole.

As with the previous studies, the major flaw of this study lies in the rather too simple manner in which marketing orientation was measured. The two questions used to measure the degree of marketing orientation of the firm are insufficiently incisive, and therefore not able to capture all dimensions of the construct. An additional problem with this study is that the response rate obtained was relatively low.

Another recent study on marketing orientation is the American doctoral study by Wrenn (1989), entitled *Measuring Marketing Orientation*. Although linking the degree of marketing orientation and company performance was not among the primary objectives set forth by the author, the study is nonetheless reviewed in this section for two reasons. The first is that this is the only known study that has attempted to measure the degree of marketing orientation in a rigorous way.⁷ The second is that

7 It is worth pointing out that Wrenn used Kotler's (op. cit.) instrument as a guide-line in developing his measure of marketing orientation.

the author did make some attempt to relate marketing orientation to performance, although this was not one of the main objectives.

The study was based on interviews with corporate, marketing and line officers in selected hospitals. The degree of marketing orientation was measured by Marketing Orientation Rating Score (MORS) which itself was calculated from 45 statements, i.e., nine statements, for each of the five areas of Kotler's Marketing Effectiveness Audit. The instrument proved to be quite reliable and valid.⁸

The findings showed that MORS correlated well with the performance measures employed. It was also reported that each of the five areas of marketing orientation has a unique and synergistic contribution, although customer philosophy was found to be more important than others.

The major reservation about this study is in respect of its marketing orientation measurement. While the modifications made on Kotler's instrument are commendable, the 45 statements used, and indeed the entire methodology, focus so specifically on the health sector that generalization is not possible.

The last study to be reviewed in this section is a recent article which appeared in the *Journal of Marketing* (Narver and Slater 1990). Noting the paucity in the literature of the studies that have examined the link between marketing orientation and corporate performance, the authors developed what they termed an 'Independent Effects Model of Relationships Between Market Orientation, Business-Specific Factors, Market-Level Factors, and Performance' (p. 29). Using this model the authors sought to

⁸ It should be noted, however, that the scale did not pass one predictive validity test.

explain the underlying relationships between marketing orientation and return on investment.

Data were collected from 113 strategic business units (SBUs) of one large corporation in the United States. This corresponds to a net response rate of 81 percent. Responding SBUs were divided into two main groups, namely commodity businesses (36 SBUs) and non-commodity businesses (77 SBUs). Ordinary Least Squares (OLS) regressions were employed to test the hypothesis that market orientation and performance are associated positively (p. 30). The results showed that among both commodity and non-commodity businesses, marketing orientation is related to profitability.

As with other previous studies, the above has at least two drawbacks. The first and perhaps the most serious is its sampling procedure. As noted earlier, the study was restricted to SBUs of only one firm. While this sampling procedure has some obvious advantages, e.g., obtaining high response rates, it can also be argued that because the companies in the sample had a similar corporate culture they were not true representatives of a wider population. In defending their sampling procedure, the authors claimed that pervasive corporate culture did not constrain perceptions because of the reasonable range of responses for the three composite measures of marketing orientation. On a 7-point Likert scale, the ranges were from 2.8 to 6.1 for customer orientation, from 2.8 to 6.6 for competitor orientation, and from 2.6 to 5.8 for inter-functional co-ordination (p. 33). Without doubt, the ranges achieved are commendable. However, it is the *distribution* rather than the range of responses that would more properly reflect whether or not the responses were pervaded by the corporate culture.

The second limitation of Narver and Slater's study is in its final measures of marketing orientation. The original measures of marketing orientation were comprehensive. However, after conducting reliability tests two composites measuring long-term orientation and profit objective were dropped because their respective reliability coefficient alphas were well below 0.5. The decision resulted into a relatively weaker measure of marketing orientation - a measure that did not include long term profitability of the company.

2.2.1 Summary of Empirical Studies Linking Marketing Concept and Performance

Section 2.2.0 presented a detailed review of key studies examining the link between the marketing concept and company performance. Three local and four overseas studies of the subject were reviewed. It would seem from the findings of the local studies⁹ that New Zealand firms have demonstrated a high level of marketing orientation. However, available evidence on the relationship between the degree of marketing orientation and company performance is not conclusive. Notwithstanding the methodological problems outlined in section 2.2.0, at least one study (Thomas op. cit.) has reported a negative relationship between marketing orientation and company performance. Ahie (op. cit.) was also able to demonstrate that a relationship between the two variables existed for only one out of four measures of performance. On a brighter note, however, Lynch et al. (op. cit.), Wrenn (op. cit.), and Narver and Slater (op. cit.) did find a relationship between the degree of marketing orientation and company performance.

⁹ Stening (op. cit.); Ahie (op. cit.); and Thomas (op. cit.).

Two studies examined the relative importance of the five areas of marketing orientation (Ahie op. cit.; and Wrenn op. cit.). It is encouraging to note that in both cases customer philosophy (the cornerstone of the marketing concept) was found to be the most important factor.

The major drawback which is shared by all seven studies reviewed in section 2.2.0 is the difficulty of developing a rigorous yet reliable and valid marketing orientation scale that can be used in *many* situations. It has been shown in this review that most measures of marketing orientation were either inadequate (Stening op. cit.; Ahie op. cit.; Thomas op. cit.; and Lynch et al., op. cit.), too specific (Wrenn op. cit.) or too narrow (Narver and Slater op. cit.) for their application in other areas.

2.3.0 Criticisms of the Marketing Concept

Although the marketing concept has attained a status comparable to an article of faith, several researchers have been very critical and hence have questioned both its validity and applicability. In an article entitled *Imbricative Marketing*, Kaldor (1971) argued that the marketing concept is not an adequate prescription for marketing strategy because sound application of the concept calls for far-sighted, consistent and utilitarian consumers. The author argued that even if the consumers are capable of recognizing their needs, this awareness may not necessarily lead to a clear identification of a physical product to satisfy those needs. The author cited several examples in support of this position. The first is that of a doctor-patient relationship. The patient describes the symptoms of his or her diseases while the doctor conducts a detailed diagnosis to determine the correct medication needed. In essence, it is the

doctor and not the patient who decides on the medicine (the product) needed for the cure (the need or demand).

The second example is that of the case of a computer and an adding machine. Both are data processing gadgets, but before the invention of computers, an accountant requiring fast manipulation of data could have not stated or even thought of the need for a computer. In this respect the author observed:

The gap between product and function is a basic criticism of the logic of the marketing concept. The prototypical marketing organization would not possess the capabilities necessary for the invention of an unknown, but needed, product (p. 21).

On the subject of consumers' inconsistency, the author cited an example of conflicting needs for an efficient transport system and a pollution-free environment. Kaldor argued that the two needs are antipodes whose interests are irreconcilable, i.e., the satisfaction of one can only be achieved at the expense of the other. This view was somewhat echoed by Bell and Emory (1971) when they argued that firms should try to promote proper consumer values because customers' actions are not always in line with their own or society's interests.

Kerby (1972) doubted the use of the marketing concept as a guide to product strategy. The author argued that product strategy should be driven by innovations rather than responding to the needs and wants of the consumers. The author echoed Kaldor's argument of consumer short-sightedness and enumerated a chain of products such as the electric light, colour TV sets, automobile and Xerox machine, as examples of products which were *not* developed as a result of expressed consumer needs and wants. Kerby was critical of relying on consumer research as the source of ideas for developing new products because of the inadequacy of the current available

techniques for measuring attitudinal elements - their interactions and the degree of importance of each. The author did not, however, dismiss the usefulness of consumer research entirely, but advised that if pre-launch research does not give sound reasons for lack of interest of the product,

. . . the marketer is justified in repudiating the research findings and proceeding under the assumption that sufficient demand exists, but is awaiting development (p. 35).

In his article entitled *The Marketing Concept: The Ultimate In Bait and Switch?*, Lundstrom (1976) argued that the implementation of the marketing concept is limited by psychological and structural barriers, i.e., the man and the firm respectively. The main source of the psychological barriers is communication breakdown between what the consumer needs and what the firm is offering. This has resulted in product proliferation and all the attendant problems. The article points to the rise of consumerism as a proof of the inadequacy of the marketing concept. On structural barriers, Lundstrom argued that firms have several interest groups such as consumers, suppliers, creditors, stockholders, employees, government and competition. The role of the marketer, therefore, is to strike a healthy balance among these groups and still maintain profits and growth. Owing to the pressures from various groups, the authors felt that the marketing concept may have been lost in the battle for existence.

Sachs and Benson (1978) were also critical of the marketing concept. The authors were convinced that:

Given our business environment, it is highly doubtful that a firm can compete vigorously and, at the same time, adhere faithfully to the marketing concept . . . under such circumstances, the marketing concept can be either deliberately discarded or left to crumble under the weight of its own irrelevancies (p. 68).

They further observed that:

Theorists may take the position that the marketing concept is that ideal, the shining beacon light that should guide business through the treacherous currents of market demand. They may lecture, scold, and rebuke businessmen for not practising their pet theory. But if the theory cannot be implemented in a practical manner [the authors wondered] should not the theory change to conform with reality? (p. 73).

On a parting note Sachs and Benson asked: "If the marketing concept is of little practical value . . . is it not time to discard the marketing concept?" (p. 74)

Perhaps the most serious of all criticisms of the marketing concept was lodged by Bennett and Cooper (1979). Writing in *Business Horizons*, the authors examined the effect of the implementation of the marketing concept on product innovation and new business strategy. While stressing the importance of new products for continued growth of firms, the authors observed however that the 'market pull' approach (inherent in the marketing concept) to product innovation is incapable of bringing about revolutionary changes in new products. The authors argued that:

. . . many of the great product innovations throughout history have been the result of a technological breakthrough, a laboratory discovery, or an invention, with only a vague notion of a market need in mind. Often these 'great ideas' originated from men and women far removed from customers, from market needs and wants, and the industry itself. Inventors, scientists, engineers and academics, in the normal pursuit of scientific knowledge, gave the world the telephone, phonograph, the electric light, and in more recent times, the laser, xerography, instant photography, and the transistor. In contrast the worshippers of the marketing concept have bestowed upon mankind such products as new-fangled potato chips, feminine hygiene deodorant, and the pet rock . . . true product innovation depends to a large extent on scientific discovery, which often must proceed in the absence of a clear and definable customer need or want (p. 77).

To support their claim, the authors quoted a senior executive of an unidentified multinational agricultural equipment firm:

Whenever we do market research to generate new product ideas, all we get back are descriptions of minor improvements, or worse yet, our competitors' features. But the bold new ideas come from in house (p. 78).

Although not cited by Bennett and Cooper, Akio Morita, the Chairman of Sony holds similar views. Referring to the success of the 'Walkman', Morita noted:

The public does not know what is possible, but we do. So instead of doing a lot of market research, we refine our thinking on a product and its use and try to create a market for it by educating and communicating with the public.¹⁰

Bennett and Cooper also argued that strict adherence to the marketing concept could lead to the slow acceptance of new products. To bring the point home the authors wrote:

Picture the would-be market researcher eighty years ago attempting to gauge market reaction to a proposed new product, the automobile. Respondents to any questionnaire would have assured the market-oriented innovator that cars would frighten horses, make too much noise, run too fast, and be generally unreliable. The competition of that time, the horse, would be judged just too strong for a successful market entry. The product would be labelled as a 'bad product' with no future. Had it not been for tough-minded innovators and entrepreneurs who were driven by a vision of what they believed and who persisted in spite of negative market reaction, the automobile might never have come of age as quickly as it did (p. 78).

The authors further argued that application of the marketing concept robs the society of resources that are diverted from major and genuine innovations to what they called the 'nitty-gritty' world of product modifications.

On the question of business strategy, Bennet and Cooper started by defining a product by a four-dimensional vector, whose dimensions are:

10 Reingold and Shimomura, *Made in Japan: Akio Morita and Sony*, William Collins Sons & Co. Ltd, (1987) p. 79.

- (i) the product's use
- (ii) the product's customer
- (iii) the product's technology
- (iv) the product's production process.

The authors later argued that in firms where the first two dimensions, i.e., product use and product customer are, decisive, the marketing concept will work quite well. In contrast, the authors maintained that where distinctive competence hinges on the technology embodied in a product or the production process, a business strategy relying heavily on market dimensions, i.e., product use and clientele, can lead to major problems. In spite of the criticisms, the author emphasized in conclusion that

In no way are we suggesting the marketing concept is not a useful tool. It is, and dozens of successful examples will illustrate the point. Our arguments are merely that the marketing concept is only one approach. A blind acceptance of this concept as the 'one and only' guide would be just as dangerous as failing to heed the proponents of the philosophy (p. 83).

In another article two years later,¹¹ the authors argued that the marketing concept provides the necessary but not sufficient conditions for success. In this article they maintained that:

The proponent of the marketing concept is right when he says the product must meet a market need. Otherwise it would have no value. But product value implies a comparison. And so it must do more than merely satisfy a need; the product must meet the needs better than the competitors' products. It is in this focus on 'being better' that is missing in the marketing concept (p. 58).

The authors cautioned of the danger of relying on consumers as a source of new product ideas because, they said, consumers are limited in three ways. The first is that

11 Bennett and Cooper (1981).

their perceptions are restricted to items familiar to them; the second is the difficulty of verbalizing their needs in view of the technology required to translate the ideas into real products; and the third, that owing to the dynamic nature of consumer needs, it is quite conceivable that by the time consumer ideas have been translated into products, their needs would have changed.

Drawing lessons from the Singer Sewing Machine Company, the authors stressed that firms should do away with the habit of relying on non-product strategies such as promotion and distribution. Instead, firms should promote a *product value concept* as a key element to success. They defined the product value concept as

. . . a business orientation that recognizes that product value is the key to profit. It stresses competing on the basis of customer need satisfaction with superior, higher value products. Value depends on the customer's perception of the product attributes, which are largely a function of the firm's technological, design, and manufacturing strengths and skills (p. 59).

The authors listed product usefulness, safety, reliability, availability, and originality as some of attributes which can be translated into value and emphasized that firms should operate from a position of power and should build in areas where they can utilize their existing strengths.

In the same article, Bennet and Cooper pointed to three factors as being responsible for the shift to non-product orientation. These are: the structure of business programmes (at Universities) which ignore new product development, performance evaluation systems which focus on short-term rather than long-term performance, and evaluation techniques for resource allocation which do not provide a healthy balance between the lower risk ordinary ventures and the more adventurous projects with long-term but less certain or even volatile payoff. Interestingly enough, a closer

examination of the article under discussion leads to the conclusion that the two critics are in a sense advocating a philosophy of consumer satisfaction but suggest only one tool, product planning, to reach it (McGee and Spiro 1988).

Riesz (1980) shared a similar view to that of Bennett and Cooper (op. cit.) when he expressed his concern and worries over the increased shift from basic to applied research due to the application of the marketing concept. The author argued that the shift from 'science push' to 'market pull' approach can have negative effects both on the growth of the firm and on the society at large. The main argument raised against the 'market pull' approach is customer inability to articulate needs and wants for goods and services that are technologically advanced. To illustrate the point, the author argued that, prior to World War II, if military personnel were asked about aircraft detection needs, they would have most likely expressed a need for a powerful optical detection system, rather than a radar. Riesz felt that

Customers' relative inability to conceptualize product ideas or improvements beyond the realm of their own experience means that the ideas and concepts obtained from the market place will be rather conventional and modest compared to those coming from the 'science push' of the research and development laboratory (p. 51-52).

Related to this problem, the author cautioned that a firm which is overly relying on applied research as a source of new product ideas is denying itself the admission ticket to the international world of science and technology, and will sooner or later lose its competitive edge.

In an article entitled *The Marketing Concept: What It Is and What It Is Not*, Houston (1986) attempts to assess the conditions under which the prescription of the marketing concept can and cannot be followed by the marketers. The main premise of his argument is that information is a prerequisite for making sound decisions. He

stressed that the exercise of seeking for additional information about other parties to the exchange (i.e., consumers) is viable to the extent that: (1) the exchange partners are not satiated, (2) the desired offering will be made available, (3) the value of such information exceeds the cost of obtaining it, and (4) the organization or all of its exchange partners are not restricted from varying and/or negotiating what they will offer. If the above four conditions are not met, then the application of the marketing concept is not feasible. It is perhaps worth noting that the author did not explain in what way the marketing concept does not meet these conditions.

To sum up: past criticisms of the marketing concept can be divided into four groups. The first is the school which claims that the application of the marketing concept discourages or hinders innovation of new products.¹² The second group claims that the marketing concept has failed to respond to the firm's social responsibility.¹³ The third argues that, given the complexity and the demands of different interested parties in the modern business, the marketing concept is no longer an effective management tool.¹⁴ The fourth and last group feels that the concept is not applicable where extra information acquired cannot be used to further the organization's goals.¹⁵ In the following section I shall present a rebuttal of these criticisms.

12 Kaldor (op. cit.); Kerby (op. cit.); Bennet and Cooper (1979 and 1981); Riesz (op. cit.).

13 Bell and Emory (op. cit.); Lundstrom (op. cit.).

14 Lundstrom (op. cit.); Sachs and Benson (op. cit.).

15 Houston (op. cit.).

2.3.1 Response to Criticisms

It was noted in the preceding section that in spite of its wide acceptance, the marketing concept has been under fierce criticism from a number of directions. While some of the criticisms may appear legitimate, others are, to say the least, baseless.

The first criticism is the allegation that lavish acceptance of the marketing concept has left very little room for genuine product innovation. A study of 107 manufacturing firms in US (Lawton and Parasuraman 1980) dismisses this claim. In the cited study, the authors sought to test three hypotheses:

- (i) The greater the extent of adoption of the marketing concept by a firm, the more likely it is that it will use customer-oriented sources for new product ideas.
- (ii) The greater the extent of adoption of the marketing concept by a firm, the greater its utilization of marketing research between idea generation and commercialisation stages.
- (iii) The greater the extent of adoption of the marketing concept by a firm, the less the innovative its new products will be (p. 20).

The extent of adoption the marketing concept was measured by four variables:

- (i) whether or not firms use customers as the focal point of all marketing activities
- (ii) the extent of co-ordination among various departments within the firm
- (iii) the frequency to which the highest marketing executive participate in top management decisions
- (iv) the percentage of management-level personnel having some marketing experience.

Customer-oriented sources of new product ideas were operationalized to include suggestions or complaints from ultimate users and a formal market research of users and their needs. Product innovation was defined from two angles - the degree of change in the user's consumption patterns as a result of adopting the product, and the degree of difference between the new product and those products already on the market.

After conducting a Chi-square analysis, the authors could not substantiate any of the hypotheses and thus concluded:

If the procedures used for measuring the extent of adoption of the marketing concept were adequate, the results of this study would suggest that adoption of the marketing concept is *not* an impediment to the development and introduction of breakthrough innovations (p. 24; emphasis mine).

Still on the first criticism, critics of the marketing concept argue that application of the marketing concept has discouraged product innovation because of the resulting shift from basic to applied research. On this issue, one of the critics himself (Riesz op. cit.) gave a good summary of some of the reasons which have led to this state of affairs. They are: changes in accounting practices for Research and Development (R&D) expenditure, consumerism, product liability, increased sensitivity to pollution, and what the author termed as the 'MBA Syndrome' in management, i.e., employing supercautious managers who are averse to risk.

Some critics argue (and perhaps rightly so) that the marketing concept puts a stress on consumer (applied) research at the expense of basic research. While this may indeed be the case, it does not imply that consumer research is the only and all-important consideration in making strategic decisions. Total dependence on customers' expressions of their own needs and wants is in itself an indication that a long-term

view of the marketing concept has not been well-grasped. This is a myopic view of understanding the marketing concept and should not be confused with anticipating the long-term needs of the customers. As noted by McGee and Spiro (op. cit.):

... the marketing philosophy as originally defined does not preclude the recognition and use of distinctive competencies. In fact, the marketing concept's focus on consumer satisfaction and profits demands that a company operating in a competitive environment find a position in the market in which its distinctive competencies provide competitive advantage (p. 43).

Searching for a position in the market and the use of distinctive competence is associated with the innovation of new products. This position was expressed by Houston (op. cit.). Responding to Kaldor (op. cit.), Houston noted that

The marketing concept focuses the marketers' attention on the customer but does not tell the marketer to disregard his/her unique capabilities and resources when deciding how to serve the customer's needs and wants best (p. 86).

In 1984, Kiel defended the marketing concept against criticisms raised by Bennett and Cooper (1979; 1981) and Riesz (op. cit.). The author advanced three arguments to prove that the marketing concept is innocent of the charges raised by its critics. The first, while acknowledging the importance of basic research, was that the high risks and the length of time associated with that research render the approach unsuitable for marketers to rely on.

The second defence of the marketing concept [wrote the author] draws on the considerable research evidence on successful innovations. There is overwhelming evidence from studies of more than 1800 innovations that marketing and related production factors are the most important influences on innovation ... between 60 to 80 percent of technological innovations over a wide variety of different products and markets have resulted from market-related forces (pp. 9-10).¹⁶

16 Carroad and Carroad (1982 p. 29) added evidence to the defence when they cited a study which showed that 'of 131 barriers to successful innovation researched, seven of the nine most severe barriers were related to lack of information about market characteristics'.

Kiel continued: "How can these results, drawn from many studies be reconciled with the criticisms of the marketing concept?" (p. 10). For his third argument, the author maintained that the critics of the marketing concept have portrayed the concept in an overly simplistic way. He argued that

The view that market pull models require extensive consumer research as a first stage and, consequently, that the approach is constrained by the consumer's limited vision of the technological future *ignores the various other means* by which market requirements can be translated into technological innovation (p. 10; emphasis mine).

The author cited competitive response on quality and price (cost saving) as possible sources of information which can lead to technological innovation. Winding up his defence, the author noted that

. . . studies on innovation show that market research *is only one means* by which an organization can determine market requirements. The marketing concept, as a managerial philosophy, draws attention to the need to be responsive to changing markets as the key to long-run corporate success. It does not specify that the only way to find out about market requirements is through the slavish use of marketing research (p. 10; emphasis mine).

Addressing the criticism of social irresponsibility, McGee and Spiro (op. cit.) observed that marketing-oriented firms will always refrain from markets which have long-term negative effects on consumers because, upon realizing the consequences, the consumers will vote against such products. Such firms, therefore, will always respond to consumers' concern about their product's safety, value or environmental impact. Finally there is the question of the inappropriateness of the marketing concept in certain situations. It suffices to note that the critic (Houston op. cit.) did not demonstrate the situations in which the marketing concept cannot be applicable.

To sum up: in the last two sections both the criticisms of the marketing concept and the responses given by its protagonists have been presented. The views of the

defendants of the marketing concept are supported for three reasons. The first is that as has been demonstrated in Chapter 6, the marketing concept is a useful philosophy and is associated with better performance. The second reason is that most of the criticisms raised are in fact directed to firms which have a narrow view of the marketing concept. Over-reliance on consumer research is one such example. And the third and most telling reason is that a closer examination of the writings of the critics leads to a crucial and interesting observation: without exception, all the criticisms mentioned are armchair reconstructions with no empirical evidence.

2.4.0 Studies of Export Performance

In this section, a detailed discussion of some empirical studies on export performance is presented with the intention of identifying those variables which researchers have associated with export performance. These variables are in turn used to construct a research model that would explain the relationships that might exist between export performance and marketing orientation. As the literature has reported numerous such studies, major studies are reviewed in detail, with other studies being summarized in the table at the end of the section.

In a widely cited British study, Tookey (1964) sought " . . . to collect information on the factors which influence aims and attainment in exporting among manufacturing firms in the hosiery and knitwear industry" (p. 48). The investigation was intended as a pilot study and the data were collected from 54 hosiery and knitwear firms based in the Leicester area. Export performance was measured by export intensity, i.e., export sales as a percentage of total sales. The findings of the study showed that size of firm, the willingness of exporting firms to adapt their products, the use of foreign agents,

frequency of visits to the foreign markets, the quality of the products (presumably as perceived by the customers), export policies and export services such as credit guarantee and export risk insurance all had an influence in determining the export success of a firm.

The major drawback of the study is that export performance was measured by a single index, namely export intensity. The use of export intensity as a measure of export performance poses a number of problems. These are discussed in detail in the following chapter (Chapter 3).

In an extensive study of six manufacturing industries in Denmark, Holland, and Israel, Hirsch (1971) aimed at identifying variables which are associated with export success. Specifically, the author sought to answer six questions pertaining to the characteristics of successful exporters. The questions were

What technologies do they use? Is their performance associated with size? What is the nature of their domestic and foreign affiliation? How important for their export performance is the domestic market? What product policies do they follow? Where do they export? (p. xvi).

Export performance was measured by weighted-average export intensity. The results of the study were as follows:

In Denmark, export performance was found to be weakly related to skill intensity; there was no clear relationship found between export performance and man/months spent abroad; no relationship was found with asset per employee. On the other hand, positive correlation was found between the dependent variable and percentage of sales spent on R&D. Success was also associated with the age of the product, i.e., the length of time the product takes to be introduced in the foreign market.

In *Holland*, six variables were found to relate positively to export performance. These were: production process, skill intensity (the relationship was weak), asset per employee, expenditure on R&D, product age, and man/months spent abroad.

Finally, in *Israel*, no clear relationship was found between export performance and production process variables. Furthermore, the correlation between export performance and skill intensity was found to be negative. On the other hand, two variables were positively related to export performance. These were: man/months spent abroad and product age. In conclusion the author noted that

the one characteristic which is common to high export performance groups in all three countries is the low mean 'age difference' of their major export product. The more successful the exporters, the fewer the years that lapse between the product's introduction on the domestic and export markets (p. 172).

As with Tookey's study, the major drawback here is the over-reliance on export intensity as a measure of export performance.

In a doctoral research involving 83 Swedish firms in the chemical and electronics manufacturing industries, Khan (1978) wanted to find out why some export ventures are successful while others fail, i.e., which variables affect the success and failure of the firm's export ventures and how these variables interact. After conducting a literature review and two pilot studies, 13 variables divided into 12 groups were investigated.

Export performance was measured by three criteria. Pre-tax profits and export sales were used as the objective criteria. The second measure was semi-objective. On a 5-point scale, firms were asked to indicate if their expectations with respect to costs, sales volume, and profits were being met. The third, a subjective one, was used to

rate the overall export performance of responding firms. In addition to these measures, two open-ended questions were included in the questionnaire. Respondents were asked for the factors which they consider to judge if exports have been successful or not, and also for the reasons for their own success or failure. The data were analyzed by multiple regression and multiple discriminant analyses. The findings showed that seven variables were found to correlate positively with export success in both industries. These were: (1) the foreign market share of a firm compared to that of its competitor, (2) export travel, (3) expenditure on market research and promotion, (4) exporting through an off-shore subsidiary, (5) export price compared to domestic price, (6) product uniqueness, and (7) post-sale services.

Khan's study suffers from one major drawback; his objective criteria demanded respondent firms to furnish him with export profitability data based on full cost accounting methods. Because of numerous problems and the simplifications made in order to solve them, it is doubtful if the criteria used were indeed objective and if the information obtained was accurate and comparable. The author himself acknowledged this problem when he stated

... this difference arises mainly as a result of the different criteria used by the firms and those used by myself in the present investigation. Profit criterion is based on "full-cost" basis, whereas several firms did not take costs such as interest expenses or depreciation when making the calculations for a product on the export market in the study (p. 158).

In a doctoral study of 29 British firms exporting industrial equipment to Saudi Arabia, Kuwait, Iraq and Syria, Mirzaian (1982 p. 20) sought "to identify and analyze the major export marketing factors that are associated with success in exporting to the Arab countries of the Middle East (ACME)". As a subsidiary objective, the author wanted to find out if there existed any significant differences in success between the free economy and the planned economy Arab countries.

Mirzaian's study is different in two ways from most of the previous studies on export performance. Firstly, it tackles the problem from both sides of the transaction, i.e., it focuses on both the exporters and the importers. Secondly, the study is confined to one regional market, the Middle East. In this respect the findings make it possible to rank exporters according to their performances since they were all subjected to the same external local and foreign conditions.

From his literature, the author identified several variables which, in the past, researchers have associated with export success. The author then consulted relevant parties involved in exporting to the Middle East in order to come up with a list of factors which were most relevant to that region. Constrained by the desired length of the questionnaire, the author felt that variables such as management attitudes, availability of credit, qualified personnel, and a good contact in the Middle East were not sufficiently important to warrant their inclusion in the research instrument. On the other hand, the author realized that things such as bribery and corruption are critical factors when trading with developing countries, but decided not to include them because of the difficulties in getting valid responses to questions dealing with such sensitive matters.

Export performance was measured by six different criteria: (1) export intensity, (2) export growth, (3) export profitability to total profitability, (4) the Queen's Award for Export Achievement and the Queen's Award for Technology, (5) respondents' own evaluation in respect of their overall performance in the Middle East, and (6) their clients' satisfaction; and a conjoint analysis correlation coefficient of the Cluster Analysis. A five-year (1975-1979) time frame was chosen. The results showed that five variables were particularly instrumental to export success. In order of importance the variables were: (1) product characteristics and reliability, (2) export company

reputation, (3) competitive price, (4) punctual delivery, and (5) after sale services.¹⁷ The author also analysed the five most successful companies and found that marketing research, product uniqueness, quality reliability, after sale services, frequent visits to the Middle East, delivery reliability and size of firm¹⁸ were contributing factors toward their success.

While Mirzaian's methodological contribution is acknowledged, his decision to exclude 'good contact' in the Middle East (as a variable) is puzzling. Cateora (1987 p. 131) noted that firms attempting to do business in the Middle East are admonished to do business through a 'connector' who often knows the right people in the right places.

In another doctoral research involving 142 Canadian electronics firms, Kleinschmidt (1982 p. 8) sought:

- i) To identify possible international marketing strategies (export strategies) based on market selection and product parameters for Canadian industrial manufacturing firms.
- ii) To identify those firms and managerial characteristics that are associated with strong export performance at the firm level for a group of heavy exporting firms.
- iii) To analyse empirically the impact of firm and managerial characteristics as explanatory determinants of a firm's performance for different types of export strategy.

Specifically, the author was seeking answers to the following questions:

- i) What market selection and product parameters are relevant in defining alternative export marketing strategies for electronics firms in Canada?

17 Taken together, the variables accounted for 72.1 percent of important manageable factors for marketing successfully to the Middle East.

18 Four of the five most successful British exporters had a labour force of more than 1000 employees.

- ii) Does adopting one or another of these export strategies affect export performance?
- iii) What are the firm and managerial variables that help to explain export performance? (p. 8)

Export performance was measured by export level (export intensity) and export growth. The author hypothesized that export performance depends on two main factors, namely firm and management variables and export marketing strategy. The former includes export planning, management perception (on export potential, product adaptation etc.) and parameters such as size and age. The latter consists of variables such as market selection, segmentation and product strategy, i.e., the level of product adaptation. Six export strategies were outlined: world marketer, world quasi-marketer, world seller, US marketer, US quasi-marketer, and US seller. The authors expectations were " . . . that firms which follow a 'many foreign countries' strategy with product adaptation and multiple segmentation will show the best export performances, while those companies that concentrate solely on the US market without product adaptation and segmentation will perform the worst" (p. 24).

Data were then collected and analysed at three levels. The first was an overall performance analysis in which performance results of all firms were bivariately and multivariately related to independent variables. The second was an analysis of high *vis-a-vis* low export performers on each performance criterion (i.e., export level and export growth). The last was a polar extreme performance analysis in which both performance criteria were taken simultaneously. Firms which registered a high export performance on both criteria were categorized as extremely high performance exporters. The opposite was the case for firms which scored a low export performance.

After conducting a chain of statistical analysis, the author drew a profile of extreme high performance exporters. Such firms:

- : were young and had short experience
- : perceived fewer export barriers
- : had a low opinion of the Canadian market
- : viewed foreign markets positively
- : had high perceived product advantage and minor relative price advantage
- : had no internal export policy constraints
- : had greater differential advantages e.g., distribution
- : had high export expectations
- : spent significantly more on all export support activities e.g., R&D (except the use of external information source)
- : made frequent visits to foreign markets.

Except for one variable (the use of external information sources), the profile of extreme high performer exporters was found to be similar to that of world marketers, i.e., firms which concentrated on countries outside the US adapted their products beyond mandatory requirements and served multiple segments.

A study by Beamish and Munro (1986) aimed to identify the variables which are most closely associated with the export success of small and medium-sized Canadian manufacturing firms. Two measures of export performance were used, namely export intensity and export profitability. The use of these measures was justified by the fact that the measures accommodated different strategies that might be used by different firms. For example, some firms may have a high export intensity (by accepting a relatively low price) because of the policy of viewing exports as a means of providing a contribution to fixed costs. Other firms may charge a relatively high export price to

compensate for the extra effort needed in exporting. Consequently, their export intensity will be low but their export profitability will be high, *ceteris paribus*.

The study examined the effects of 64 variables on the two measures of export performance. Of the 64, 20 variables correlated with one or both of the two measures used. The variables were then grouped and analysed in six areas. These were:

- : motivation for exporting - denoted by the manner in which a firm ventured into exporting.
- : commitment to exporting - as exemplified by the proportion of export employees to total employees, the proportion of president's time devoted to exporting etc
- : geographic (market) emphasis - number of markets served etc.
- : product characteristics - the degree of product modification, the degree of product uniqueness in foreign markets, the extent to which the product enjoys competitive advantage etc.
- : distribution selection - the extent to which firms use their own sales force and the degree of similarity between foreign and domestic channels
- : marketing activities - importance of customer service and the degree of involvement of foreign representatives in marketing planning.

A stepwise multiple regression analysis was then conducted. Only those variables exhibiting significant correlations with the performance measures were entered into the model. The findings showed that export commitment as indicated by the ratio of employees with export responsibilities to total employees was the *only* variable which correlated to both export intensity and export profitability.

A recent New Zealand study on exporting was done by Lindsay (1990). The study was intended to apply the model of success in exporting to a larger group of 60 small and medium-sized firms. The model was developed in an earlier study of 17 companies who had a 'proven' record of success (Lindsay 1989). Data were collected through personal interviews with managing directors and/or export managers of each of the 60 companies. The results showed that seven factors were critical to success in exporting. Listed in their order of importance, the factors were: (1) R&D, (2) product quality (3) active investment, (4) management style, (5) market selection, (6) strategic marketing orientation, and (7) personal contact.

The main limitation with Lindsay's study lies in the choice of subjects used for the study. As noted earlier, the study was based on sample of 60 firms who had a 'proven' record of success. While the author mentioned that the 'majority' (the exact number was not given) of these firms were recent winners of The New Zealand Export Award, it was not clearly stated what the criteria were for selecting the remaining firms. It would seem that Lindsay's study relied heavily on the export award as *the* criterion for measuring export success. This practice has some drawbacks which will be further explained in the next chapter.

To sum up: in the last section key empirical studies that have examined factors associated with a firm's export performance have been reviewed. Although the exercise provided invaluable insights as to how different variables influence the performance of the firm, it was also apparent that, in many studies, export performance was not measured in a rigorous way. Since the construct (i.e., export performance index) is central to studies covering this subject, a more thorough approach is required to develop a multiple measure of performance which has both

high validity and reliability. Indeed this is the approach employed in this study and discussed in greater detail in Chapter 5.

2.5.0 Concluding Remarks

This chapter has reviewed pertinent literature on both marketing orientation and export performance of the firm. The insights gained from the review have been synthesized into a research model of the relationship between export performance and marketing orientation. This model is presented in the following chapter.

To conclude, a summary of studies that have examined different variables and their effect on export performance of the firm is presented in table 2.1. In this summary, the variables are divided into five main groups: (1) firm differential advantage, (2) marketing strategy and foreign market conditions, (3) management attitude and commitment to exporting, (4) managers' personal traits and (5) government support. These composites of variables constitute part of the research model which is presented in Chapter 3.

TABLE 2.1

A Summary of Studies of Export Performance of the Firm

Variable	Author(s)	Relationship with Export Performance
1 Firm Differential Advantage		
i) size	Tookey (op. cit.); Hirsch (op. cit.); Mirzaian (op. cit.)	positive
	Neidell (1971); Stening (op. cit.); Bilkey and Tesar (1977); (Khan op. cit.); Kleinschmidt (op. cit.); Cavusgil (1984a); Diamantopoulos (1988); Lindsay (op. cit.)	no relationship
ii) export experience	Alexandridis (1971); Fenwick and Amine (1979); Bilkey (1982); Stening (op. cit.)	positive
	Neidell (op. cit.); Ayal and Hirsch (1982); Ursic and Czinkota (1984); Diamantopoulos (op. cit.); Lindsay (op. cit.)	no relationship
	Bilkey (op. cit.)	negative
	Kleinschmidt (op. cit.);	positive with short experience
iii) domestic base	Lindsay (op. cit.)	positive
	Stening (op. cit.)	no relationship
2 Marketing Strategies and Market Conditions		
iv) product adaptation	Tookey (op. cit.); Fenwick and Amine (op. cit.); Kaynak and Kothari (1984); Kleinschmidt (op.cit); Lindsay (op. cit.)	positive
	Koh and Robicheaux (1988); Diamantopoulos (op. cit.)	no relationship
v) product quality	Tookey (op. cit.); Cunningham and Spigel (op. cit.); Mirzaian (op. cit.); Kaynak and Kothari (op. cit.); Burton and Schlegelmilch (op. cit.); Lindsay (op. cit.)	positive
	Ayal and Hirsch (op. cit.)	no relationship

vi) product uniqueness	Alexandridis (op. cit.); Khan (op. cit.); Mirzaian (op. cit.); Kleinschmidt (op. cit.)	positive
	Ayal and Hirsch (op. cit.); Cavusgil (op. cit.)	no relationship
vii) distribution	Tookey (op. cit.); Cunningham and Spigel (op. cit.); Lindsay (op. cit.)	positive with use of foreign agents
	Khan (op. cit.)	positive with foreign subsidiary
viii) delivery schedules	Jackson (1981); Khan (op. cit.); Mirzaian (op. cit.)	positive
ix) pricing strategy	Cunningham and Spigel (op. cit.); Khan (op. cit.); Mirzaian (op. cit.); Kaynak and Kothari (op. cit.); Lindsay (op. cit.)	positive
	Bilkey (op. cit.); Koh and Robicheaux (op. cit.)	positive when export price is higher
	Khan (op. cit.)	positive when export price is lower
	Mirzaian (op. cit.); Kaynak and Kothari (op. cit.); Cody (1988)	positive with competitive price
	Neidell (op. cit.)	positive with FOB
	Cunningham and Spigel (op. cit.)	positive with special prices
x) export initiation	Neidell (op. cit.); Czinkota and Johnston (1983); Cavusgil (1984b); Lindsay (op. cit.)	positive with pro-active behaviour
xi) number of countries served	Stening (op. cit.); Diamantopoulos (op. cit.); Beamish and Munro (1986)	positive
	Beamish and Munro (op. cit.)	no relationship
xii) degree of competition	McGuinness and Little (1981)	positive
	Bilkey (op. cit.)	no relationship

3 Management Attitude and Commitment to Exporting

xiii) language skills	Cunningham and Spigel (1971); Burton and Schlegelmilch (1987)	positive
	Mirzaian (op. cit.)	no relationship
xiv) risks and profitability	Stening (op. cit.); Cavusgil (1984a)	positive with high profit expectations
	Roy and Simpson (1981)	no relationship with risk
xv) overseas visits	Tookey (op. cit.); Hirsch (op. cit.); Cunningham and Spigel (op. cit.); Neidell (op. cit.); Stening (op. cit.); Khan (op. cit.); positive Jackson (op. cit.); Mirzaian (op. cit.); Kleinschmidt (op. cit.); Cavusgil (1984b); Lindsay (op.cit)	
	Hirsch (op. cit.); Koh and Robicheaux (op. cit.)	no relationship
xvi) export unit	Stening (op. cit.) Bilkey (op. cit.); Koh and Robicheaux (op. cit.); Diamantopoulos (op. cit.)	positive
xvii) R&D spending	Hirsch (op. cit.); Stening (op. cit.); Kleinschmidt (op. cit.); Burton and Schlegelmilch (op. cit.)	positive
xviii) importance given to exporting	Tookey (op. cit.); Stening (op. cit.); Beamish and Munro (op. cit.); Cavusgil (1984a); Diamantopoulos (op. cit.)	positive

4 Managers' Personal Traits

xix) education and experience	Simmonds and Smith (1968); Simpson and Kujawa (1974); Burton and Schlegelmilch (op. cit.); Axinn (1988)	positive
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5 Government Support

xx) export incentives	Stening (op. cit.); Cullwick and Mellalieu (1981); Czinkota and Johnston (op. cit.); Lindsay (op. cit.)	positive
	Diamantopoulos (op. cit.)	no relationship

CHAPTER 3

RESEARCH MODEL AND OPERATIONAL DEFINITIONS

3.0.0 Introduction

This chapter has two objectives. The first is to present a theoretical framework of the relationship between marketing orientation and export performance and the second is to construct operational definitions of both dependent and independent variables used in this research.

An introductory overview of the conceptual model of marketing orientation and export performance is presented, followed by a detailed discussion of each of the components of the model. A visual representation of the model of marketing orientation and export performance is included.

3.1.0 The Model of Export Performance and Marketing Orientation: An Overview

The relationship between export performance and marketing orientation can be examined in a number of ways. In order to give this study some focus, a research model has been developed to assist in explaining the underlying relationships that might exist between marketing orientation and export performance.

The basic proposition of this study is that the firm's export performance depends on the degree to which the firm has embraced the marketing concept. The model further

postulates that the degree of adoption and implementation of the marketing concept is not the only factor that influences the firm's export performance. The model acknowledges the existence of certain variables that previous research has associated with export performance. For this reason, such variables are identified and controlled wherever it is appropriate to do so. Diagrammatically, this relationship is presented as:

Figure 3.1 Reduced Model of Export Performance and Marketing Orientation

In the following pages, each component of the model is examined in more detail.

3.2.0 Export Performance

The contribution of the export sector to the economic development of any country can not be over-emphasized. Cavusgil (1984), among others, reported the advantages of exporting at both macro and firm levels. At macro level, restoration of a balance of payments deficit and creation of employment are among the positive effects. At the firm's level, exporting, which is normally triggered either by a problem (Woo Young and Brasch 1978) or an opportunity (Kaynak and Kothari 1984), could help firms in a

number of ways. Some of these are: accelerating technological and marketing innovation Cavusgil (1984), improved profitability, increased sales growth, risk reduction through market diversification, smoothed production runs, economies of scale in production, access to raw materials supply, and opportunities for management development (Cullwick 1978).

Almost without exception, researchers agree on the role exports can play in the economic well-being of a country. However, there are great disagreements among the researchers on how to measure the firm's export performance. The literature on export marketing has documented several export performance evaluation methods. Of these, five methods have been widely used by researchers both in New Zealand and overseas. These are: (1) export intensity, (2) export growth rate, (3) export profitability, (4) export award, and (5) self-evaluation. Each of these has its advantages and drawbacks. In the following section a brief review is made of each of these methods and their respective advantages and disadvantages.

3.2.1 Past Research on Measuring Export Performance

i) Export Intensity

There are wide disagreements among the researchers on how to measure export performance. The most frequently used indicator is export intensity.¹ Hirsch (1971 p.

1 See Tookey (1964); Hirsch (1971); Hirsch and Adar (1974); Stening (1974); Fenwick and Amine (1979); McGuinness and Little (1981); Kleinschmidt (1982); Mirzaian (1982); Beamish and Munro (1986); Axinn (1988); Diamantopoulos (1988).

21) gives a standard formula for computing this index.² The index is derived by expressing export sales as percentage of total sales as shown below:

$$EP = \frac{\sum_{t=1}^n t_k \frac{E_{t_k}}{S_{t_k}}}{\sum_{t=1}^n t_k}$$

where: E_t = Exports in year t

S_t = Total Sales in year t

$t = (1, \dots, n)$

$k = 1$ when E_t/S_t is defined

$k = 0$ when E_t/S_t is undefined due to lack of data.

The formula has two main implications. The first is that higher weight is given to the most recent exports so that such exports should influence the firm's ranking more than historical data, i.e., E_{t_1}/S_{t_1} (export intensity of 19X₁) will be given the weight 1; E_{t_2}/S_{t_2} (export intensity of 19X₂) will be given the weight 2, and so on. The second is that in the event that data is not available in any particular year, the formula computes average weighted export intensity for the fewer years for which data is available.

Many researchers have expressed their reservations on the use of export intensity as a measure of export performance. The measure is very limited in that it does not consider the profitability of export sales (Tookey op. cit.; Cunningham and Spigel op. cit.); nor does it take into consideration the firm's success in individual markets (Khan

² Of 26 export performance studies reviewed in the current research, 20 focused directly on the relationship between export performance and some independent variables. Of these, 11 studies (55 percent) used export intensity as a criterion for measuring export performance.

1978); and it ignores lost opportunities and inadequate response in exploiting new markets (Cavusgil 1984a).

Put another way, export intensity does not show if a firm is maximizing the export opportunities open to it. In the words of Cavusgil (1984a p. 10):

. . . a standard for judging export performance should incorporate the degree of responsiveness shown by firms to actual market forces, as well as the idea of 'optimization' of exports in relation to the commercially ideal size of output in each industry.

Ursic and Czinkota (1984) also expressed their doubts on the suitability of export intensity as a measure of export performance. They argued that variations in total sales (denominator) could result in misleading conclusions about export volume. In this regard, a change in export intensity may not necessarily be a result of a change in the total volume exported.

McGuinness and Little (1981 p. 115) too were critical of the rationale of using export intensity as a measure of export performance. They argued that

As a measure of foreign performance, sales intensity is at best only a rough gauge. Some problems with it can be illustrated by the following examples:

A firm doing an inadequate export job with a new product having a very large foreign market might appear to be a superior performer to another firm with a large market share of a relatively small foreign market.

A firm pushing a new product hard to yield a high growth rate overseas might appear to be a weaker performer to another firm with a higher overseas sales and a declining growth rate.

In addition to the problems discussed thus far, implicit in the export intensity is the assumption that firms exporting more of their output are good performers compared to those which sell more in the domestic market. This may not necessarily be the

case. For, conceptually, a globally oriented firm will search for and serve the markets which are more profitable even if this means selling all or a very substantial amount of its output in the domestic markets. Were export intensity to be used as a measure of export performance, such firms would certainly be rated very poorly, though in reality they are more profitable than those firms which have a higher export intensity.

In spite of these reservations, export intensity has at least two advantages. The first is that the data required to compute the index are often readily available and *somewhat* less commercially sensitive. The second is that export intensity at least serves as a good indicator of the overall importance of exports to the firm.

ii) Export Growth Rate

Export growth criterion measures change in exports over a certain period of time. Several researchers in the past have used export growth as a measure of export performance.³ Whilst export growth rate shares some of the problems inherent in export intensity, it is in some ways superior. Its main strength lies in the fact that it is dynamic.

In this study, a slight variation in export growth rate was proposed (and finally used) as one of the possible objective measures of export performance. This is the absolute export sales index.⁴ It is however, believed that, as a measure of export performance, absolute export sales index is superior to the simple index of export growth rate

3 See Kleinschmidt (op. cit.); Mirzaian (op. cit.); Fenwick and Amine (op. cit.). In addition to these, Kleinschmidt cited ten studies which employed export growth (financial, sales, manpower etc.) as a measure of export performance.

4 The index is calculated by the formula:

$$\text{ndx}_z = \frac{\text{expo } 89 * \frac{\text{sales } 89}{100}}{\text{expo } z * \frac{\text{sales } z}{100}}$$

Where ndxz = absolute export sales index for year z
 1989 = the base year
 expo z = export sales for year z
 sales z = total sales for year z

because the former takes into account changes in both domestic and export sales. In as much as export growth rate is derived from export intensity, there are reasons to believe that a mere contraction in export growth rate does not necessarily imply poor export performance.

iii) Export Award

The use of the export award as a criterion for measuring export performance has also found favour among some researchers.⁵ Where this measure is employed, firms are broadly categorized into two groups, namely the achievers (winners of the award for the time-frame under investigation) and the non-achievers. The chief advantage of using the export award as a criterion for measuring export performance is that more often than not a comprehensive list of the winners is readily available and easily accessible.

The measure itself is, however, open to criticisms on two main fronts. The first is that while in most cases certain guide lines are set to discriminate the achievers from the non-achievers, the measure is not entirely objective in that some form of judgement is normally applied to selecting the winner(s). This judgement is used not only in making the final selection of the winners, but also in interpreting key terminologies and weighing them against each applicant. For example, in the case of the Queen's Award to Industry for Achievement, Cunningham and Spigel (op. cit. p. 3) noted that

5 Lindsay (1989); Cunningham and Spigel (1971). See also Mirzaian (op. cit.) who gave a detailed discussion on four studies (one of which is a Ph.D Dissertation) that have used export award as a measure of export performance.

terms such as 'substantial' and 'spectacular' increases in exports used in criteria 1, 2 and 4 provide no quantifiable measures and the phrases 'breakthrough' and 'a particularly difficult market' in criteria 5 are subjective statements.⁶

Perhaps it is this lack of objectivity in the selection process that Mirzaian (op. cit.) referred to in a study⁷ in which the author found a sizeable number of disgruntled companies which could not understand why they did not win the award. Little wonder that an article published in 1981⁸ revealed two embarrassments in The Queen's Award to Industry for Achievement winners. The first was Rolls Royce which received its fifth export award just the year before it went bankrupt! The second was that in early 1981 a previous winner's award was annulled after investigations showed that the winner had falsified figures. This in part explains the degree of subjectivity in both interpreting the criteria and making the final selection.

The second difficulty with the use of the export award is that, for different reasons, some firms do not apply for it. One of the results of this is that the export award is at best, a *relative* measure of performance for the companies that have *applied*. It is therefore quite conceivable (at least in theory) that a winner of the award could be the best out of only a small subset of potential recipients.

Against this proposition however, some people might have reason to believe that a good number of high export performers would apply for the award. Hence the exclusion of firms which did not apply for the award would in itself not invalidate the

6 The same can be said of The NZ Export Award for which one criterion reads: "... account will be taken of a *breakthrough* into or holding a market in the face of *extremely difficult* or *competitive* trading conditions" (emphasis mine).

7 D. Hollier, "The Plain Man's Guide to Winning a Queen's Award", *The Business Administration*, (May 1977), pp. 25-26.

8 *The Times*, April 22, 1981.

findings of the results. It is argued that the non-applicants would mainly consist of relatively poor export performers who would not have won the award even had they applied.

Notwithstanding the reservations raised, the export award was initially included among possible judgemental criteria for measuring export performance.⁹

iv) Self-evaluation

Several researchers have acknowledged the importance of self-evaluation as a measure of export performance.¹⁰ As noted by Cunningham and Spigel (op. cit. p. 2):

Success, like beauty, is in the eye of the beholder . . . a company may consider itself to be successful in exporting if it achieves its own objectives predetermined for a specific market over a certain period of time. Such objectives may cover the securing of a particular high value order, the penetration of a new market, or the attainment of a viable market share in a particular overseas country.

Fenwick and Amine (op. cit. p. 748) also stressed the importance of self-evaluation when they observed that

. . . it can be argued that the only reasonable measure of the success of a company's policy is its ability to meet the particular goals set for it. Thus any measure of export performance should include some assessment of the company's success on its own terms, albeit measured subjectively.

Khan (op. cit.) found some support for the use of the firm's self-evaluation among the measures of export performance. The author was told by one of his respondents that

9 This criterion was later dropped from the final scale. For a full discussion, see Chapter 5.

10 See Cunningham and Spigel (op. cit.); Fenwick and Amine (op. cit.); Mirzaian (op. cit.); Khan (op. cit.).

we are the main employers in this community. Therefore we have a moral responsibility to our employees. More than half the employees' jobs are directly dependent on exports and *we consider ourselves successful*¹¹ if we don't need to sack any one of them (pp. 144-145; emphasis mine).

The main drawback of this measure of performance is its subjectivity. In some cases this problem makes comparison across companies difficult and in others even meaningless.

In this research, self-evaluation was proposed and finally used as a measure of export performance. This decision is justified by the fact that this study focused solely on manufacturing firms, making it possible to compare across them.

v) Export Profitability

Export profitability is a measure which has found a considerable degree of support from researchers.¹² Without doubt, long-term export sales profitability is the best objective criterion if sufficient and reliable data are available. However, the difficulties involved in obtaining accurate profitability data¹³ make this measure least suitable. And even if such information was readily available, differences in firms' cost structures and accounting policies¹⁴ makes comparison difficult and less meaningful.

11 Indeed, some of the firms reported continuous losses while considering themselves successful. In contrast, some firms had a record of continuous profits but rated themselves as unsuccessful.

12 See Mirzaian (op. cit.); Beamish and Munro (op. cit.); Bilkey (op. cit.); Khan (op. cit.); Koh and Robicheaux (1988).

13 Hirsch and Lev (1973 p. 84) appreciated this problem when they observed that "a direct measurement of export profitability is difficult (or even impossible) since it requires an allocation of the firm's costs over domestic and export sales. Such cost accounting allocations (especially of administrative expenses) are known to be largely arbitrary".

14 Bilkey (1982) noted that out of 168 respondents, only 24 percent reported the use of careful cost accounting methods in determining their export profitability; 23 percent used subjective business judgements derived from experience; 36 percent used a combination of the two; 17 percent used meaningful proxies for profitability.

This problem was appreciated by Mirzaian (op. cit. p. 270) who reluctantly used export profitability as a measure of export performance because

the majority of respondents indicated that they do not make a practice of distinguishing between home and exports profitability, with the result that any assessment of . . . exports' profitability was virtually impossible. In addition the numerous limitations that were faced during the interviews led to the conclusion that using the export profitability criterion would be difficult to evaluate due to the number of arbitrary assessments that were to be used to overcome the various limitations in the response of each individual company.

For these and other reasons, export profitability was not considered as a possible criterion for measuring export performance.

vi) Peer Evaluation

Peer evaluation involves the researcher asking the firms in the sample to evaluate, rank or mention the name of peers whom they think have been good performers, either based on laid down criteria or through their general impressions of the peers. Although not popular in the literature, peer evaluation could serve as a useful gauge of performance in a setting (such as in New Zealand) where virtually all the players know each other. The obvious difficulty associated with this evaluation approach is the bias the technique has toward large and well-known firms.

3.2.2 Summary

This section has examined varying views on measuring export performance. It has been noted from the literature that researchers are at variance on how export performance should be measured, although the most commonly used measure of export performance is export intensity. Furthermore, problems associated with the

use of export intensity as a measure of export performance have been identified. These problems are further compounded when, as in most cases, export intensity is used as *the* measure of performance. Kleinschmidt (op. cit. p. 122) correctly remarked:

it is probable that this exclusive reliance on export level [export intensity] as a measure of export performance for both conceptual development and empirical analysis has resulted in too narrow an interpretation of firms' export performance. The determinants of 'good export performance' found in previous studies relate to only one kind of performance - export level and fail to capture the total performance.

In my view, the best way of measuring export performance is through the use of multiple criteria rather than relying on any single measure.¹⁵ In this study, two objective and two judgemental measures were used: export intensity, the absolute export sales index, self-evaluation and peer evaluation respectively.

The criteria used may not fully address all the questions and criticisms levied against the use of and over-reliance on export intensity. Nonetheless, the use of multiple criteria will, among other things, help to minimize the biases and inadequacies inherent in a single criterion.

Diagrammatically, the measures of export performance proposed for this research can be presented as:

15 Indeed this approach is increasingly finding favour in the literature. See for example, Khan (op. cit.); Fenwick and Amine (op. cit.); Kleinschmidt (op. cit.); (Mirzaian 1982); Beamish and Munro (op. cit.).

EXPORT PERFORMANCE

Objective Measures

- : export intensity for 1984 to 1989
- : absolute export sales index for 1984 to 1988

Judgemental Measures

- : importance of and company's self-evaluation of export market share
- : importance of and company's self-evaluation of export profitability
- : importance of and company's self-evaluation of export market diversification
- : importance of and company's self-evaluation of customer satisfaction
- : company's self-evaluation of its overall export performance five years ago
- : company's self-evaluation of its current overall export performance
- : company's self-evaluation of overall export performance three years hence
- : peer evaluation
- : export award

Figure 3.2 Proposed Measures of the Firm's Export Performance

3.3.0 The Marketing Concept

Chapter 2 explored different definitions of the marketing concept, traced its evolution, and reviewed empirical studies that have examined the link between marketing orientation and export performance. The same chapter also covered both the various

criticisms of the marketing concept and responses to the criticisms. This section presents a workable definition of the marketing concept and the criteria used in

consumers occupy in the formulation of marketing strategies; the importance of a coordinated effort throughout the organization; and the importance of long-term profitability of the firm. In spite of these similarities, there is a marked difference between the definition presented here and those found elsewhere. Notably, the definition adopted in this study, does not subscribe to the idea that the marketing department should be given more importance than others. It is argued that in a marketing-oriented firm all departments have, in their own right, an important role to play in the realization of the firm's objectives. In such firms each department, and indeed each job, is seen to aim at customer satisfaction. It is the chief executive officer, rather than the chief marketing executive, who should steer the firm to a marketing (or rather customer) orientation through a proper coordination of 'decentralized' marketing activities. This is the true application of the marketing concept. Hayes (1988 p. 14) is also sympathetic with this view when he writes:

. . . marketing concept is too important to be delegated solely to the marketing department. Certain activities, of course, are logically assigned to the marketing department; sales, advertising, and market research are the obvious ones. In many organizations, such activities as physical distribution and after sale services are also functions of the marketing department. But the marketing concept - the notion that the firm has as its primary purpose the satisfaction of customer wants and needs - is the responsibility of top management. If this philosophy is to become ingrained in the beliefs and values of the organization, top management must define it in organizationally relevant terms and must constantly reiterate and reinforce it.

It was noted in Chapter 2 that the degree of marketing orientation of the firm is measured by the extent to which the firm has adopted *and* implemented the marketing concept. In this research, adoption of the marketing concept is measured by three variable groups: (1) customer focus, (2) long-term profit orientation (as reflected by the extent to which the firm monitors performance), and (3) the system of evaluating marketing staff. The extent of implementation is measured by two

variables: integration and organizational structure (a reflection of the extent to which the marketing department has control over certain marketing functions).

In this research, as in others, the marketing concept has been deliberately split into two main components (adoption and implementation) because each of the two influences performance differently. Conceptually, it is quite possible to see a firm registering high performance as a result of adopting the marketing concept with relatively little implementation, and vice versa.

The variables used for measuring the firm's degree of marketing orientation were drawn from three types of literature: empirical, normative and critical studies of the marketing concept.¹⁸ The reasons for drawing independent variables from the first two sets of literature are obvious. Those are variables which have received wide publicity and have been regarded by both normative and empirical writers as reasonable measures of the firm's degree of marketing orientation. However, for the third set of literature, it is believed that some of the criticisms are genuine and need serious consideration. In the following pages each of these variables is described.

1 Customer Focus

i) use of customers as a source of new product ideas

The extent to which the firm uses customers as a source of new product ideas, i.e., the machinery established by the firm to listen to and accommodate consumers' ideas. These can be either in the form of suggestions or complaints, or both.

¹⁸ See Chapter 2.

ii) use of customers to evaluate new product ideas

The extent to which firms use customers to evaluate new ideas (whatever the source).

iii) measuring customer satisfaction

Although customer satisfaction is at the very heart of the marketing concept, past research has not attempted to measure it directly or otherwise. This problem is not confined to marketing scholars. In a fairly recent study which sought to explore the reasons for failure to achieve a true marketing orientation, Hayes (ibid. p. 14) noted that most firms do not attempt to measure customer satisfaction directly. Instead many firms gave more attention to monetary measures of performance, and customer satisfaction was given little or no attention at all.

iv) market segmentation

The extent to which the firm develops different products to serve different market segments. Marketing segmentation contributes to customer satisfaction because the former is a response to differing consumer needs.

v) training of non-marketing staff

The extent to which staff in departments other than marketing are given marketing related training. For an organization to 'think' marketing, staff in other departments need to be exposed to some basic principles of marketing so as to make them appreciate and fully participate in achieving the goal of customer satisfaction.

2 Evaluation Systems

The extent to which firms use marketing-based performance measures in evaluating managers. In this study, four such measures were used: customer satisfaction, profits on products, profits on markets and overall market share.

3 Profitability

Commitment to long-term export sales profitability is a difficult variable to measure. Many firms do not have accounting systems elaborate enough to separate domestic from export sales profitability. And where they do, there are still problems of confidentiality, and hence of accessibility to such information. There is a further problem of comparability of data among firms which adopt different accounting systems. Due to these practical difficulties, commitment to long-term export profitability was measured by a dichotomous question, i.e., whether or not the firm conducts profitability analysis by products, by markets and by key customers.

4 Integration and Coordination

The marketing concept dictates that there should be a high degree of integration both within the marketing department and throughout the organization. Lack of coordination within the marketing department is illustrated by Kotler (1988 p. 20) who cites an example where the firm's engineer was upset by the marketing staff because they (the marketing staff) "were always protecting the customer and not thinking of the company's interests!" Integration with other departments is also

crucial. Commenting on the role of each department in a marketing oriented organization McCarthy and Perreault (1990 p. 29) wrote:

The 'fences' come down in an organization that has accepted the marketing concept. There are still departments, of course, because specialization makes sense. But the total system's effort is guided by what customers want - instead of what each department would like to do.

In this study, integration and coordination was measured by the extent to which the marketing department shared information and made joint decisions with other departments, notably the production, finance and sales departments.

5 Organizational Structure

Many researchers in the past have argued that implementation of the firm's marketing concept requires a proper organizational structure to place the marketing department on an equal footing with other departments. In the past this was measured by the status of the chief marketing executive (denoted by the officer to whom he or she reports), the number and type of committees of which he or she is a member,¹⁹ his or her title and the responsibility that the marketing department has for various functions.²⁰

In this study, this variable was measured by the extent to which the marketing department was responsible for nine functions in the organization. These functions were: (1) product planning and development, (2) packaging, (3) pricing, (4) credit

19 McNamara (1970); Stening (op. cit.).

20 Stening (ibid.).

extension, (5) advertising, (6) personal selling, (7) transportation, (8) inventory control, and (9) quality control.²¹

Presented below is a visual presentation of *proposed* measures of the firm's degree of marketing orientation:

²¹ Vizza et al. (1967 p. 14-15) and McCarthy and Perreault (op. cit. p. 31) present a list of functions over which marketing departments ought to have some sort of control. At least one study has used a similar method. See Stening (op. cit.).

Figure 3.3 Proposed Measures of the Firm's Marketing Orientation

3.4.0 Control Variables

It was noted in section 3.1.0 that the degree to which a firm is marketing oriented is not the only factor that determines its export performance. It is therefore appropriate to identify those factors that need to be controlled when examining the relationship between marketing orientation and export performance. This section sets out to achieve this.

The control factors are divided into five main constructs: (1) the firm's differential advantages, (2) marketing strategy, (3) management attitude toward exporting, (4) managers' personal traits, and (5) the level of government support. In the following pages each of these is addressed in detail.

1. Firm's Differential Advantages

With respect to the firm's differential advantages, three aspects were investigated: size of the firm, export experience, and domestic base.

i) Size of the Firm

There are several ways in which the size of the firm is defined and measured. Hirsch (op. cit.) gives a summary of some of these measures and their shortcomings. The first is the total fixed assets of the firm. This measure is not suitable because it ignores the contribution of other inputs such as labour, scientists, and engineers. A further inadequacy of this measure rests on the fact that it represent historical costs rather than current or replacement costs. Even without this, the measure is still unsuitable in

situations where the equipment is hired and the premises rented rather than owned by the firm.

The second is the total work force. The main advantage of this measure is that it is responsive to temporary changes in market conditions. When the demand falls, employees are put on shorter hours and when it unexpectedly increases, workers are asked to work extra hours. If the changes are likely to be more permanent in nature, then the management will resort to hiring or firing of workers as a logical solution to the problem. A serious drawback to using total work force as a measure of size is that it ignores the contribution of capital.

The third is the total sales of the firm or plant. Though this is a commonly used method, at times a wrong impression of the firm's true size could be given due to large changes in inventories. A high reduction of inventories gives an inflated picture of the size and vice versa. Commenting on the paper by Czinkota and Johnston (1983), Reid (1985) for example, challenged the use of total sales volume as a measure of size by stating that ". . . sales volume as a size criterion for distinguishing between firms' export behaviour may have less merit than using export sales volume". The author further argued that unless an assumption is made of some equivalent relationship between export sales volume and the variables under investigation, ". . . export volume is an intervening variable capable of confounding the research results" (p. 154). Against this reasoning, one can argue that total sales gives a better estimation of the firm's size, because the amount of resources a firm has to support the export arm of its business is, by and large, contingent upon the *total* rather than export sales only. If one was to follow Reid's suggestion, two firms will be regarded as having the same size even though one is exporting 50 percent of its total sales of 1 million tons while the other one exports only 5 percent of its total sales of 10 million tons.

Finally, Hirsch points to value added as an adequate measure of size. He defines value added as "... the market value of one year's output less the value of purchases and inventory adjustments. This measure represents the contribution to output of both capital and human resources utilized by the firm" (p. 72). The author realized the distortions which random and cyclical factors may have toward the firm's true size and as a remedy, he suggested the averaging of the value added over a number of years. After presenting different viewpoints on measuring the size of the firm, Hirsch advocated the use of present value of the total resources available to the firm as an ideal measure of size, and suggested that the value added could be conveniently used as a proxy for the present value of total resources available to the firm.

Empirical evidence on the influence the size of the firm has on export performance is mixed. On the one hand, Neidell (1971), Stening (op. cit.), Bilkey and Tesar (1977), Khan (op. cit.), Kleinschmidt (op. cit.), Cavusgil (1984a²²), Diamantopoulos (1988), and Lindsay (1989) found no relationship between the size of the firm and export performance.²³ On the other hand, Tookey (op. cit.); and Hirsch (op. cit.) reported the existence of a relationship between the two variables. Hirsch in particular noted that such a relationship existed only within a certain range, beyond which the relationship did not hold.²⁴

22 In a study of 70 Wisconsin and Illinois manufacturing firms Cavusgil (1984b) obtained conflicting results. Although no relationship was found between the size of the firm (measured by the number of employees) and commitment to exporting, the author *did* find a significant relationship between the two variables when size of the firm was measured by annual sales.

23 Mirzaian (op. cit.) cited two articles (*Financial Times*, April 21, 1979 and *The Times*, April 22, 1981) which revealed that small firms have won export awards in Britain, hence implying that size of the firm has no relationship to export performance.

24 Although in one of the findings of the quoted study the author did not find a clear relationship between size of the firm and export intensity, he nonetheless noted that "... it would be possible to say that the high export ratio was more evident in small companies than large ones" (p. 267).

There are several reasons for believing that there exists a positive relationship between size of the firm and export performance. The relationship is explained by the fact that large firms can, as a rule, reap the advantages of financial, marketing, procurement and other economies of scale. These firms can also afford to assume the risks involved in new product development as well as other forms of business and export-related risks. Large firms also have the ability to allocate more resources to exporting by opening a separate export unit which will handle complex documentation and other exporting procedures. Furthermore, such firms often have more ability to employ competent business school-trained managers who are capable of monitoring and adjusting to changes taking place in the environment. It can therefore be argued that, though there might not exist a direct relationship between the size of the firm and export performance, it is the characteristics which are associated to the size (e.g., management capabilities and financial resources) which could lead to a positive relationship between the two variables.

Notwithstanding Reid's (op. cit.) criticism, in this study, size of the firm was measured by both total sales and the total number of employees. Since empirical evidence on this variable is not conclusive, a significant relationship was not necessarily expected.

ii) Export Experience

Owing to peculiar problems such as documentation, mode of payments, product adaptation, use of foreign language etc., export markets often pose economical, administrative, psychological and cultural barriers to new exporters. However, as exporters acquire more experience, one would expect that these barriers and problems would be minimized. It might, therefore, be reasonable to believe that there exists a positive relationship between exporting experience and export performance.

Contrary to such expectations, empirical evidence on this variable is not conclusive. While some researchers indeed found a positive relationship,²⁵ others²⁶ contradicted this view.

In this study, export experience is defined as the number of years the firm has been exporting. There was no specific expectation about the direction of the relationship.

iii) Domestic Base

The effect domestic base has on export performance is a variable which has received less attention in overseas literature on export performance. Of all the literature surveyed, only two (both of them New Zealand studies) investigated the effect that domestic base might have on performance. It would be reasonable to assume that firms which have a strong domestic base will feature relatively better in foreign markets than firms which do not have such a base. However, this assumption is not conclusively supported by the available evidence. The evidence reported by the two cited studies is split. Whilst Stening (op. cit.) dismissed the assumption, the findings by Lindsay (op. cit.) reinforced it.

In this study, the strength of the domestic base was measured by the firm's domestic market share over the last five years, and it was expected that, in the event of a significant relationship, it would be positive.

25 See for example, Alexandridis (1971); Stening (op. cit.); Fenwick and Amine (op. cit.); Bilkey (op. cit.). Bilkey however, found a negative correlation with export profitability (the main dependent variable) though in the same study export experience was positively correlated with export intensity.

26 Neidell (op. cit.); Ayal and Hirsch (1982); Kleinschmidt (op. cit.); Ursic and Czinkota (op. cit.); Diamantopoulos (op. cit.); and Lindsay (op. cit.). Ursic and Czinkota however, examined the relationship with business experience generally and not export experience particularly.

2. Marketing Strategy and Market Conditions

The effect of marketing strategy and market conditions on export performance can not be over-emphasized. Several studies have reported the importance and the contribution of these two factors to the firm's export performance. In this study, the two factors were investigated under nine different sub-headings. These were: (1) product adaptation, (2) relative product quality, (3) product uniqueness, (4) channels of distribution, (5) before and after sale services, (6) pricing, (7) export initiation (the first export order), (8) number of markets served; and (9) the degree of competition in export markets. The first eight variables are related to the firm's strategy while the last one gives a 'feel' for foreign market conditions. Presented below is a description of each and how it was measured.

i) Product Adaptation

The literature on export performance has frequently associated product adaptation with high export performance.²⁷ Product adaptation was defined by Kacker (1975 p. 62) as

. . . any change, adjustment or compromise made by an . . . exporter in his product offering (shape, design, components, measurements or other specifications) to gain entry into and serve the needs of an overseas market.

The main objective of adaptation is to achieve a long-term growth in exports through the lasting satisfaction of overseas buyers. To underscore the importance of product adaptation, Kleinschmidt (op. cit. p. 24) stressed that

27 See Tookey (op. cit.); Fenwick and Amine (op. cit.); Kleinschmidt (op. cit.); Kaynak and Kothari (1984); and Lindsay (op. cit.). There are however, two known studies that contradict this view. See Koh and Robicheaux (op. cit.) and Diamantopoulos (op. cit.).

firms which voluntarily adapt their products beyond compulsory adaptation to demands in foreign markets, . . . are operating in a manner consistent with the marketing concept. Such firms . . . should perform better than those firms which do not adapt and segment their markets.

According to Kacker (op. cit.) product adaptation can be placed on a continuum. One end of the continuum indicates a minor degree of adaptation incorporating a limited number of extremely necessary modifications in the product. Changes in the voltage system, units of weight and measurements, and the use of Arabic script on typewriters and computers are a few examples of minimum form of product adaptation. The other end of the continuum represents a level of maximum adaptation, a stage at which the identity of the original product is completely lost and an altogether new product emerges as the outcome of a series of major modifications. A typical example of this form of adaptation is the non-alcoholic beer exported to some of the Gulf countries. In between these two extremes is an area of voluntary adaptation. This is a deliberate strategic decision aimed at meeting specific needs of the markets. Often such decisions go beyond mandatory forms of adaptations. To illustrate the point, Kacker (op. cit. p. 65) cited a case in which a bicycle manufacturer took customer preferences into consideration by adjusting the mudguards from the round shape to a 'U' shape. In another case, the bicycles exported to a certain country went completely unpainted because the buyers preferred them that way.

In this study, product adaptation was measured by the frequency at which firms make voluntary modifications to meet the needs of overseas buyers. Since there are only two known studies²⁸ which contradict a seemingly overwhelming majority of consistent findings, our expectations were that firms making frequent voluntary product

28 Koh and Robicheaux (op. cit.) and Diamantopoulos (op. cit.).

adaptations will have a better chance of showing higher export performance than firms which seldom do so.

ii) Relative Product Quality

Like adaptation, many researchers have associated high quality products with high export performance.²⁹ Only one study is known of that holds a different view.³⁰ Conventional wisdom would suggest that the higher the perception of quality that overseas buyers have of a product, the higher are the chances for that particular product to succeed in the given market.

Product quality is rather a difficult variable to measure.³¹ Perhaps the best way to measure this variable is to survey overseas buyers for their impressions of the products. Owing to obvious practical difficulties, this option was not taken further. Instead, information was sought on exporters' own perceptions of the quality of their products relative to those of competitors in the same market segment and price range. The expectation was that relatively high quality perception would be associated with a high export performance.

iii) Unique Product Advantage/Product Uniqueness

A unique product is one for which no comparable product exists on the market in which that product is sold. Although a unique product might not necessarily be a desired or needed product, nonetheless many people would expect and associate a

29 See Tookey (op. cit.); Cunningham and Spigel (op. cit.); Mirzaian (op. cit.); Kaynak and Kothari (op. cit.); Burton and Schlegelmilch (1987); and Lindsay (op. cit.).

30 See Ayal and Hirsch (op. cit.).

31 Khan (op. cit.) and Ayal and Hirsch (op. cit.) also appreciated this problem. In the former study, product quality was measured by exporters' quality problems, while in the case of the latter, relative skill intensity was used as a proxy for product quality.

unique product with a high export performance. Surprisingly, available empirical evidence on this variable is not conclusive. Whilst Alexandridis (op. cit.), Khan (op. cit.), Mirzaian (op. cit.), and Kleinschmidt (op. cit.) found a positive relationship, Ayal and Hirsch (op. cit.), and Cavusgil (1984a) held a different view. Again it was not practically possible to measure product uniqueness directly. Instead, exporters were asked if they considered their product unique or common in their major market(s).³² Since available evidence is mixed it was expected that the direction of the relationship could go either way.

iv) Channels of Distribution

The importance of channels of distribution in both domestic and international marketing is obvious. Terpstra (1987) sees selection of channels of distribution as one of the most critical decisions in international marketing, and suggests that the selection depends on four main factors. These are: (1) the company's goals (with regard to the volume of international business desired, geographical coverage and the time span of foreign involvement); (2) the size of the company in sales and assets; (3) the company's product line and the nature of its products (i.e., industrial or consumer goods, high or low priced goods, and the technological content); and (4) the competition abroad.

Cateora (1987 p. 572) too stressed the importance of the channels of distribution and observed that

To complete the components of the marketing mix and to get the product to the target market, channels of distribution must be developed. Each country or target market area presents the international marketer with unique middlemen and distribution patterns. The challenge for the international marketer is to forge channels from available

32 A major market is a market to which a firm exports more than 50 percent of its total sales.

middlemen that will be effective in meeting the needs of the target market within the constraints imposed by company policies and resources.

Cateora went on to suggest four key elements in distribution decisions. These were: the functions performed by middlemen (and the effectiveness with which each is performed), the cost of their services, their availability, and the extent of control which the manufacturer can exert over middlemen activities.

Keegan (1984 p. 374) also acknowledged the importance of the channel of distribution when he noted that ". . . channel strategy is one of the most challenging and the most difficult components of an international marketing program". Hence he suggested that "Channel strategy in an international marketing program must fit the company's competitive position and overall marketing objectives in each national market" (p. 375). He further argued that the process of shaping international channels to fit overall company objectives and competitive position is constrained by four factors. These are: customer characteristics (such as number, geographical distribution, income, shopping habits etc.); product attributes (degree of perishability, service requirements, unit price etc.); middlemen characteristics; and environmental forces (i.e., economical, social, cultural and political foreign environment).

As in the study by Khan (op. cit.), channel strategy in the current research was investigated along two basic flows, namely ownership and the physical flow. Ownership flow refers to the number of intermediaries a product passes through before reaching the overseas buyer. This can be done by selling in any of the following: through an agent, through a wholesaler, through an off-shore subsidiary/domestic-based export department, or through a state owned corporation.

Several researchers have examined the effect of the type of distribution channel and dealer support on export performance. Tookey (op. cit.), Cunningham and Spigel (op. cit.), and Lindsay (op. cit.) found successful exporters were making effective use of foreign agents. On the other hand, Khan (op. cit.) found the use of a foreign subsidiary was a contributing factor to export success. In Bilkey's study (op. cit.) of Wisconsin manufacturing firms no constant pattern emerged. The results showed that the importance of a channel varied according to the type of product and market to which the product is exported. In this study, expectations were that for industrial products, direct selling would positively correlate with export performance, whereas in the case of consumer goods, selling through agents would contribute more toward export performance, *ceteris paribus*.

The second basic flow is physical. It involves all transactions necessary for the physical movement of goods through transportation and storage. It consists of both physical distribution and promptness in delivery (Khan op. cit.). The former is to some extent a non-controllable factor, while the latter is in most cases under full command of the firm. This research focused on the second aspect of physical distribution, i.e., delivery time, because the only known study³³ that had examined the effect of physical distribution on export performance found the variable to be insignificant.

The importance of promptness in delivering the goods, be it in a foreign or domestic market, can be best illustrated by the case described by Lindsay (op. cit. p. 97). The author related a story of a managing director of a New Zealand company who had to require extra hours from his staff so that the company could meet the new deadline

33 See Khan (op. cit.).

brought forward by a US customer. When the product was ready, for fear of any delays, the managing director took the first available flight to the US to deliver the goods personally. The US customer was highly impressed and the two firms had continued warm business relations.

Available empirical evidence on the relationship between promptness in delivery and export performance shows that strict adherence to delivery schedules often leads to high export performance,³⁴ and that when fewer delivery problems were encountered by exporters, the higher were the chances of export success.³⁵ In this study, delivery time was measured by the extent of the importance the firm attaches to meeting delivery deadlines. An alternative operationalization was to use delivery problems encountered (Khan *op. cit.*). The problem with this definition lies in its limitation in comparing firms which export different products to different markets. Conventional wisdom would suggest that importers would prefer suppliers who are relatively free of delivery problems, but the reality is that different markets have different delivery standards. A firm exporting to the US, for example, may report more delivery problems (partly because of relatively high customer expectations) compared to a similar firm exporting the same product to, say, India. Khan's measure is more useful in situations where firms in the sample export the same product to markets having similar characteristics. It was expected that attaching high importance to delivery schedules would correlate positively with export performance.

34 See Jackson (1981); and Mirzaian (*op. cit.*).

35 Khan (*op. cit.*).

v) Before and After Sale Services

The level of before and after sale services is another variable which has been associated with export performance. Services refers to activities provided by the manufacturer (or someone on his behalf) to the customers. Services can be generally divided into three groups, namely commercial, financial and product support services (Piercy 1982). Commercial services take the form of ability to beat the deadlines, ability to meet emergency order, delivery of goods in acceptable condition, the policy on returned goods etc. Financial services include direct customer credit, helping the customers to establish links with the sources of finance or in some cases even advancing loans to the customers. Product support services is divided into two. The first part is pre-sale activities which include physical demonstrations, installation etc. The second is post-sale services which are normally in the form of supply of spare parts, maintenance and repairs, training etc.

Without exception, all known researchers who have investigated this variable have associated it with high export success.³⁶ The level of service provided to the customers can be measured in different ways. One such possibility is to use the firm's service budget. However, this study did not use this operationalization for fear that such financial data might be considered commercially sensitive, and hence classified. As an alternative, on a 4-point Likert scale, exporters were asked to indicate the degree of importance their firms attached to the services listed. It was expected that attaching more importance to customer service would be associated with high export performance.

36 See Cunningham and Spigel (op. cit.); Khan (op. cit.); Mirzaian (op. cit.); Kaynak and Kothari (op. cit.); and Lindsay (op. cit.).

vi) Pricing Strategy

Simply stated, a price is a monetary sacrifice which the buyer makes in exchange for goods and/or services. Under normal circumstances, the price is set between the unit cost of production (the floor) and what the market will bear (the ceiling). For obvious reasons, export prices are in most cases different from domestic prices. The literature has documented several pricing methods from different disciplines ranging from economics to psychology. Some of these methods are cost-plus, marginal pricing and market based pricing. Cost-plus pricing is the commonest of all the pricing methods. Its popularity comes from its simplicity. Though it is commonly used, cost-plus pricing suffers from at least two drawbacks (Piercy 1982 p. 156). The first is that the mark-up is often set arbitrarily and is based on targets rather than opportunities. And the second, which is more disturbing than the first, is that the logic of the method is tautological. The price is arrived at after the allocation of all the costs including the overheads. The allocation of the overheads is based on an assumed sales volume which in turn is influenced by the set price!

A researcher investigating the relationship between price and export performance has several price measurement options. Some of these are: (1) price quotation strategy, e.g., FOB, and CIF, (2) pricing and invoicing currency strategy, (3) relative export price, i.e., exporters' price compared to competitors' price, (4) export price compared to domestic price, and (5) the basis for determining export price, e.g., price based on costs; using prevailing market prices; entering into price agreements; charging what the market can bear etc. There is overwhelming evidence in the literature pointing to a positive relationship between pricing strategy and export performance. Whilst Cunningham and Spigel (op. cit.) found special prices to be a contributing factor toward export success of winners of The Queen's Award to Industry, a study by Weinrauch and Rao (1974) showed that price is the most important variable and as

such required adaptation and adjustments when exporting to foreign markets. Other researchers such as Bilkey (op. cit.), and Koh and Robicheaux (op. cit.)³⁷ found that when export prices are higher than domestic prices, export performance was also high.³⁸ Yet others such as Mirzaian (op. cit.), and Kaynak and Kothari (op. cit.) associated competitive pricing with export success. Contradicting Koh and Robicheaux (op. cit.), Neidell (op. cit.) did find a significant positive relationship between price quotation strategy (in this case FOB) and export performance.

In this study, pricing strategy was investigated under three different headings as shown below:

- (1) method of price determination, i.e., costs, prevailing market prices and what the market will bear
- (2) currency strategy - this is especially important in New Zealand where exporters have been complaining of a high exchange rate. A follow-up question was asked to probe the frequency with which exporters cover themselves against foreign exchange fluctuations.
- (3) relative export price, i.e., firm's price compared to that of major competitor(s)

The expected results were as follows:

- (1) method of price determination - prevailing market prices, and what the market will bear will positively correlate with export performance, *ceteris paribus*.

37 Interestingly enough, in the same study other dimensions of pricing strategy were not found to be significantly related to export performance. These were: export currency strategy, method of price determination, and export price quotation strategy.

38 Khan (op. cit.) found exact the opposite of this relationship.

However, with regard to cost-based pricing, the relationship could be positive or negative depending on how prohibitive the costs are and the elasticity of demand for the product in a particular market.

- (2) currency strategy - invoicing in the importers' currency will positively correlate with export performance.
- (3) relative export price - negative relationship with success, i.e., the lower the price compared to competitors' price the higher is the chance of success.

vii) Export Initiation

The literature on export marketing divides exporters into pro-active and re-active firms. Studies by Neidell (op. cit.), Czinkota and Johnston (op. cit.), (Cavusgil 1984b), and Lindsay (op. cit.) showed that successful exporters were pro-active, i.e., firms which actively sought for their first export order. In a slightly different vein Stening (op. cit.) found that firms exporting for positive reasons were among high export performers. The conclusiveness of the evidence in the literature is not surprising because, due to the peculiar nature of export markets, success in exporting requires careful planning, systematic evaluation of foreign markets and a purposeful decision to export.

In this research, respondents were asked whether involvement in exporting was primarily a result of an unsolicited order or a deliberate export decision. A similar operationalization was used by Piercy (1981) and Diamantopoulos (op. cit.). It is therefore expected that pro-active export behaviour would be associated with high export performance.

viii) Number of Markets Served

One important aspect of export strategy relates to the number of markets that the exporting firms choose to serve. Basically, there are two market coverage strategies which firms can choose from. These are concentration and diversification. Exporters adopting a concentration strategy are better able to monitor and adjust to changes taking place in the foreign markets. This strategy also permits effective use of merger resources and facilitates manpower specialization. Furthermore, exporters using this market coverage strategy have the advantage of fewer distractions from important tasks created by small orders which, in most cases, originate from serving too many small markets.

In spite of its usefulness, the strategy of market concentration has some limitations. The first is that if care is not taken, the strategy can lead to over-reliance on too few markets. Related to the first, the second problem of market concentration strategy is that foreign markets are often surrounded with a relatively high degree of uncertainty, partly because of difficulties involved in getting complete information about the markets and partly because of the relatively high degree of political risk. Owing to the character of the market, an exporter using a market concentration strategy needs to exercise great care in selecting the markets so as to minimize the probability of failure. Finally, it should be noted that international markets contain many groups with varying degrees of power and influence. According to Piercy (1982 p. 57), market concentration strategy is associated with high market share and an exporter using this strategy stands more chances of being accused of dumping and unfair competition. Such accusations could beget laws and other forms of non-tariff barriers from the host country.

The second type of export strategy is market diversification which is also referred to as market spreading. The protagonists of this approach to exporting argue that market spreading not only reduces the dependence on too few markets but also reduces the overall market risks through operating in a portfolio of markets. In addition, the strategy helps the exporters to acquire more experience through exposure to different market conditions. They further argue that this strategy offers better prospects for the use of product specialization as a competitive tool. They also maintain that since most of the expenses involved in serving overseas markets are overheads rather than variable costs, market spreading is especially attractive because the necessary administrative expenses do not markedly increase with the increase in market numbers. Finally, they hold that where country differences are less important than buyer differences between groups of similar countries, market clustering becomes a very useful marketing technique. The technique does however call for a market spreading strategy.

Like any strategy, market spreading is not free of flaws. The main danger is that when too many markets are selected, the span of control is increased, visits become less frequent, distributors are not adequately motivated and no in-depth market penetration is made in any one market. Thus, when competition (from any source) builds up, it becomes difficult to withstand.³⁹

Available empirical evidence on the relationship between market coverage strategy and export performance is somewhat mixed. While on the one hand Stening (op. cit.), Diamantopoulos (op. cit.) and Lindsay (1990) have reported a high export performance when the number markets served is increased, on the other hand a study

³⁹ For a good summary of factors which determine the choice between market concentration and market spreading strategies, see Piercy (Ch. 6 op. cit.).

by Beamish and Munro (op. cit.) found that results were not conclusive. A positive relationship was found when export performance was measured by export intensity - this was not found when export profitability was used as a performance measure.

In this study, a simple count of the number of countries which a firm exports to was used to measure this variable. Given the weight of evidence, it was expected that market diversification strategy would be associated with high export performance.

ix) Competition

As with domestic markets, export markets' competition plays a major role in determining the firm's success. In foreign markets, competition emanates from three main sources. These are: domestic firms which are in the same line of business, foreign firms, and the exporter's compatriots. Such competition can take the form of price or non-price competition. The use of the former largely depends on the price elasticity of demand and the tool can be very effective if the objective is to obtain a substantial increase in short-term export volume. However, the danger of relying on price as a competitive tool is the risk of eroding corporate and brand images and a bad association of the price with quality. Furthermore, substantial price cuts could lead to accusations of dumping or could entice a price war which in turn could lower the profits. In this world of fierce competition, many firms have resorted to using non-price competition in the form of design flexibility, product quality, before and after sale services, personal visits etc. as competitive weapons. Piercy (Chapters 8 to 10 op. cit.) gives a good summary of empirical evidence showing how both price and non-price competitive tools have led to success. It is important to note that no sweeping generalizations can be made about the best competitive strategy. In the real world, firms use a combination of both price and non-price competition rather than relying on one single factor. The emphasis on any of the two will depend on the price

elasticity of demand for the product, the market structure, government regulations and a host of other factors.

Empirical evidence about this variable is not conclusive. While McGuinness and Little (op. cit.) unexpectedly found a positive relationship with export performance, Bilkey (op. cit.) found a negative one. In this study, respondents were asked to rate the degree of competition (in export markets) relative to the domestic market. An alternative measure of competition is to use the number of major competitors in domestic and major foreign markets. It was decided not to use this option because, in the case of foreign markets, it is very difficult, if not impossible, for firms to obtain accurate data on the number of competitors they have; even more so if they are serving huge, complex and very competitive markets such as Japan and the USA. Were accurate data available, one might argue that the sheer number of competitors would not necessarily give a better indication of the intensity of competition.

Although conventional wisdom would seem to associate a lower perception of foreign competition with high export performance, there are reasons to believe otherwise. The argument is simply this: firms reporting a high perception of foreign competition are likely to be more prepared and better able to cope with the situation than those which have a low perception of the degree of foreign competition. Expectations were that the direction of the relationship between the level of foreign competition and export performance could go either way. This is so because, conceptually, both relationships are possible, a fact which is further supported by the split in the empirical evidence.

3 Management Attitude and Commitment to Exporting

i) Language Skills

Language skills is one of the variables which gives some indication of management commitment to exporting. Some researchers in the past have examined the effect that foreign language skills might have on export performance. Although conventional wisdom suggests that firms which have good language skills would have an advantage over those which do not, available evidence is split. Cunningham and Spigel (op. cit.) found language proficiency among the 'other ingredients' for successful exporting - a finding which was echoed by Burton and Schlegelmilch (op. cit.), but Simmonds and Smith (op. cit.) did not see the importance of linguistic abilities in obtaining the first export order. Mirzaian (op. cit.) too did not find that knowledge of Arabic language was a key to the success of British firms in exporting to Middle East markets. A possible explanation could be that most exporting companies either have local partners or engage the services of local agents who are conversant with both colloquial and business local languages. In this study, firms were asked to rate their overall language skills on a 5-point Likert scale. Unlike past studies, the difference here was that the question focused on company-wide language skills rather than focusing on export or marketing managers' skills. Since available evidence is split, the direction of the relationship was not predetermined.

ii) Attitude toward Risk and Profitability

Managerial attitude toward risks and perceived profitability of exporting has a bearing on the export performance of a firm. As discussed earlier, export markets pose different type of problems and have a relatively high degree of risk compared to domestic markets. Export risk ranges from financial risks, e.g., exchange rate fluctuations to business risks, e.g., credit extension to political turmoil such as an

abrupt change of government (a typical problem in developing countries). It is therefore not surprising that many exporters are very cautious when dealing with foreign markets compared to doing business at home.

Relatively little has been written on the relationship between perception of risks and expectations on profits with export performance. Most of the studies on exporting provide evidence of the differences between exporters and non-exporters with respect to perception of risk and expectation on profitability of exporting.⁴⁰ Two studies are known of that have directly examined the relationship between profit expectations and export performance (Stening op. cit.; Cavusgil 1984a). In the cited studies, the relationship was found to be positive. On the question of risk, Roy and Simpson (op. cit.) did not find risk perceptions to be a critical factor in export decisions.

For the purposes of this study, on a 5-point Likert scale, exporters were asked to rate their general perception of export risks and profitability compared to the domestic market. The relationship between high perception of export profitability and export performance might be understandable, but the widely reported findings of perception of risks and export performance need qualifying. For this seemingly overwhelming evidence to hold true, an assumption must be made that a high perception of risk will necessarily result in a risk averse behaviour. This might not always be the case. More so since the finance literature⁴¹ associates aggressive firms (risk takers) with high return on equity compared to conservative ones. In this study, it was expected that high perception of profitability of exporting and low perception of risk would be associated with high export performance.

40 See for example, Simpson and Kujawa (1974); Roy and Simpson (1981).

41 See for example Van Horne (1986).

iii) Visits to Foreign Markets

The frequency of visits to foreign markets is one of the variables which has attracted the attention of many researchers of export performance. There are two purposes to these visits. One is to maintain close links with foreign distributors, while the second is to keep in touch with the markets with a view to getting a better 'feel' for the market conditions. There seems to be general agreement in the literature that frequent visiting is positively correlated with export performance.⁴²

Foreign visits can be measured in three different ways: by time, by costs or by the nature of the visits. In this research foreign visiting was measured by time, i.e., the average number of days in a year. One might be tempted to think that an annual travel budget could have given a better idea of the firms' commitment to and keenness for foreign markets. This alternative operationalization was not accepted because different countries have different levels of cost of living. If cost were used as a criterion, it would have been difficult to make meaningful comparisons between, say, two firms, one operating predominantly in high cost countries, and the other in low cost countries. The third measure is the nature of foreign visits. This measure is also not suitable because of possible difficulties involved in getting genuine answers to a seemingly sensitive question such as this. It was expected that exporters who make frequent visits to foreign markets would have a better chance of showing a high export performance.

42 See Tookey (op. cit.); Hirsch (op. cit.); Cunningham and Spigel (op. cit.); Neidell (op. cit.); Stening (op. cit.); Khan (op. cit.); Jackson (op. cit.); Mirzaian (op. cit.); Kleinschmidt (op. cit.); Cavusgil (1984b); Lindsay (op. cit.). In the same study, Hirsch did not find a positive relationship in Denmark. Koh and Robicheaux (op. cit.) supported this view.

iv) Export Unit

The existence of a separate unit for handling exports depends on the overall significance and contribution of exports toward achieving corporate objectives. If a firm exports a very small or negligible percentage of its total sales, then such exports will normally be handled by the existing sales or marketing department. However, as commitment to exporting increases, foreign operations become more complex - hence the need for a separate department or unit to handle exports.

Several researchers have associated the existence of an export unit with high export performance.⁴³ In this study, a simple dichotomous question was used to indicate the presence or absence of an export department or unit. Where such an entity existed, respondents were asked to give the number of years since its inception. Given the overwhelming consistent relationship reported in the literature it was expected that firms that have a separate export unit would have a better chance of reporting a high export performance.

v) Spending on Research and Development

Research and Development (R&D) has been frequently regarded as an important ingredient for success in exporting. The evidence in the literature too supports this proposition.⁴⁴ R&D has been defined as

... all costs associated with the search for, or discovery of, new knowledge that may be useful in developing new products, services, processes or techniques, or that might significantly improve existing products or processes. Excluded are costs of routine

43 For details see, Stening (op. cit.); Bilkey (op. cit.); Koh and Robicheaux (op. cit.); and Diamantopoulos (op. cit.). Stening also found that successful exporters distributed their products through foreign branches, a finding which was later echoed by Khan (op. cit.).

44 See for example, Hirsch (op. cit.); Stening (op. cit.); Kleinschmidt (op. cit.); Burton and Schlegelmilch (op. cit.).

product improvement or seasonal changes of style, market research and testing, quality control and legal costs to protect patents (Kleinschmidt op. cit. in the appendix).

In this study, respondent firms were asked to indicate their R&D expenditures as a percentage of total sales. Critics would be inclined to think that the actual amount spent on R&D would have given a better measure. However, owing to the sensitive nature of such information, it was thought that the respondents might not have been willing to cooperate. Again it was envisaged that a positive relationship between R&D spending and export performance would emerge, *ceteris paribus*.

vi) Importance given to Exporting

The overall importance given to exporting is another variable which researchers have associated with successful exporting. For instance, in a study of small and medium-sized Canadian manufacturing firms, Beamish and Munro (op. cit.) found that attaching high importance to exporting, as indicated by the ratio of employees with export responsibilities to total employees, led to high export intensity and high export profitability. Stening (op. cit.) too found that successful exporters attached high importance to exporting. In his study of Wisconsin manufacturing firms, Cavusgil (1984a) found that the existence of an export policy (an indication of attaching high importance to exporting) was associated with high export intensity firms - a finding which was earlier reported by Tookey (op. cit.). In his fairly recent study of exporters in the Scottish food and beverage industry, Diamantopoulos (op. cit.) found export staff (i.e., the number of people involved in exporting) as the best discriminator between high and low involvement exporters.

In this study, the importance attached to exporting was measured by the number of full-time employees with export responsibilities. Where part-time employees were involved in exporting, their number was halved and added to the number of full-time

employees. A similar operationalization was used by Diamantopoulos (op. cit.). An alternative would be to use the total salary paid to the employees directly involved in exporting. This was not feasible due to the nature of the information sought. It was expected that the more people are involved in exporting, the higher are the chances of better performance.

4. Managers' Personal Traits

Much has been written in the literature on the importance of managers' personal traits in steering a firm into export markets. This section will discuss two personal characteristics of managers that have been widely reported in the literature. These are their level of education and their work experience.

i) Level of Education and Work Experience

Conventional wisdom would suggest that the higher the level of education (business-related) of the executives involved in exporting, the higher would be the chances of success in exporting. The same can be said of managers' length of service in a particular firm as well as total accumulated experience in export business.

Simpson and Kujawa (op. cit.) reported significant differences in the level of education between decision makers in exporting and non-exporting firms - as did Burton and Schlegelmilch (op. cit.). In both studies, decision makers in exporting firms had a considerably higher level of education than in non-exporting firms. Axinn (op. cit.), in her study of machine tool manufacturing firms in Ontario and Michigan, found that firms which had a higher export intensity had a high percentage of managers who had overseas work experience. In a slightly different vein, Simmonds

and Smith (1968) related living and/or working overseas with a favourable export behaviour.

For the purposes of this study, the two variables were operationalized as follows:

- : level of education - respondent managers were asked to indicate their highest level (e.g., college degree, high school certificate) and the type of education (e.g., business degree, engineering degree, computer background).
- : experience in exporting - respondent managers were asked to indicate the number of years' experience in exporting.

Firms employing business trained managers or managers who have experience in exporting, or both, were expected to have a high export performance compared to those which do not have such managers.

5. Government Assistance

The importance of government assistance to exporters cannot be over-emphasized. For a country such as New Zealand, whose survival depends on exporting, the role of the government becomes even more pronounced. Government assistance to exporters can be in different forms ranging from tax incentives to preferential exchange rates (for export-related transactions), non-tax incentives, and outright subsidies. This section will focus on these issues.

i) Tax Incentives

Unlike many countries, New Zealand is a country whose survival depends on exports. For this and other reasons, one would expect a more active and positive role by government in promoting exports. One such assistance would be to provide tax incentives.

Many governments have used tax incentives to encourage exporters either to export more or to diversify their exports to cover both non-traditional products and markets. In New Zealand, tax incentives have been granted either on the basis of export performance or on the basis of actual expenditures incurred solely for generating export sales. It was mentioned in Chapter 1 that the government had phased out all forms of tax incentives in 1990. When deciding to phase out tax incentives, the government claimed that success in exporting (at the firm's level) relies on exporters being more marketing oriented - a proposition whose validity will be determined by this study. Three New Zealand based studies⁴⁵ on export performance have shown that tax incentives helped exporters to achieve a high export performance. It would be interesting to see how New Zealand exporters will perform after all tax incentives have been removed. However, the issue is beyond the scope of the current research. Internationally, Czinkota and Johnston (op. cit.) too related tax incentives to high export performance. In contrast, Diamantopoulos (op. cit.) could not discriminate high export performers from low export performers based on government export assistance.

In this study, on a 4-point Likert scale, exporters were asked to indicate the degree of importance they attached to tax incentives. Further, on a 3-point scale, they were

⁴⁵ Cullwick and Mellalieu (1981); Stening (op. cit.); and Lindsay (op. cit.).

asked the extent to which removal of tax incentives had affected their export operations in a number of areas. It was expected that firms which attached high importance to tax incentives would record a high export performance. As for the effect that the removal of tax incentive might have had on different areas, it was expected that firms reporting relatively no effect from the removal of tax incentives would show a high export performance.

ii) Other Forms of Government Assistance

Beside tax incentives, governments assist exporters in a variety of ways. Some of these are: preferential foreign exchange rates, gathering trade information through trade commissioners, assist in marketing research, foreign representation, outright subsidies etc. In his study of British exporters to the Middle East, Mirzaian (op. cit.) reported that British exporters often complained that they were not adequately supported by the government compared to exporters in other countries such as France and Japan. To hammer the point home, Mirzaian cited a visit to Saudi Arabia by President Giscard D'Estaing of France who was accompanied by at least 200 businessmen. In contrast, when a British Prime Minister visited the same country, he was accompanied mainly by government officials. Despite the rate of such complaints, in that study government assistance was not found to be a statistically critical factor for determining export success.

For the purposes of this study, exporters were asked to indicate the degree of importance their firms attach to different forms of government assistance. It was expected that firms attaching relatively high importance to government assistance would show a high export performance.

3.4.1 Summary

In summary: past research has identified and associated certain variables with high export performance. The variables were discussed in detail at three levels. At the first level, past studies of the variables were outlined and the outcome of relationships was presented. At the second, variables were put in their proper context and operational definitions were offered for each of them. Finally, in the light of previous research, some predictions were made as to the direction of the relationship that these variables would have on export performance. Presented below is a visual representation of *potential* control variables and, where appropriate, their hypothesized relationships with export performance:

*Expected Relationship with Export Performance***Firm's Differential Advantages**

size of the firm	
export experience	
domestic base	+

Marketing Strategies

product adaptation		+	
relative product quality		+	
product uniqueness			
channels of distribution:			
	direct distribution	+	with industrial goods
	indirect distribution	+	with consumer goods
	delivery deadlines	+	
before and after sale service		+	
pricing:			
	what the market can bear	+	
	prevailing market price	+	
	cost-plus		
	currency strategy	+	with buyers' currency
	relative price	-	
export initiation		+	with pro-active behaviour
number of markets served			
competition			

Management Attitude and Commitment

language skills	
attitude toward risk	+
attitude toward profitability	
visiting foreign markets	+
export unit	+
R&D spending	+
importance given to exporting	+

Managers' Personal Traits

education	+
export experience	+

Government Support

tax incentives	+
other forms of government support	+

Figure 3.4 Potential Control Variables and their Expected Relationship with Export Performance

3.5.0 Concluding Remarks

This chapter has discussed in detail different components of the model of marketing orientation and export performance. The model has three major components: (1) the measures of adoption and implementation of the marketing concept, (2) the objective and judgemental measures of export performance, and (3) the control factors that researchers in the past have associated with export performance. The model explains the underlying relationships between marketing orientation and export performance, taking into account other factors which in the past have been associated with high export performance. Diagrammatically these relationships are presented in figure 3.5 below:

Figure 3.5 The Model of the Relationship Between Export Performance and Marketing Orientation⁴⁵

⁴⁵ The reader's attention is drawn to the fact that this model is a compact version of figures 3.2, 3.3 and 3.4 presented in this chapter.

CHAPTER 4

RESEARCH DESIGN AND METHODOLOGY

4.0.0 Introduction

The validity and reliability of any research depends, to a large extent, on the methodology employed by the researcher. This chapter outlines the methodology followed in this study. The chapter begins with a discussion of the time frame covered by this research. Thereafter, various issues on data collection methods, questionnaire design and sampling procedures are explored. Also covered in this chapter is the pilot enquiry, techniques used to entice high responses, the response rate patterns and the data analysis techniques.

4.1.0 Investigation Time Period

The time frame used in this study is five years i.e., 1985-1989. There were several reasons for choosing this time frame. The first is that a relatively short time frame helps to avoid the problem of the respondents 'digging out' the information from their archives - a problem which could potentially contribute to high external non-response rate. The second is that, even if such information had been readily available, it would have been of little relevance to the present conditions because of many changes that have taken place in the last five years. The third, that if longer time periods were used, there is a greater possibility of a mismatch between the decision maker (the respondent) and the result of past decisions as reflected by export and/or total sales.

Put another way, the use of a longer time period could have increased the chances of surveying respondents who may not have been responsible for the sales performance for most of the years under investigation. This mismatch could have contributed to a high external non-response rate because many people would have not seen the need to respond to questions related to a time when, perhaps, they were not in the employment of the firm in question. A related possible effect of the mismatch is that, for those who would have cared to respond, there could have been some differences in the manner in which respondents would have responded to the questionnaire, depending on whether or not they were already working with that particular firm and were occupying that same position throughout the time period under investigation.

The fourth reason is that 1984 is the year in which the Labour government was voted into office. In its two terms (1984-87 and 1987-90) Labour government made several policy changes which clearly had an impact on the overall pattern of New Zealand foreign trade. It must be emphasised that no attempts were made to evaluate the performance of the government *per se*, for the simple reason that such attempts are beyond the scope of this study. The focus was rather to examine the performance of manufacturing exporters (under the Labour government) in a period of significant restructuring and deregulation. Almost certainly however, there will be some remnants of the previous government policies in the foreign trade machinery that could have influenced firms' export performances.

The possibility also exists of carry-over effects from policies of the previous government which could have influenced the performance of exporters during the early years of the Labour government. However, owing to the difficulties involved in determining the extent of such influences and isolating them, it was felt that living with these limitations did not adversely confound the findings of this study. Finally, a

five-year time frame was preferred because many studies in the marketing literature have used a similar time frame which suggests it is the preferred norm.¹

4.2.0 Choice of Data Collection Method

Mailed questionnaires were used to collect the data for this study. This kind of survey was favoured for its numerous advantages, including: wider geographical coverage, lower cost, high degree of reliability (since respondents have more time to think and verify their records at the time of completing the questionnaire) and the fact that it elicits responses from people who would be too busy for personal interviews. Despite these merits, mailed questionnaires are well-known for their low response rates - hence a possibility of introducing non-response bias. Section 4.6 explains the efforts made to mitigate this problem.

The data collecting instrument was carefully designed to enhance response rate.² The instrument contained 12 pages with 198 items including five open-ended questions. Although critics may argue that a long questionnaire such as this one could contribute to a high external non-response rate, the evidence in the literature is not conclusive. There are at least two studies that have reported that the length of the questionnaire

1 See for example Hirsch (1971); Mirzaian (1982); Thomas (1988). Kleinschmidt (1982) used a five-year time frame for measuring export intensity but three years for measuring export growth.

2 The questionnaire is attached in Appendix A.

(measured by either the number of pages, the number of items or the time required to complete the questionnaire) did not have any bearing on the response rates.³

4.3.0 Sampling Frame

This study is based on a survey of firms in the New Zealand manufacturing industry. The industry is very diverse and covers a wide range of products such as textiles, industrial chemicals, petroleum refineries, rubber products, and petroleum and coal products. To ensure a level of uniformity and comparability across firms, it was decided to focus on firms operating in the following areas:

- (1) textiles
- (2) wearing apparel and footwear
- (3) wood processing and wood products
- (4) paper and paper products
- (5) other foods
- (6) beverage industries
- (7) plastics products
- (8) nonmetallic mineral products
- (9) fabricated metal products
- (10) machinery
- (11) electrical machinery
- (12) basic metal industries
- (13) other manufacturing industries

³ See for example Sheth and Roscoe (1975); Roscoe et al. (1975). See also Kanuk and Berenson (1975) who cited six studies which reported no significant relationship between the length of the questionnaire and the response rate. Similar findings were cited by Blumberg et al. (1974) and Linsky (1975).

A single industry was chosen in order to have a control for industry differences. Specifically, the manufacturing industry was chosen because of its importance to the New Zealand economy as evidenced by its contribution to foreign exchange earnings, GDP, and employment.

As of February 1991, the New Zealand manufacturing industry had 17,336 enterprises employing 237,177 people.⁴ This is equivalent to 11.1 percent of total enterprises and 20 percent of the total work force in New Zealand. In the year ending June 1982, the total value of manufactured exports was NZ\$ 1,885.9 million, equivalent to 28.5 percent of the total New Zealand exports. By June 1991, the value rose almost threefold to NZ\$ 5,258.7 million (34.7 percent of total exports).⁵

As of June 1991, the three major destinations for New Zealand manufactured exports were Australia (38.5 percent), Japan (20.0 percent) and the USA (6.3 percent). However, in terms of growth, by the year ending August 1991, manufactured exports to South Korea, Indonesia and Singapore had increased markedly. The percentage *growth* of manufactured exports to these countries was 95 percent, 70 percent and 55 percent respectively. Notably, during the same period, manufactured exports to the three largest destinations, i.e., Australia, Japan and the USA, fell by 5 percent, 3 percent and 15 percent respectively.

Data were collected through a mail survey of chief marketing executives⁶ of manufacturing firms throughout the country. The list was obtained from the Business

4 *Business Patterns (Hot off the Press)*, 1991 catalogue no. 01.502 set no. 91-92/046 p. 2.

5 New Zealand Manufacturers' Federation.

6 Where a firm did not officially have a separate marketing executive, the questionnaire was filled out by the person responsible for making marketing decisions.

Directory section of the Department of Statistics. The sampling frame was selected as follows:

- (1) inclusion of *all* firms employing more than 50 employees
- (2) inclusion of 40 percent of firms employing between 10 and 49 employees. These were divided into 30 percent exporters and 10 percent non-exporters
- (3) *exclusion* of all firms employing fewer than 10 employees

Firms employing fewer than 10 employees constitute 77 percent of the number of enterprises in the manufacturing industry.⁷ However, since their contribution to the industrial turnover is just about 10 percent and they employ about 15 percent of the total work force in the industry, a decision was made to exclude them from the sampling frame. It is believed that their omission does not invalidate the findings of this study. After taking into account the above considerations, 995 firms were selected to form the sampling frame for this study.

4.4.0 Preliminary Enquiry

A preliminary enquiry was conducted between November 1989 and February 1990. In-depth personal interviews were conducted with marketing executives of eight firms based in Auckland, Christchurch and Wellington. The ideas collected were synthesized and integrated into the research instrument. Following that, a pilot study was carried out by mailing eleven questionnaires to the most senior marketing executives of the firms selected for the purpose. The exercise was aimed at achieving

⁷ It should also be noted that only 9 percent of manufacturing exporters belonged to this group.

three objectives. The first was to test the content validity as well as the ease of understanding the questionnaire.

The second was to test the willingness and ability of the respondents to respond to the questions. In this regard, care was taken not to seek for information which would have been perceived by the respondents as highly confidential, commercially sensitive or embarrassing. The third objective was to determine additional variables which respondents might consider important to the subject of enquiry. In order to overcome ambiguities and semantics in the questionnaire, academic colleagues were consulted for their opinions. Expert opinion was also sought from the English Language Institute (ELI) of Victoria University of Wellington. Necessary changes were made as a result of feedback.

4.5.0 Initial Correspondence

Personalized correspondence in mail surveys is a subject which has been extensively investigated. To date, however, the available evidence is not conclusive. Some researchers have found personalization of the correspondence to the respondents to be a useful vehicle for achieving high response rates while others have found that it has no effect.⁸ Interestingly, others have associated personalization with low response

⁸ Jobber (1986) gives a good summary of the studies on this subject.

rates.⁹ Critics of personalization of letters such as Linsky (1975 p. 94) fear that personalization might run counter to a subject's desire for maximum anonymity. However, some scholars have reported that personalization is especially useful when dealing with subjects from whom it is hard to get a response (Dillman and Frey 1974).

This study dealt with such subjects. Owing to the nature of their positions, many of them travel around and outside the country most of the time. For this reason a decision was made to obtain the names of all the most senior marketing executives of the firms in the sampling frame. The names were then used in all subsequent correspondences. On the last day of January 1990, a letter was sent to all (995) firms in the sampling frame requesting the name and the title of their most senior marketing executive.¹⁰ At this stage no mention was made about the research in progress.

4.5.1 *Response to the Initial Correspondence*

Of the 995 letters sent, positive responses were received from 543 firms (54.6 percent) while 408 firms (41 percent) did not respond. The remaining 44 letters (4.4 percent) were sent back for different reasons, but usually because the firm in question was under liquidation or it could not be traced due to change of address. In the end, a

9 See Houston and Jefferson (1975). It should however be noted that in the cited study, personalization was operationalized as: "Subjects in the personalized cells of the study received questionnaires with their name and address affixed to the top of the first page. All efforts to maintain respondent non-identification were omitted from the cover letter. The desired effect was that the respondent gained the impression that he was receiving individual attention and his responses were singularly important" (p. 115). As noted by Wiseman (1976 p. 111), the authors confounded personalization with another variable, namely, confidentiality.

10 See Appendix B.

total of 951 questionnaires was mailed on Sunday, August 12, 1990. Of these, 543 were personalized and the remaining 408 were addressed to the Managing Director. In both cases, the covering letter accompanying the questionnaire and the inside cover of the questionnaire had a specific request that the questionnaire should be completed by the most senior marketing executive (if the firm had one) or the person responsible for making marketing decisions.

4.6.0 Measures taken to Reduce External Non-response Rate

A survey of the literature revealed several techniques which help to minimize external non-response rate. Some of these are: making a pre-questionnaire contact, enclosing a covering letter with the questionnaire, use of colours and graphics in the questionnaire, making multiple follow-ups, and survey sponsorship. Other commonly used techniques are: enclosing return multiple stamps envelopes, hinting that a follow-up letter will be sent in the event that the questionnaire is not returned, inclusion of a premium such as a ballpoint pen and the use of deadline dates.¹¹

In this study, an eclectic approach has been adopted in that only those techniques have been used that are suitable to New Zealand's conditions. The approach drew heavily from Dillman's celebrated Total Design Method (TDM).¹² Details of two of these techniques follow.

-
- 11 Scott (1961) and Kanuk and Berenson (op. cit.) give an extensive and excellent discussion on these and many other techniques. See also Clark and Kaminski (1989); Linsky (op. cit.); Blumberg et al. (op. cit.).
 - 12 D. A. Dillman, *Mail and Telephone Surveys: The Total Design Method*, John Wiley & Sons, Inc., (1978). Dillman's TDM treats the techniques for eliciting high response rates as one package rather than relying on any single measure.

4.6.1 Covering Letters

Two covering letters were sent with the questionnaire. The first one was part of the questionnaire booklet and was signed by the Hon. Mike Moore, the then Minister of External Relations and Trade who subsequently became the Prime Minister. The letter explained the importance of the study to New Zealand and concluded with a request to the potential respondents to complete the questionnaire. A direct quote from the letter urging the respondents to cooperate was put on the front cover of the questionnaire in order to attract attention. The second letter was written by Professor P. C. Thirkell, Chairperson of the Marketing Group, Faculty of Commerce and Administration, Victoria University of Wellington.¹³ Its main features were that:

- : it gave a detailed explanation of the objects of the study
- : it mentioned all New Zealand institutions supporting the project
- : it assured confidentiality and anonymity
- : it offered respondents an opportunity to attend a series of workshops where the findings of the study would be presented, and also to acquire at cost *The Marketing Managers' Guide to Improving Marketing Effectiveness and Export Performance* (in preparation, R. K. Dau)
- : it implicitly indicated a possibility of a follow-up being made in the event that the questionnaire was not returned.

¹³ See Appendix B.

4.6.2 Follow Up

Two follow-up letters were sent out approximately three weeks and five weeks from the date of the initial mailing.¹⁴ In both letters the objects of the study were restated. The first letter was a simple reminder that the questionnaire had not been returned. An offer of a replacement copy was made if the original one had been misplaced. The second follow-up letter enclosed a second copy of the questionnaire. This time the respondents were requested to complete and return it by a given date. The follow-up exercise was worthwhile as it resulted in 189 (22.9 percent of the potential respondents) additional responses. Jobber (op. cit. p. 191) reported similar positive experience by other researchers.

4.7.0 Mailing Dates and Response Patterns

As noted in Section 4.5.1, following the initial correspondence, a total of 951 questionnaires was mailed on Sunday, August 12, 1990. These were divided into 618 exporters and 333 non-exporters.¹⁵ The time lag between the initial contact (see Section 4.5.0) and the date of the first wave (August 12, 1990) produced some 'mortality' in the data base due to firms closing, employee movement or change of address.

14 See Appendix B.

15 Data were collected from non-exporters for future comparison of the relationship between marketing orientation and *overall* performance across exporters and non-exporters. The results are not given in this study because they fall outside the scope of the study.

4.7.1 Response Rates

When responses were inspected it was quite clear that some adjustments had to be made to the initial mail out. These adjustments took into consideration that:

- : between the initial correspondence and mailing the questionnaire some firms had gone on liquidation
- : some firms have separate branches in the North and South Islands and had indicated that where one questionnaire was completed it reflected the operations of the entire organization
- : some firms did not have marketing departments. All their marketing activities were done either by Producers' Boards, or their parent organizations or some other firms
- : some firms had since ceased their manufacturing operations and moved to another line of business, such as trading or servicing
- : some firms could not be traced due to change of address.

Following adjustments, the number of potential respondents dropped from 951 to 827 as presented in table 4.1.

TABLE 4.1
Total Net Mail Out

Total questionnaires sent		951
Less		
Gone, no address	42	
Not qualified	59	
Liquidated/under liquidation	17	
Firms which answered as a group	<u>6</u>	<u>124</u>
Potential Respondents		827

Out of 827 potential respondents, responses were received from 386 firms. In an article in the *Journal of Marketing Research*, Wiseman and Billington (1984 p. 337) proposed a standard definition of the response rate.¹⁶ Using this definition, this study attained a *gross response rate* of 49.2 percent.¹⁷ It was decided that the returned questionnaires which had more than 10 percent internal non-response would be dropped from the analysis. Thirty questionnaires failed the test and were not further processed. As a result, 356 questionnaires were retained and used in most of the

16 The rate is computed as:

$$\text{Completed Interviews} + \left[\frac{\text{Completed Interviews}}{\text{Completed Interviews} + \text{Ineligible}} \right] (\text{not contacted} + \text{Refused, eligibility not determined})$$

$$\frac{386}{386 + \left[\frac{386}{386 + 82} \right] (42 + 441)}$$

17 For the sample of exporters, the gross response rate is 45.1 percent.

analysis. This was equivalent to a *net response rate* of 47.6 percent. A summary of sample characteristics is presented in table 4.2.¹⁸

18 For more detailed sample characteristics see Appendix C.

TABLE 4.2
Summary of Sample Characteristics

	Absolute Frequency (n)	Relative Frequency (%)
<i>Nature of Goods</i>		
Consumer Goods	188	53.1
Industrial Goods	163	46.0
50-50	3	0.8
<i>Nature of Operations</i>		
Exporters	265	74.4
Non-exporters	91	25.6
<i>Size: (Total Sales)¹⁹</i>		
Small	115	32.5
Medium	178	50.4
Large	61	17.2
<i>Size: (Total Employees)²⁰</i>		
Small	94	29.5
Medium	181	57.7
Large	44	13.8
<i>Wave</i>		
First Wave	171	48.0
Second Wave	86	24.2
Third Wave	99	27.8

19 Small Firms Total Sales under \$5m.; Medium-Sized Firms \$5m.-\$50m.; Large Firms over \$50m.

20 Small Firms fewer than 50 Employees; Medium-Sized Firm 50-250 Employees; Large Firms over 250 Employees. The only known New Zealand study that has measured size using the number of employees has operationalized the variable in this way (see Cody 1988 p. 55).

It is worth noting at this point that the response rate received is very pleasing, for two main reasons. The small size of New Zealand, compared to the amount and frequency of research carried out, makes it very difficult for the potential respondents to cooperate, and yet there was a good response. At the time of this study there were several other studies being conducted soliciting responses from the same group of people. A general manager of one large exporting firm lent support to this claim when he wrote:

... you are possibly getting the backlash of being last in line of about 20 other surveys which have been carried out within about the last 3 to 6 months.

The second reason is that the economic downturn has put more pressure on many business executives so that it is becoming increasingly difficult for most executives to spare the 30 minutes required to complete a questionnaire such as the one used in this study. Furthermore, the increase in the intensity of competition has forced many firms to be cost conscious and more secretive. The following quotes explain it all:

In response to your request to fill in your national study and questionnaire I would like to point out that in the user pays environment we have today our quote to do this for you would be \$50-00 + GST. Nothing will happen to the questionnaire until we get your answer. (Managing Director).

One of the marketing managers who refused to participate noted:

Since . . . (name of the firm) inception six years ago the company has grown to be the market leader in . . . (name of the line of business). This success can be attributed to some very innovative marketing methods, and a policy of not disclosing those methods. (brackets added to hide the identity of the firm).

A general manager marketing of a large firm returned a blank questionnaire and noted:

Regretfully, time does not allow us to respond to the now almost daily requests for assistance in completing surveys of both universities, major research companies and individuals seeking assistance with marketing papers and I am therefore returning your questionnaire uncompleted. [sic]

Apart from the cited cases, typical reasons given for not being able to cooperate were: too busy to complete the questionnaire, completing questionnaires is against the firm's policy, firm is too small, hence the respondents did not think the questionnaire was relevant to firm of such size etc.

4.8.0 Test for Non-response Bias

One of the drawbacks of mail surveys is the problem of non-response. The problem becomes more serious if it can be established that the respondents are significantly different from non-respondents on the subject under investigation. The probability of having a non-response bias increases as response rates from the survey decreases. However, it is important to note that a low response rate in itself does not necessarily imply that the study suffers from non-response bias. The bias occurs if and only if the respondents are substantially different from non-respondents (Kinnear and Taylor 1987 p. 394).

Armstrong and Overton (1977) have suggested three methods for protection from biases that might result from non-response. These are: to reduce the non-response itself, to sample non-respondents, and to estimate the effects of non-response. Estimating the effect of non-response can be done either by comparing the results of the survey with known values for the population, or by making subjective estimates of non-response bias through indicators such as the level of education (in case of consumer surveys) or size of the firm (for industrial surveys).

A third useful way of estimating the non-response bias is through extrapolation methods. These methods are based on the assumption that subjects who respond less readily are similar to non-respondents. Armstrong and Overton (op. cit.) discussed three ways in which extrapolation can be done. These are: the time trends, the concurrent waves method, and the successive waves method.

Notwithstanding a very pleasing response rate achieved in this study (see section 4.7.1), tests for non-response bias were carried out to see if such a problem did exist in the data. A comparison between early and late responses was made to assess a non-response bias since it is the most commonly used method for the purpose. In lending support for this approach, Armstrong and Overton (op. cit. p. 397) wrote:

The most common type of extrapolation is carried over *successive waves* of a questionnaire. 'Wave' refers to the response generated by a stimulus, e.g., a follow-up postcard. Persons who respond in later waves are assumed to have responded because of the increased stimulus and are *expected to be similar to non-respondents* (italics as in original, other emphasis mine).

This method is popular because it is simple, inexpensive, does not require additional data and examines variables that are linked to the research (Ellis et al. 1970 p. 104). In spite of its popularity, it would perhaps be fair to note that some researchers are very critical of using this method.²¹

Tests for non-response bias were carried out in two ways. In the first, overall tests administered to all respondents in the sample taken as *one group*. The time in which the questionnaires was received (wave) was used as a criterion tested against:

21 See for example Ellis et al. (op. cit.).

- (1) size of the firm (both by total sales and number of employees)
- (2) type of product produced (consumer versus industrial product)
- (3) type of operation (exporters versus non-exporters)

Using the second approach, a similar series of tests was conducted except that exporters and non-exporters were treated *separately*. In all, a total of ten Chi-square tests were conducted. Save for one case, the results showed that there was no non-response bias in the data set. A slight non-response bias was found between exporters and non-exporters generally. Presumably, the bias was detected because of a relatively low interest among non-exporting firms to participate in a study which appeared to be export centred. The bias however was in some way expected and did not seem to be a major problem because the sampling frame was drawn in such a manner that exporters were more represented than the non-exporters. Full details of the results are presented in Appendix D.

4.9.0 Data Analysis Techniques

There is disagreement among researchers on the issue of matching the level of measurement with appropriate statistical techniques. A more orthodox view is to employ parametric statistics on data which are strictly interval in nature. Data which lack the properties of an interval scale are normally subjected to relatively less powerful statistical techniques. This traditional view has been challenged and has thereby raised an intellectual debate among social science researchers. Labovitz (1967 p. 151), for example, believed that

. . . certain assumptions of both descriptive and inference statistics *can* be violated without unduly altering the conclusions; and strict adherence to measurement scales may lead to an extensive waste of information.

The author had demonstrated that parametric statistical techniques are robust to the distinctions between ordinal and interval scales and that some tests of significance such as the t-test, the F distribution of analysis of variance, the sign test, Wilcoxon's test and a few others are insensitive to the differences in the level of measurement used (1970). Admitting that some small error may emerge as a result of treating ordinal variables as interval, Labovitz (*ibid* p. 523) noted that this is offset by

. . . (1) the use of more powerful, sensitive, better developed and interpretable statistics with known sampling error, (2) the retention of more knowledge about the characteristics of the data, and (3) greater versatility in statistical manipulation, e.g., partial and multiple regression, analysis of variance and covariance, and most pictorial presentations.

Labovitz however cautioned that if two or more assumptions underlying the use of parametric statistics are violated, then there would be no justification for employing such techniques on ordinal data.

Another protagonist of the treatment of ordinal data (e.g., Likert scale type of data) as if they were interval data is Nunnally. In his widely cited text, Nunnally (1978 p. 17) observed:

The author strongly believes that it is permissible to treat most of the measurement methods in psychology and other behavioural sciences as leading to interval scales (and in some instances, ratio scales). Whereas the logic of determining measurement scales in any area of science is a highly controversial matter and logically very involved, it will be argued that usually no harm is done in most studies in behavioural sciences by employing methods of mathematical and statistical analysis which take intervals seriously.

Albaum, Best and Hawkins (1977 p. 25) are also sympathetic to the unorthodox view.

The authors noted that

For the applied researcher to treat semantic scale data as ordinal data is unnecessarily cautious. One might argue that this is the most 'conservative' approach as it requires the fewest assumptions concerning the data. However, the goal of the applied researcher is to make the best decision possible. If, as this study indicates, scales derived from semantic scale data are interval in nature, the information lost by treating them as ordinal may frequently lead to a poorer understanding of the measured attribute or characteristic, resulting in non-optimal decisions being made.

Although the common practice in behavioural sciences has been to treat ordinal data as attaining interval level of measurement (i.e., departing from the orthodox view), Martilla and Garvey (1975) consider this practice as one of the four sins of marketing research. Henkel (1975) too is opposed to this practice. Responding to Labovitz (op. cit.) Henkel (op. cit. p. 24) argued that

The arguments advanced for the treatment of ordinal and quasi-interval data as though they were interval are unconvincing. The argument that tests of significance are unaffected, though correct, is irrelevant; the arguments relative to interpretability, information retention, and the like are empty of meaning and consequently uninformative.

In conclusion, however, the author noted:

. . . the intent is not to argue that ordinal and quasi-interval data cannot under any circumstances be treated as though they were interval data. It is quite possible that there are many circumstances in which such a relaxation of level of measurement assumptions may be eminently reasonable.

Morris (1968), Champion (1968), Mayer (1970) and Wilson (1971) too are critical of treating ordinal data as interval. While scholars such as Champion (op. cit.) and Wilson (op. cit.) feel strongly against using parametric statistics on ordinal data, others, though critical, seem to accept treating ordinal data as interval if the particular

technique being used is robust with respect to distributional assumptions (Mayer op. cit. p. 917).

In summary: detailed explanation has been given of the views of some scholars on the appropriateness of using parametric statistics on data which strictly speaking do not have interval properties. We have also noted the reservations which some scholars have on using parametric statistics on non-interval data. Given the weight of evidence in the literature, it would seem, on balance, that the popular view in the discipline is that Likert scale data have properties of an interval scale and can appropriately be used for parametric statistics. This is even more possible when the dependent variable (as is the case in this study) is normally distributed (see Chapter 5, section 5.5.0).

4.10.0 Concluding Remarks

This chapter has outlined in considerable detail the methodology employed in this study. Specifically, a five-year time frame was used because such data is convenient for the respondents. More importantly, a five-year time frame was preferred because the data is more relevant to the current New Zealand's economic conditions. Mailed questionnaires were used to collect the data and, after making two follow-ups, a 47.6 percent net response rate was obtained. Tests for non-response bias were conducted and generally the results showed that non-response bias was not a problem.

In the final section, different viewpoints on the use of statistical techniques were presented. Some scholars supported the idea of using parametric statistics on ordinal data such as Likert scale type of data while others had opposing views. On balance, it

was reported that the general practice in behavioural science literature is to use parametric statistics on non-interval data.

Now that the methodology has been described in detail, Chapter 5 develops measurement scales of marketing orientation, export performance and the control variables.

CHAPTER 5

BUILDING MEASUREMENT SCALES

5.0.0 Introduction

In Chapters 1 and 2 it was shown in some detail that there has been a paucity in the literature of studies that have examined the relationship between marketing orientation and organization performance, be it in domestic market or export operations. What is even more disturbing is that, to date, there has not been any serious attempt to develop a measure of marketing orientation that can be generalized in some meaningful way.

It was proposed in Chapter 3 that the model of marketing orientation and export performance has three major components. These are: (1) marketing orientation, (2) export performance and (3) control variables. In the light of this background, the objective of this chapter is threefold: firstly to build scales for measuring the two dominant constructs (export performance and marketing orientation) as well as the control variables; secondly to test the validity and reliability of these scales; and finally, to explore the nature of the distribution of the dependent variable so as to determine its suitability for use in parametric analyses.

5.1.0 Measuring Marketing Orientation

The marketing orientation of the firm was *broadly* measured at two levels: at the adoption and at the implementation of the marketing concept. A total of 38 items (14 measuring adoption and 24 measuring implementation of the marketing concept) were developed for measuring the two constructs. These items constituted the domain of the marketing orientation construct. In subsequent sections the items are tested for their suitability (unidimensionality and reliability) for being the final measures of marketing orientation. Meantime these *preliminary* measures are summarized in figures 5.1 and 5.2 below:

customer focus

- : frequency of use of customers as a source of new product ideas
- : frequency of use of customers to evaluate new product ideas
- : whether or not the firm has criteria for measuring customer satisfaction
- : number of days training given to marketing staff
- : frequency of marketing-related training given to non marketing staff
- : frequency at which the firm develops different products for different market segments

evaluation systems

- : using customer satisfaction as a criterion in evaluating the performance of marketing department
- : using profits on market(s) as a criterion in evaluating the performance of marketing department
- : using profits on product(s) as a criterion in evaluating the performance of marketing department

monitoring profitability

- : frequency at which the firm conducts profitability analysis by products
- : frequency at which the firm conducts profitability analysis by markets
- : frequency at which the firm conducts profitability analysis by key customers
- : number of years in which the firm can tolerate short-term losses in the hope of achieving satisfactory returns in the long term
- : the magnitude of the loss (as a percentage of total sales) the firm can tolerate in the hope of achieving satisfactory returns in the long run

Figure 5.1 Preliminary Measures of Adoption of the Marketing Concept

organizational structure

- : whether or not the chief marketing executive is a member of board of directors
- : whether or not the chief marketing executive is a member of new product planning committee
- : whether or not the chief marketing executive is a member of executive committee
- : whether or not the chief marketing executive is a member of finance committee
- : an officer to whom the chief marketing executive reports
- : extent of responsibility marketing department has toward product planning and development
- : extent of responsibility marketing department has toward packaging
- : extent of responsibility marketing department has toward pricing
- : extent of responsibility marketing department has toward credit extension
- : extent of responsibility marketing department has toward advertising
- : extent of responsibility marketing department has toward personal selling
- : extent of responsibility marketing department has toward dealer selection
- : extent of responsibility marketing department has toward transportation
- : extent of responsibility marketing department has toward inventory control
- : extent of responsibility marketing department has toward quality control
- : title of the respondent (chief marketing executive)

integration

- : frequency at which the marketing department shares information with production department
- : frequency at which the marketing department shares information with R&D department
- : frequency at which the marketing department shares information with finance department
- : frequency at which the marketing department shares information with sales department
- : frequency at which the marketing department makes joint decisions with production department
- : frequency at which the marketing department makes joint decisions with R&D department
- : frequency at which the marketing department makes joint decisions with finance department
- : frequency at which the marketing department makes joint decisions with sales department

**Figure 5.2 Preliminary Measures of Implementation
of the Marketing Concept**

The items presented in figures 5.1 and 5.2 above have a strong foundation in both normative and empirical studies reported in the marketing literature. The constructs were carefully selected so as to include the three main tenets of the marketing concept, namely: (1) customer focus, (2) integration and coordination within the marketing department and across the organization and (3) long-term profit objective.

5.2.0 Test for Unidimensionality

Having identified the general pool of items to use for measuring the adoption of the marketing concept, the next task was to decide on which items to include and which to drop from the scale. According to the domain sampling model¹ the primary source of measurement error is inadequate sampling of the content of the domain of relevant items. This can occur either by under- or over- sampling the domain of the construct. In this study, the former problem was mitigated by an extensive search of pertinent literature on the subject. In the case of the latter problem, tests for unidimensionality and reliability were conducted and it is believed that these tests were helpful in minimizing the problem. However, before such tests were conducted, a decision was made to eliminate from the scale items that had missing values of more than 10 percent - a limit which has been widely used in behavioural science literature. The decision to discard some of the items from the scale is always a difficult one since it involves a trade-off between the scale's reliability (by using a relatively large number of items for a given scale) *vis-a-vis* statistical purity (by using only those items which have been adequately responded to).

1 Nunnally (1978 Chapter 6).

Alternative options for treating the missing values are available in the literature. However, because of the centrality of the constructs to this study, all the alternative options were found unsuitable. Some of these options are: substituting the missing data with a mean response for the item in question, assigning the value which is assumed the respondent *would have used* if the question was answered, and assigning the missing responses to a 'don't know' or 'not applicable' category.

The decision to drop items with a relatively high internal non-response resulted in nine items being dropped from further analysis. I believe that the high internal non-response was partly caused by a relatively high number of small and medium-sized firms in the sample.² To such firms, some of the questions may have appeared to be not applicable to them because of the size of their operations.³ It was therefore decided to drop these items because the advantages that would have been obtained from their inclusion would have been outweighed by the possible 'noise' they would have introduced into the data. The items are presented in Appendix E figure E-1.

5.2.1 Unidimensionality

A unidimensional scale is the one in which each item in the scale measures the same underlying construct. A researcher would normally check to see if the response to a particular item follows the general pattern of responses to other items. An item which does not follow the general pattern is dropped from the scale on the grounds that the item is measuring something different from the other items.

2 32.5 percent small firms and 50.4 percent medium-sized firms using total sales as a measure of size.

3 Indeed a univariate separate analysis done by size did confirm this suspicion.

This study employed five different scales to capture different dimensions of the marketing concept. The scales were:

- (1) customer focus
- (2) evaluation systems⁴
- (3) monitoring profitability
- (4) integration
- (5) organizational structure

Item-to-scale correlation co-efficients were calculated for items in each of the five scales so as to identify items which did not belong to the marketing orientation scale. The results showed that four items had remarkably low item-to-total correlation co-efficients, suggesting that they do not properly fit into the marketing orientation scale. These items were eventually dropped from the final scale.⁵

After testing for unidimensionality, the following 22 (out of the original 38) items were taken as the *final* measures of marketing orientation:

4 This scale was later dropped as it had a very low reliability co-efficient alpha. The scale had three items. These were: (i) using customer satisfaction as a criterion in evaluating the performance of marketing department, (ii) using profits on market(s) as a criterion in evaluating the performance of marketing department, and (iii) using profits on product(s) as a criterion in evaluating the performance of the marketing department.

5 The items are presented in Appendix E figure E-2.

1 Customer Focus Scale

- i) use of customers as a source of ideas
- ii) use of customers to evaluate new ideas
- iii) measuring customer satisfaction
- iv) developing products for different segments

2 Profit Monitor Scale

- v) profitability analysis by products
- vi) profitability analysis by markets
- vii) profitability analysis by key customers

3 Integration Scale

- viii) sharing information with production department
- ix) sharing information with finance department
- x) sharing information with sales department
- xi) joint decisions with production department
- xii) joint decisions with finance department
- xiii) joint decisions with sales department

4 Organization Structure Scale

- xiv) the extent of responsibility of marketing department over product planning and development
- xv) the extent of responsibility of marketing department over packaging
- xvi) the extent of responsibility of marketing department over pricing
- xvii) the extent of responsibility of marketing department over credit extension
- xviii) the extent of responsibility of marketing department over advertising
- xix) the extent of responsibility of marketing department over personal selling
- xx) the extent of responsibility of marketing department over transportation
- xxi) the extent of responsibility of marketing department over inventory control
- xxii) the extent of responsibility of marketing department over quality control

Figure 5.3 Final Measures of Marketing Orientation

5.3.0 Measuring Export Performance

The procedures employed for measuring marketing orientation were also used for measuring the export performance of the firm. As with marketing orientation, the export performance measure was divided into two parts, namely the objective measures and the judgemental measures as described below:

5.3.1 Objective Measures

For the purposes of this study, two objective measures of export performance were used. These were the export intensity and the absolute export sales index.⁶ Presented below is the set of objective measures employed in this research:

: export intensity 1985
: export intensity 1986
: export intensity 1987
: export intensity 1988
: export intensity 1989
: absolute export sales index 1984
: absolute export sales index 1985
: absolute export sales index 1986
: absolute export sales index 1987
: absolute export sales index 1988

Figure 5.4 Preliminary Objective Measures of Export Performance

⁶ The formula for computing this index is given in section 3.2.1, page 64, footnote 4.

After conducting the necessary reliability tests, all the above items were found to be quite reliable, hence none of them was dropped from the final export performance scale. The results of these tests are presented later in the chapter.

5.3.2 Judgemental Measures

Initially a total of 15 items was identified to provide a *preliminary* judgemental measure of export performance. The items are summarized in the figure below:

- : export market share
- : export profitability
- : market diversification
- : creation of employment
- : customer satisfaction
- : overall export performance - five years ago
- : overall export performance - current year
- : overall export performance - from 1990 to 1993
- : peer evaluation
- : export award

Figure 5.5 Preliminary Judgemental Measures of Export Performance

Information on the first five items was sought in two stages. In the first stage, respondents were asked to rate the importance their firms placed on the listed items. The second stage was a follow up question for each item; the respondents were asked to evaluate their respective firm's performance.

After conducting preliminary univariate analysis and performing unidimensionality and reliability tests, three items were dropped from the scale either because of their relatively high missing values or because they did not perform well in the reliability tests. The items are:

- i) creation of employment
- ii) overall export performance for three years from 1990
- iii) export award between 1985-1990

Since the sample had relatively many small and medium-sized firms, the poor performance shown by some of the items (and their subsequent deletion) did not come as a surprise. For example, owing to the size of their firms, it is likely that most respondents felt that creation of employment was not an important factor in evaluating their performance, and hence may not have seen any need to respond to that question. The second scale item (of overall export performance of the respondents three years from 1990) did not perform well in the reliability test. A possible explanation for this outcome is that over the last few years there have been numerous changes in the business environment in New Zealand - so much so that it has become difficult for businesses to foresee the future. The last item, on export award, was dropped because most of the firms in the sample had never won an export award before. There were therefore not enough firms in this category to justify any

meaningful statistical analysis. Presented below is the *final* list of measures of export performance:

1	Objective Measures
	<i>Export Intensity</i>
i)	export intensity 1985
ii)	export intensity 1986
iii)	export intensity 1987
iv)	export intensity 1988
v)	export intensity 1989
	<i>Absolute Export Sales Index</i>
vi)	absolute export sales index 1984
vii)	absolute export sales index 1985
viii)	absolute export sales index 1986
ix)	absolute export sales index 1987
x)	absolute export sales index 1988
2	Judgemental Measures
xi)	export market share
xii)	export profitability
xiii)	market diversification
xiv)	customer satisfaction
xv)	overall export performance - five years ago
xvi)	overall export performance - current year
xvii)	peer evaluation

Figure 5.6 Final Measures of Export Performance

5.4.0 Measuring Control Variables

The literature review presented in Chapter 2 resulted in a total of 39 items⁷ which have previously been linked with export performance. The results of the bivariate analysis showed that out of the 39 items only 24 are significantly related to export performance at 0.05 or better. At this stage of analysis, the 24 items were treated as *tentative* control variables. These are:

7 Here, the words 'items' and 'variables' are used interchangeably.

Firms' Differential Advantages	
export experience	****
Marketing Strategy and Market Conditions	
product adaptation	****
product quality	***
product uniqueness	*
use of off-shore subsidiary	**
quote in buyer's currency	****
quote in third party currency	***
hedging	***
physical demonstrations	****
training customer employees	****
after sales maintenance	****
export initiation	*
number of countries served	****
Management Attitude and Commitment	
language skills	**
attitude towards profits	****
visiting foreign markets	****
export unit	***
R&D spending	****
people involved in exporting	****
Managers' Personal Traits	
export experience	****
Government Support	
importance of NZ Embassies	**
removing incentives: effects on promotion	**
removing incentives: effects on quality of export products	*
removing incentives: effects on customer visits	**

Figure 5.7 Tentative Control Variables

significant levels: * $p > 0.05$ ** $p > 0.01$ *** $p > 0.001$ **** $p > 0.0001$

The above 24 items were selected as possible control variables in the further examination of the relationship between export performance and marketing orientation. Several measures however, were taken to refine the scales. An examination of the scale showed one item was left under each of 'Firms' Differential Advantages' (i.e., the number of years the firm has been in the export business) and 'Managers' Personal Traits' (i.e., the number of years the respondent manager has been involved in exporting). It was therefore decided to regroup them along with other items in the 'Management Attitude and Commitment' Scale. It is opined that the number of years the firm has been in the export business can be regarded as part of management's commitment to exporting.

In a slightly different vein, firms employing managers with long experience in exporting can be said to be committed to export business. This provides the justification for treating the number of years the respondent manager has been involved in exporting as an indication of a firm's commitment to exporting. The decision to regroup the two items resulted in three final control scales.

In the end two items were dropped from the final scale of measures of control variables because of their remarkably low item-to-scale correlations. These items and their respective correlations (in parentheses) are: using the currency of the third party as part of the currency strategy (0.043) and the importance of New Zealand Embassy staff abroad (0.038). Presented below is a visual representation of the *final* control variables:

1 Marketing Strategy and Market Conditions

- i) product adaptation
- ii) product quality
- iii) product uniqueness
- iv) use of off-shore subsidiary
- v) quote in buyer's currency
- vi) hedging
- vii) physical demonstrations
- viii) training customer employees
- ix) after sales maintenance
- x) export initiation
- xi) number of countries served

2 Management Attitude and Commitment

- xii) language skills
- xiii) attitude towards profits
- xiv) visiting foreign markets
- xv) export unit
- xvi) R&D spending
- xvii) number of people involved in exporting
- xviii) firm's export experience
- xix) managers' export experience

3 Government Support

- x) removing incentives: effects on promotion
- xi) removing incentives: effects on quality of export products
- xii) removing incentives: effects on customer visits

Figure 5.8 Final Measures of Control Variables

5.5.0 Testing for Reliability

The reliability of a measure refers to the extent to which the measurement process is free from random errors. Reliability is a first step towards determining validity because the former is a necessary, but not sufficient, condition for the existence of the latter. Reliability is divided into two categories, namely stability and equivalence reliability.

Stability reliability involves obtaining the same or similar results for each unit measured every time a measure is taken (Walizer and Wienir 1978). This requires the use of the same indicators, same operational definitions and same data collection procedures each time the measurement is taken.

In contrast, equivalence reliability essentially involves obtaining the same or similar results with different types of measures taken at the same time. This involves using the same constructs but applying one or more different indicators, operational definitions and/or data collection procedures.

Social science literature has documented four methods of assessing a measure's reliability. These are: (1) the test-retest, (2) equivalent-forms, (3) split-halves and (4) internal consistency methods. The test-retest method assesses the *stability* of the measures under investigation while the remaining three methods are concerned with the *internal consistency* of the measures rather than their stability over a period of time.

For the purposes of this study, Cronbach alpha was used to test the reliability of the measures employed. There were two reasons for making this decision. The first was

the drawbacks inherent in the other alternative methods. Take, for example, the test-retest method. This technique can only be useful if, and only if, the investigator is willing to assume that the variable under investigation has not changed in between the two tests - a very strong assumption indeed. Added to this is the problem that experience in the first test will influence the responses in the second. In the case of the split-half method, the major difficulty is that the correlation between halves will depend largely on how the items were divided.

The second reason for using Cronbach alpha was because Nunnally (1978 p. 214) has demonstrated that co-efficient alpha "... represents the expected correlation of one test with an alternative form containing the same number of items". Novick and Lewis (1967 p. 10) have also demonstrated that co-efficient alpha has yet another property in that, when a split-half test is taken, co-efficient alpha is equal to the mean of split-half reliabilities. Finally alpha co-efficient technique was preferred to the other alternatives because it has been proven to be more robust (Nunnally op. cit. p. 230)⁸ and because the method has been widely reported in social science literature.

In a leading article on developing better measures of marketing constructs, Churchill (1979 p. 68) recommended the use of Cronbach alpha as a measure of reliability when he wrote:

The recommended measure of the internal consistency of a set of items is provided by co-efficient alpha which results directly from the assumptions of the domain sampling model. . . . Co-efficient alpha *absolutely* should be the first measure one calculates to assess the quality of the instrument. It is pregnant with meaning because the *square root* of co-efficient alpha is the *estimated correlation of the k-item test with errorless true scores* (italics as in original).

8 Earlier the author stressed that co-efficient alpha "... is so pregnant with meaning that it should *routinely be applied to all new tests*" (p. 214; emphasis mine).

Table 5.1 below summarizes the results of reliability tests for the three measures, namely the export performance, the marketing orientation, and the control variables scales:⁹

TABLE 5.1
Reliability Test for Measures Used

Scale	Cronbach Alpha (standardized)
<i>Marketing Orientation</i>	
Customer Focus	0.63
Profit Monitor	0.75
Integration	0.79
Organization Structure	0.82
<i>Export Performance</i>	
Objective Measures	0.80
Judgemental Measures	0.77
<i>Control Variables</i>	
Marketing Strategies and Market Condition	0.61
Management Attitude and Commitment	0.57
Government Support	0.60

⁹ For more details on these scales see Appendix E.

It is pleasing to note that most of the reliability co-efficient alphas for marketing orientation, export performance and control variables are above acceptable levels.¹⁰ The results presented here therefore suggest that the scales developed in this study are internally consistent, hence highly reliable. Similarly, most of item-to-total correlations were either well above the norm (0.3) or close to it.¹¹ There were, however, a few cases in which the item-to-total correlations were somewhat low. Nonetheless, the items in question were retained in the scale, partly because of their content validity and, more importantly, their inclusion did not adversely affect the reliability of the scale. A separately conducted test, excluding these items, showed that their exclusion did not markedly improve the reliability of the scale.

5.6.0 Testing for Validity

The validity of a measure refers to the extent to which the measurement instrument is free from both systematic and random errors. A measure is said to be valid if it measures what it is supposed to measure. To the extent that a measure is valid it is also reliable since reliability is a necessary but not sufficient condition for validity. Theoretically, valid measures represent an optimum level of capturing a construct. Normally such measures would not underidentify the construct by omitting its unique characteristics, nor would they contain surplus characteristics that might contaminate the construct (Peter and Churchill 1986). Validity is broadly divided into three main

10 In an excellent meta analysis of published marketing studies that have examined reliability and validity issues, Peter and Churchill (1986 p. 7) reported an average reliability value of 0.75. Noting that the reliability value was reasonably high, the authors reported that 23 measures had reliability values below 0.6.

11 See Appendix E.

groups, namely content, construct and predictive validity. Each of these are discussed below.

5.6.1 Content Validity

Content or face validity is a subjective evaluation by 'experts' to determine if the measurement appears to be measuring what it is intended to measure. According to Nunnally (op. cit. p. 92), content validity is by and large determined by subjective evaluations on the adequacy and the manner in which the domain of the construct was sampled. The author writes:

If it is agreed by most potential users of the test, or at least by persons in positions of responsibility, that if the plan was sound and well carried out, the test has a high degree of content validity.

In this study, it is believed that the instrument employed achieved a high degree of content validity because all the constructs were drawn from their respective well-known literature bases and were measured in a multidimensional way. Furthermore, senior members of staff as well as marketing practitioners were consulted at the time of developing the instrument.

5.6.2 Construct Validity

Construct validity lies at the very heart of scientific process. It involves determining what the instrument is in fact measuring. Construct validity is divided into three categories.

The first is *convergent* validity. This is determined by the extent to which the measure correlates highly with other techniques designed to measure the same construct. Put another way, a measure is said to have attained a convergent validity if it does not contradict known theories about the construct. Several researchers,¹² however, have indicated that the logic of convergent validity is tautological. As Churchill et al. (1974 p. 259) succinctly put it:

There is, however, a logical fallacy in claiming that a measure is valid if it relates to other constructs in hypothesized ways. To determine construct validity, a measure must fit a theory about the construct; but to use this as evidence, it is necessary to assume that the theory is true.

Establishing the existence of convergent validity was particularly difficult in this study because, as explained in Chapter 1, the theory of marketing concept is, at best, based on the conventional wisdom that there is a positive relationship between the adoption and implementation of the marketing concept and organization performance. The theory itself has not been substantially tested to see if indeed such is the case. In the absence of known 'acceptable standards' for testing the existence of convergent validity, factor analysis was conducted on all 22 items on the marketing orientation scale. Under the circumstances, this is an acceptable approach to assessing convergent validity. Since the items in the scale were selected to reflect different aspects of marketing orientation (i.e., customer focus, profit monitor, integration and organization structure for implementation of the marketing concept), it was expected that factors representing each of these variants would emerge.¹³ The results of the

12 See, for example, Nunnally (op. cit. p. 104).

13 Allison (1978 p. 568) used a similar approach.

factor analysis¹⁴ demonstrate that the marketing orientation scale has reached an acceptable level of convergent validity.

A further test of convergent validity was conducted by observing the magnitude of reliability co-efficient alpha when the scores of the four scales are combined into one marketing orientation scale (Narver and Slater 1990). The results in Appendix E table E-4 show that the Cronbach alpha for marketing orientation scale is 0.82. This provides further support that the measures of marketing orientation used in this study have attained an acceptable level of convergent validity.

In their meta analysis of studies that have investigated validity and reliability, Peter and Churchill (op. cit. p. 8) reported an average construct validity of 0.57. However, owing to methodological differences between the cited and this study, it is not possible to make a direct comparison between the two findings.

The second category of construct validity is *discriminant*. Discriminant validity is indicated by " . . . predictably low correlations between the measure of interest and other measures that are supposedly not measuring the same variable or concept" (Heeler and Ray 1972 p. 362). In a nutshell, a measure is said to have achieved a desired level of discriminant validity if it does not correlate very highly with another measure from which it should differ. Peter and Churchill (op. cit.) have reported an average discriminant validity of 0.22.

In this study, discriminant validity was measured by examining the relationship between Marketing Orientation Score (MOS) and the question that sought to know

14 See Chapter 6 section 6.1.2, especially table 6.2.

whether or not respondents used overall market share as a criterion in evaluating the performance of the marketing department.¹⁵ This question was intended to measure something not necessarily related to the adoption and implementation of the marketing concept, because in theory one would expect all firms (regardless of their marketing orientation) to at least use overall market share to gauge the performance of their marketing departments. Hence there is no particular reason to expect a

significantly high correlation between MOS and using "overall market share as a criterion for evaluating the performance of the marketing department."

TABLE 5.2

**Discriminant Validity Test: Relationship Between MOS and
Overall Market Share as a Performance Measure**

<i>Construct</i>	<i>Sample</i>	<i>Mean</i>	<i>Std. Dev.</i>
MOS	356	-0.001	0.458
Use of Overall Market Share	348	0.658	0.475

$r = 0.071$

$p = 0.19$

The final category is *nomological* validity. This is referred to as

. . . an observed relationship between measures purported to assess different (but conceptually related) constructs. In general, if two constructs (C_1 and C_2) are conceptually related, evidence that purported measures of each (M_1 and M_2) are related is usually accepted as empirical support for the conceptual relationship (Peter 1981 p. 137-138).

The mean correlation co-efficient for variables which were subjected to nomological validity tests as reported by Peter and Churchill (op. cit. p. 8) is 0.29. In this study, the presence of nomological validity was probed by examining the relationship between the four composites of marketing orientation.¹⁶ The four composites are believed to measure different aspects of conceptually related constructs. The results of this test are summarized in table 5.3a below:

16 Wrenn (op. cit. p. 104) used a similar approach.

TABLE 5.3a

**Nomological Validity Test: Relationship Between Different
Composites of Marketing Orientation**

	Customer Focus	Monitoring Performance	Integration	Organization Structure
Customer Focus				
Monitoring Performance	$r = .38$ $p = 0.0001$ $n = 356$			
Integration	$r = .26$ $p = 0.0001$ $n = 356$	$r = .21$ $p = 0.0001$ $n = 356$		
Organization Structure	$r = .18$ $p = 0.0009$ $n = 352$	$r = 0.1$ $p = 0.08$ $n = 352$	$r = .23$ $p = 0.0001$ $n = 352$	

To continue the test for nomological validity, an examination was made of the relationship between the measures of adoption of the marketing concept and those of the implementation of the concept. The results are presented in table 5.3b.

TABLE 5.3b

**Nomological Validity Test: Relationship Between the Adoption
and Implementation of the Marketing Concept**

<i>Construct</i>	<i>Sample</i>	<i>Mean</i>	<i>Std. Dev.</i>
Adoption	356	-0.005	0.623
Implementation	356	0.00006	0.531

$r = 0.26$

$p = 0.0001$

Although many of the correlation co-efficients reported in tables 5.3a and 5.3b are somewhat below the average reported by Peter and Churchill above, the fact that all the co-efficients are in the expected direction, and highly significant, is important.

At this juncture it is perhaps worth observing that Peter and Churchill (op. cit. pp. 2-3) have noted that social science theories lack specificity about the hypothesized magnitude of relationships between constructs. For this reason, the authors cautioned that there is no such a thing as the 'true' correlation between construct valid measures. They continued:

And even if there were such a thing as the 'true' correlation between construct-valid measures there is no reason to believe it should be large. Rather, most if not all of these correlations could be expected to be small given the many factors likely to affect any social science phenomenon. Thus, if we infer that a measure has a high degree of construct validity after examining all of the evidence, we should have greater confidence in the relationships found between it and other valid measures *regardless of their size*. If

the theory proposes only a positive directional relationship and the measures of the constructs are judged to have a high degree of construct validity, a correlation of 0.2 should *not* be viewed as inadequate solely because it is not large. Stated differently, it is the theory and the process of generating the results that are critical in evaluating construct validity and not simply the magnitude of the empirical indicators (p. 3; emphasis mine).

The results in tables 5.3a and 5.3b provide some support that the measures used in this research have attained an acceptable level of nomological validity.

5.6.3 Predictive Validity

Predictive or concurrent validity shows the extent to which particular measures predict other 'criterion' measures. It involves correlating scores on the predictor test with scores of the criterion variable.

It was stated in Chapter 1 that one of the objectives of this study is to find if there exists a relationship between export performance and the degree of marketing orientation. Conventional wisdom suggests that the two are related. In this study, predictive validity was examined by using the degree of marketing orientation to predict export performance of the firm.¹⁷ The results of the test are presented in the table below. Although the correlation co-efficient is low, the fact that the relationship is positive and also highly significant demonstrates that the degree of marketing orientation of the firm *can* be used as a valid predictor of export performance.

17 At least one researcher has used a similar approach. See Wrenn (op. cit. p. 108).

TABLE 5.4

Predictive Validity Test: Relationship Between MOS and EPS

<i>Measure</i>	<i>Sample</i>	<i>Mean</i>	<i>Std. Dev.</i>
Marketing Orientation Score (MOS)	265	-0.003	0.445
Export Performance Score (EPS)	265	-0.012	0.505

$$r = 0.20$$

$$p = 0.0009$$

This section concludes with the pattern of validity measures suggested by Peter and Churchill (op. cit. p. 7). After conducting a meta analysis of published marketing research on measure validation, the authors proposed (and eventually found) the following pattern:

Reliability values should be largest because they present the correlation of measures with themselves.

Convergent validity values should be second largest because they represent the correlation between two different measures purported to measure the same construct.

Nomological validity values should be third largest because they present the correlation between different, conceptually related construct.

Discriminant validity values should be the smallest because they present the relationship between theoretically unrelated constructs.

It would seem that the results presented in this chapter (see tables 5.1 to 5.4) are consistent with the above pattern.

5.7.0 Dependent Variable Scale Distribution

It was noted in Chapter 4 (section 4.9.0) that the more popular view in behavioural science literature is to treat ordinal scales (such as the Likert scale) as interval scales and use appropriate parametric statistics for the data at hand. It was also noted in the same section that some scholars do not agree with this seemingly popular view, especially if too many assumptions underlying parametric statistics are violated. At least one scholar has noted that ordinal data can be treated as interval data if the parametric technique being used is robust with respect to distributional assumptions (Mayer 1970 p. 917). For this reason, an examination was made of the nature of the dependent variable's distribution, before the formal testing of the hypothesis.

The Shapiro-Wilk statistic, 'W', was computed to test the null hypothesis that the data come from a normal distribution. The 'W' statistic can take any value greater than zero and up to one. The higher the value of 'W' the more normally distributed the data are. The results of the 'W' statistics and other summary measures of distribution are presented in table 5.5.

TABLE 5.5

Test of Normality for Dependent Variable Distribution (EPS)

Mean	-0.01
Standard Deviation	0.50
Skewness	0.35
Kurtosis	0.35
Prob < W	0.80
N	265

Clearly, the results presented in the table above provide support to the claim that the export performance (dependent) variable has attained an acceptable level of normal distribution. Accordingly, it would appear from these results that the dependent variable can appropriately be used in parametric analyses.

5.8.0 Concluding Remarks

In this chapter measures have been developed for the three main constructs: marketing orientation, export performance and the control variables. The measures were then subjected to reliability and validity tests. The results indicated that the measures are quite reliable and have attained an acceptable level of validity. Finally, the nature of the distribution of dependent variable was explored and the results suggested that the dependent variable is normally distributed, and hence appropriate for use in parametric analyses.

CHAPTER 6

RESEARCH FINDINGS

6.0.0 Introduction

This chapter reports the main findings of this study. The discussion examines the relationship between export performance and marketing orientation in three stages. The first is the bivariate analysis which explores the *overall* relationship that might exist between the two constructs. In the second stage, a multiple regression technique is employed in order to find out which aspect(s) of marketing orientation is (are) related to export performance *without* controlling for control variable effects. This analysis is preceded by a factor analysis of variables measuring marketing orientation so as to explore the underlying dimensions of the construct. Four factors are extracted and the scores are used as inputs into the regression model.

At the third stage of analysis, the relationship between export performance and marketing orientation is re-examined after 'partialling out' the effects of intervening variables. This step however, is preceded by a bivariate analysis between export performance and some 39 independent variables. The object of this analysis is to identify and select for further analysis only those control variables that exhibit a significant¹ positive relationship with export performance. At every stage, the insights gained from the results are discussed. These in turn serve as a basis for the conclusions that are drawn in the last chapter (Chapter 8).

1 Significant at 0.05 or better.

The chapter ends by exploring the existence of multicollinearity among the predictor variables.

6.1.0 Testing the Hypothesis

To recapitulate, the central hypothesis to be tested is:

- H_0 there exists a positive relationship between the adoption and implementation of the marketing concept and the export performance in New Zealand manufacturing industry
- H_a there is no relationship between the adoption and implementation of the marketing concept and the export performance in New Zealand manufacturing industry.

6.1.1 Correlation Analysis

In order to test the above hypothesis, correlation co-efficients were computed relating Export Performance Scores (EPS) with Marketing Orientation Score (MOS).² The

² EPS and MOS was computed by the formula below:

$$\text{EPS or MOS} = \sum_{i=1}^k \left[\frac{x_i - \bar{X}_{qi}}{s_{qi}} \right]$$

where q_{xi} response to question i
 $\bar{X}_{qi}$ mean response of question i
 s_{qi} standard deviation of question i
 k number of items answered.

Pearson correlation co-efficient of export performance and marketing orientation was 0.2 and was significant at 0.0009. Its non-parametric equivalent, i.e., the Spearman correlation, was 0.21 and was significant at 0.0005.

It would appear from these results that the degree of marketing orientation is positively related to export performance. Although the relationship is not very strong, its direction and the level of significance provide statistical support for the null hypothesis that there is a positive relationship between export performance and marketing orientation.

6.1.2 Factor Analysis

Having established the existence of a positive relationship between export performance and marketing orientation generally, a further inquiry was made to identify which specific aspect(s) of marketing orientation best explained the relationship with export performance. To further explore the underlying dimensions of the relationship between marketing orientation and export performance, factor analysis of 22 independent variables³ was conducted measuring the extent of adoption and implementation of the marketing concept.

Factor analysis was employed so as to determine some patterns that might exist in the data, in particular to establish whether the underlying dimensions proposed in the research model might be supported. Another useful property of factor analysis is that the technique transforms the data into components which are orthogonal to one

3 See Chapter 5, figure 5.3.

another for further use as independent variables in the multiple regression model.⁴ This latter aspect of factor analysis is crucial because it prevents multicollinearity problems that might emerge if independent variables are highly correlated.

It was proposed in Chapter 5 that the degree of the firm's marketing orientation can be captured by four constructs. For this reason, a decision was made to run the factor analysis procedure and force a four factor structure. The results are presented in table 6.1.

4 See Kinnear and Taylor (1987 pp. 527-528).

TABLE 6.1
General Factor Analysis Results⁵

		FACTORS			
Perceptual Measure		I	II	III	IV
i)	use of customers as a source of ideas	0.11	0.17	0.20	0.73
ii)	use of customers to evaluate new ideas	0.06	0.12	0.25	0.73
iii)	measuring customer satisfaction	-0.08	0.04	0.57	0.02
iv)	developing products for different segments	-0.04	-0.04	0.40	0.54
v)	profitability analysis by products	0.002	0.02	0.73	0.10
vi)	profitability analysis by markets	0.13	0.13	0.66	0.23
vii)	profitability analysis by key customers	0.02	0.13	0.70	0.16
viii)	sharing information with production department	0.12	0.73	0.02	0.09
ix)	sharing information with finance department	0.08	0.79	0.09	-0.09
x)	sharing information with sales department	-0.002	0.60	-0.19	0.36
xi)	joint decisions with production department	0.20	0.69	0.15	0.07
xii)	joint decisions with finance department	0.12	0.64	0.25	-0.16
xiii)	joint decisions with sales department	0.08	0.52	0.03	0.31
xiv)	responsibility for product planning and development	0.54	-0.07	-0.13	0.15
xv)	responsibility for packaging	0.57	0.17	-0.003	0.08
xvi)	responsibility for pricing	0.71	0.04	-0.08	0.14
xvii)	responsibility for credit extension	0.70	0.17	0.03	-0.17
xviii)	responsibility for advertising	0.42	-0.06	-0.08	0.32
xix)	responsibility for personal selling	0.48	0.25	-0.01	0.20
xx)	responsibility for transportation	0.72	0.17	0.11	0.001
xxi)	responsibility for inventory control	0.73	0.04	0.07	-0.04
xxii)	responsibility for quality control	0.53	0.11	0.19	-0.18

5 Varimax rotation.

With the exception of one out of 22 items (i.e., measuring customer satisfaction) the pattern which emerged from the factor analysis was consistent with the four composites of marketing orientation proposed in Chapter 5. For this reason, the initial names of the four composites were retained as factor labels except for a slight modification on factor 3. This factor was renamed as monitoring performance instead of monitoring profitability because the items included in this factor were not only measuring profitability but also another aspect of firm performance, i.e., customer satisfaction. The pattern and the factor labels are presented in table 6.2. Altogether the four factors explained 52.7 percent of the variation in the 22 original variables.

TABLE 6.2
Factor Analysis Results: Factor Labels

Factor Name (% of Variance Explained)	Perceptual Measure	Loadings
1 Organization Structure		
(21.4%)	responsibility for product planning and development	0.54
	responsibility for packaging	0.57
	responsibility for pricing	0.71
	responsibility for credit extension	0.70
	responsibility for advertising	0.42
	responsibility for personal selling	0.48
	responsibility for transportation	0.72
	responsibility for inventory control	0.73
	responsibility for quality control	0.53
2 Integration		
(12.0%)	sharing information with production department	0.73
	sharing information with finance department	0.79
	sharing information with sales department	0.60
	joint decisions with production department	0.69
	joint decisions with finance department	0.64
	joint decisions with sales department	0.52
3 Monitoring Performance		
(9.0%)	profitability analysis by products	0.73
	profitability analysis by markets	0.66
	profitability analysis by key customers	0.70
	measuring customer satisfaction	0.57
4 Customer Focus		
(6.3%)	use of customers as a source of ideas	0.73
	use of customers to evaluate new ideas	0.73
	developing products for different segments	0.54

Before proceeding with the inquiry on the aspect(s) of marketing orientation that explain the relationship with export performance, it is worth making some comments on the insights gained from the factor analysis results. The results in tables 6.1 and 6.2 above suggest that the internal structure of the measures of marketing orientation is good. There are at least three reasons in support of this observation. The first is that it can be seen from table 6.2 that all but two⁶ factor loadings are above ± 0.5 , a value commonly used as the acceptable minimum in the literature (Noerager 1979).

The second is that it is quite evident from table 6.1 that test items within the *same* marketing orientation dimension tend to load reasonably well on the *same* factor. Conversely, the third reason is that looking at table 6.2, there is a very clear pattern for test items measuring the *different* dimensions of marketing orientation to load reasonably well on *different* factors. The three reasons taken together lead to a conclusion that the internal structure of the measures of marketing orientation is solid and that *all* test items contributed to the assessment of the four dimensions of marketing orientation. These findings suggest that marketing concept is a multi-facet construct having four related dimensions.⁷ This revelation has some important managerial implications. This discussion is deferred to Chapter 8.

6 Even so, the two items have positive loadings of greater than 0.4.

7 These findings are in contrast with the findings of two previous studies which concluded that marketing concept is a unidimensional construct (See Wrenn 1989 p. 133; Narver and Slater 1990 p. 25).

6.2.0 Multiple Regression Without Control Variables

After identifying the factors to use as inputs into the regression model, Ordinary Least Square (OLS) multiple regression procedures were employed. Four factors measuring different dimensions of marketing orientation were regressed against Export Performance Score (EPS). The results of the regression model are presented in table 6.3 below:

TABLE 6.3

Multiple Regression Results of Overall Export Performance
and Marketing Orientation

<i>Predictor</i>	<i>Beta</i>	<i>T value</i>	<i>Prob > T </i>
Customer Focus	0.097692	2.797	0.0057
Organization Structure	0.062181	1.780	0.0766
Integration	0.057949	1.659	0.0987
Monitoring Performance	0.036519	1.045	0.2971

N = 200 *Model R*² = 0.0707 *df* = 4, 195 *F* = 3.709 *Prob > F* = 0.0062

Clearly the results in table 6.3 show that all but one of the measures of marketing orientation have significantly⁸ contributed to the explanation of the variation in export performance. The F statistic for the full regression model is 3.709. With 4, 195 degrees of freedom, the F statistic is significant at $p = 0.01$.

6.2.1 Explained Variance

As expected, given the complexity of the phenomenon under investigation, the results of multiple regression analysis are relatively weak in explanatory power ($R^2 = 7.1\%$), but they do indicate the existence of a positive relationship between export performance and marketing orientation. The results are pleasing on two counts. The first is that this research does not claim that the firm's export performance is solely determined by the degree of adoption and implementation of the marketing concept, and it was never expected that would be the case. On the contrary, it is acknowledged that export performance is a very complex construct and is determined by numerous factors, some of which are by and large beyond a given firm's control.⁹ The construct is perhaps even more complex in a country such as New Zealand where, since the floating of New Zealand dollar in March 1985 coupled with high interest rates, exports from this country have become relatively uncompetitive. Suffice it to note that this relatively low ability to compete has pushed many businesses into liquidation and many of those that are still working have been forced to scale down their operations. Given this highly volatile economic environment, finding support for the hypothesis is extremely pleasing.

8 Significant at 0.1 level or better.

9 The model presented in Chapter 3 provides further proof that there are other factors which contribute to the explaining of the export performance of the firm.

The second pleasing aspect to the results is that they are consistent with previous research which has shown that marketing orientation by itself cannot fully explain the variation in corporate performance. In their American study of 103 vice presidents of marketing and planning, Lusch and Luczniak (1987) concluded that the marketing concept on its own could not give a good statistical fit for the data under investigation. It was only after the concept was extended to include the stakeholder concept (and subsequently renamed as the extended marketing concept) that a better statistical fit was obtained. The main implication of this finding is that firm performance is better explained when the definition of the marketing concept is widened to include other publics.¹⁰ This study however, could not extend the definition of the marketing concept because measuring 'other publics' would have made the project unmanageable.

6.2.2 Level of Significance for the Factors

The results of regression analysis (table 6.3) show that all but one factor significantly contributed to the explanatory power of the model at 0.10 or better. Monitoring performance is the only factor that was not statistically significant in the regression model although the direction of the relationship was as expected. This factor has two main components. The first it measures the frequency at which responding firms monitor profitability by markets, by products and by key customers. The second measures whether or not responding firms have criteria for measuring customer satisfaction.

10 Indeed many scholars go beyond the traditional marketing concept by paying more attention to other publics. See for example *Marketing News*, September 14 (1984) where Kotler is reported to advocate the concept of megamarketing.

Monitoring performance, as defined in this study, requires very sound accounting systems and, more importantly, a competent team of marketers who can see the need for maintaining such records and also know how to use them. Given the nature (and the definition) of this factor, its relative unimportance in explaining variation in export performance was not totally surprising. This finding is, in some respect, consistent with at least one local study.

In a study of marketing planning in New Zealand, van der Walt et al. (1989) reported that over two-thirds of the officers responsible for making marketing decisions had not even heard of the very basic planning aids. This in some way suggests that there is a relatively low degree of marketing sophistication in people responsible for making marketing decisions in most New Zealand businesses. If these findings are anything to go by, and given the nature and the definition of monitoring performance, it is not totally surprising that the factor did not feature well in the regression model.

On the other hand, two measures, namely integration and organizational structure, were statistically significant at 0.1 but not at 0.05 level. In this study, organizational structure was measured by the extent to which the marketing department has control over nine different functions.¹¹ The functions ranged from those that are considered to be predominantly marketing functions (e.g., advertising) to those that are in essence marketing related functions (Vizza et al. 1967) but have traditionally been kept under the control of production and finance departments. Examples of these are inventory control and credit extension respectively.

11 See Appendix A q12.

A possible explanation for the relatively lower level of significance of organizational structure (as defined in this study) is that in many New Zealand firms marketing departments do not have enough authority over many marketing related functions. This position is to some extent supported by the fact that over the last three years New Zealand has witnessed massive restructuring of both public and private firms. Presumably, these restructures are, among other things, aimed at giving marketing executives more authority over traditional marketing functions which were otherwise controlled by non-marketing staff.

As for integration, this variable was measured by the extent to which the marketing department shares information and makes joint decisions with other departments such as production and finance.¹² The relatively lower level of significance for this variable may suggest that in many New Zealand firms the degree of cooperation between different functional departments is relatively low. Though not proven by the current research, a paper by Bloch (1989) appearing in *New Zealand Journal of Business* suggested that conflict between marketing and other functional departments is not uncommon. It is not claimed that such is the case in New Zealand, but the fact that integration had a relatively low level of significance *could* suggest a low degree of integration or even the existence of a conflict rather than cooperation between marketing and other departments. New Zealand studies of this area are non-existent, and therefore Bloch's (ibid.) call that more work needs to be done is reinforced.

On a more positive note, the results in table 6.3, indicate that customer focus is the single most important factor in explaining the firm's overall export performance in this study. This finding is consistent with both local and overseas research.

12 See Appendix A q7 and q8.

In his attempt to find out whether or not the American manufacturing firms have adopted the marketing concept, Hise (1965) reported that of the three¹³ elements of marketing orientation, customer orientation found the greatest degree of acceptance by the firms in the survey. In his study of Wellington and Manawatu firms, Ahie (1987) found that of the five¹⁴ measures of marketing orientation, customer philosophy was given the strongest emphasis by the firms surveyed. Similar findings were reported by Wrenn (1989).¹⁵

Since customer focus emerged as the single most important factor in explaining the firm's overall export performance, it was further dissected to find out which aspect(s) of customer focus is (are) more important. The exercise produced two interesting (and closely related) results. Table 6.2 shows the first: that factor 4 has three items, two of which (i.e., use of customers as a *source* of ideas and use of customers to *evaluate* new ideas) have high factor loadings compared to the third. This would imply that the firm's export performance is by and large determined by the extent to which firms are close to their customers - a finding that lies at the very heart of the marketing concept.

The second interesting observation from table 6.2 is the tie in the factor loadings for the two items under discussion, i.e., using customers as a source of ideas and using customers to evaluate new ideas. This finding suggests that customers are equally important both as a source and an evaluation of new ideas.

13 i.e., customer orientation, profitability of marketing operations and an organizational structure which puts the chief marketing executive on an equal footing with other line executives (p. 9).

14 Based on Kotler (1977).

15 Wrenn too employed Kotler's Marketing Effectiveness Audit (Kotler *ibid.*).

It was noted in Chapter 2 that one of the serious criticisms directed at the marketing concept is the shift from the 'science push' to the 'market pull' approach in developing new products.¹⁶ However, the evidence presented here shows that new product ideas *need not always* come from just one of the two sources. A tie in the factor loadings implies that both 'science push' and 'market pull' approaches are consistent with the marketing concept, and that ideas generated through *any* of the two sources have equal chances of contributing to corporate success.¹⁷ In an article entitled *Hang on to the Marketing Concept*, Parasuraman (1981) cited several examples of firms in the US and Japan which have been successful as a result of having a good interface between basic research and perceived customer needs.

To summarize the discussion of the regression results, the expected direction of the relationship was supported, and at a level of significance which suggests some (albeit weak) link between export performance and marketing orientation. Since, as discussed earlier, the link between export performance and marketing orientation was expected to be weak, the general pattern of findings of the multiple regression is consistent with and is in support of the hypothesized relationships.

6.3.0 Export Performance and Marketing Orientation with Control Variables

This section explores the relationship between export performance and marketing orientation, taking into account factors which may potentially act as intervening variables when explaining the variation in the dependent variable. The probe

16 See Kerby (1972); Bennet and Cooper (1979); Riesz (1980).

17 Kotler (1988 p. 19) cites the 3M firm which claims that *over two-thirds* of its innovation ideas come from listening to customer complaints.

however, is preceded by a bivariate analysis between export performance and some independent variables. The object of this analysis is to identify and select for further analysis only those control variables that exhibit a significant¹⁸ positive relationship with export performance. A total of 22 variables was found to correlate with export performance as initially reported in Chapter 5. These were grouped into three composites of variables which were then used as control variables in the regression model. The composites are: (1) marketing strategy and market condition, (2) management attitude and commitment, and (3) government support.¹⁹

6.3.1 *Multiple Regression with Control Variables*

In order to further investigate the relationship between export performance and marketing orientation while controlling for intervening variables, three Ordinary Least Squares (OLS) regression runs were executed. These are regressions of export performance on: (1) the four factors scores measuring the degree of marketing orientation, (2) the three scales measuring control variables and finally, (3) the full model, i.e., regressing the four factors scores measuring the degree of marketing orientation *and* the three scales measuring control variables against export performance.

Ordinary Least Squares (OLS) procedure was used because the objective here was to determine whether or not the inclusion of the four factors measuring the degree of marketing orientation (after the control variables are in the equation) will improve

18 Significant at 0.05 or better.

19 For a derivation of these composites, see Chapter 5, section 5.4.0.

the explanatory power of the model. This involves two steps. The first observes the change in the R-square value *after* the marketing orientation measures are in the equation. The second step involves an analysis of variance (ANOVA) and calculates the partial F statistic to test whether or not the change in R-square value (if any) is statistically significant. Table 6.4 below summarizes the results of these procedures.

TABLE 6.4

**Multiple Regression Results of Export Performance, Marketing
Orientation and Control Variables**

<i>Regression Run</i>	<i>df</i>	<i>F</i>	<i>Prob > F</i>	<i>R²</i>
1. Control Variables	3, 196	53.726	0.0001	0.4513
2. Marketing Orientation	4, 195	3.709	0.0062	0.0707
3. Run 1 <i>and</i> 2 above	7, 192	24.041	0.0001	0.4671

N = 200

From the results in table 6.4 the following conclusions can be drawn:

- i) both the four factors measuring the degree of marketing orientation and the three composite items measuring control variables (*in their own right*) have the ability to explain the variation in export performance. The R-square

values for each are 0.4547 and 0.0707, significant at 0.0001 and 0.01 respectively.

- ii) after controlling for the effects of intervening variables, the factor scores measuring the degree of marketing orientation made a small but statistically significant contribution in explaining the variation in export performance. This is evident from the slight change in the R-square value, the partial F statistic and its associated level of significance.

It is worth noting that the partial F statistic in this case tests the degree of *additional* contribution that marketing orientation makes in explaining export performance. Since the measures of marketing orientation were entered into the model *after* the intervening variables were in the equation, marketing orientation must have had additional predictive features so as to qualify as a significant independent variable. The partial F co-efficient ($F = 5.7$ $df = 4, 192$) and its associated significance level (0.001) demonstrate that, although the change in the R-square value is small (3.5 percent),²⁰ it is nonetheless statistically significant. These findings are consistent with earlier findings on bivariate analysis in that both analyses provide statistical support for accepting the null hypothesis that there is a positive relationship between marketing orientation and export performance.

20 Calculated as: $\frac{\text{R-square Regression Run3 Minus R-square Regression Run1}}{\text{R-square Regression Run1}}$

6.4.0 Testing for Multicollinearity

One of the assumptions of the linear regression model is the absence of multicollinearity among the predictor variables included in the model. Several statistics and econometrics texts explain how to detect and deal with multicollinearity. For an excellent discussion on this issue the reader is referred to Chapter 10 of the text by Gujarati (1988).

Because multicollinearity is a serious problem in regression analysis, three different techniques were employed to determine whether or not such conditions exist in the predictors used in the current research. These were: (1) a bivariate correlation analysis among predictor variables, (2) calculation of the Variance Inflation Factor (VIF), and (3) inspection of the eigensystem of the independent variables. The results of these tests are presented in table 6.5 below:

TABLE 6.5

Collinearity Diagnostics: Correlation Matrix and the VIF

	<i>Correlation Matrix</i>							<i>VIF</i>
	FACT1	FACT2	FACT3	FACT4	MKT	COM	GOV	
FACT1	1.00							1.044
FACT2	0.00	1.00						1.029
FACT3	0.00	0.00	1.00					1.043
FACT4	0.00	0.00	0.00	1.00				1.159
MKT	-0.07 (0.33)	0.12 (0.10)	0.17 (0.02)	0.36 (0.00)	1.00			1.656
COM	0.11 (0.11)	0.11 (0.13)	0.14 (0.05)	0.19 (0.01)	0.54 (0.00)	1.00		1.461
GOV	-0.07 (0.29)	0.11 (0.13)	0.09 (0.22)	0.06 (0.41)	0.16 (0.02)	0.08 (0.28)	1.00	1.044

N = 200 level of significance in parentheses

FACT1	factor scores measuring organizational structure
FACT2	factor scores measuring integration
FACT3	factor scores measuring monitoring performance
FACT4	factor scores measuring customer focus
MKT	a composite of control variables measuring marketing strategy and market conditions
COM	a composite of control variables measuring management attitude and commitment towards exporting
GOV	a composite of control variables measuring importance of government support

The results of pairwise correlation among predictor variables indicate that there are no multicollinearity problems among independent variables. All zero order correlations among predictors are below the norm of 0.8.²¹

As for the Variance Inflation Factor (VIF) as a test for multicollinearity, Chatterjee and Price (1977 p. 182) suggest that if the VIF exceeds 10 then multicollinearity is at work. The results in table 6.5 above clearly show that such conditions do not exist in the data set.

The third and final test for multicollinearity is an examination of the eigensystem. Essentially this involves calculating the condition number 'k' and the condition index (CI) and comparing them with their respective norms. Algebraically the two indices are calculated as:

$$k = \frac{\text{maximum eigenvalue}}{\text{minimum eigenvalue}}^{22}$$

CI = square root of 'k'

Gujarati (op. cit. p. 301) sets the following norms for interpreting both the condition number 'k' and the condition index:

- : if 'k' is between 100 and 1000 - moderate to strong multicollinearity
- : if 'k' is greater than 1000 - severe multicollinearity
- : if CI is between 10 and 30 - moderate to strong multicollinearity
- : if CI is greater than 30 - severe multicollinearity

²¹ See Gujarati (1988 p. 299).

²² Note that CI and 'k' can also be computed between the maximum eigenvalue and any other eigenvalue (Gujarati op. cit. p. 302).

Table 6.7 below summarizes the results of both indices.

TABLE 6.6

Collinearity Diagnostics Using Eigensystem

Number	Eigenvalue	Condition Index (CI)	Condition Number 'k'
1	1.86481	1.00000	1.0000000
2	1.10593	1.29853	1.6861802
3	1.03041	1.34528	1.8097783
4	1.00000	1.36558	1.8648087
5	1.00000	1.36558	1.8648087
6	0.85819	1.47409	2.1729413
7	0.74313	1.58411	2.5094045
8	0.39753	2.16588	4.6910362

It is quite evident from table 6.6 above that both the condition number 'k' and the condition index are within the acceptable range of non-collinearity among the predictors. Tables 6.6 and 6.7 therefore provide statistical support for the claim that multicollinearity was not a problem in the current research.

6.5.0 Concluding Remarks

In summary: this chapter has demonstrated that there exists a positive relationship between marketing orientation and export performance. The null hypothesis is therefore supported.

It has also been shown that customer focus is a very important factor in explaining export performance. The implication of this finding is that constant interaction with the customers is a key to the firm's success. The evidence presented reinforces the marketing orientation theory that customers should be the focal point of most of the firm's activities.

Finally, tests were made for multicollinearity conditions that might have been present in the data. Three different techniques were employed. Without exception, all the three techniques supported the claim that multicollinearity conditions did not exist among the predictor variables.

CHAPTER 7

OTHER FINDINGS

7.0.0 Introduction

In the previous chapter, the major findings relating to the objectives of the thesis were presented. This chapter reports on other findings of this study. The chapter is divided into two major parts. The first part is to some extent an extension of Chapter 6. In this part, separate analyses are made of the relationship between export performance and marketing orientation after controlling for the size of the firm and the type of product. The intent of the exercise is to highlight more specifically the impact of product type and size of firm upon export performance.

The second part is divided into two sections. In the first section, a multiple regression technique is employed to determine which of the independent variables jointly explain the variability in export performance. In the second section, general comparisons are made between the results of this study and those obtained by previous local studies.

At the end of the chapter is a check-list of success factors in exporting. This, it is hoped, will provide a useful guide for improving export performance in the New Zealand manufacturing industry.

PART I

EXPORT PERFORMANCE AND MARKETING ORIENTATION CONTROLLING FOR SIZE OF THE FIRM AND PRODUCT TYPE

7.1.0 Marketing Orientation and Export Performance by Product Type

This section explores the relationship between marketing orientation and export performance across firms producing different product types. The intent is to examine if product type (i.e., consumer *versus* industrial goods) makes any difference in explaining the relationship between export performance and marketing orientation. The method employed was similar to the one described in the previous chapter, section 7.3.1. It essentially involved the following:

- (1) Separating firms producing consumer goods from those producing industrial goods.
- (2) Executing a set of three Ordinary Least Squares (OLS) regression runs.
- (3) Observing changes in the R-square values for each group to see if inclusion of the measures of marketing orientation (after other control variables are in the equation) will improve the explanatory power of the model.
- (4) conducting an analysis of variance (ANOVA) and calculating the partial F statistic to test whether or not the change in R-square value (if any) is statistically significant.

Tables 7.1a and 7.b below summarizes the results of these procedures.

TABLE 7.1a

**Multiple Regression Results of Export Performance, Marketing
Orientation and Control Variables (Consumer Goods)**

<i>Regression Run</i>	<i>df</i>	<i>F</i>	<i>Prob > F</i>	<i>R²</i>
1. Control Variables	3, 95	26.99	0.0001	0.4602
2. Marketing Orientation	4, 94	1.225	0.3053	0.0496
3. Run 1 <i>and</i> 2 above	7, 91	12.059	0.0001	0.4812

N = 99¹

TABLE 7.1b

**Multiple Regression Results of Export Performance, Marketing
Orientation and Control Variables (Industrial Goods)**

<i>Regression Run</i>	<i>df</i>	<i>F</i>	<i>Prob > F</i>	<i>R²</i>
1. Control Variables	3, 95	24.25	0.0001	0.4337
2. Marketing Orientation	4, 94	2.58	0.0422	0.0989
3. Run 1 <i>and</i> 2 above	7, 91	11.825	0.0001	0.4763

N = 99

1 Coincidentally, the sample was split exactly into consumer and industrial exporters.

The results in tables 7.1a and 7.1b show that, for both consumer and industrial goods, the measures of marketing orientation *did* contribute to the explanatory power of the model. In the case of consumer goods, the change in the R-square value is 4.56 percent.² Its corresponding partial F statistic is 3.686 and is significant at 0.001 level (df = 4, 91). In contrast there was a change of 9.8 percent in the R-square value for firms producing industrial goods. Its associated partial F statistic is 7.4 and is significant at 0.0001 (df = 4, 91).

It would seem from these results that, in examining the relationship between export performance and marketing orientation, there are no significant differences between firms producing consumer goods and those producing industrial goods. In the latter case however, the change in R-square value is *greater* and *more* significant than in the former.

7.1.1 Marketing Orientation and Export Performance by Size of the Firm

As with the previous section, this section seeks to explore the relationship between export performance and marketing orientation while controlling for size of the firm. The procedure used is similar to the one described in section 7.1.0 above. Tables 7.2a, 7.2b and 7.2c below present the results of this exercise.

2 The formula for calculating the change in R^2 value is given in Chapter 6, footnote 20.

TABLE 7.2a

**Multiple Regression Results of Export Performance, Marketing
Orientation and Control Variables (Small Firms)**

<i>Regression Run</i>	<i>df</i>	<i>F</i>	<i>Prob > F</i>	<i>R</i> ²
1. Control Variables	3, 48	10.37	0.0001	0.3935
2. Marketing Orientation	4, 47	2.54	0.0521	0.1777
3. Run 1 <i>and</i> 2 above	7, 44	4.939	0.0004	0.4400

N = 52

TABLE 7.2b

**Multiple Regression Results of Export Performance, Marketing
Orientation and Control Variables (Medium-Sized Firms)**

<i>Regression Run</i>	<i>df</i>	<i>F</i>	<i>Prob > F</i>	<i>R</i> ²
1. Control Variables	3, 105	30.515	0.0001	0.4658
2. Marketing Orientation	4, 104	1.01	0.4060	0.0374
3. Run 1 <i>and</i> 2 above	7, 101	14.322	0.0001	0.4981

N = 109

TABLE 7.2c

**Regression Results of Export Performance, Marketing
Orientation and Control Variables (Large Firms)**

<i>Regression Run</i>	<i>df</i>	<i>F</i>	<i>Prob > F</i>	<i>R²</i>
1. Control Variables	3, 35	11.714	0.0001	0.5010
2. Marketing Orientation	4, 34	2.327	0.0761	0.2149
3. Run 1 and 2 above	7, 31	6.332	0.0001	0.5885

N = 39

The results in the tables above can be summarized as follows:

- i) *small firms*: the change in R-square value after including measures of marketing orientation is 11.8 percent. The associated partial F statistic is 3.657 and is significant at 0.025 (df 4, 44);
- ii) *medium-sized firms*: the change in R-square value is 6.9 percent. The partial F statistic of 6.51 is significant at 0.0001 (df 4, 101);
- iii) *large firms*: the change in R-square value is 17.5 percent. With the degrees of freedom 4, 31 the partial F statistic of 6.56 is significant at 0.0001.

It is evident from these results that in all three cases the measures of marketing orientation did contribute to the explanatory power of the regression model. In all cases the changes in the R-square values were found to be statistically significant.

These results are consistent with the findings of a separate bivariate analysis between export performance and marketing orientation.³ In the bivariate analysis, size of the firm in itself was not significantly related to export performance. It would therefore seem from these results that export performance and marketing orientation are positively related irrespective of the size of the firm, although the power of the relationship is greater for large firms and least for medium-sized firms.

7.1.2. Summary

In the first part of this chapter, the relationship between export performance and marketing orientation was re-examined across different size levels and product types. The results showed that in all but two cases⁴ the measures of marketing orientation in *themselves* did explain the variance in export performance. However, after controlling for exogenous variables, marketing orientation in *all* cases made a statistically significant contribution to explaining the variation in export performance. These results are generally consistent with the findings presented in the previous chapter.

3 See Chapter 5, section 5.4.0.

4 i.e., table 7.1a regression run 2 and table 7.2b regression run 2.

PART II

FACTORS MOST IMPORTANT TO EXPORT SUCCESS

7.2.0 Export Performance and Independent Variables

It is evident from the results presented in the previous chapter (section 6.3.0) and those presented in the first part of this chapter (tables 7.1a to 7.2c) that the measures of marketing orientation made a statistically significant contribution to explaining the variation in export performance irrespective of size of the firm and product type. The results however, also showed that the control variables had a major influence in explaining the variance in export performance. In order to gain more insights into this issue a further investigation was made to determine the specific effects the independent variables⁵ had on export performance. This more detailed type of analysis was seen to be important in identifying *specific* decision areas which managers might seek to improve on so as to increase the overall export performance. These variables were selected as possible entrants into the multiple regression model. The procedure and results of the regression are presented in the next section.

5 These are the same as the control variables presented in Chapter 5, section 5.4.0. However, the analysis presented here is based on 22 variables. Two variables were dropped from the analysis because of high missing values. The variables are the frequency at which firms enter into foreign exchange contracts to hedge themselves against foreign exchange fluctuations and whether or not the decision to export was prompted by a fortuitous order.

7.2.1 Stepwise Multiple Regression

After identifying the variables to use as inputs into the regression model, a stepwise multiple regression procedure was employed. The technique selects and enters into the model each independent variable in turn according to its power to explain the variation in the dependent variable. A total of 22 independent variables were regressed against export performance.⁶ The results of the regression procedure are presented in table 7.3 below:

TABLE 7.3

Multiple Regression Results: Export Performance versus 22 Independent Variables

<i>Predictor</i>	<i>Beta</i>	<i>Partial R²</i>	<i>F</i>	<i>Prob > F</i>
Visiting foreign markets	0.002	0.217	55.29	0.0001
Quoting in the currency of the buyer	0.004	0.111	32.93	0.0001
Management attitude toward profits	0.127	0.068	22.21	0.0001
Managers' export experience	0.014	0.051	17.95	0.0001
Quoting in the currency of a third party	0.005	0.042	16.19	0.0001
Number of people involved in exporting	0.001	0.014	5.39	0.0213
Quality of export products	0.069	0.013	5.34	0.0219
Firm's export experience	0.005	0.010	4.19	0.0421

N = 201 *R² value* 52.7% *F value* 26.78 *DF* 8, 192 *p* 0.0001

6 Multicollinearity tests similar to those reported in Chapter 6, section 6.4.0, were conducted. The results showed no serious multicollinearity among predictor variables as evidenced by the following indicators: the highest pairwise correlation co-efficient was 0.58 while the highest Variance Inflation Factor (VIF) was 2.12.

Within the context of this chapter, it can be said from the results in the above table that the relationship between export performance and marketing orientation is largely explained by eight variables. Collectively, the eight variables account for 52.7 percent of the variation in the dependent variable. In the following pages they will be discussed in detail.

i) Visits to Foreign Markets

As predicted in Chapter 3, the results in the above table show that paying regular visits to foreign markets is positively related to export performance. This variable alone explained 21.7 percent of the variation in export performance which is equivalent to 41.1 percent of the *explained* variance.

The importance of visiting foreign markets is not hard to see. Frequent visits to these markets make it possible for the firm's executives to meet key distributors and customers, identify market opportunities and solve any problems that distributors and/or customers might have. Lindsay (1990 pp. 31-32) gives a good summary of different advantages that firms might get by visiting foreign markets.

Many past researchers have associated visiting foreign markets with high export performance (See Chapter 2, table 2.1). It is also significant to note that two New Zealand studies did examine this variable and both obtained similar findings (Stening 1974; Lindsay op. cit.).

Exploring this variable further, firms were divided into three groups according to their level of export performance. Firms were labelled as high, medium and low export

performers depending on the Export Performance Score they had obtained.⁷ The average number of person-days for each group was then computed. It was expected that the average number of person-days for high export performers would be the highest, followed by the medium and low export performers, in that order. The mean number of person-days and the standard deviations for each group are presented in the table below:

TABLE 7.4

**Distribution of Firms According to their Export
Performance and Visits to Foreign Markets**

<i>Characteristics of Firms</i>	<i>Sample</i>	<i>Mean</i>	<i>Std. Dev.</i>
Low Export Performers	66	24.6	29.9
Medium Performers	130	51.7	48.8
High Performers	59	92.9	86.7

Overall mean 54 person-days

The results in table 7.4 show a pattern consistent with what was expected. High performing firms visited foreign markets more often, followed by medium performing

7 The following criteria were used to divide the firms into three groups: top 25 percent of EPS (high export performers); 50 percent of EPS (medium export performers); bottom 25 percent of EPS (export performers).

firms.⁸ It was demonstrated in Chapter 6 that customer focus is the most important factor in determining the firm's export performance. In so far as regular visits to foreign markets help to maintain close contact with the customer, the results presented here further elucidate the earlier findings presented in Chapter 6.

ii) Quoting in Currency other than the New Zealand Dollar

In this section, the results relating to quoting in the currency of the buyer and the currency of a third party are presented. Although each of the two variables is related to export performance *in its own right*, nonetheless it was decided to present them together because of the nature of the variables and their close relationship to one another.

Currency strategy is a variable that has received no attention in export marketing literature. Given the current New Zealand foreign exchange policy (i.e., floating the dollar), it is puzzling to note that even the most recent export study of New Zealand firms (Lindsay op. cit.) did not investigate the effect currency strategy might have on export performance.

In July 1984 the New Zealand dollar was devalued by 20 percent against the five basket of currencies. In March 1985, the dollar was floated and its value against other currencies was determined by the supply and demand conditions in the foreign exchange market. Following these decisions, the New Zealand dollar has been very volatile in the last five years.

8 A further breakdown was made in which firms were divided into three size categories: small, medium and large. Average visiting days were then computed for high, medium and low performing firms within each size category. The results showed that the average visiting days were 53, 30 and 12 for high, medium and low performing firms respectively. This pattern is consistent with earlier findings.

The fact that invoicing in a currency other than the New Zealand dollar is associated with high export performance is not surprising. Given the situation with the New Zealand dollar, many exporters have complained that foreign exchange fluctuation is a major problem in exporting. A separate univariate analysis revealed that high foreign exchange and its volatility were the major problems in exporting. Collectively, the two variables were mentioned by 38.5 percent of the exporters.⁹ When asked to evaluate the level of government support for foreign exchange related problems, only 5.7 percent of the respondents thought that the government had been supportive on this issue. In contrast 54.4 percent of the respondents felt strongly about the inadequate level of government support on foreign exchange matters.¹⁰

Given the circumstances surrounding the foreign exchange rate, it is natural that many overseas importers would prefer quotations either in their own currencies or in a stable currency of a third party so as to avoid foreign exchange risks.¹¹ These results are further supported by the results of a bivariate analysis which showed that when the prices were quoted in New Zealand dollar an inverse relationship with export performance was detected. The correlation co-efficient of the relationship between quoting in New Zealand dollar and export performance is -0.43 and is significant at 0.0001.

9 N = 263.

10 In a slightly different vein, 45.7 percent of the exporters indicated in a separate question that government policies have adversely affected their export operations.

11 The results of a univariate analysis supports this claim. The results showed that only 36.5 percent (n = 264) of total manufactured exports are priced in New Zealand dollars. In contrast 55.3 percent of the exports are priced in the currency of the buyer and 8.2 percent are in the currency of a third party, mostly US dollar.

The results presented here are in keeping with what was expected and hypothesized in Chapter 3. As noted earlier, there is no known research that has examined the effect of currency strategy on export performance. Given the volatility of the New Zealand dollar against other currencies, and the tendency to quote exports in a foreign currency, currency strategy is undeniably an interesting area where more research is needed.

iii) Management Attitude toward Profits

It was noted in Chapter 3 that management attitude towards profits is a further variable that has received relatively little attention in export marketing literature. There are only two known studies that have examined the relationship between this variable and export performance (See Stening *op. cit.*; Cavusgil 1984a). It is significant to note that the results presented here concur with those of the earlier studies.

The fact that a positive attitude towards export profit is related to high export performance is not surprising. It can be argued that a more positive perception of export profitability can help to shape the overall management attitude toward exporting. This in turn could result in more allocation of both human and capital resources into exporting - a decision that could lead to high export performance.

iv) Managers' Export Experience

The number of years' experience that managers have in exporting is another variable that has positively correlated with export performance. These results are not only consistent with past research (Simmonds and Smith 1968; Simpson and Kujawa 1974; Burton and Schlegelmilch 1987; Axinn 1988) but are also in line with what was hypothesized in Chapter 3.

It is argued here that firms employing managers with more export experience have a good chance of achieving a relatively high export performance because such managers will use their overseas contacts to create more opportunities for their firms. Furthermore, managers with export experience are familiar with local export procedures and as such will use their skills to expedite the processing of export orders.

A further investigation was made to highlight the specific differences between high, medium and low export performers in relation to managers' number of years of export experience. The results of this exercise are presented in table 7.5 below:

TABLE 7.5

**Distribution of Firms According to their Export
Performance and Managers' Export Experience**

<i>Characteristics of Firms</i>	<i>Sample</i>	<i>Mean</i>	<i>Std. Dev.</i>
Low Export Performers	66	6.4	7.3
Medium Performers	132	8.6	6.4
High Performers	67	11.7	7.8

Overall mean 8.8 years

The results in table 7.5 above add further insight to the earlier finding that managers' export experience is related to export performance.

v) Number of People Involved in Exporting

The degree of importance given to exporting (measured by the number of people involved in exporting) has been found to relate positively with export performance. While all past researchers have reported similar findings (Tookey 1964; Beamish and Munro 1986; Cavusgil 1984a; Diamantopoulos op. cit.), it is significant to note that the results presented here concur with the only known New Zealand study that has examined the possible effects this variable has on export performance (Stening op. cit. p. 143).

A further inquiry was made to shed more light on specific differences between high, medium and low exporters in relation to the number of people involved in exporting. The results are presented in table 7.6 below:

TABLE 7.6

**Distribution of Firms According to the their Export Performance
and the Number of People Involved in Exporting**

<i>Characteristics of Firms</i>	<i>Sample</i>	<i>Mean</i>	<i>Std. Dev.</i>
Low Export Performers	58	4.6	9.2
Medium Performers	110	11.9	21.6
High Performers	60	58.2	142.7

Overall mean 22 people

The results in table 7.6 above add further insight to the earlier finding that the number of people involved in exporting is related to export performance.

vi) Quality of Export Products

It was noted in Chapters 2 that many past researchers found a positive relationship between export performance and the quality of export products (e.g., Tookey op. cit.; Cunningham and Spigel 1971; Mirzaian 1982; Kaynak and Kothari 1984; Burton and Schlegelmilch 1987; Lindsay 1990). The only known study that did not find a relationship between product quality and export performance is that by Ayal and Hirsch (1982).

Conventional wisdom would suggest that firms producing high quality products will experience relatively fewer product quality complaints from customers. Taking this assumption further, it is argued here that product quality is related to customer satisfaction¹² and that firms producing high quality products will record a relatively higher level of customer satisfaction than those firms which have relatively low quality products. On this basis there could be some reason to believe that firms producing high quality products will report a higher export performance than other firms.¹³ It is therefore no surprise that this study has found a positive relationship between export performance and product quality. This finding is consistent with past studies and the predictions made in Chapter 3.

vii) Firm's Export Experience

There has been a considerable debate in the literature on the nature of the relationship between export experience and export performance. While some past studies did not find a relationship between firm export experience and export

12 A separate bivariate analysis showed that there was a modest but statistically significant relationship between product quality and customer satisfaction. The Pearson correlation co-efficient was 0.14 significant at 0.06.

13 It was noted in Chapter 5, figure 5.7, that there is a positive relationship between product quality and export performance. The Pearson correlation co-efficient is 0.21, significant at 0.001.

performance (Neidell 1971; Ayal and Hirsch 1982; Ursic and Czinkota 1984; Diamantopoulos 1988; Lindsay 1989),¹⁴ there are studies which *did* find a relationship between the two variables (Alexandridis 1971; Fenwick and Amine 1979; Bilkey 1982; Stening op. cit.).

In this study, firms have been involved in exporting 13.3 years on average; 61.4 percent of the firms (n = 259) fell into this category. In order to sharpen the gained insights, a further analysis was carried out in which firms were grouped according to their level of export achievement. It was expected that high export performers would mainly consist of firms which have been in exporting for a considerable length of time. This expectation is justified by the fact that firms that have been in business for longer periods have more experience and are more likely to have more expertise than the newcomers. Table 7.7 below summarizes the findings of the average number of years for high, medium and low export performers.

TABLE 7.7

Distribution of Firms According to their Export Performance and the Number of Years Continuously Involved in Exporting

<i>Characteristics of Firms</i>	<i>Sample</i>	<i>Mean</i>	<i>Std. Dev.</i>
Low Export Performers	64	9.9	6.4
Medium Performers	131	12.8	9.4
High Performers	64	17.8	13.3

Overall mean 13.3 years

14 Kleinschmidt (1982) found 'young' firms (in terms of age of firm) to be more successful in exporting than older ones.

The results in table 7.7 above confirm the earlier expectations that high export performers are mainly firms that have a relatively longer export experience, followed by medium and low export performers.

7.2.2 Summary

In section 7.2.1, a stepwise multiple regression procedure was employed to determine the joint effect that 22 independent variables might have on export performance. The results showed that eight variables were included in the final regression equation. These were: (1) visits to foreign markets, (2 and 3) quoting in currencies other than the New Zealand dollar,¹⁵ (4) management attitude toward export profitability, (5) managers' export experience, (6) export commitment measured by the number of people involved in exporting, (7) quality of export products, and (8) the firm's export experience. Jointly, they accounted for 52.7 percent of the variation in export performance.

Further analyses, based on four variables, were conducted to highlight the specific nature of the differences across high, medium and low export performers. The variables were: visiting foreign markets, managers' export experience, number of people involved in exporting, and the firm's export experience. It was expected that a pattern would emerge in which high export performers would have higher means on all four variables, followed by medium and low export performers. The results obtained were consistent with these expectations. For the same four variables, analyses were also made of the differences between high, medium and low export

15 Quoting in the currency of the buyer and quoting in the currency of a third party were collapsed into one variable.

performers in three size categories. The pattern that emerged was generally consistent with the one obtained when firms were not divided into different size categories. The results reported in section 7.2.1 were therefore consistent with the predictions made in Chapter 3 and were also generally consistent with past research.

To conclude section 7.2.1, a word of caution is in order. The results presented here do not conclusively determine the direction of causality. For example, while it may sound reasonable to suggest that high export performance is *caused* by more visits to foreign markets, it may also be reasonable to believe that it is past high export performance that has made it possible for the firm's executives to make regular visits to foreign markets. Take, for instance, management attitude toward export profitability. Within the context of this research, it is suggested that a favourable attitude toward export profitability helps to increase export performance. However, two issues remained unresolved. First, it can be argued that a favourable attitude towards export profitability may motivate the firm to commit more resources into exporting which in turn may help to improve the export performance. To this end, the positive relationship between management attitude towards export profitability and export performance is caused by an intervening variable, namely increased commitment to exporting. The second unresolved issue is that of the nature of the relationship. While it is possible that a favourable attitude to export profitability *can* cause high export performance, it is also possible that past success shapes management attitude towards export profitability.

The same attitude of causality could be applied to managers' export experience and the number of people involved in exporting. It could be argued that past success would motivate the firm to increase its commitment to exporting in a number of ways. One way would be to increase the number of people involved in exporting and

another to engage the services of managers with high export experience. These and other measures could help improve the export performance of the firm even further.

The most appropriate response is to recognize that, in situations where causality issues are involved, the independent and the dependent variables may well be reinforcing each other. Making regular visits to foreign markets, for example, could result in high export performance which in turn will increase the firm's ability to finance more overseas visits and vice versa. While correlation and multivariate analyses can never conclusively establish the direction of causality, the relationships described are generally very supportive of the theoretical model and its underlying relationships.

7.3.0 Comparison between this Study and Previous Local Studies

In this section, a comparison is made between the findings of this study and those obtained by previous local studies. The comparison will be of the results of marketing orientation and export performance and the factors that are most important to export success. Before making such comparisons however, reference is made to the fact that previous local studies that have addressed some of the issues covered by this study (see Chapter 3) are either out-of-date (Stening op. cit.) or limited in their methodology.¹⁶ (Ahie 1987; Thomas 1988; Lindsay op. cit.). In some cases therefore direct comparisons between the results of this study and past local studies are not possible.

16 To a certain extent this observation applies to Stening's (op. cit.) study as well.

7.3.1 Relationship between Marketing Orientation and Performance

Previous local researchers are unanimous about the degree of marketing orientation of New Zealand firms. The three researchers¹⁷ who studied this problem concluded that New Zealand firms have generally demonstrated a relatively high level of marketing orientation. However, these researchers are at variance when it comes to linking marketing orientation with performance. Available evidence seems to be evenly split. Studies by Stening (op. cit.) and Ahie (1987¹⁸) reported a positive relationship between marketing orientation and performance, but Thomas (1988) found either an inverse relationship between the two constructs or at best no relationship between them. This latter finding was also reported by Ahie.

In this study, the results showed that there is a positive relationship between marketing orientation and export performance. This finding was internally consistent across all size ranges and product type, and externally consistent with Stening's findings. In view of the methodological difficulties faced by Ahie (op. cit.) and Thomas (op. cit.)¹⁹, it is argued that the results in this study are more robust and empirically supportable.

Looking at marketing orientation from a different perspective, it was decided to investigate and see if there exist any differences in the degree of marketing orientation between exporters and non-exporters. It was expected that exporters

17 Stening (op. cit.); Ahie (1987); Thomas (1988).

18 It should be noted however, that Ahie's findings were not consistent. In some cases the study did not find a relationship between marketing orientation and performance measures. For details, see Chapter 2.

19 For details, see Chapter 2, section 2.2.0.

would be more marketing oriented than non-exporters. The basis of this expectation was an *a priori* assumption that the degree of risks and uncertainties involved in exporting, coupled with the nature of competition in the export markets and the need for exporting firms to be close to the customer, is higher than for non-exporting firms. Table 7.8 below summarizes the results of the mean Marketing Orientation Score (MOS) between exporters and non-exporters.

TABLE 7.8

Distribution of Firms based on their Degree of Marketing Orientation

<i>Characteristics of Firms</i>	<i>Sample</i>	<i>Mean</i>	<i>Std. Dev.</i>
Exporters	265	0.04	0.42
Non-Exporters	91	-0.13	0.53

It is clear from the above table that the mean MOS for exporters is higher than that for non-exporters. In order to determine whether the two means are different, a *t test* was conducted to test the hypothesis that the means are equal. The calculated t-value was 2.6445. With 132.1 degrees of freedom, the t-value was significant at 0.01. The results clearly show that exporters are more marketing oriented than non-exporters.

While these results are consistent with earlier expectations they are in contrast to the findings by Stening (op. cit.). The differences in the findings between the two studies could possibly be explained by the differences in the economic environments in which the two studies were conducted. This study was carried out at a time when economic

conditions were difficult and the economy was highly deregulated. In contrast, the study by Stening was conducted in the early 1970s - a time when the economy was highly regulated and relatively stable. Both the overall economic performance and the business environment were good. Given the more favourable business and economic environment around them, many non-exporting firms perhaps became complacent and saw little need for being more customer focused - hence the reason for not finding the difference in terms of the degree of marketing orientation between exporters and non-exporters.

7.3.2 Analysis of Factors Most Important to Export Success

This section reports on the comparative analyses between the findings of this study and those of previous local studies by Stening (op. cit.) and Lindsay (1990). The analyses will focus on factors that are common to these studies.

To recapitulate the findings reported in section 7.2.1, this study found that eight factors were most important to successful exporting. These were: (1) visits to foreign markets, (2 and 3) quoting in currencies other than the New Zealand dollar,²⁰ (4) management attitude toward export profitability, (5) managers' export experience, (6) export commitment measured by the number of people involved in exporting, (7) quality of export products, and (8) the firm's export experience. Five of these eight variables have been investigated by either one or both previous local studies. These were: (1) visiting foreign markets, (2) management attitude toward export profitability, (3) export commitment measured by the number of people involved in

20 See footnote 15.

exporting, (4) quality of export products, and (5) the firm's export experience. It is these five variables that this section will address.

i) *Visits to foreign markets*

The findings reported by this study are generally consistent with those reported by previous local researchers. Stening (op. cit. p. 164), for example, reported that visits to foreign markets was associated with high export performance in all three countries under investigation, namely Australia, New Zealand and Canada. Similar views were shared by Lindsay (1990 p. 28). Although the three local studies are unanimous about the relationship between frequency of visiting foreign markets and export performance, it is worth noting that the incidence of exporters who have *never* visited the foreign markets has increased compared to 1974. In his 1974 study Stening (p. 165) found that 3.26 percent of exporters ($n = 92$) had never paid a visit to their foreign markets. In this study the percentage is 3.9 with the sample size of 255. This slight increase can possibly be explained by the tightening economic conditions.

ii) *Management attitude toward export profitability*

The results of this study are consistent with those reported by Stening (op. cit. pp. 128-131). In both studies a favourable attitude toward exporting was found to be positively related to export performance. It is also worth noting that in spite of difficulties involved in exporting, this study has found that on average exporters are now more positive about export profitability than they were in 1974. In his 1974 study Stening reported that 77.1 percent of exporters ($n = 89$) thought exporting was less profitable than doing business at home. Only 7.14 percent of exporters thought otherwise. In this study the percentages are 50.6 and 17.1 respectively ($n = 263$). Clearly these results show that exporters are now more positive about exporting than

they were some 17 years ago. This change in attitude has possibly been shaped by the stagnation in and increased competition from the domestic market.

iii) *Export commitment*

In this study, export commitment was measured by the number of people involved in exporting. In the earlier study (Stening op. cit.) this variable was measured by the seniority of the executive in charge of export activities. The results of this study are generally consistent with those of Stening.

iv) *Quality of export products*

Lindsay (op. cit. p. 40) found that successful exporters produced good quality products and used quality as a key competitive advantage. Although in this study exporters were not asked to indicate their key competitive advantage, the results of this study are generally consistent with those of the earlier study.

v) *Firm's export experience*

The results of this study are consistent with one local study (Stening op. cit.) but are at variance with another (Lindsay op. cit.).

This study found that the average number of years that firms have been involved in exporting is 13.3 and that 61.4 percent of the exporters ($n = 259$) fell into this category. Furthermore, this study found that 47.1 percent of the exporters had more than 10 years' export experience. In Stening's study the percentage was 28.16. Although an accurate direct comparison between the two studies is not therefore possible, it would seem from these results that there are now more firms in New Zealand which have long experience in exporting compared to 1974. A possible explanation for this is that the limited size of the domestic market has forced firms to

look beyond New Zealand. In spite of the turbulences encountered in exporting, many firms seem to continue operating in these markets because of the absence of a sizeable domestic market.

7.4.0 Concluding Remarks

To conclude, in this chapter a re-examination of the relationship between marketing orientation and export performance was made, taking into account the size of the firm and its product type. The results showed that the measures of marketing orientation *did* contribute to the variation in export performance across all size ranges and product type. These results are encouraging. Put simply, they imply that marketing orientation is not a monopoly of large firms nor is it of consumer goods firms, as suggested by one overseas researcher.²¹

Multiple regression techniques were employed to determine the joint effects some independent variables might have on export performance. From the results of multiple regression procedures, it can be said that firms which attained a reasonably high level of export performance:

- (i) paid frequent visits to foreign markets;
- (ii) invoiced their exports in a currency other than the New Zealand dollar;
- (iii) had a positive attitude toward export profitability;
- (iv) employed managers with reasonably high export experience;

21 See McNamara (1970). However, the reader should note that McNamara did *not* relate the degree of marketing orientation to corporate performance.

- (v) had a high commitment to exporting as evidenced by the number of people involved in export operations;
- (vi) exported good quality products;
- (vii) had considerable experience in exporting.

It is pleasing to note that all the above factors are by and large within a firm's control. However, given the competitive nature of foreign markets, a favourable local business environment is essential if New Zealand manufacturing firms are to be more successful in their international operations. This has some implications for both public policy and export marketing strategy. It is to these managerial and public policy implications that the next chapter addresses itself.

CHAPTER 8

SUMMARY, CONCLUSIONS AND IMPLICATIONS

8.0.0 Introduction

This last chapter is comprised of five sections. The first gives an overview of the research project. It includes the research objectives, the tested hypothesis and a summary of the major findings. The second section is addressed mainly to managers, offering them its implications for the New Zealand manufacturing industry.

The third section considers the implications this study could have for public policy. The fourth discusses the contributions it has made to the existing marketing concept theory. The fifth and final section presents the study's limitations and suggests areas for future research.

8.1.0 Summary of the Study

This study sought to establish whether there is a relationship between marketing orientation and export performance. The nature and timing of this study is important on two counts. The first is that, in spite of the popularity of the marketing concept, no known study has been conducted to date to see if there is a relationship between marketing orientation and corporate performance in such a manner that the findings can be generalized to many situations.

What previous researchers have done can be categorized into three groups. The first group consists of normative writers who offer prescriptions of what a marketing orientation firm should look like. The second group is composed of researchers who have examined the extent to which firms have adopted and implemented the marketing concept. Some of these researchers went a little further when they tested to see if there are any differences in the adoption and implementation of the marketing concept across different size levels, business orientation (i.e., exporters versus non-exporters) and product type. Studies falling into this category have some empirical backing, but a notable omission in these works is that no attempts were made to link the adoption and implementation of the marketing concept and corporate performance. The third and final group consists of studies that have made some attempts to link marketing orientation and performance. The efforts by this latter group are commendable in that some attempts at least have been made to establish the link between the two constructs. However, these studies are limited because they were insufficiently detailed or because their empirical settings were so restrictive that it is difficult to generalize the findings to other areas.

The second reason which makes this study important and timely is the New Zealand's government decision to move toward a more deregulated economy, coinciding with the developments around the world with respect to regional trade policies, e.g., the European Community's decision to have a single market by 1992. These and other developments have left New Zealand firms facing intense competition both at home and abroad. A study such as this one helps to sharpen the understanding of the link between export performance and some marketing variables. This understanding is crucial to managers who want to develop and/or establish good marketing programmes that will lead to export success.

In the light of this, the objectives of this study were twofold:

- i) to examine the nature of the relationship, if any, which exists between the adoption of the marketing concept and export performance in the New Zealand manufacturing industry; and
- ii) to identify which aspects of marketing orientation correlate with export performance.

A model of the relationship between export performance and marketing orientation was developed to test the hypothesis that marketing orientation is positively related to export performance. The model has three main components: marketing orientation, export performance and the control variables. The first, marketing orientation, is divided into the adoption and implementation of the marketing concept and was operationalized in a manner that included all the three elements of the marketing concept: customer focus, integration and profit orientation.

The second component of the model, export performance, is divided into two elements: objective and judgemental performance measures. The objective measures of performance consist of export intensity and absolute export sales index. The other element, judgemental measures, sought from the exporters a self-evaluation of how good or bad their export operations have been (in the last five years) on six criteria. The criteria were: (1) export market share, (2) export profitability, (3) market diversification, (4) customer satisfaction, (5) current overall export performance, and (6) expected overall export performance in the three years from 1990. Also covered under judgemental measures was a peer evaluation.

The third and final component of the model is the control variables. These are exogenous variables and had to be controlled when examining the relationship between marketing orientation and export performance.

The data for this study were collected through a nation-wide survey of firms involved in manufacturing operations. Manufacturing industry was chosen as the empirical setting for this study because of the increased importance of this industry to New Zealand's economy. Nine hundred and fifty-one questionnaires were mailed in August 1990. Two covering letters accompanied the questionnaires. The first was part of the questionnaire booklet and was signed by the Hon. Mike Moore, the then Minister of External Relations and Trade and subsequently the Prime Minister. The second letter was written by Professor P. C. Thirkell, Chairperson of the Marketing Group, Faculty of Commerce and Administration, Victoria University of Wellington. Both letters explained the objects of the study and requested that the questionnaire be completed by the most senior marketing executive (if the firm had one) or the person responsible for making marketing decisions.

After the initial mail-out, two follow-ups were made by mail. The initial mail-out and the two follow-ups produced a gross response rate of 49.2 percent. This was later reduced to a net response rate of 47.6 percent. This is equivalent to 356 firms.

Several scales were developed to measure the degree of marketing orientation, export performance, and the control variables. Reliability tests were then conducted using Cronbach alpha. These were followed by tests for construct (i.e., convergent and discriminant), nomological, and predictive validities. The results showed that the scales used in this research are valid and had attained an acceptable level of reliability.

The data for this research were analysed at two main levels. The first level was directly related to the testing of the central hypothesis at hand while the second level explored other issues which were of interest in their own right.

In the first level, multiple regression analysis was employed to test the central hypothesis that there exists a positive relationship between export performance and marketing orientation. This was conducted in two ways, i.e., with and without control for exogenous variables. The multiple regression analysis was however preceded by an intermediate step. This step was a factor analysis of the measures of marketing orientation. The results of factor analysis revealed two interesting points. The first was that the results showed that marketing orientation is a multi-facet construct having four dimensions. This was evidenced by reasonably high loadings across all the four factors measuring marketing orientation. The second point, contrary to the opinion of the critics of the marketing concept, was that the results of factor analysis showed that customers can be an equally good source of new product ideas. These two findings have important implications for both managers and marketing concept theory and will be further discussed in the next section.

The general pattern of the multiple regression findings showed that there is a positive relationship between export performance and marketing orientation irrespective of size of the firm or the type of product. This was generally the case with or without control for exogenous variables. It was further noted that the observed relationship between export performance and marketing orientation was in some cases somewhat weak. However, in view of the fact that the objective of this study was to determine the *direction* rather than the magnitude of the relationship, these results are pleasing because the empirical data gave support to the hypothesized relationships.

The second level of analysis was prompted by the results which emerged from the first level. It was evident from earlier results that the control (exogenous) variables were more dominant in explaining the relationship between export performance and marketing orientation. For this reason, a further investigation was conducted to find out which of the control variables were most responsible for the variation in export performance. The results showed that eight out of 22 variables accounted for most of the variation in export performance in the sample. In order of importance the variables were: (1) visits to foreign markets, (2 and 3) quoting in currencies other than the New Zealand dollar,¹ (4) management attitude toward export profitability, (5) managers' export experience, (6) export commitment measured by the number of people involved in exporting, (7) quality of export products, and (8) the firm's export experience. Collectively, the variables explained 52.7 percent of the variation in export performance. These eight factors provide the recipe for successful exporting.

8.2.0 Managerial Implications

The findings of this study have several implications for managers in general and for those in the manufacturing industry in particular. Although this study focused on the manufacturing industry, most of the findings can, with proper caution, be generalized to other industries.

The first important finding of interest to managers is that this research has demonstrated that marketing orientation and export performance are positively related, irrespective of size of the firm and product type. Marketing orientation is not

1 This variable had two items which were collapsed into one. See Chapter 7, footnote 15.

therefore a monopoly of any particular category of firm. Firms should therefore strive to be more marketing oriented because such a practice is associated with higher export performance.

The second important implication for managers is that the marketing concept is multidimensional with all of its various underlying elements making a unique contribution towards a firm being more marketing oriented. Managers should therefore not take the extreme position that a firm need only be good in one element. A marketing oriented firm, for example, cannot or should not have a high degree of integration among different departments in the organization but at the same time neglect performance monitoring or customer orientation.

Closely related to the second, the third important implication stems from the finding that among the four elements of marketing orientation, customer focus came out as the most important factor in explaining the variation in export performance. A firm's sales come from either new or repeat customers and it is more costly to attract new customers than to retain current customers; customer retention is therefore more critical to the firm's sales than customer attraction. Kotler (1988 pp. 18-19) suggests that the key to customer retention is customer satisfaction because a satisfied customer buys again, talks favourably to others about the firm, pays relatively less attention to competing brands and advertising, and buys other products that the firm later adds to its line.

In so far as customer focus helps to achieve customer satisfaction, the message to marketing managers is clear: in order to be successful, firms should keep constant interaction with their customers. This can be achieved by various means such as

making regular visits to foreign markets, and using customers as a source of ideas or to evaluate new product ideas.

Another important implication of the findings of this study is that managers should realize that traditional market research can be a useful vehicle for new product development. It has been proven by this study that ideas generated from this source have just as much chance of success as those generated from other sources. Because of this, and depending on the nature of the product, small firms or those which do not have adequate resources to carry out basic research should not feel 'left out' in the battle for developing new products which will better serve the needs of the customers.

Another finding of interest to managers is that a substantial part of manufactured exports are invoiced in currencies other than the New Zealand dollar - a practice that is positively related to export performance. Furthermore, this study has found a relatively strong inverse relationship between quoting in the New Zealand dollar and export performance. Given the volatility of foreign exchange rates and the current tendency to invoice in a foreign currency, managers should seriously look into entering into foreign exchange contracts that will help to minimize foreign exchange risks. In a truly marketing oriented organization, where there is a constant exchange of information across all departments, the marketing and accounting/finance departments will exchange notes and enter into foreign exchange contracts.²

The reader will recall that the results of factor analysis in Chapter 6 showed that four out of nine variables measuring organizational structure had high factor loadings. The variables are: pricing, credit extension, transportation, and inventory control. This

² The fact that integration was not found to be an important factor in explaining the variation in export performance may well suggest that such exchange of information is lacking.

finding too has important implications for managers. Starting with pricing and credit extension, the message to marketing managers is that the two can and should be used as part of the overall marketing strategy. However, proper care should be exercised when using pricing as a competitive tool so as to avoid accusations of dumping, or activating unnecessary price wars which could result in reduction of profitability.

Turning to transportation, this factor is especially important to New Zealand because of location, i.e., in being far from most markets. It is however disturbing to note that only 34 percent³ of marketing managers indicated that they have either full or major control over activities related to transportation. Given its strategic importance to export operations, the areas of responsibilities of transportation should be re-defined to allow marketing managers to have more input in the decision making process. Some authors⁴ argue that in a truly marketing oriented firm transportation is seen as a customer service and that marketing managers should therefore be fully involved in decision making about transport.

Inventory control is another factor which has featured well in the factor analysis. However, it was somewhat disturbing to note that only 29.1 percent⁵ of marketing managers had either full or major responsibility over inventory control. Since inventory management has a bearing on customer satisfaction, one would expect that marketing managers would have more input in making decisions related to this function. Such an orientation would ensure that inventory levels are kept according to customer requirements and hence improve the chances of satisfying the customers.

3 N = 253.

4 See for example Vizza et al. (1967 pp. 14-15); McCarthy and Perreault (1990 p. 31).

5 N = 254.

A further finding of factor analysis which should be of interest to managers is performance monitoring. This variable had four items of which three had reasonably high factor loadings. These are: profitability analyses by products, by markets and by key customers. The implication of this finding for managers is that the traditional practice of measuring the overall corporate performance is inadequate. In this world of competition and changing consumer needs, firms should, at the very least, measure their performance with respect to their products, markets and key customers. Trends for each of these categories should be maintained so as to anticipate new opportunities or threats. These may take any of the following forms: new product development, improving the quality of existing product(s), finding new uses for the product, identifying new users in the current markets, searching for new markets, looking for ways to increase the usage rate (if applicable), and interviewing key customers.

There are two other findings which should be of interest to managers. This research has found a positive relationship between product quality and export performance. Product quality can be an effective competitive weapon because it has several advantages. The first is that, unlike pricing, product quality is relatively difficult to match, at least in the short-term. The second is that product quality may help to create and/or strengthen brand loyalty. The third is that high product quality reduces customer complaints, consequently increasing the chances of customer satisfaction. And the fourth advantage is that high product quality helps to minimize the firm's warranty liability. In view of these and other benefits, the implication of the results in this study is that firms should introduce sound quality control programmes which will ensure high quality products. This could be achieved by sending the production staff on quality control training programmes, by maintaining proper maintenance (preventive) schedules and when need arises, by replacing the equipment.

Furthermore, since product quality is linked with customer satisfaction,⁶ marketing managers should play a greater role in setting quality standards.⁷ This involves studying the changes in consumer preferences and how competitors' products are positioned.

The last, but not the least finding of interest to managers, is that this study has developed an empirically based check-list of factors that are important to increasing the firm's export performance. The obvious advantage of this check-list is that the manufacturing firms can conduct a self-audit to determine their strengths and weaknesses in each factor in the list. Areas of strengths can then be consolidated while more attention is given to weaknesses.

8.3.0 Implications for Public Policy

This section considers some of the implications the findings of this study have for public policy. This study has demonstrated that there is a positive relationship between export performance and marketing orientation, irrespective of the size of the firm or the product type. This finding holds two major implications for policy makers. The first is that export companies should strive to improve the marketing skills of managers who are responsible for marketing decisions. While this responsibility primarily rests on individual companies, institutions such as the Trade Development Board (TDB) should act as a catalyst in promoting education aimed at improving marketing skills of such managers. The second implication is related to the role

⁶ See Chapter 7, footnote 12.

⁷ This research has found that only 37.9 percent of marketing managers had either full or major responsibility over quality control.

played by different companies in different size categories. The findings presented in this study show that each category of firms is important and can contribute to the nation's higher export performance in its own way. While recognizing the differences in firms' needs according to their size and product type, the government should not be led into thinking that large firms are more important and hence need more support than smaller ones. Government support for export programmes should therefore be channelled by taking into account the special needs of different groups.

A further finding that holds implications for public policy relates to the factors that are most important to export success. While it has been demonstrated in this research that most factors that contribute to export success are internal to the company, it is argued that some form of support from the government and trade promotion institutions such as the TDB is desirable. For example, firms have a greater role to play to ensure customers' quality requirements are met (see the previous section), but, at the same time, it is believed that policy makers can make a contribution in achieving this objective. To achieve this, government could offer support through the tax system to exporters who wish to procure new equipment, or the Trade Development Board might include quality as a criterion in determining the winners of the New Zealand Export Award.⁸ Such a move would motivate exporters to attain an acceptable quality standard.

Finally, a more general finding that requires the attention of the policy makers is that managers of many firms do have a positive attitude toward export profitability. What is now needed therefore is more involvement with and encouragement for exporters

8 In order to maintain some degree of objectivity, entrants could be asked to produce 'a quality control statement' giving details on rate of rejects, preventive maintenance schedules etc.

by government. This would not only motivate existing exporters but also attract new ones.

8.4.0 Contributions to the Marketing Concept Theory

This fourth section deals with the contributions this study has made to the marketing concept theory.

A major contribution of this study is that it is the first of its kind to develop and empirically test a model of marketing orientation and export performance. Furthermore, this study has examined and established the existence of a link between export performance and marketing orientation. By doing that, it has not only filled in the existing research gap in this area but has also improved the general understanding of the marketing orientation theory. Specifically, the findings of this study have reinforced the marketing orientation theory which underscores the importance of customers as the focal point of all the firm's activities.

Another major contribution of this study is that its findings dismiss the views of armchair theorists who maintain that implementation of the marketing concept leads to an over-reliance on 'market pull' research, and consequently hinders new product development. Contrary to this view, this study has clearly demonstrated that new product ideas generated through the 'market pull' type of research have an equal chance of being successful. For this reason, firms should keep in close contact with their customers and should not underestimate the potential for generating new and viable product ideas from this apparently cheap source.

8.5.0 Limitations of this Study and Suggestions for Future Research

This final section discusses the limitations of this study and offers some suggestions for future research.

Perhaps the main limitation of this study is that it has not focused its investigations on any particular market or region. Undoubtedly, different foreign markets pose varying problems arising from culture, government regulations, tariffs and other forms of barriers, levels of economic development, political stability etc. Conventional wisdom would suggest that a study of exporters operating in the *same* markets or regions would provide more insights into the problem at hand.

While it is recommended that future research should look into this angle, it is also cautioned that, given the small size of New Zealand and the low total number of exporters, such sampling procedure could result in a sample too small to be suitable for most multivariate statistical analyses, including those used in this study. Perhaps a case study approach would be one way around this problem.

Another limitation of this study is that it did not consider the time lag between the adoption and implementation of the marketing concept and the resulting export performance.⁹ The methodology which was employed in this research did not permit this. Any attempts to consider the effect of time lags would have made this project unmanageable. Certainly, it is a very useful and interesting angle and needs further exploration in the future.

9 Indeed this was the reservation which Professor Gary Lilien of Pennsylvania State University had about the research model. Professor Lilien was visiting Victoria University of Wellington as part of a distinguished visitors' programme.

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Victoria University of Wellington

QUESTIONNAIRE

**A NATIONAL STUDY OF
THE MARKETING PERFORMANCE OF
NEW ZEALAND MANUFACTURING FIRMS**

"I believe that if we are to lift our marketing performance as a nation of exporters, we have to start by developing attitudes of commitment and professionalism....."

"I commend this project to you in the interest of us all, and ask that you contribute by taking time out to complete the questionnaire"

Mike Moore
Minister of External Relations and Trade

Office of THE MINISTER of EXTERNAL RELATIONS and TRADE
DEPUTY MINISTER OF FINANCE

PARLIAMENT BUILDINGS, WELLINGTON, NEW ZEALAND

The need for sophisticated marketing skills in order to succeed in today's highly competitive international marketplace has become increasingly apparent to many New Zealand exporters over recent years. Others who have not taken heed of this trend have failed to perform, or in some cases even to survive.

Enclosed you will find details of a research project being undertaken by the Marketing Group at Victoria University into the relationship between marketing expertise and export performance. This study is aimed at sharpening our understanding of this link, and what it takes to achieve success in markets overseas.

I believe that if we are to lift our marketing performance as a nation of exporters, we have to start by developing attitudes of commitment and professionalism. The responses from manufacturers in this survey will be invaluable in enabling an accurate measurement to be made of current attitudes and behaviour, as a basis for assessing what needs to be done in the area of marketing skills to enhance our export earnings and levels of employment.

I commend this project to you in the interests of us all, and ask that you contribute by taking time out to complete the questionnaire.

A handwritten signature in dark ink, appearing to read 'Mike Moore', is written over a horizontal line.

Mike Moore

To whom does the chief marketing executive in your company report

- i) the Chief Executive Officer? []
- ii) other company executive? (specify) _____ []

Is your company's chief marketing executive a member of the following committees:

If your company does not formally have these committees, please indicate whether or not the head of the marketing department participates in making decisions on matters related to these committees.

		Yes	No
i) board of directors?	..	[]	[]
ii) new product planning committee?	..	[]	[]
iii) executive committee?	..	[]	[]
iv) finance committee?	..	[]	[]

How often does the marketing department share information about the customers with the following departments?

	Frequently	Quite Often	Sometimes	Seldom	Never
i) Production	[]	[]	[]	[]	[]
ii) Research and Development	[]	[]	[]	[]	[]
iii) Finance	[]	[]	[]	[]	[]
iv) Sales	[]	[]	[]	[]	[]
v) Treasury (if separate)	[]	[]	[]	[]	[]

How often does the marketing department make joint decisions with the following departments?

	Frequently	Quite Often	Sometimes	Seldom	Never
i) Production	[]	[]	[]	[]	[]
ii) Research and Development	[]	[]	[]	[]	[]
iii) Finance	[]	[]	[]	[]	[]
iv) Sales	[]	[]	[]	[]	[]
v) Treasury (if separate)	[]	[]	[]	[]	[]

For each person in the marketing department, on average, how many days per year are spent on training? (including in-house training)

_____ days

14 How much of your company's *total sales* are priced using the following methods?

i) cost-plus	..	..	..	_____ %
ii) prevailing market price	..	..	..	_____ %
iii) what the market can bear	..	..	..	_____ %
iv) other methods (specify) _____	..	..	..	_____ %
				100%

15 Does your company use the following criteria to evaluate the performance of the marketing department?

		Yes	No
i) return on equity	..	[]	[]
ii) customer satisfaction	..	[]	[]
iii) profits on market(s)	..	[]	[]
iv) profits on product(s)	..	[]	[]
v) overall market share	..	[]	[]
vi) other criterion? (specify) _____			

16a How often does your company search for information on:

	Frequently	Quite Often	Sometimes	Seldom	Never
i) general economic environment?	[]	[]	[]	[]	[]
ii) changes in technology?	[]	[]	[]	[]	[]
iii) competitors' products?	[]	[]	[]	[]	[]
iv) customer attitudes and behaviour?	[]	[]	[]	[]	[]
v) size of the market for a specific product?	[]	[]	[]	[]	[]
vi) relative profitability of different markets?	[]	[]	[]	[]	[]
vii) new product ideas?	[]	[]	[]	[]	[]
viii) need for possible changes to existing products?	[]	[]	[]	[]	[]

16b Thinking about different sources of information, what percentage of the following does your company use:

i) own marketing research department?	_____ %
ii) marketing research agents?	_____ %
iii) institutions such as Manufacturers' Federation and TDB?	_____ %
iv) company sales representatives?	_____ %
v) other sources? (specify) _____	_____ %
	100%

SECTION B:**TO BE ANSWERED BY EXPORTING FIRMS ONLY****IF YOUR FIRM IS NOT EXPORTING GO TO SECTION C**

Which of the following product types accounts for the **greater percentage** of your company's **export sales**?

Consumer Products ☐ Industrial Products ☐

For how many *consecutive* years has your company been engaged in exporting? _____ year(s)

a Does your company have a department/unit which *exclusively* handles export activities?

No ☐ (Go to Q. 24a) Yes ☐ (Go to Q. 25)

23b If Yes, for how long has this department/unit been in existence? _____ year(s)

4a What is the current number of *full time* employees *directly* involved in export activities? _____ employees

4b What is the current number of *part time* employees *directly* involved in export activities? _____ employees

5 Thinking about your company's first decision to export, was the decision made as a result of an unsolicited order?

Yes ☐ No ☐

6a To how many different countries does your company export? _____ countries

6b Of the number of countries mentioned above, please name the *main three* and their approximate contribution to *export* sales.

Name of the Country

% of Total Export Sales

i) _____
ii) _____
iii) _____

_____%
_____%
_____%

7 Thinking about *non-English* speaking countries that your company exports to, overall, how would you rate the language skills in your company?

Very Good Good Average Poor Very Poor

☐ ☐ ☐ ☐ ☐

8 On *average* how many person-days per year are spent by company executives in visiting foreign markets?

_____ person-days

- 34 Still thinking about your company's export product(s), how often does your company make product modifications beyond the legal requirements set by importing countries?

Always	Often	Sometimes	Seldom	Never
[]	[]	[]	[]	[]

- 35 How important are the following customer services to your company's export activities?

	Very Important	Fairly Important	Not So Important	Not At All Important
i) meeting delivery deadlines	[]	[]	[]	[]
ii) customer credit	[]	[]	[]	[]
iii) physical demonstration	[]	[]	[]	[]
iv) training of customer employees	[]	[]	[]	[]
v) after sale maintenance	[]	[]	[]	[]

- 36a Please list up to *three major* export related problems that your company has faced in the last *five* years

i) _____

ii) _____

iii) _____

- 36b For each of the problems listed above, please indicate how supportive or unsupportive the government policies have been to your company's export activities.

	Supportive	Neutral	Unsupportive
i) _____	[]	[]	[]
ii) _____	[]	[]	[]
iii) _____	[]	[]	[]

- 37 In the last *five* years how important were the following to your company's export activities?

	Very Important	Fairly Important	Not So Important	Not At All Important
i) Tax incentives	[]	[]	[]	[]
ii) TDB services-formerly MDB and TradeCom	[]	[]	[]	[]
iii) Trade missions	[]	[]	[]	[]
iv) NZ Embassy staff abroad	[]	[]	[]	[]

41a In assessing the performance of your company as an **exporter**, how important are the following criteria?

	Very Important	Fairly Important	Not So Important	Not At All Important
i) export market share	[]	[]	[]	[]
ii) export profitability	[]	[]	[]	[]
iii) market diversification	[]	[]	[]	[]
iv) creation of employment	[]	[]	[]	[]
v) customer satisfaction	[]	[]	[]	[]
vi) other criterion (specify) _____	[]	[]	[]	[]

41b For each of the criteria **used**, how would you rate the **export performance** of your company during the last *five years*?

	Very Good	Fairly Good	Average	Not So Good	Not Good At All
i) export market share	[]	[]	[]	[]	[]
ii) export profitability	[]	[]	[]	[]	[]
iii) market diversification	[]	[]	[]	[]	[]
iv) creation of employment	[]	[]	[]	[]	[]
v) customer satisfaction	[]	[]	[]	[]	[]
vi) other criterion (specify) _____	[]	[]	[]	[]	[]

41c Thinking about the **overall** performance of your company as an **exporter**, and its future prospects, how would you rate the export performance of your company:

	Very Good	Fairly Good	Average	Not So Good	Not Good At All
i) five years ago?	[]	[]	[]	[]	[]
ii) at present?	[]	[]	[]	[]	[]
iii) three years from now?	[]	[]	[]	[]	[]

50a In assessing the performance of your company in the New Zealand market how important are the following criteria?

	Very Important	Fairly Important	Not So Important	Not At All Important
i) market share	[]	[]	[]	[]
ii) profitability	[]	[]	[]	[]
iii) employment creation	[]	[]	[]	[]
iv) return on equity	[]	[]	[]	[]
v) customer satisfaction	[]	[]	[]	[]
vi) other criterion (specify) _____	[]	[]	[]	[]

50b Thinking about the overall performance of your company in the New Zealand market, and its future prospects, how would you rate the overall performance of your company:

	Very Good	Fairly Good	Average	Not So Good	Not Good At All
i) five years ago?	[]	[]	[]	[]	[]
ii) at present?	[]	[]	[]	[]	[]
iii) three years from now?	[]	[]	[]	[]	[]

51 Please name up to five New Zealand exporters in the manufacturing industry whom you think have been successful in export business.

- i) _____
- ii) _____
- iii) _____
- iv) _____
- v) _____

52 Would you like to be sent a summary of the findings of this study?

Yes [] No []

Thank you very much for your cooperation. Please mail back the questionnaire using the enclosed pre-paid envelope.

Ramadhani K Dau
Marketing Group
Victoria University of Wellington
P.O. Box 600
WELLINGTON

APPENDIX B

CORRESPONDENCE

Victoria University of Wellington

Faculty of Commerce
& Administration

PO Box 600
Wellington
New Zealand

Marketing Group

Telephone $\frac{04}{+ 64 \ 4}$ 715 330
Facsimile 712 200
Telex NZ 30882

January 31, 1990

Dear Sir/Madam,

We are updating our records on the list of marketing executives in New Zealand's manufacturing industry. The list is normally used for various activities such as research, inviting marketing practitioners to seminars organized by the department as well as inviting them to speak to our marketing students.

I will appreciate if you would kindly write in the name of the most senior marketing executive in your company and return this letter in the enclosed prepaid envelope.

Thanking you in advance.

Sincerely yours,

Dr. Peter C Thirkell
Professor of Marketing
Marketing Group Chairperson

Name of the most senior marketing executive Mr/Mrs/Ms

His/Her title

Victoria University of Wellington

P.O. Box 600, Wellington, New Zealand
Faculty of Commerce & Administration
Marketing Group

Telephone : (04) 471-5330
Facsimile : (04) 471-2200
E-mail: ...@matai.vuw.ac.nz

August 13, 1990

Dear [Name of the Respondent]

I write to seek your support for a national study looking at the link between marketing approaches used by manufacturing firms, and their actual performance both domestically and overseas. We are all aware of the increasing need for sound marketing performance in a deregulated environment. This study will provide invaluable insights into present marketing practice among New Zealand manufacturers, and the extent to which alternative marketing strategies affect business success.

The research itself is being carried out by one of our doctoral students, Mr Ramadhani Dau, a Commonwealth Scholar within the Marketing Group at Victoria. This is a three year research project for him, and the success or otherwise of his programme depends very much on the willingness of managers like yourself to participate in the project. While I am conscious that firms in New Zealand are increasingly being asked to provide information and complete questionnaires, I think that the importance and potential benefits of this survey are sufficient to justify a small investment of time by all of us. Mike Moore has specifically endorsed the aims of this project, and funding support is being provided through Victoria University, TDB and a Commonwealth Scholarship grant.

The questionnaire is comprehensive and should be completed by the **most senior** marketing executive, or the person who makes the marketing decisions. It typically takes from 30 to 40 minutes to complete. It has however been rigourously tested and checked by other practitioners, and a number of marketing managers have commented that completing the questionnaire is a useful self-audit of marketing activities within their own firms. All information collected will be treated in **strictest confidence**. The reference number in the questionnaire is for mailing purposes only so that the name of your company can be removed from the follow up mailing list once your questionnaire is received. You and your company will never be identified by name, and only summary results across all companies will be published.

The results of the study are to be published as *The Marketing Manager's Guide to Improving Marketing Effectiveness and Export Performance*, and will also be presented at a series of workshops around New Zealand. Participating firms will be invited to attend the workshops and obtain a copy of *The Marketing Manager's Guide* at cost. It is our expectation that the insights gained from this research will be of particular interest and value to managers such as yourself.

I am most grateful for your assistance.

Sincerely,

Dr Peter Thirkell
Professor of Marketing

Victoria University of Wellington

Marketing Group
Faculty of Commerce & Administration
PO Box 600
Wellington
New Zealand

Ramadhani K Dau
Phone : (64) (04) 721 000 ext 8656
Fax : (64) (04) 712 200

September 3 1990

Dear [Name of the Respondent]

Recently a questionnaire was mailed to you seeking your support for a national study on marketing approaches used by New Zealand manufacturing firms. The summary of the results across all companies will provide the basis for my doctorate dissertation and I hope will provide useful insights into present marketing practice among New Zealand manufacturers.

In order for the results of this study be as representative as possible, it is important that each firm in the sample complete and return their questionnaire. And as indicated in the letter by Professor Thirkell, the success or otherwise of my programme depends very much on the willingness of managers like yourself to participate.

If you have already returned the questionnaire please consider this letter as an appreciation for your cooperation. If, as we often do ourselves, you have put the questionnaire aside to finish later, I would be grateful if you would fill it out and return it as soon as possible. In the event that your questionnaire has been misplaced please call me at (04) 721-000 ext 8656 or send me a fax at (04) 712-200 so that I may send you a replacement copy right away.

I am most grateful for your assistance.

Cordially

A handwritten signature in dark ink, appearing to read 'Ramadhani K Dau'.

Ramadhani K Dau
PhD Candidate

Victoria University of Wellington

P.O. Box 600, Wellington, New Zealand
Faculty of Commerce & Administration
Marketing Group

Telephone : (04) 471-5330

Facsimile : (04) 471-2200

E-mail: ...@matai.vuw.ac.nz

September 24, 1990

Dear [Name of the Respondent]

About five weeks ago I wrote to you seeking your support for a national study on marketing approaches used by New Zealand manufacturing firms. We have had a good response from managers all around the country, but as of today we have not received your completed questionnaire. I am therefore writing to you again because of the importance each questionnaire has to the usefulness of this study.

The summary of results across all companies will provide the basis for Mr Dau's doctorate dissertation and will also provide invaluable insights into present marketing practice among New Zealand manufacturers. And as indicated in my letter of August 13, the success or otherwise of his programme depends very much on the willingness of managers like yourself to participate.

If you have already returned the questionnaire please accept our sincere thanks. If you have put the questionnaire aside to finish later, I would be grateful if you would fill it out and return it by October 5.

There is a good level of interest in the *Marketing Managers' Guide to Improving Marketing Effectiveness and Performance*, and the planned series of workshops based on the survey results. I would remind you that participating firms will be invited to attend these workshops which would be of particular interest.

Once again I would like to assure you that all the information collected will be treated in strictest confidence. Your identity and that of your company will not be disclosed under any circumstances. The reference number in the questionnaire is for mailing purposes only so that the name of your company can be removed from the follow up mailing list once your questionnaire is received.

In the event that your questionnaire has been misplaced, a replacement copy is enclosed.

I am most grateful for your assistance.

Sincerely yours

Dr Peter Thirkell
Professor of Marketing

APPENDIX C

SAMPLE CHARACTERISTICS

TABLE C-1

Responses by Nature of Goods and Operations

	Consumer Goods	Industrial Goods	50-50	Total
Exporters	124	138	3	265
Non Exporters	<u>64</u>	<u>25</u>	<u>0</u>	<u>89</u>
Total	188	163	3	354
Missing = 2				

TABLE C-2

Respondents by Nature of Goods and Size (Total Sales)¹

	Consumer Goods	Industrial Goods	50-50	Total
Small	62	51	1	114*
Medium	96	80	1	177*
Large	<u>28</u>	<u>32</u>	<u>1</u>	<u>61</u>
Total	186**	163	3	352

* one small and one medium-sized firm did not specify the type of goods they produce

** one consumer goods firm did not specify its size

1 Firms' size was classified as follows:

Sales under \$5m. - Small

\$5m. < Sales < \$50m. - Medium-sized

Sales > \$50m. - Large

TABLE C-3

Respondents by Nature of Goods and Wave

	Consumer Goods	Industrial Goods	50-50	<i>Total</i>
First Wave	82	87	2	171
Second Wave	44	39	1	84*
Third Wave	<u>62</u>	<u>37</u>	<u>0</u>	<u>99</u>
<i>Total</i>	188	163	3	354

* two firms did not specify the nature of goods they produce

TABLE C-4

Respondents by Nature of Operations and Size (Total Sales)

	Small	Medium	Large	<i>Total</i>
Exporters	80	134	51	265
Non-Exporters	<u>35</u>	<u>44</u>	<u>10</u>	<u>89*</u>
<i>Total</i>	115	178	61	354

* two non-exporters did not specify the size of their firms

TABLE C-5

Respondents by Nature of Operations and Wave

	First Wave	Second Wave	Third Wave	<i>Total</i>
Exporters	138	61	66	265
Non-Exporters	<u>33</u>	<u>25</u>	<u>33</u>	<u>91</u>
<i>Total</i>	171	86	99	356

TABLE C-6

Respondents by Size (Total Sales) and Wave

	First Wave	Second Wave	Third Wave	<i>Total</i>
Small	52	29	34	115
Medium	88	47	43	178
Large	<u>31</u>	<u>10</u>	<u>20</u>	<u>61</u>
<i>Total</i>	171	86	97*	354

* two firms did not specify the size of their operations

TABLE C-7

Respondents by Alternate Measures of Size

	Total Sales		Number of Employees ¹	
	Number	Percentage	Number	Percentage
Small	115	32.48%	94	29.5%
Medium	178	50.28%	181	56.7%
Large	61	17.23%	44	13.8%

1 The firms were classified using the following criteria:
Less than 50 Employees - Small
50 < Employees < 250 - Medium-sized
Employees > 250 - Large

APPENDIX D

TESTS FOR NON-RESPONSE BIAS

ALL FIRMS

TABLE D-1

Wave versus Size of the Firm (Employees)

Frequency Cell Chi-Square Percent Row Percent Column Percent	Small	Medium	Large	Row Total
First Wave	39	90	22	151
	0.6787	0.2181	0.066	
	12.23	28.21	6.90	47.34
	25.83	59.60	14.57	
	41.49	49.72	50.00	
Second Wave	23	49	6	78
	107E-7	05083	2.1048	
	7.21	15.36	1.88	24.45
	29.49	62.82	7.69	
	24.47	27.07	13.64	
Third Wave	32	42	16	90
	1.1322	1.6095	1.036	
	10.03	13.17	5.02	28.21
	35.56	46.67	17.78	
	34.04	23.20	36.36	
Column Total	94	181	44	319
	29.47	56.74	13.79	100%

Frequency Missing = 37

Chi-Square	DF	Value	Prob.
	4	7.354	0.118

TABLE D-2

Wave versus Size of the Firm (Sales)

Frequency Cell Chi-Square Percent Row Percent Column Percent	Small	Medium	Large	Row Total
First Wave	52	88	31	171
	0.227	0.0473	0.0798	
	14.69	24.86	8.76	48.31
	30.41	51.46	18.13	
	45.22	49.44	50.82	
Second Wave	29	47	10	86
	0.0404	0.3264	1.5672	
	8.19	13.28	2.82	24.29
	33.72	54.65	11.63	
	25.22	26.40	16.39	
Third Wave	34	43	20	97
	0.1966	0.6835	0.6457	
	9.60	12.15	5.65	27.40
	35.05	44.33	20.62	
	29.57	24.16	32.79	
Column Total	115	178	61	354
	32.49	50.28	17.23	100

Frequency Missing = 2

	DF	Value	Prob.
Chi-Square	4	3.814	0.432

TABLE D-3
Wave versus Type of Goods

Frequency Cell Chi-Square Percent Row Percent Column Percent	Consumer	Industrial	50-50	Row Total
	82	87	2	171
	0.8554	0.8671	0.2094	
First Wave	23.16	24.58	0.56	48.31
	47.95	50.88	1.17	
	43.62	53.37	66.67	
	44	39	1	84
	0.0083	0.0027	0.1166	
Second Wave	12.43	11.02	0.28	23.73
	52.38	46.43	1.19	
	23.40	23.93	33.33	
	62	37	0	99
	1.6891	1.6167	0.839	
Third Wave	17.51	10.45	0.00	27.97
	62.63	37.37	0.00	
	32.98	22.70	0.00	
Column Total	188	163	3	354
	53.11	46.05	0.85	100.0

Frequency Missing = 2

	DF	Value	Prob.
Chi-Square	4	6.204	0.184

TABLE D-4
Wave versus Nature of Operations

Frequency Cell Chi-Square Percent Row Percent Column Percent	Exporters	Non Exporters	Row Total
First Wave	138	33	171
	0.9012	2.6245	
	38.76	9.27	48.03
	80.70	19.30	
	52.08	36.26	
Second Wave	61	25	86
	0.1422	0.414	
	17.13	7.02	24.16
	70.93	29.07	
	23.02	27.47	
Third Wave	66	33	99
	0.8033	2.3391	
	18.54	9.27	27.81
	66.67	33.33	
	24.91	36.26	
Column Total	265	91	356
	74.44	25.56	100
Chi-Square	DF	Value	Prob.
	2	7.224	0.027

EXPORTERS ONLY

TABLE D-5

Wave versus Size of the Firm (Employees)

Frequency Cell Chi-Square Percent Row Percent Column Percent	Small	Medium	Large	Row Total
First Wave	25	77	19	121
	0.7922	0.2064	0.0532	
	10.64	32.77	8.09	51.49
	20.66	63.64	15.70	
Second Wave	43.10	54.23	54.29	
	15	33	5	53
	0.2816	0.0297	1.0607	
	6.38	14.04	2.13	22.55
Third Wave	28.30	62.26	9.43	
	25.86	23.24	14.29	
	18	32	11	61
	0.576	0.6407	0.4036	
Column Total	7.66	13.62	4.68	25.96
	29.51	52.46	18.03	
	31.03	22.54	31.43	
	58	142	35	235
	24.68	60.43	14.89	100

Frequency Missing = 30

Chi-Square	DF 4	Value 4.044	Prob. 0.400
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TABLE D-6
Wave versus Size of the Firm (Sales)

Frequency Cell Chi-Square Percent Row Percent Column Percent	Small	Medium	Large	Row Total
First Wave	38	74	26	138
	0.3216	0.2551	0.0117	
	14.34	27.92	9.81	52.08
	27.54	53.62	18.84	
	47.50	55.22	50.98	
Second Wave	20	32	9	61
	0.1316	0.0432	0.6393	
	7.55	12.08	3.40	23.02
	32.79	52.46	14.75	
	25.00	23.88	17.65	
Third Wave	22	28	16	66
	0.2162	0.8652	0.8564	
	8.30	10.57	6.04	24.91
	33.33	42.42	24.24	
	27.50	20.90	31.37	
Column Total	80	134	51	265
	30.19	50.57	19.25	100
Chi-Square	DF	Value	Prob.	
	4	3.345	0.502	

TABLE D-7
Wave versus Type of Products

Frequency Cell Chi-Square Percent Row Percent Column Percent	Consumer	Industrial	50-50	Row Total
First Wave	60	76	2	138
	0.3239	0.238	0.1227	
	22.64	28.68	0.75	52.08
	43.48	55.07	1.45	
	48.39	55.07	66.67	
Second Wave	26	34	1	61
	0.2266	0.1571	0.1387	
	9.81	12.83	0.38	23.02
	42.62	55.74	1.64	
	20.97	24.64	33.33	
Third Wave	38	28	0	66
	1.6401	1.1805	0.7472	
	14.34	10.57	0.00	24.91
	57.58	42.42	0.00	
	30.65	20.29	0.00	
Column Total	124	138	3	265
	46.79	52.08	1.13	100
Chi-Square	DF	Value	Prob.	
	4	4.775	0.311	

NON-EXPORTERS ONLY

TABLE D-8
Wave versus Size of the Firm (Employees)

Frequency Cell Chi-Square Percent Row Percent Column Percent	Small	Medium	Large	Row Total
First Wave	14	13	3	30
	0.1016	0.0619	0.0143	
	16.67	15.48	3.57	35.71
	46.67	43.33	10.00	
	38.89	33.33	33.33	
Second Wave	8	16	1	25
	0.6876	1.6625	1.0519	
	9.52	19.05	1.19	29.76
	32.00	64.00	4.00	
	22.22	41.03	11.11	
Third Wave	14	10	5	29
	0.1987	0.8913	1.1531	
	0.1987	0.8913	1.1531	
	16.67	11.90	5.95	34.52
	48.28	34.48	17.24	
Column Total	36	39	9	84
	42.86	46.43	10.71	100

Frequency Missing = 7

Chi-Square	DF	Value	Prob.
	4	5.823	0.213

TABLE D-9
Wave versus Size of the Firm (Sales)

Frequency Cell Chi-Square Percent Row Percent Column Percent	Small	Medium	Large	Row Total
First Wave	14	14	5	33
	0.0806	0.3284	0.4503	
	15.73	15.73	5.62	37.08
	42.42	42.42	15.15	
Second Wave	40.00	31.82	50.00	
	9	15	1	25
	0.0703	0.5641	1.165	
	10.11	16.85	1.12	28.09
Third Wave	36.00	60.00	4.00	
	25.71	34.09	10.00	
	12	15	4	31
	0.003	0.0069	0.0767	
Column Total	13.48	16.85	4.49	34.83
	38.71	48.39	12.90	
	34.29	34.09	40.00	
	35	44	10	89
	39.33	49.44	11.24	100

Frequency Missing = 2

Chi-Square	DF 4	Value 2.745	Prob. 0.601
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TABLE D-10
Wave versus Type of Goods

Frequency Cell Chi-Square Percent Row Percent Column Percent	Consumer	Industrial	Row Total
	22	11	33
	0.1262	0.323	
First Wave	24.72	12.36	37.08
	66.67	33.33	
	34.38	44.00	
	18	5	23
	0.129	0.3302	
Second Wave	20.22	5.62	25.84
	78.26	21.74	
	28.13	20.00	
	24	9	33
	0.0031	0.0078	
Third Wave	26.97	10.11	37.08
	72.73	27.27	
	37.50	36.00	
Column Total	64	25	89
	71.91	28.09	100

Frequency Missing = 2

Chi-Square	DF 2	Value 0.919	Prob. 0.631
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APPENDIX E

TESTS FOR RELIABILITY OF THE SCALES

TABLE E-1
Four Scales for Measuring Marketing Orientation

Construct	Item to Total Correlation (standardized)	Reliability Co-efficient Alpha (standardized)
1. <i>Customer Focus Scale</i>		
<i>use of customers:</i>		
i) as a source of ideas	0.46	0.63
ii) to evaluate new ideas	0.59	
iii) measuring customer satisfaction	0.23	
iv) developing products for different segments	0.36	
2. <i>Profit Monitor Scale</i>		
v) profitability analysis by products	0.55	0.75
vi) profitability analysis by markets	0.62	
vii) profitability analysis by key customers	0.58	
3. <i>Integration Scale</i>		
viii) sharing information with production department	0.55	0.79
ix) sharing information with finance department	0.63	
x) sharing information with sales department	0.46	
xi) joint decisions with production department	0.57	
xii) joint decisions with finance department	0.55	
xiii) joint decisions with sales department	0.49	
4. <i>Organisation Structure Scale</i>		
<i>extent of responsibility marketing department has toward</i>		
xiv) product planning and development	0.48	0.82
xv) packaging	0.53	
xvi) pricing	0.63	
xvii) credit extension	0.60	
xviii) advertising	0.42	
xix) personal selling	0.44	
xx) transportation	0.57	
xi) inventory control	0.60	
xxii) quality control	0.42	

TABLE E-2

Adoption of the Marketing Concept Scale

Construct	Item to Total Correlation (standardized)	Reliability Co-efficient Alpha (standardized)
<i>use of customers:</i>		
i) as a source of ideas	0.40	
ii) to evaluate new ideas	0.50	
iii) measuring customer satisfaction	0.32	
iv) developing products for different segments	0.40	
<i>profitability analysis by:</i>		
v) products	0.48	
vi) markets	0.55	
vii) key customers	0.49	0.73

TABLE E-3

Implementation of the Marketing Concept Scale

Construct	Item to Total Correlation (standardized)	Reliability Co-efficient Alpha (standardized)
<i>sharing of information with:</i>		
i) production department	0.39	
ii) finance department	0.45	
iii) sales department	0.34	
<i>joint decision making with:</i>		
iv) production department	0.40	
v) finance department	0.43	
vi) sales department	0.38	
<i>extent of responsibility marketing department has toward:</i>		
vii) product planning and development	0.40	
viii) packaging	0.50	
ix) pricing	0.54	
x) credit extension	0.54	
xi) advertising	0.32	
xii) personal selling	0.42	
xiii) transportation	0.50	
xiv) inventory control	0.50	
xv) quality control	0.37	0.817

TABLE E-4
Overall Marketing Orientation Scale

Construct	Item to Total Correlation (standardized)	Reliability Co-efficient Alpha (standardized)
<i>use of customers:</i>		
i) as a source of ideas	0.36	
ii) to evaluate new ideas	0.38	
iii) measuring customer satisfaction	0.17	
iv) developing products for different segments	0.29	
v) profitability analysis by products	0.27	
vi) profitability analysis by markets	0.39	
vii) profitability analysis by key customers	0.29	
<i>sharing of information with:</i>		
viii) production department	0.38	
ix) finance department	0.43	
x) sales department	0.31	
<i>joint decision making with:</i>		
xi) production department	0.44	
xii) finance department	0.44	
xiii) sales department	0.41	
<i>extent of responsibility the marketing department has toward:</i>		
xiv) product planning and development	0.37	
xv) packaging	0.46	
xvi) pricing	0.48	
xvii) credit extension	0.43	
xviii) advertising	0.32	
xix) personal selling	0.37	
xx) transportation	0.41	
xxi) inventory control	0.41	
xxii) quality control	0.34	0.82

TABLE E-5

Absolute Export Sales Index Scale

Construct	Item to Total Correlation (standardized)	Reliability Co-efficient Alpha (standardized)
i) absolute export sales index 1984	0.79	
ii) absolute export index 1985	0.55	
iii) absolute export index 1986	0.73	
iv) absolute export index 1987	0.75	
v) absolute export index 1988	0.64	0.87

TABLE E-6

Export Intensity Scale

Construct	Item to Total Correlation (standardized)	Reliability Co-efficient Alpha (standardized)
i) export intensity 1985	0.95	
ii) export intensity 1986	0.97	
iii) export intensity 1987	0.99	
iv) export intensity 1988	0.97	
v) export intensity 1989	0.93	0.99

TABLE E-7

Objective Measure of Export Performance Scale

Construct	Item to Total Correlation (standardized)	Reliability Co-efficient Alpha (standardized)
i) absolute export index 1984	0.40	
ii) absolute export index 1985	0.24	
iii) absolute export index 1986	0.37	
iv) absolute export index 1987	0.36	
v) absolute export index 1988	0.27	
vi) export intensity 1985	0.56	
vii) export intensity 1986	0.57	
viii) export intensity 1987	0.62	
ix) export intensity 1988	0.65	
x) export intensity 1989	0.73	0.80

TABLE E-8

Judgemental Measure of Export Performance Scale

Construct	Item to Total Correlation (standardized)	Reliability Co-efficient Alpha (standardized)
<i>importance of the following criteria in assessing firm's performance as exporter:</i>		
i) export market share	0.38	
ii) export profitability	0.32	
iii) market diversification	0.39	
iv) customer satisfaction	0.31	
<i>firm's performance for each of the following criteria:</i>		
v) export market share	0.58	
vi) export profitability	0.45	
vii) market diversification	0.59	
viii) customer satisfaction	0.42	
<i>overall performance:</i>		
ix) five years ago	0.30	
x) at present	0.56	
xi) evaluation by the peers	0.32	0.77

TABLE E-9

Overall Measure of Export Performance Scale

Construct	Item to Total Correlation (standardized)	Reliability Co-efficient Alpha (standardized)
i) absolute export index 1984	0.29	
ii) absolute export index 1985	0.19	
iii) absolute export index 1986	0.25	
iv) absolute export index 1987	0.21	
v) absolute export index 1988	0.14	
vi) export intensity 1985	0.59	
vii) export intensity 1986	0.61	
viii) export intensity 1987	0.67	
ix) export intensity 1988	0.70	
x) export intensity 1989	0.75	
<i>importance of the following criteria in assessing firm's performance as exporter:</i>		
xi) export market share	0.33	
xii) export profitability	0.30	
xiii) market diversification	0.41	
xiv) customer satisfaction	0.28	
<i>firm's performance for each of the following criteria:</i>		
xv) export market share	0.57	
xvi) export profitability	0.48	
xvii) market diversification	0.55	
xviii) customer satisfaction	0.35	
<i>overall performance:</i>		
xix) five years ago	0.23	
xx) at present	0.55	
xxi) evaluation by the peers	0.27	0.84

- : number of days training given to marketing staff
- : frequency of marketing-related training given to non-marketing staff
- : whether or not the chief marketing executive is a member of board of directors
- : whether or not the chief marketing executive is a member of new product planning committee
- : whether or not the chief marketing executive is a member of executive committee
- : whether or not the chief marketing executive is a member of finance committee
- : extent of responsibility marketing department has toward dealer selection
- : frequency at which the marketing department shares information with R&D department
- : frequency at which the marketing department makes joint decisions with R&D department

**Figure E-1 Marketing Orientation Measures Dropped Due to
High Internal Non-response**

- : number of years in which the firm can tolerate short term losses in the hope of achieving satisfactory returns in the long run
- : magnitude of the loss (as a percentage of total sales) the firm can tolerate in the hope of achieving satisfactory returns in the long run
- : officer to whom the chief marketing executive reports
- : title of the respondent

Figure E-2 Marketing Orientation Measures Dropped Due to Low Item-Scale Correlations

VITA

Name : Ramadhani Kitwana DAU

Date of Birth : August 18, 1958

Place of Birth : Dar-es-Salaam, Tanzania

Tertiary Education : American University in Cairo
February 1984 - June 1986
M.B.A

: University of Dar-es-Salaam
June 1979 - March 1982
B.Com (Marketing)
First Class Honours

Academic Awards and Honours : New Zealand Commonwealth Scholar
March 1988 - February 1992

: University Prize
for being the best 3rd year BCom student
March 1982
size of the class: 120 students

: Management and Administration Prize
for being the best 2nd year BCom student
March 1981
size of the class: 120 students

: Vice-Chancellor's Prize
for being the best 1st year BCom student
March 1980
size of the class: 120 students

Work Experience

: Tutor
Victoria University of Wellington
March 1988 - October 1991

: Assistant Lecturer
University of Dar-es-Salaam
July 1984 - present

: Tutorial Assistant
University of Dar-es-Salaam
April 1982 - June 1984

Publications and Papers

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