COMPETITIVE STRATEGIES FOR SUBSIDIARIES OF MULTINATIONAL COMPANIES: A COMPARATIVE STUDY OF AMERICAN, JAPANESE, EUROPEAN AND TAIWANESE FIRMS IN TAIWAN

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CHAPTER I

INTRODUCTION

The Nature of the Problem

One of the most significant postwar phenomena of economic development is the increasing internationalization of business activities (Jain 1987, 1989). Leading corporations around the world have paid much more attention to international operations to maintain competitive edges in today's dynamic economic scene.

The multinational corporation (hereafter also called "MNC", "multinational companies", or "multinationals") represents the highest level of overseas involvement and is characterized by the international strategies of marketing, production, and investment (Freeman and Persen 1980). However, conceptual and empirical research on various issues of MNCs is limited.

First of all, it has been reported that, by coordinating and integrating market opportunities across international boundaries, the multinational corporations could become more powerful in allocating and exploiting the natural resources for their own benefits (Jain 1987, 1989, Robock and Simmonds 1983, Kotabe and Omura 1989, Keegan 1984, Kotler, Fahey, and Jatusripitak 1985, etc.) Yet,

what are the key factors that affect the multinationals' capabilities to proceed with their foreign operations and investment? Should global strategies be contingent upon certain external and/or internal variables? Previous research is limited and appears to be diversified in answering the above questions (Levitt 1980, 1988, Ohmae 1985, Porter 1986, Sheth 1986, Walters 1986, Wind and Douglas 1986, Jain 1989). Thus, a more comprehensive framework is required to assimilate different perspectives on international strategy for multinational corporations.

Secondly, whereas multinationals were uniquely an American phenomena in the 1960s, the Japanese and European firms have substantially increased the tempo of their direct foreign investment in the past decades (Ramstetter 1986, Yoshida 1985). It is expected that the Japanese and European multinationals will seriously compete with the U.S. multinationals very soon in many places of the world (Kotler, Fahey, and Jatusripitak 1985). Yet, only a very limited number of scholars focus their studies on the comparisons of the business operations between the multinationals of the United States and those of other countries (Kotabe and Omura 1989, Wang 1989, Yeh 1989, Yu 1987, Tai 1983). Thus, whether the U.S., Japanese, and European multinationals adopt the same international strategy remains unclear.

Thirdly, the emergence of the economic development in Taiwan has created a very significant worldwide attention

(Atac 1986). It has been argued that one of the most important reasons for the continual economic development of Taiwan was the stable foreign investment from the MNCs of the U.S. and other countries (Hamilton 1983, Ting 1985, Lin 1981). Yet, how these foreign based firms compete with each other and with local companies in the marketplace is subject to further studies.

Given that previous research on the above issues seems to be inconclusive and does not integrate the related variables into a more comprehensive framework, the purpose of this study is to explore the characteristics of strategic operations for the subsidiaries of multinational companies.

Research Issues

The basic concepts that define strategy have become the key issues of business operations. Yet, their common definitions and operational constructs are still controversial (Hambrick 1980, Pearce, Robbins, and Robinson 1987, Dobrydnio 1987, Mintzberg 1978, Rumelt 1974). First, previous research has been concerned with both content strategy and process strategy. Strategy content research examines the patterns of strategic decisions and behaviors regarding the goals, people, and competitive strategies for the corporations or business units. Strategy process research focuses on the basic level of sophistication inherent in business activities to facilitate the

implementation of competitive strategy (Robinson and Pearce 1988). Research to date has failed to simultaneously incorporate the concerns on both process strategy and content strategy (Fahey and Christensen 1986).

In addition, the strategic analysis process occurs at three levels: corporate, business, and product (Cravens 1987). Corporate level strategy addresses the broader strategic issues, such as goals and objectives, portfolio analysis, and resource allocations for the entire corporation. Business level strategy addresses the narrower strategic management and marketing issues. It is concerned with integrating all functional areas to obtain sustainable competitive advantages for the business unit. Product level strategy concentrates its efforts on tactical and implementation issues at the brand level. With very few exceptions (Dess 1987, McDaniel and Kolari 1987, Andrews 1971), most of the previous research has not considered to an integration of the relationships between strategies at different levels.

Recent research on strategy has focused increasing attention on the development of typology of strategies for the business unit. Such typology is often referred to as generic strategies, gestalts, or strategic archetypes (Miller and Friesen 1978, Fahey and Christensen 1986, Kim and Lim 1988, Kim 1984). Among others, Miles and Snow (1978), based on the degree of product market development, identified four strategic typologies for the companies:

prospectors, defenders, analyzers, and reactors. Porter (1980, 1985), emphasizing the methods of competition, identified three generic competitive strategies: cost leadership, differentiation, and focus.

Both of these frameworks have received great acceptance and proved to be useful for the conceptualization of business strategy. A number of subsequent studies (Hambrick 1983, Miller 1986, Snow and Hrebiniak 1980, Dess and Davis 1984, Robinson and Pearce 1988, Dess 1987, etc.) have been conducted to further investigate empirically the characteristics of these typologies. However, the vast majority of these studies have primarily been conducted in the U.S. and focused on U.S. businesses. Thus, whether these conceptual and empirical findings can be generalized to the firms with different national origins in different countries is subject to further validation.

In addition, research has shown that firms with different investment origins tended to exercise their power (e.g., degree of authorization, formalization, and integration) differently over their affiliates (Negandhi and Welge 1984, Negandhi and Prasad 1971, Kotler and Fahey 1982, Doyle, Saunders, and Wong 1986). However, the dependency between the subsidiaries and their parent firm's (hereafter also called "P-A dependency") influences on the strategic operations of the affiliates of MNC has not been studied.

Finally, most of the previous research on international business strategy have been intensive studies on a relatively small number of firms with limited research variables. Many contributions were based more upon casual observation and incomplete data than upon some empirical evidence (Kagono, Nonaka, Sakakibara, and Okumura 1989). It is argued that the absence of scientific methodology and empirical data have resulted in misunderstanding, arbitrariness, and confusion of findings (Sugimoto and Maoa 1982). These findings thus have little help in testing the generalizability of existing framework and in formulating further constructs for international strategy.

This study intends to integrate the above research issues and develop a more comprehensive framework for the strategic operations of MNC subsidiaries. The conceptual framework is shown in Figure 1. The following approaches will be the basic guidelines for this study:

(1) An integrative approach to develop a reliable measurement scale for the constructs of international comparative strategy. The measurement scale should encompass variables of content strategy and process strategy. These variables may include the firm's goals and objectives, competitive strategies, and parent-affiliate dependency.

(2) An empirical approach to employ scientific methodologies for sampling, data gathering, and data

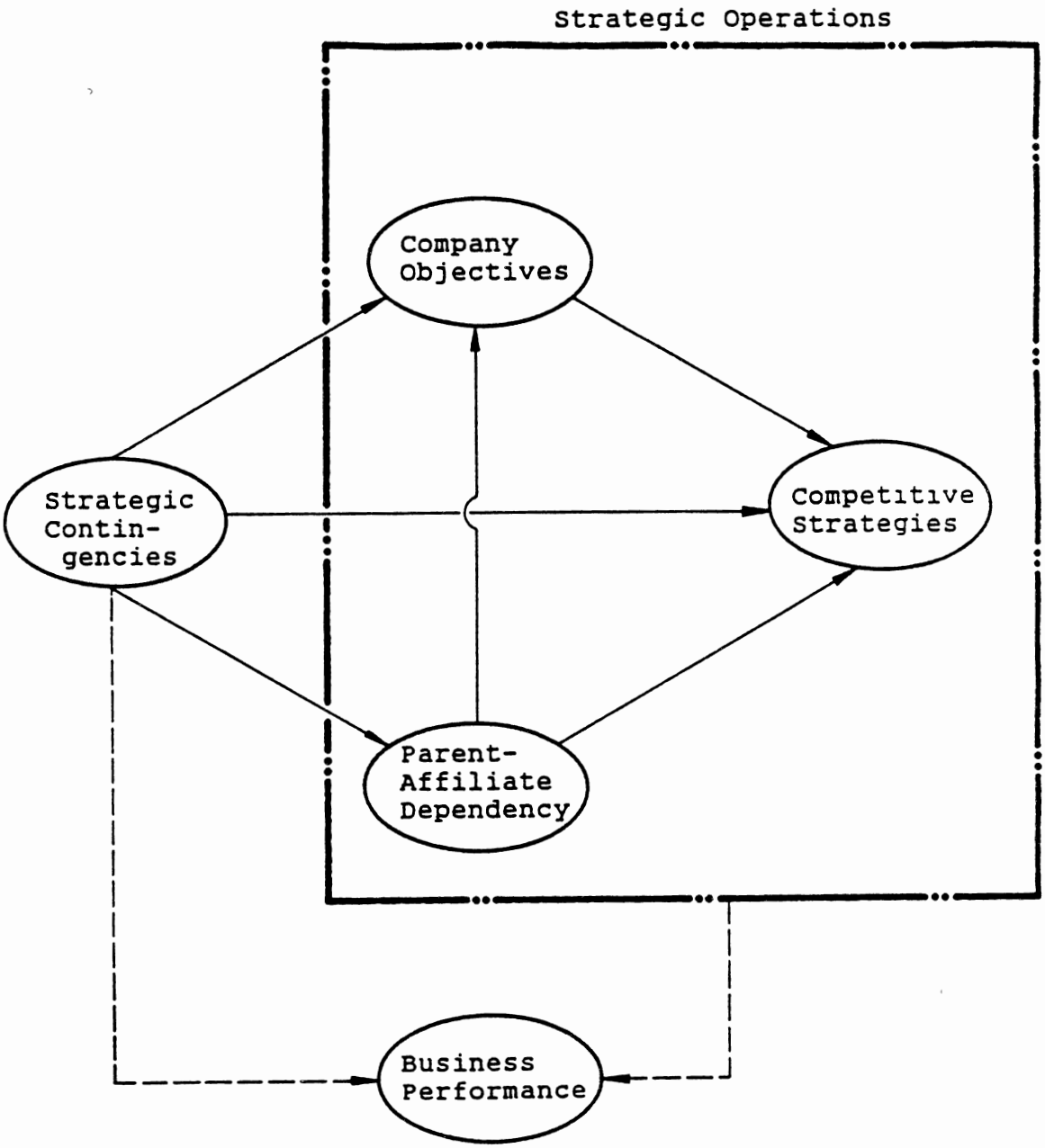

Figure 1. The Basic Concepts of This Study

analyzing. This approach may enable us to identify the general characteristics of population from large sample data and to test hypotheses applying statistical techniques.

(3) A contingency approach to systematical verify the relationships among strategic variables and relationships between contingency variables and strategic variables.

As shown in Figure 1, it is proposed that certain relationships exist between company objectives, competitive strategies, and parent-affiliate dependency. It is also proposed that several contingency factors, such as environmental attractiveness, industry competition, product/market opportunities, and company strengths will influence the degree of emphasis of strategic variables. Furthermore, it is also suggested that different patterns of strategic operations and different contingencies of MNC subsidiaries will result in different performance, though the performance item is not included in the scope of this study. A detailed discussion of this conceptual framework is shown in Chapter III.

Research Objectives and Contributions

As discussed earlier, most of previous studies on MNC strategic operations have been conducted in the U.S. and did not simultaneously consider the impact of many factors such as strategic contingencies, company objectives,

competitive strategies, and parent-affiliate dependency. The primary purpose of this study is to go one step further and empirically compare the strategic orientations and associations among multinational firms with different investment origins and environmental contingencies. Specifically, the objectives of this study are as follows:

1. To identify key variables and factors that have significant impacts on the strategic operations of the subsidiaries of multinational firms in the overseas countries;
2. To investigate and compare the similarities and differences of strategic operations among American, Japanese, European, and Taiwanese firms operating in Taiwan;
3. To identify the nature of relationships among strategy-related constructs, i.e., company objectives, competitive strategies, and parent-affiliate dependency;
4. To investigate the relationships between strategic contingencies and strategic operations for MNC subsidiaries operating in Taiwan.

This research promises to contribute to our understanding on how MNCs and their subsidiaries interact with each other and how various strategic contingencies impact on patterns of strategic orientations for MNC subsidiaries operating in the overseas marketplace. The primary objective of this study is to provide new insight

into the research area of competitive strategy for the MNCs. The specific contributions of this study could be described as follows:

1. Most of previous studies on competitive strategy have been conducted in the U.S. This study wishes to verify the underlying dimensions of strategic typology through empirical comparisons of business operations among American, Japanese, European, and Taiwanese firms operating in Taiwan. The results of this study should expand the knowledge base of competitive strategy and may identify potential areas for future research;
2. Previous studies on strategic operations of MNCs have tended to acquire data from the parent firms rather than from the subsidiaries. This approach is more convenient but may be misleading due to the gap between induction (from the headquarter) and reality (from the affiliate). The results of this study should provide another aspect of empirical validation for the competitive strategies of MNCs;
3. Most of previous studies have failed to identify the relationships among strategy-related constructs and the relationships between competitive strategy and other contingency factors. The results of this study may provide further insights on the concept of "strategic fit" for MNC subsidiaries in the overseas marketplace.

Clarification of Constructs

Conceptually, the performance of a firm is decided by many factors. Among others, one is to enact or identify various combinations of strategic environments and integrate different functional strengths (e.g., finance, marketing, production, human resources, etc.) that enable the firm to capitalize on the forthcoming opportunities with lower expenses than the competitors. Another is to adopt strategies that ensure the best interests of the firm.

This study thus identifies strategic contingency and strategic operation as two major issues that affect the performance of multinational operations. Strategic contingencies are the conditions of external environments, positions of competition, and strengths/weaknesses of the firm. Strategic operations are managerial decisions regarding the selection and adjustment of goals, objectives, strategies, and structures of the firm.

Based on previous research (Ginsberg and Venkatraman 1985, Cravens, Hills, LaForge, and Lunsford 1989, Kobrin 1987), this study has identified four major components for strategic contingencies. The first component is the environmental variables which describe the characteristics of various aspects of a firm's external environment. These include economic conditions, political and legal favorability, technological strength, and socio-cultural

distance between the parent and the host country.

The second component is the industry competition variables which describe the competitive conditions of the industry. These include competition intensity, industry concentration, industry attractiveness and growth for the whole industry.

The third component is the product/market variables which describe the opportunities of the market. These include market growth, product maturity, market share, market share growth, buyer fragmentation, and service requirement of the product.

The fourth component is the company variables which describe the internal characteristics of the organization. These include the ownership structure, size, sales, age, industry type, and customer distribution of the firms.

This study also identifies company objectives, competitive strategies, and parent-affiliate dependency as three major components for the strategic operations of MNC subsidiaries in the overseas marketplace. To enhance reliability, multiple-item scales were designed to measure these constructs.

The "competitive strategies" have been studied and elaborated extensively but their exact scope and content remain undefined. In this study, we use multiple-item scales to operationalize the concepts of competitive strategy. Questionnaire items used by previous studies (Dess 1987, Robinson and Pearce 1988, Dess and Davis 1984,

Hambrick 1983) serve as important references for the creation of listing items to characterize different methods of competition for the firm. A pilot study conducted earlier has shown through factor analysis and correlation analysis that there appears to be five distinct patterns of strategic orientation for the sample firms:

- Process innovation orientation (4-item scale)
- Product development orientation (4-item scale)
- Price leadership orientation (4-item scale)
- Market development orientation (3-item scale)
- Focus orientation (3-item scale)

The "company objectives" have been studied as important factors for the formulation of competitive strategy and consequently the performance of the business. After reviewing the questionnaire items used by previous research (Dess 1987, Bourgeois 1980, Child 1975) and the results of the pilot study, this study decided to classify the firm's "objectives" into three major dimensions:

- Market growth orientation (2-item scale)
- Financial orientation (6-item scale)
- Organizational development orientation (7-item scale)

The "parent-affiliate dependency" has been identified as one of the most important issues for international business operation (Gates and Egelhoff 1986, Garnier 1982, Martinez and Jarillo 1989, Ghoshal and Nohria 1989). Previous studies focused on three major components as the

primary factors for this construct:

1. Centralization/decentralization of decision making authority;
2. Formalization/standardization of policies, rules, and procedures;
3. Integration/coordination of shared values between parent firms and their affiliates.

Based on these three components, multiple-item scales are developed to measure the extent that parent firm influences various decision situations on the affiliate. The results of the pilot study show that centralization and formalization appear to be collapsed into one factor. Thus, only two dimensions are identified in this study:

. Centralization/formalization orientation

. Coordination/integration orientation

For all constructs of strategic operations, Churchill's (1979) "Procedures for Developing Better Measures" is adopted to purify the measurement scale and to identify its dimensionality. Three techniques are used for the purpose of purification:

. Item to total correlation

. Principal component factor analysis with varimax rotation

. Coefficient alpha

Once the measurement scales are proved to be reliable through the above purification process, they are used to identify the nature of relationships among strategic

variables and relationships between contingency variables and strategic variables.

Research Project

A cross-sectional survey was conducted in this study to identify the managers' perceptions on various strategy related variables. The target populations are the CEOs, presidents, vice presidents, managers, and strategic staffs of American, Japanese, European, and Taiwanese firms operating in Taiwan. The following sources of the lists of MNC subsidiaries and local firms are used as the sampling frame of this study:

(1) The U.S. Firms in Taiwan (1989-1990);

(2) The Japanese Firms in Taiwan (1987-1988);

(3) The European Firms in Taiwan (1989-1990);

(4) The Top 1000 Manufacturing Firms in Taiwan (1989-1990);

Following a review of previous similar studies, four criteria were used to identify the target firms for this study:

(1) Only manufacturing firms are selected;

(2) For the American, Japanese, and European MNC subsidiaries, the amount of capital provided by the parent firm exceeds 50 percent of the firm's total capital;

(3) The total number of employees of the firm exceeds 100;

(4) The total sales volume of the firm exceeds 1.5 million U.S. dollars;

Based on the above criteria, 1050 qualified firms were selected from the sampling frame. Stratified sampling was adopted in this study. Each 300 firms were selected from American, Japanese, and Taiwanese strata, respectively. However, since the number of European subsidiaries in Taiwan is smaller, only 150 firms were selected from the European stratum.

A six-page, 76-item survey questionnaire was designed to measure managers' perceptions on various strategic and contingency variables (see Appendix A). To match with different national origins of management people; Chinese, Japanese, and English version of questionnaires were developed and sent to the presidents of Taiwanese, Japanese, and American/European firms in Taiwan, respectively. To substantiate the response rate, telephone calls were conducted for most of sample firms during the data gathering period. Out of the 1050 sample firms, 21 could not be contacted and 283 completed and returned the answers. A total of 256 questionnaires were usable, producing a response rate of 24.88 percent.

The relationships among research variables will be assessed through the following techniques:

(1) Multiple T-comparisons for the means of variances among firms with different investment origins

(2) Factor analysis

(3) Correlation coefficient analysis

(4) Analysis of variance (ANOVA)

(5) Multiple regression analysis

A detailed description of research methodology and data analyses is shown in Chapter III.

Structure of the Dissertation

This dissertation contains six chapters, and the summary for each is as follows:

Chapter I outlines the research problems, purposes, and structure of the study. Major variables are explored and a conceptual framework is presented. The research project, including methodology, sampling, and analytic techniques are discussed.

Chapter II reviews the previous literature relevant to the study. This chapter is organized around four major constructs of interest: company objectives, competitive strategies, parent-affiliate dependency, and strategic contingencies. Key variables and their respective relationships are identified. Finally, an integrated research agenda is proposed.

Chapter III presents the hypothesized relationships, construct measures, and research design for this study. A conceptual model that suggests the general relationships among strategic contingencies, company objectives, competitive strategies, and parent-affiliate dependency is first identified. Several hypotheses are proposed to

integrate the results of previous studies. Then, the measurement of each construct is described. Finally, the research design, including the sampling plan, data collection procedures, and data analysis techniques are discussed.

Chapter IV describes the characteristics of respondents. Purification processes, including factor analyses, correlation analyses, and reliability tests are conducted for the measurement scales of this study.

Chapter V presents the empirical results of the study. It includes the comparisons of the characteristics of American, Japanese, European, and Taiwanese firms; the interpretations of relationships between strategic contingencies and strategic operations; and the evaluations of relationships among competitive strategy, company objectives, and parent-affiliate dependency. These discussions and comparisons lead to the conclusions of this study in the following chapter.

Chapter VI is a summary of the significant findings and conclusions of this study. Suggestions and practical implications of the results are presented for future research.

CHAPTER II

LITERATURE REVIEW

Introduction

This chapter reviews strategy related literature in strategic marketing, strategic management, industrial organization economics, and organizational behaviors for the operations of MNC subsidiaries in the overseas marketplace. It is organized around four major constructs of interest: strategic contingencies, company objectives, competitive strategy, and parent-affiliate relationship.

First, the status and issues of international business strategy are evaluated. Second, key variables and constructs for the strategic operations of international business are identified. Third, strategic associations including relationships among company objectives, competitive strategies, and parent-affiliate dependency are surveyed. Fourth, key variables and relationships for strategic contingencies are identified. Finally, an integrated research agenda for this study is proposed.

The Status and Issues of International Business Strategy

International business strategy involves the ways of

transmitting raw material resources among nations and the interactions of business activities among different societies (Jain 1987). Despite its complexity and risk, companies do increasingly engage in various kinds of international operations to maintain competitive edges in today's dynamic economic scene. Yet, an acceptable framework that encompasses relevant variables and constructs for development of the international business strategy has to be identified (Cavusgil and Nevin 1981, Cavusgil and McDonald 1988).

Two issues seem to be essential for this task. One is to broaden the conventional framework of strategy by incorporating new variables in an international dimension so that it will better reflect the complexity of the constructs of international strategy. Another issue is to verify the reliability and validity of the constructs through conducting empirical tests outside the U.S. These should focus on international businesses with different national origins in different countries. In order to pursue the former issue, there is a need to first evaluate the status of current research on international strategy.

The Status of Strategy Research

Strategy has been conceptualized from different angles (Pearce, Robbins, and Robinsons 1987). For example, according to Jain (1985) "Strategy is concerned with the deployment of potential results and development of a

reaction capability to adapt to environmental changes." Day (1984) on the other hand, argues that "strategy describes the direction the organization will pursue within its chosen environment and guides the allocations of resources and efforts."

Previous strategy-related studies could be classified into the following categories (Hambrick 1980):

1. Strategy-performance linkage is interested in how different strategies relate to organizational performance (Hatten, schendel, and Cooper 1978, Walker and Ruekert 1987, Lee 1988).
2. Strategy-structure linkage is interested in how industry and organizational structure affect strategy (Chandler 1962, Walker and Ruekert 1987).
3. Strategy-process linkage is interested in the relationships between the firm's strategy and its organizational process and managerial activities (Miles and Snow 1978, Robinson and Pearce 1988).
4. Interlevel strategic linkage is interested in the interrelationships among different strategic levels (Hofer 1975, Hofer and Schendel 1978, McDaniel and Kolari 1987). For example, given that certain corporate level strategy is adopted, what types of business level strategies could one expect to find?
5. Intended-realized strategy linkage is focused on identifying and analyzing the gap between intended strategy (i.e., an executive's intention) and realized

strategy (i.e., the firm's actual achievement) (Dess 1987, Robinson and Pearce 1988).

The Issues of Strategy Research

Although strategy has been studied extensively, several issues deserve further clarifications. First, a critical comment is that most of the previous research has been either intensive case studies of a relatively small number of firms or broader studies with limited types and number of variables (Kagono et al. 1989). Thus, a reliable and acceptable strategy construct has yet to be developed. Furthermore, as the vast majority of strategy studies have been conducted in the U.S. and focused on domestic markets and domestic firms, the issue as to whether the empirical findings could be generalized to international dimension is subject to further validation.

In addition, business environments have been demonstrated as the key impact factors for both strategies and performances of the firm (Porter 1980, Prescott 1986). Traditionally, most theorists from industrial organization economics literature have viewed environments as primary determinants of business performances. Thus, the firm should react to external environments by aligning both its strategy and its structure (Hitt, Ireland, and Stadter 1982, Jauch, Osborn, and Glueck 1980).

However, recent researchers from strategic management literature have taken a more proactive approach and

considered environments as constraints that could be changed by managers. They argue that a business should "enact" environments to fit a desired strategy (Bourgeois 1984, Prescott 1986). Thus, "the fit between external environments and business strategy is argued to be a reactive, deterministic relationship on one extreme and a proactive, enactment position on the other" (Walker and Ruekert 1987). In other words, whether environmental variables are the predictors of international strategic variables is yet to be determined.

Finally, business characteristics have also been recognized as other essential factors for strategic operations. International comparison studies have over-emphasized socio-cultural comparisons among different countries. This socio-cultural perspective argues that firms with different cultural attributes, such as values, norms, and psychological orientation, will adopt different patterns of strategic operation. For example, Japanese firms tend to emphasize groupism, clanism, and cohesiveness, while American firms are concerned more on individualism, independency, and aggressiveness (Ouchi 1981; Kagono, et al. 1989).

Previous studies on socio-cultural comparisons tend to use intensive case studies that are based more upon casual observation and incomplete data than upon some empirical evidence (Kagono et al. 1989). Furthermore, cultures are comprised of diverse subcultures, and each subculture tends

to be elusive and always changed. Thus, recent research on international business studies have taken other variables into consideration, including ownership structure, size, operation history (age), industry (product) type, international operation experience, customer distribution, etc. (Capon et al. 1987, Garnier 1982, Gates and Egelhoff 1986, Kagono et al. 1989).

In summary, it seems essential to develop an integrated conceptual framework for strategy research that encompasses the above issues and extend the research into the international dimension. In the following sections, key variables and constructs for international business operations will be identified first. Then, previous literature related to strategic associations including relationships among company objectives, competitive strategies, and parent-affiliate dependency will be evaluated. Finally, relationships between strategic contingencies and strategic variables will be proposed.

Key Constructs for Strategic Operations

Although we have identified many research issues for current strategy studies, it is not the intent of this study to encompass all these issues. Instead, this study will only focus on identifying key impact variables that represent the major constructs of each strategic component and the associations among these constructs. Thus, in this section, key variables and constructs will first be

evaluated.

For strategy research, "company objectives" and "competitive strategies" are the two major factors that have been widely evaluated in previous studies (Dess 1987, Burke 1984, Abell and Hammond 1979, Dess and Davis 1984, Porter 1980, Miles and Snow 1978, Walker and Ruekert 1987, Galbraith and Schendel 1983, Rohinson and Pearce 1988). Company objectives define the basic purpose of business strategy. Different firms facing different strategic situations are likely to select different strategic objectives. These strategic objectives will affect the strategy choice of the firm (Wheelen and Hunger 1986).

Competitive strategies refer to the competitive methods that a firm selects to compete in the marketplace. The purpose of selecting specific competitive methods is to exploit environmental opportunities and organizational strengths to create sustainable competitive advantages and to improve the competitive position of the firm (Bourgeois 1980, Hofer and Schendel 1978, Robinson and Pearce 1988).

In addition to the above strategic factors, strategy research of international businesses has also identified the parent-affiliate relationship as one of the most critical factors for strategic operations. Parent-affiliate relationship refers to the level of dependency (e.g., degree of authorization, formalization, integration, and control) between multinational parent firms and their affiliates. Research has shown that the parent-affiliate

dependency will affect the organizational structure and the strategy choice of the subsidiary firms (Gates and Egelhoff 1986, Garnier 1982, Martinez and Jarillo 1989, Ghoshal and Nohria 1989).

Many other strategy related constructs may also have significant impacts on the strategic operations of international businesses. However, due to the focus of this dissertation, we will only concentrate on the above three constructs and their associations in this research.

Company Objectives

Missions, goals, and objectives are three major terms that have been frequently mentioned in the strategy literature. These terms always refer to more general and broader guidelines for the whole corporation, and are regarded as the core constructs of corporate strategy (Aaker 1988, Cravens 1987, Kotler 1988).

Corporate mission is the purpose or reason for the existence of the company. It determines the patterns of specific objectives for top management to achieve. These objectives are listed as an end result of planned activities. Since firms have to interact with many people and organizations (e.g., customers, suppliers, distributors, creditors, local communities, host governments, among others), the objectives of a firm should reflect these external forces and decide the logical fashion of priorities. Wheelen and Hunger (1986) illustrate some

possible objectives for the firms:

- Profitability (net profits)
- Efficiency (low costs, productivity, etc.)
- Growth (increase in total assets, sales, etc.)
- Shareholder wealth (dividends plus stock price appreciation)
- Utilization of resources (ROE or ROI)
- Contributions to customers (quality/price)
- Contributions to employees (employment security, wages)
- Contributions to society (taxes paid, participation in charities)
- Market leadership (market share, reputation)
- Technological leadership (innovations, creativity)
- Survival (avoiding bankruptcy)
- Personal needs of top management (using the firm for personal purposes, such as providing jobs for relatives)

Dess (1987), following the review of questionnaire items used by previous studies (Bourgeois 1980, Child 1975), developed a 15-item scale to measure company objectives:

- Net profit over five years
- Rate of sales growth
- Recognition as an innovative firm
- Retaining key personnel
- Employee satisfaction/morale
- Development of new products
- Net profit over one year

. Firm's prestige/reputation

. Market penetration

. Management development/selection

. Lowest cost relative to competitors

. Employee compensation and benefits

. Growth in assets and reserves

. Dividends distributed

. Community service/goodwill in community

Another stream of studies identified the company objectives by three categories as measured by market share (Abell and Hammond 1979, Burke 1984, Buzzell, Gale, and Sultan 1975):

. Build

. Hold

. Pull back

"Build" objective aims at increasing market share of the firm. "Hold" objectives focus on improving profitability without losing market position. "Pull back" objective concerns with increasing cash flow of the firm.

Walker and Ruekert (1987) identified three major dimensions for strategic objectives:

. Effectiveness: the relative success of a business products compared to those of the competitors. Thus the relative sales growth and market share growth are the major focus. Firms pursuing effectiveness are always more long term oriented with the objective of dominating market share.

- Efficiency: the outcome of a business program in terms of profitability (ROI, ROE, etc.) or sales volume. Firms pursuing efficiency are always more short term oriented with the objective of maximizing current profitability.
- Adaptability: the business success in responding to the changing environment. Thus, the growth of R & D and new product development are the major concerns. Firms pursuing adaptability focus on maintaining flexibility so that they can survive and lead in the next run of competition.

It is likely that many firms do not have clear, formal objectives. Rather, they have vague, verbal ones (Wheelen and Hunger 1986). Furthermore, firms always face substantial trade-offs in setting strategic objectives. "Good performance in one dimension often means sacrificing performance in another, no single strategy (typology) can be expected to perform well in all situations no matter how well it is implemented" (Walker and Ruekert 1987).

In summary, it appears appropriate to design multiple-item scales to measure "company objectives". Thus, the following items (variables) are identified in this study to measure the "company objectives" of the firm.

(1) Increasing market share

(2) Aggressiveness on sales growth

(3) Improving profitability (Net profit)

(4) Increasing cash flow

(5) Emphasis on resources utilization (e.g., ROE or ROI)

(6) Recognition as an innovative firm

(7) Retaining key personnel

(8) Employee satisfaction/morale

(9) Technological leadership

(10) Enhance firm's prestige/reputation

(11) Contributions to customers (e.g., quality/price)

(12) Management development/selection

(13) Employee compensation and benefits

(14) Growth in assets and reserves

(15) Contributions to shareholders (e.g., dividends distribution)

(16) Contributions to society (e.g., community services)

These variables are selected based upon their appearance in previous literature. A purification process was conducted in the pilot study to identify the dimensionality and reliability of the measure.

Competitive Strategies

The strategy of a firm specifies how a corporation will achieve its missions and objectives. It focuses on the creation of sustainable competitive advantages (Aaker 1988, Bourgeois 1980, Hofer and Schendel 1978, Day and Wensley 1988). Recent research on strategy has focused increasing attention on the development of typologies for the business unit. Such typologies were often referred to as generic strategies, gestalts, or strategic archetypes

(Fahey and Christensen 1986, Herbert and Deresky 1987, Robinson and Pearce 1988, Galbraith and Schendel 1983, Kim and Lim 1988). However, the number of possible strategy type and the characteristics of each typology vary widely from author to author.

Table I shows some of previous studies for business typologies. It is suggested that the number of possible strategy types and their characteristics are to a large extent dependent upon the objectives of the firm as emphasized by different authors (Galbraith and Schendel 1983). For example, Porter (1980) is concerned with profitability performance. Buzzell et al. (1975) emphasize market share performance. Hofer and Schendel (1978) focus on both profitability and market share performance. Wissema et al. (1980) are concerned with short term and long term objectives.

It is argued that most of these gestalt approaches are oriented predominantly toward the industrial organization discipline and use only a few variables to classify firms into strategic groups (Kim and Lim 1988, Robinson and Pearce 1988). Their reliability may be doubtful. Recent studies have been aware of these problems and try to identify the strategic patterns through the measures of multiple-item scales.

TABLE I

TYPOLOGIES OF BUSINESS STRATEGIES

Strategy Type	Characteristics of Strategy Type
Buzzell et al. (1975)	
. Building	High investment to increase market share
. Holding	Investment to maintain market share
. Harvesting	Low investment, cost controls to generate cash and profit
Utterback and Abernathy (1975)	
. Performance maximizing	Emphasize product, service, technology, and R&D
. Sales maximizing	Marketing emphasis to increase sales and share
. Cost minimizing	Emphasis process technology/ R&D to decrease cost
Hofer and Schendel (1978)	
. Share increasing	High investment to increase market share
. Growth	Maintain position in expanding markets
. Profit	Cost controls,throw off cash
. Market concentration	Realignment to focus on smaller segments
. Turnaround	Improve strategic posture
. Liquidation	Generate cash and withdraw
Wissema et al. (1980)	
. Explosion	Improve competitive position in short term
. Expansion	Improve competitive position in long term
. Continuous growth	Maintain position in expanding markets
. Slip	Give up market share to get cash in growing market
. Consolidation	Give up market share to get cash in stable market
. Contraction	Liquidate assets and terminate market position

TABLE I (Continued)

Strategy Type	Characteristics of Strategy Type
Porter (1980)	
. Cost leadership	Efficiency, experience curves, cost and overhead control
. Differentiation	Creating uniqueness in product and/or service
. Focus	Focusing on specific buyer groups, or markets
Galbraith and Schendel (1983)	
. Harvest	Low investment, price, quality, and promotion
. Builder	High investment, R&D, and promotion, share increasing
. Continuity	Stable on investment, production, lower risk
. Climber	Narrow product line, low price, high investment, R&D
. Niche	High service high quality, low advertising, high R&D
. Cashout	High price & quality, low R&D
Robinson and Pearce (1988)	
. Efficiency	Low cost, EOS, quality control, process innovation
. Service	Customer service, reputation, high end segment
. P/d innovation & development	New product development, specialty P/d, process R&D
. Brand & channel influence	Brand identification, channel integration, new product R&D
Kim and Lim (1988)	
. P/d differentiation	High price, differentiation, new P/d development
. Mkt differentiation	Marketing, high advertising, channel integration
. Cost leadership	Operating efficiency, EOS, purchasing power
. Focus	Brand image, high service, high quality

TABLE I (Continued)

Strategy Type	Characteristics of Strategy Type
Snow and Hrebiniak (1980)	
. Prospector	Pioneer, broad P/d line, care on competitor response high service, marketing oriented
. Defender	Stabilizer, narrow P/d line, high quality low price, maintain market share
. Analyzer	Stabilizer on existing P/d, emphasize both efficiency and innovation, product R&D
. Reactor	Miss application of strategy

Source: (1) Galbraith and Schendel (1983)
(2) This study

Table II shows the variables used to measure the strategic patterns of business operation in recent studies. It is the opinion of this research that multiple-item scales could be more comprehensive in catching the concepts of strategies. Thus, in this study, multiple-item scales are developed to reflect the multifaceted nature of the constructs for competitive strategies. Each variable was selected based on its appearance in previous literature and seemingly theoretical appropriateness to represent the concepts of competitive strategy (i.e., the face validity).

TABLE II

STRATEGIC VARIABLES FOR
COMPETITIVE STRATEGIES

Selected Strategy Variables	Previous Studies				
	G&S	D&D	DES	K&L	R&P
1. Pricing below competitors		V	V	V	V
2. New product development	V	V	V		V
3. Broad product range	V	V	V	V	V
4. Extensive customer service capabilities	V	V	V		V
5. Specific efforts to insure a pool of highly trained/experienced personnel	V	V	V		V
6. Extremely strict product quality control procedures	V	V	V		V
7. Continuing, overriding concern for lowest cost per unit	V				V
8. Maintaining high inventory levels		V	V		V
9. Narrow, limited range of products				V	
10. Building brand identification		V	V	V	V
11. Developing and refining existing products		V	V		V
12. Strong influence and control over channels of distribution	V	V	V	V	V
13. Major effort to insure availability of raw materials		V	V	V	V
14. Major expenditure on production process-oriented R & D					V
15. Only serve specific geographic markets		V	V		V
16. Promotion advertising expenditures above the industry average	V	V		V	V
17. Emphasis on the manufacture of specialty products		V	V	V	V
18. Concerted effort to build reputation within industry		V			V
19. Innovation in manufacturing process		V	V		V
20. Products in higher priced market		V	V	V	V

TABLE II (Continued)

Selected Strategy Variables	Previous Studies				
	G&S	D&D	DES	K&L	R&P
21. Products in lower priced market					V
22. Innovation in marketing techniques and methods		V	V		V
23. Product differentiation				V	
24. Market differentiation				V	
25. Acquiring high-caliber work force				V	
26. Marketing by credit and discount				V	
27. Achieving economics of scale				V	
28. Emphasis on operating efficiency		V	V	V	
29. Extensive marketing research		V			

Note: G&S: Galbraith and Schendel (1983)
D&D: Dess and Davis (1984)
DES: Dess (1987)
K&L: Kim and Lim (1988)
R&P: Robinson and Pearce (1988)

Although previous studies used similar variables to measure strategy constructs, the results of these studies do not agree as to the primary strategy variables. Table III shows the major dimensions of competitive strategy found by four recent studies (Dess and Davis 1984, Kim and Lim 1988, Robinson and Pearce 1988, Galbraith and Schendel 1983). It seems essential to integrate the results of this study and extend them to an international dimension.

TABLE III

MAJOR DIMENSIONS FOR COMPETITIVE STRATEGIES

Previous Studies	Major Dimensions Found
1. Dess and Davis (1984)	. Cost leadership . Differentiation . Focus
2. Kim and Lim (1988)	. Cost leadership . Product differentiation . Market differentiation . Focus
3. Robinson and Pearce (1988)	. Efficiency . Service . Product innovation and development . Brand and channel influence
4. Galbraith and Schendel (1983)	Consumer P/d: . Harvester, . Builder, . Continuity, . Climber, . Niche, . Cashout Industrial P/d: . Low commitment, . Maintenance, . Growth, . Niche

Source: This study

Parent-Affiliate Dependency

The parent-affiliate dependency refers to the extent to which parent firms exercise the power over their affiliates. This topic has recently emerged as an area of considerable research interest (Kogut 1985, Gates and

Egelhoff 1986, Garnier 1982, Martinez and Jarillo 1989, Ghoshal and Nohria 1989, Negandhi and Welge 1984, Doyle, Saunders, and Wong 1986). Yet, different studies tend to identify parent-affiliate relationships from different perspectives. For example, Gates and Egelhoff (1986) viewed centralization as the sole construct of parent-affiliate relationship. They operationalized this construct by identifying the level of centralization on the following functional decision making areas:

1. Marketing decisions
    - Product design, service, and guarantee
    - Product prices
    - Channel distribution
    - Selling methods, sales commissions and promotion
2. Manufacturing decisions
    - Production schedules and plans
    - Process innovation, plant expansion
    - Purchasing and subcontracting activities
    - Quality control decision
3. Financial decisions
    - Inventory level
    - Terms of credits
    - Financing of major expansion
    - Insurance policy

Garnier (1982) used "decision making autonomy" to characterize the concept of parent-affiliate relationship.

He contended that the age and size of the affiliate, the operational interdependence (e.g., percent of affiliate's sales going to the parent firm, and/or percent of affiliate's raw material coming from the parent firm), financial interdependence, and research interdependence are among several critical elements influencing parent-affiliate relationships.

Ghoshal and Nohria (1989) identified the following attributes as the primary factors for parent-affiliate relationships:

1. Centralization/decentralization of decision making through the hierarchy of decision authority;
2. Formalization/standardization of written policies, rules, job descriptions, and standard procedures through instruments such as manuals, tables, charts, etc.;
3. Normative integration/socialization of shared values between parent firms and their affiliates in terms of shared strategic objectives, involvements, bilateral visiting, etc.

Ghoshal and Nohria (1989) further suggested that the structure of parent-affiliate relationships depends on the nature of two contingencies: environmental complexity and local resources availability. Their empirical study shows that an integrative organizational structure fits subsidiaries with complex environments and abundant local resources; a hierarchical structure fits subsidiaries with

stable environment and limited local resources, and a federative (high formalization) structure fits subsidiaries with stable environment and abundant local resources.

Martinez and Jarillo (1989) further identified the "output and behavior control" as an additional factor for parent-affiliate relationships. Output and behavior control includes direct supervision and monitoring of financial performance, technical reports, sales and marketing data, etc.

Table IV shows the variables used to measure the parent-affiliate dependency in recent studies. As mentioned previously, multiple-item scales seems to be more comprehensive to represent the multifaceted nature of the constructs of parent-affiliate relationships.

The above discussions cover the related literature for the constructs of international business strategy including company objectives, competitive strategies, and parent-affiliate dependency. In the next section, relationships among these strategy related constructs will be evaluated.

Relationships among Strategy Related Constructs

The issue of associations between different strategic components have been discussed widely. Most of previous studies viewed strategy as a potential predictor of other organizational phenomena (Hambrick 1980):

TABLE IV

SELECTED VARIABLES FOR PARENT-AFFILIATE RELATIONSHIPS

Selected Variables	Major Studies			
	G&N	M&J	G&E	GAR
1. Delegation of authority	V		V	V
2. Provide supporting activities		V		
3. Communication and bilateral visiting	V	V		
4. Provide well-defined rules and policies	V	V		V
5. Provide operational manuals for different situations	V	V	V	V
6. Involvement on planning process			V	V
7. Continue monitoring	V	V		
8. Tough cost and budget control	V	V		V

Note: G&N: Ghoshal and Nohria (1989)
M&J: Martinez and Jarillo (1989)
G&E: Gates and Egelhoff (1986)
GAR: Garnier (1982)

. Different patterns of strategy will result in different organizational performance (Hatten, Schendel, and Cooper 1978, Walker and Ruekert 1987, Lee 1988);

. Different patterns of strategy need different types of organizational structure to implement specific strategy (Walker and Ruekert 1987, McDaniel and Kolari

1987);

. Different patterns of strategy should match with different functional behaviors, including marketing, finance, production, R&D, etc. (Hofer 1975, Hofer and Schendle 1978, McDaniel and Kolari 1987).

Only a very limited number of studies focus on the associations among different strategy constructs. Specifically this study concentrates on identifying the relationships among company objectives, competitive strategies, and parent-affiliate dependency. The following sections will evaluate these relationships.

Company Objectives and Competitive Strategies

Porter's (1980) generic strategies and Miles and Snow's competitive strategies were two highly accepted typologies that have generated many empirical investigations. White (1986) argued that firms pursuing short term objectives should adopt cost leadership strategy to exploit cost advantages through standardization, production automation, economics of scale, integration of supplier and channels, etc. On the other hand, firms pursuing long term objectives should adopt differentiation strategy to enhance innovation, technological advancement, product quality/reputation, etc.

Studies from Miles and Snow (1978), Snow and Hrebiniak (1980), Hambrick (1983), McDaniel and Kolari (1987), Hendon

(1981), Kirchoff and Kirchoff (1980), Phillips, Chang, and Buzzell (1983), and many others have addressed more issues on the relationship between company objectives and competitive strategies. For example, the prospector's strategy is found to be more marketing orientation toward finding new product and market opportunities for the long run. On the other hand, the defender's strategy is found to be relative lacking in marketing orientation. This strategy focuses on more short term efficiency toward exploiting cost advantages.

Competitive Strategies and Parent-Affiliate Dependency

The relationships between strategy and structure have been evaluated by many studies (Miller 1987, Porter 1980, Dalton et al. 1980, Pugh, Hickson, and Turner 1968, McDaniel and Kolari 1987, Snow and Hrebiniak 1980, Chandler 1962, Ruekert, Walker, and Roering 1985, Zeithmal and Fry 1984). Miller (1987) argued that particular strategy and structure commonly went together. Firms focusing on market differentiation tended to have a centralized, formalized, and integrated organizational structure. Firms emphasizing complex process innovation tended to be more decentralized but integrated.

McDaniel and Kolari (1987) contended that firms adopting a prospector's strategy tended to be more decentralized but specialized, while a defender's strategy

tended to be more centralized. Porter (1980) argued that firms with cost leadership strategy tended to have a more structured organization with tight control system and clear responsibility, while firms with differentiation strategy tended to have an organic or unstructured organization with high marketing orientation and high level of coordination and integration among functional areas.

Walker and Ruekert (1987) argued that a prospector's strategy sought to succeed in the long run through effectiveness (e.g., increase market share) and adaptability (e.g., new product development). A defender's strategy emphasized short term profitability through maximizing efficiency.

Firms with different investment origins are also found to have significantly different strategic orientation to their business operations. Comparatively, the U.S. firms emphasize more short term profitability (Craig, Douglas, and Reddy 1987), while the Japanese firms focus more on incremental process innovation and technological advancement (Ouchi and Johnson 1978).

It is hypothesized in this study that firms adopting different patterns of strategy tend to exercise different level of parent-affiliate dependency. Firms adopting cost leadership or defender's strategy may have a higher level of parent-affiliate dependency. On the other hand, firms adopting differentiation or prospector's strategy tend to have a lower level of parent-affiliate dependency.

Company Objectives and Parent-Affiliate Dependency

The associations between company objectives and parent-affiliate dependency have been neglected in previous literature. However, this association is very important for international business strategy. It is proposed that MNC subsidiaries with long term orientation will need a lot of supporting activities from the parent firms, thus, a higher level of parent-affiliate dependency is required. On the other hand, firms with short term orientation will emphasize current profitability. Thus, a lower level of parent-affiliate dependency may be appropriate.

Strategic Contingencies

Contingency theories argue that the appropriateness of different strategies depended on strategic situations (Porter 1985, Prescott 1986). Thus, both the firm's strategy and its strategic situations are considered to have significant effects on performance (Gatignon and Anderson 1987, Anderson and Coughlan 1987, Bilkey 1978, Cvar 1984, Davison 1982, Douglas, Craig, and Keegan 1986, Ginsberg 1984, Ginsberg and Venkatraman 1985, Gupta and Govindarajan 1984, Green and Allaway 1985, Harrigan 1983, Root 1987, Sharma, Durand, and Gur-Arie 1981). Cravens et al. (1989) identified four major contingencies for international strategic situations:

1. Environmental attractiveness: including economic

conditions, political/legal favorability, technological strengths, and socio-cultural similarity;

2. Industry competition: including competitive intensity, industry attractiveness, and industry growth and size;
3. Product/market opportunities: including product life cycle, market growth, market size, service requirement, and buyer fragmentation;
4. Organizational strengths: including available resources and skills, foreign operation experience, market share, cost advantages, corporate diversity, industry type, etc.

Key constructs and relationships for the strategic contingencies are further evaluated in the following sections.

Environmental Attractiveness

Environmental characteristics of the foreign markets have been regarded as one of the most critical issues for multinational operations (Day and Wensley 1983, Anderson and Gatignon 1986, Ghoshal 1987, Jain 1985, 1987, 1989, Wind and Perlmutter 1977, Wind, Douglas, and Perlmutter 1973, Lawrence 1967, Axinn 1988, Biggadike 1981, Bonoma 1984, Cave 1981, Beaghan 1987, Baldridge and Burnham 1975, Zeithaml and Zeithaml 1984, Kobrin 1987). Among others, four elements are considered to be the most important issues for the environmental attractiveness of a foreign

market:

. Economic conditions

. Political/legal favorability

. Technological strength

. Socio-cultural similarity

The economic environment reflects the industrial structure and income distribution of the host country. Industrial structure shapes the product and service requirements, income level, and employment level of a potential market. Income distribution indicates the purchasing power and market size of the host country. The legal and political environment includes factors such as political stability, government bureaucracy, tax and monetary regulations, etc. Technological strengths focus on factors such as level of skills of the workforce, patent protection, cumulative foreign business experience, etc. Socio-cultural distance refers to the similarity of popular attitudes and values between the parent country and the host country. This issue has created a lot of attention (Schiffman, Dillon, and Ngumah 1981, Terpstra 1978, 1985, Rokeach 1973, Lee 1988, Jauch and Kraft 1986, Jauch and Glueck 1980). Each country has cultural traditions, preferences, and taboos that differentiate it from other foreign countries (Renon 1984).

Thus, for subsidiaries of multinational companies located in the overseas marketplace, the environmental conditions of the host country could be the most essential

factors for their success. For this reason, one must control this factor by selecting the sample firms from similar environmental conditions. Since all sample firms in this study are the American, Japanese, European, and Taiwanese firms operating in Taiwan, they should face on similar economic conditions, political/legal favorability, and technological skills. Consequently, the issues of environmental attractiveness will not be considered in this study.

Industry Competition

Industry and competition analyses focus on competition intensity, industry attractiveness, industry growth, and industry size (Kotler 1988). Competition intensity concerns on how intensely a firm competes with the reference product and how similar the competitor's strategies are. Factors considered in previous research are the size and number of competitors, mobility barriers, etc.

Industry attractiveness refers to the degree of favorability of the industry for the firm. It is usually affected by the extent to which the firm holds key success factors in relation to competitors. Industry growth and size refer to the trends and potential of the industry.

Industry characteristics have been recognized as major determinants of competitive activities and strategies (Biggadike 1981, Kotler 1988). Alderson (1965) viewed

industry competition as a struggle for differential advantage over other firms. Day and Wensley (1983) suggested that both customers and competitors are key factors for strategic contingencies.

However, most previous studies (Burke 1984, Anderson and Zeithaml 1984, Hambrick 1983, Galbraith and Schendel 1983) focused on the relationships between industry competition and business performance (ROI) rather than the relationships between industry competition and strategic variables. Thus, it is the intent of this study to verify these relationships.

Product/Market Opportunities

The following elements are the major concerns of the characteristics of the product/market opportunities:

- Product life cycle
- Market growth
- Market size
- Market homogeneity
- Buyer fragmentation

Many studies have attempted to identify the relationships between product life cycle and competitive strategy (Kotler 1988, Porter 1980, Hofer 1975, Biggadike 1981, Anderson and Zeithaml 1984, Abell and Hammond 1979). It is argued that certain patterns of strategies are appropriate at certain stage of product life cycles. But the research results do not fully confirm this assumption. The major problems may

be that different industry types (e.g., steel industry vs. semi-conductor industry) tend to have different patterns of product life cycles and thus result in adopting different competitive strategies.

Market growth rate and market size are other contingencies for business strategy. It is suggested that market with higher growth rate and larger market size tends to be more attractive (Abell and Hammond 1979). It is also shown that market growth rate appears to have a more significant relation to business performance of firms in European than in the U.S. (Negandhi and Welge 1984). But research has not investigated the relationships between business strategy and market growth and size.

Market homogeneity and buyer fragmentation are other important market characteristics. Market homogeneity refers to the similarity of customer preference on product attributes, features, prices, services, etc. Buyer fragmentation indicates the size of customer distribution in terms of purchasing amount. It is argued that in a higher homogeneous and concentrated market, buyers tend to have more bargaining power (Porter 1980, Biggadike 1981, Burke 1984, Buzzell, Gale, and Sultan 1975), and consequently firms tend to have more restrictions to adopt a desired strategy.

In sum, though the major variables and factors for product/market characteristics have been widely reviewed, the relationships between product/market characteristics

and other strategic related variables were not fully clarified. It is the intent of this study to further evaluate these relationships.

Company Characteristics

Company characteristics for overseas MNC subsidiaries refer to factors such as investment origins, available resources, company size, market share, ownership structure, operation history (age), industry types, etc. The strategic operations of MNCs between different national origins have been widely discussed (Hitt, Ireland, and Stadtar 1982). It is shown that U.S. parent firms tend to exercise higher centralization, formalization, and control over their affiliates than non-U.S. parent firms (Negandhi and Welge 1984, Negandhi and Prasad 1971). In addition, U.S. firms are found to be more marketing oriented that spend more promotional expenditure and consequently sell products with same grade in higher prices (Craig, Douglas, and Reddy 1987). On the other hand, Japanese firms are more process oriented and emphasize technological advancement and productivity enhancement (Ouchi and Johnson 1978).

Ownership structure, company size, and operation history (age of local affiliate) are found to be the main predictors of autonomy (Garnier 1982). Market share generally indicates the cost position and competence of a firm, and it has long been identified as a key to

profitability (Buzzell, Gale, and Sultan 1975). Industry types are also found to be the major factor for the selection of competitive strategy (Porter 1980, 1985).

The above discussions cover the key constructs and relationships between strategy choice and various environmental, industry, market, and organizational contingencies. It is shown that most of previous research has focused on the strategic operations in domestic markets and did not integrate the contingency variables into more consolidated dimensions. Thus, one of the purposes of this study is to comprehensively examine the relationships between contingency variables and strategic variables. The next section proposes an integrated approach for these relationships.

An Integrated Research Agenda

The preceding discussion has identified the components and relationships for the strategic operations of MNC subsidiaries. It has also evaluated the contingency relationships between strategic variables and various industry, product/market, and company variables. In this section, an attempt is made to integrate the results of previous research and develop a research agenda for this study.

It is proposed that the performance of a business could be influenced by: (1) the attractiveness of the environment (including industry competition), (2) the

competitive position of the firm, and (3) the management skills of the executives (Walker and Ruekert 1987). Thus,

Business Performance = f (Strategic Operations) x (Strategic Contingencies)

Furthermore, this study has considered strategic operations as factors that could be basically under the control of business executives, but views strategic contingencies as primary determinants of business performance. Executives should adjust strategy and structure to "react" on various conditions of the environment (Zeithaml and Zeithaml 1984). Thus

Strategic Operations = f (Strategic Contingencies)

This study focuses on relationships between strategic variables and contingency variables. We have identified company objectives, competitive strategies, and parent-affiliate dependency as three critical factors for the strategic operations of MNC subsidiaries. We have also identified industry competition, product/market opportunities, and company strengths as three major contingency factors that may predict the strategic behaviors of MNC subsidiaries.

Performance is not included in the study. There is a number of reasons for this omission. First, it is extremely difficult to secure adequate measures of performance. Executives tend to hesitate in answering the

business performance questionnaires (i.e., average Profitability, ROI). Also, in the multinational setting, such concepts are difficult to separate between performances of the parent firms and their affiliates. Second, Strategic operations are, by definition, relative long term in nature. In many cases, there is a time lag between strategy implementation and performance achievement. With a cross-sectional research design, it is very difficult to overcome the timing issues in this study. Based on the above discussions, the following research agenda is developed for this study:

Research Question 1

"What are the perceived similarities and differences on different strategic operation variables and strategic contingency variables among American, Japanese, European, and Taiwanese firms?"

- Company objectives
- Competitive strategies
- Parent-affiliate dependency
- Industry competition
- Product/market opportunities
- Company characteristics

Research Question 2

"What are the relationships between specific patterns of competitive strategies and different orientations of company objectives?"

Research Question 3

"What are the relationships between specific patterns of competitive strategies and different levels of parent-affiliate dependency?"

Research Question 4

"What are the relationships between specific types of company objectives and different levels of parent-affiliate dependency?"

Research Question 5

"What specific patterns of competitive strategies, company objectives, and parent-affiliate dependency are associated with specific characteristics of industry competition, product/market opportunities, and organizational strengths?

CHAPTER III

RESEARCH HYPOTHESES AND METHODOLOGY

Introduction

This chapter first presents a conceptual model of international business strategies that suggests general relationships among strategic variables and contingency variables. Hypotheses that guide the research are then discussed. The construct measurements for strategic operations and strategic contingencies; including company objectives, competitive strategies, parent-affiliate dependency, industry competitions, product/market opportunities, and company characteristics are outlined. Finally, the research design, including the sampling plan, data collection, and data analysis techniques are described.

The Conceptual Model

A proposed conceptual model for this study is shown in Figure 2. It is indicated that, among others, the most critical factors for the strategic operations of MNC subsidiaries are: (1) the goals and objectives a firm selected; (2) the competitive strategies a firm adopts; and (3) the level of dependency between the multinational

parent firms and their affiliates. It is further assumed that there are certain relationships among company objectives, competitive strategies, and parent-affiliate dependency, as noted by the directional lines linking research variables.

The characteristics of industry competition, product/market opportunities, and company strengths may serve as important elements for the strategic operations of MNC subsidiaries. In other words, these strategic contingencies will impact the firm's selections of company objectives, the emphasis of competitive strategies, and the degree of parent-affiliate dependency. Figure 2 also suggests that the conditions of strategic contingencies and the quality of strategic operations jointly determine the performance of the organization, though the performance item is not included in the scope of this study.

Based on this conceptual model, research variables for strategic operations and strategic contingencies will first be identified. Research questions as shown in Chapter II will be operationalized in the following sections. This study focuses on the opinions of the managers of MNC subsidiaries rather than those of the parent firms. The reason for this focus is mainly that previous studies have emphasized the opinions of the parent firms. The results of this study can serve as a comparison and validation from different perspectives.

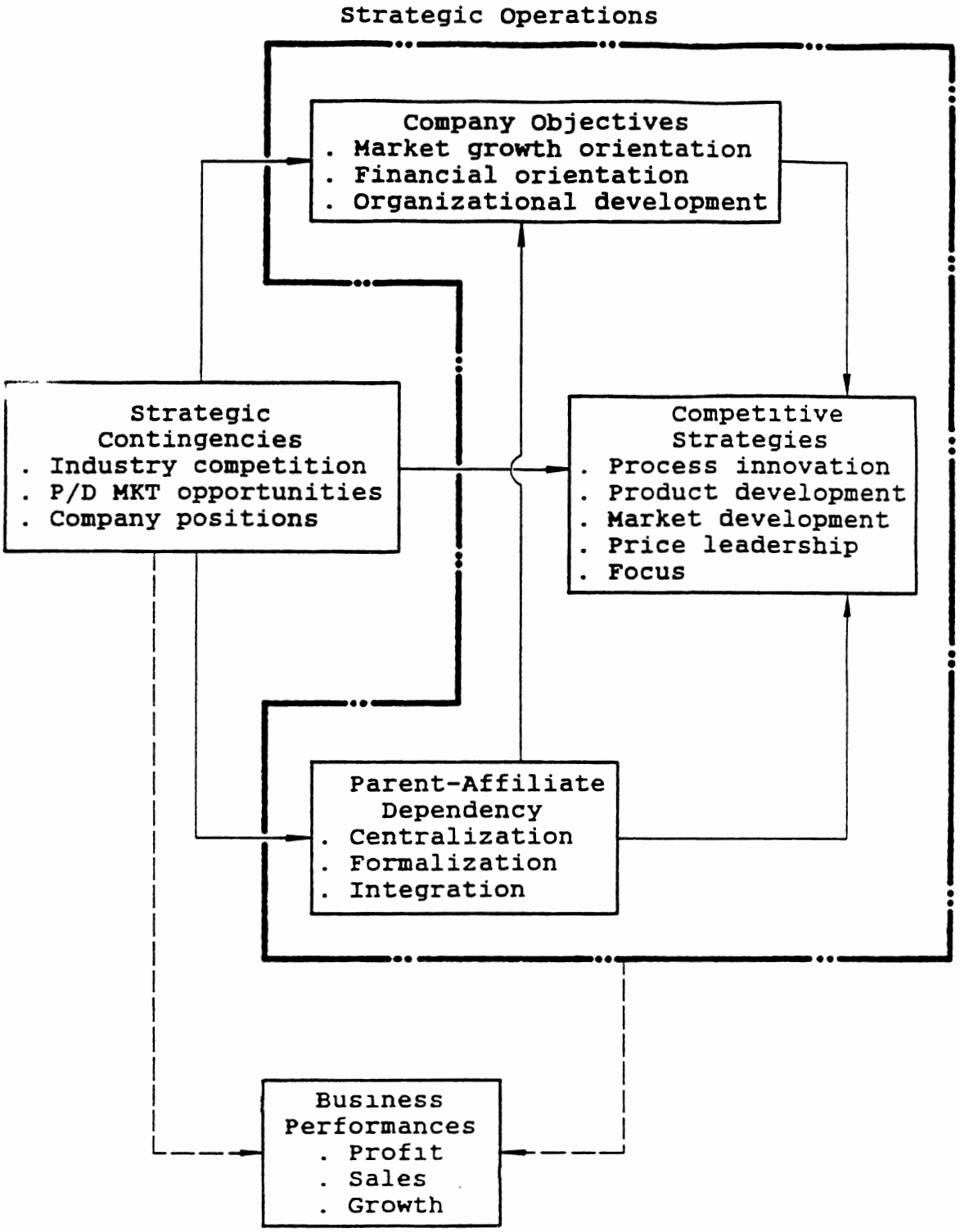

Figure 2. Conceptual Model of Strategic Relationships

Hypotheses to be Tested

The literature review indicated that there would be some potential relationships between competitive strategies, company objectives, and parent-affiliate dependency. It also suggested that the characteristics of several contingency variables might be critical for the selections of specific strategic components.

Based on the results of previous studies, the hypothesized relationships between variables are presented in Figure 2. It is proposed that, in general, firms should identify company objectives, competitive strategies, and parent-affiliate relationships based upon the conditions of the exogenous and intrinsic environments, including industry competition, product/market opportunities, and company characteristics. In other words, the strategic operations of a firm will vary depending upon various contingency environments. Thus, contingency variables will serve as predicting variables for the adoption of strategy.

Furthermore, it is proposed that there are specific relationships between company objectives, competitive strategies, and parent-affiliate dependency. For a strategic operation to be successful, the firm should carefully select or adopt specific combination of strategic components in such a way that a harmonic and consistent pattern of strategy will result. This is referred to as the concept of "strategic fit" in strategy literature.

Finally, the primary purpose of this study is to

evaluate the similarities and differences of strategic operation and strategic contingency variables among American, Japanese, European, and Taiwanese firms operating in Taiwan. Thus, comparisons of these variables should be conducted. Specifically, five sets of hypotheses are formulated and will be evaluated through empirical validation in this study.

Hypothesis I: Comparisons of strategic variables among American, Japanese, European, and Taiwanese firms operating in Taiwan (see Table V as a summary).

H1 : Firms with different investment origins tend to operate differently on the strategic components of company objectives, competitive strategies, and parent-affiliate dependency.

H1-1 : American MNC subsidiaries in Taiwan tend to operate in the following ways:

- More financial oriented;
- Emphasize product development and market development strategies;
- Have a parent-affiliate dependency with higher levels of centralization/formalization but lower levels of coordination/integration.

H1-2 : Japanese MNC subsidiaries in Taiwan tend to operate in the following ways:

- More organizational development oriented;
- Emphasize process innovation and product

development strategies;

. Have a parent-affiliate dependency with lower levels of centralization/formalization but higher levels of coordination/integration.

TABLE V

COMPARISONS OF HYPOTHESIZED PATTERNS OF STRATEGIC OPERATIONS

Strategic Components	Company Objectives	Competitive Strategies	P-A* Dependency
American firms	Financial orientation	Market/product development	Low C/F High C/I
Japanese firms	Organizatnl development	Process innovation Product development	Low C/F High C/I
European firms	Organizatnl development	Product development Focus	Low C/F High C/I
Taiwanese firms	Market growth	Price leadership Market development	N/A

* Note: C/F: Centralization/Formalization
C/I: Coordination/Integration

H1-3 : European MNC subsidiaries in Taiwan tend to operate in the following ways:

. More organizational development oriented;

. Emphasize product development and focus strategies;

. Have a parent-affiliate dependency with lower

levels of centralization/formalization but higher levels of coordination/integration.

H1-4 : Taiwanese firms in Taiwan tend to operate in the following ways:

. More market growth oriented;

. Emphasize price leadership and market development strategies.

Hypothesis II: Relationships between competitive strategies and company objectives.

H2 : MNC subsidiaries with different company objectives tend to chose different competitive strategies.

H2-1 : MNC subsidiaries identifying a market growth objective tend to emphasize price leadership and market development strategies.

H2-2 : MNC subsidiaries identifying a financial objective tend to emphasize product development and market development strategies.

H2-3 : MNC subsidiaries identifying an organizational development objective tend to emphasize process innovation and product development strategies.

Hypothesis III: Relationships between competitive strategies and parent-affiliate dependency.

H3 : MNC subsidiaries with different parent-affiliate dependency tend to emphasize different competitive strategies.

H3-1 : MNC subsidiaries having a parent-affiliate

dependency with lower levels of centralization/ formalization but higher levels of coordination/ integration tend to emphasize process innovation and product development strategies.

H3-2 : MNC subsidiaries having a parent-affiliate dependency with higher levels of centralization/ formalization and higher levels of coordination/ integration tend to emphasize market development strategy.

H3-3 : MNC subsidiaries having a parent-affiliate dependency with higher levels of centralization/ formalization but lower levels of coordination/ integration tend to emphasize price leadership and focus strategies.

Hypothesis IV: Relationships between company objectives and parent-affiliate dependency.

H4 : MNC subsidiaries with different parent-affiliate dependency tend to identify different company objectives.

H4-1 : MNC subsidiaries having a parent-affiliate dependency with higher levels of centralization/ formalization and higher levels of coordination/ integration tend to identify market objectives.

H4-2 : MNC subsidiaries having a parent-affiliate dependency with higher levels of centralization/ formalization but lower levels of coordination/

integration tend to identify financial objectives.

H4-3 : MNC subsidiaries having a parent-affiliate dependency with lower levels of centralization/ formalization but higher levels of coordination/ integration tend to identify organizational development objectives.

Hypothesis V: Relationships between strategic operation variables and strategic contingency variables.

H5 : MNC subsidiaries facing different contingency environments tend to identify different company objectives, competitive strategies, and parent-affiliate dependency.

H5-1 : The characteristics of the competitive environment (industry competition, industry attractiveness, and industry growth) will influence the selection of company objectives, competitive strategies, and parent-affiliate relationships of MNC subsidiaries.

H5-2 : The characteristics of product/market opportunities (product market growth, product maturity, market share, market share growth, buyer fragmentation, and service requirements) will influence the selection of company objectives, competitive strategies, and parent-affiliate relationships of MNC subsidiaries.

H5-3 : The characteristics of company positions (ownership structure, annual sales volume, number of employees, operational dependency, operation history (age), and product types) will influence the selection of

company objectives, competitive strategies, and parent-affiliate relationships of MNC subsidiaries.

Construct Measurement

The above hypotheses necessitate the measurement of strategic operation and strategic contingency constructs. For the purpose of this study, the following six major strategic factors are operationalized in this study:

- Company objectives
- Competitive strategies
- Parent-affiliate dependency
- Industry competition
- Product/market opportunities
- Company characteristics

To enhance reliability, multiple-item scales are designed to measure the multifaceted nature of each of the above constructs (Venkatraman and Grant 1986, Venkatraman and Ramanujam 1985). This section illustrates the measurement methods for these constructs.

Company Objectives

A review of questionnaire items used by previous studies, including (1) Bourgeois 1980, 1984, (2) Dess 1987, (3) Child 1975, (4) Khandwalla 1976, and (5) Wheelen and Hunger 1986, was taken to determine the variables of company objectives for this study. Multiple-item scale including 16 variables was developed to operationalize the

concepts of company objectives.

(1) Increasing market share

(2) Aggressiveness on sales growth

(3) Improving profitability (Net profit)

(4) Increasing cash flow

(5) Emphasis on resources utilization (e.g., ROE or ROI)

(6) Recognition as an innovative firm

(7) Retaining key personnel

(8) Employee satisfaction/morale

(9) Technological leadership

(10) Enhance firm's prestige/reputation

(11) Contributions to customers (e.g., quality/price)

(12) Management development/selection

(13) Employee compensation and benefits

(14) Growth in assets and reserves

(15) Contributions to shareholders (e.g., dividends distributed)

(16) Contributions to society (e.g., community services)

Respondents are asked to indicate the degree of importance to their firms on each of the above items using a five point scale (1 represents that this item is "not at all important", and 5 represents that this item is "extremely important").

Competitive Strategies

As discussed in chapter II, recent research on competitive strategies has focused on the development of

typologies for the firm. Yet, previous studies did not develop a comprehensive framework to identify relevant dimensions for a firm's competitive strategies. Thus, in this study, strategic dimensions proposed by Porter (1980), Miles and Snow (1978), Walker and Ruekert (1987), Robinson and Pearce (1988), Dess and Davis (1984), etc. serve as an important reference for the creation of listing items for this study. The following 26 items were selected to characterize different competitive strategies of the firm:

(1) Pricing below competitors

(2) Developing new products

(3) Providing a broad assortment of products

(4) Providing extensive customer services

(5) Strict product quality control

(6) Achieving the lowest cost position in the industry

(7) Providing narrow range of products

(8) Building brand identification

(9) Refining existing products

(10) Control over channels of distribution

(11) Major expenditure on production process-oriented R & D

(12) Focusing on a few segments within our geographic market

(13) Promotion advertising expenditures above the industry average

(14) Manufacturing of specialty products

(15) Concerted effort to build reputation within industry

(16) Innovation in manufacturing process

(17) Offering products in higher priced market segments

(18) Offering products in lower priced market segments

(19) Innovation in marketing techniques and methods

(20) Emphasis on market penetration

(21) Quick delivery and immediate response to customer orders

(22) Acquiring high-caliber work force

(23) Marketing by credit and discount

(24) Investing in new facilities to gain a competitive advantage

(25) Emphasis on production efficiency

(26) Extensive marketing research

Respondents are asked to indicate the degree to which their firms emphasized each of the above 26 competitive methods on five-point Likert scales (the anchor points are that 1 represents that this item is "not considered", and 5 represents that this item is a "major, constant emphasis" item for the strategic operations of the firm during the past few years).

Parent-Affiliate Dependency

In this study, the following 10 variables were selected to measure the extent of parent firm's influence on various decision situations of the affiliates:

(1) In general, delegation of authority from the parent firm for major decision making is limited.

(2) The parent firm has provided a lot of supporting activities to our firm.

(3) The parent firm frequently sent people to our firm, and vice versa.

(4) The parent firm has provided a fairly well-defined set of rules and policies.

(5) There are manuals provided from parent firm to define most of the courses of action to be taken under different situations.

(6) The parent firm has been highly involved in the planning process of our firm.

(7) The parent firm continuously monitors to ensure that rules and policies are not violated.

(8) The parent firm has a very tough cost and budget control system to our firm.

(9) The Communication and coordination between our firm and the parent firm is good.

(10) The parent firm gave us a very high flexibility to adapt to dynamic environment.

Questionnaire items used by previous studies (Ghoshal and Nohria 1989, Gates and Egelhoff 1986, Herbert 1984, Miller 1986, 1987, etc.) were selected for this study. Five-point Likert scales were developed to measure the opinions of respondents on all listing items in this section. The anchor points are that 1 represents that the respondent "strongly disagrees" with the statement, and 5 represents that the respondent "strongly agrees" with the statement.

Industry Competition

Competition among firms is the driving force of industry dynamics. It is one of the most important characteristics for determining company strategies, especially for firms operating in the overseas marketplace. However, previous research tend to use different variables

to identify competition. Porter (1985) used 44 variables to measure five major competitive forces: (1) entry barriers; (2) supplier power; (3) buyer power; (4) substitution threat; and (5) intensity of rivalry. In this study, four variables were used to identify the industry competition of MNC subsidiaries. Questionnaire items were designed as follows:

(1) Competition among firms in our industry was intense.

(2) Most sales in our industry was made by just a few firms.

(3) Our industry was very attractive in terms of size, growth, and margins.

(4) The sales growth of our industry was very high.

Five-point Likert scales were developed to measure the opinions of respondents on all listing items in this section. A 1 represents that the respondent "strongly disagrees" with the statement, and 5 represents that the respondent "strongly agrees" with the statement.

Product/Market Opportunities

To verify the characteristics of product/market opportunities, six variables were identified in this study: (1) product life cycle; (2) product/market growth; (3) market share; (4) market share growth; (5) buyer fragmentation; and (6) service requirements. Specifically, the following questionnaire items were developed:

(1) Our products/markets grew substantially.

(2) Most of our products/markets were in the mature stage

of product life cycle.

(3) The market share of our products was very high.

(4) The market share of our products grew rapidly.

(5) Our products/markets consisted of many small volume buyers.

(6) The products needed more services.

Five-point Likert scales were developed to measure the opinions of respondents on all listing items in this section. A 1 represents that the respondent "strongly disagrees" with the statement, and 5 represents that the respondent "strongly agrees" with the statement.

Company Characteristics

Previous research has shown that the characteristics of company positions may serve as important factors for their strategic operations. Thus, the following variables were identified to measure the position of MNC subsidiaries:

(1) Ownership structure of MNC subsidiaries

- Percent of capital provided by the parent firm
- Percent of capital provided by Taiwanese share holders

(2) Size of MNC subsidiaries

- Total capital
- Total number of employees
- Average annual sales volume

(3) Operation history (age) of MNC subsidiaries

(4) Product types: Respondents were asked to list five

major products that were eventually classified into thefollowing product categories)

- Industry products
- Consumer products

(5) Distribution of Customers

- Amount percent of sales transferred to parent firm
- Amount percent of sales exported to other countries
- Amount percent of sales sold domestically

Questionnaire Design

Based on the above discussions, a 6-page, 76-item survey questionnaire was developed to obtain the responses from the CEOs, presidents, vice presidents, managers, and strategic staffs about their opinions on various strategic operation and strategic contingency variables; including company objectives, competitive methods, parent-affiliate dependency, industry competition, product/market opportunities, and company characteristics. To match questioning with different national origins of management people, English, Japanese, and Chinese versions of the questionnaires were designed and sent to the executives of the American/European, Japanese, and Taiwanese firms, respectively. The English and the Chinese version of the questionnaires were designed by this researcher. The Japanese version of the questionnaire was translated by two gentlemen: a director of one MNC subsidiaries in Taiwan and

a professor of one national university in Taiwan. Both of them are of Japanese origin and both know English and Japanese very well. Readjustments were made if the results of the translation terms diverged or were misleading. The questionnaire was pretested through a pilot study conducted earlier. Questionnaire items were revised based on the results of the pilot study before being put into the final form. The content of the questionnaire is shown in Appendix A.

Research Design

The research plan is designed to test the hypotheses as mentioned earlier. First, the sampling plan is presented. Next, data collection methods are described. Finally, the steps of data analysis are outlined.

Sampling Plan

A Sampling plan was developed to ensure that certain types of MNC subsidiaries were included in this study. This study selected multinational subsidiaries in Taiwan for our sample due to the following reasons:

(1) Taiwan was one of the export oriented countries that have established plenty of incentives for foreign investments;

(2) As guided by inherent cultural background and by the policy of the goverment, industry concentrations in Taiwan were comparative lower than those of Japan and

korea. Thus rather than a few huge company dominated, many small to medium size firms existed in the marketplace;

(3) Taiwan had good connections with both Japan and the U.S. Since Taiwan was the colony of Japan during 1895-1945, and then the close ally of the U.S. after the second world war.

Following a review of previous similar studies, four criteria were used to select the target firms of this study:

(1) Only manufacturing firms are selected;

(2) For American, Japanese, and European MNC subsidiaries, the amount of capital provided by the parent firm exceeds 50 percent of the firm's total capital;

(3) The total employee of the firm exceeds 100;

(4) The total sales volume of the firm exceeds 1.5 million U.S. dollars.

The following sources of the lists of MNC subsidiaries and local firms were used as the sampling frame of this study:

(1) The U. S. Firms in Taiwan (1989-1990);

(2) The Japanese Firms in Taiwan (written in Japanese, 1987-1988);

(3) The European Firms in Taiwan (1989-1990);

(4) The Top 1000 Manufacturing Firms in Taiwan (written in Chinese, 1989-1990).

Based on the above criteria, 1050 qualified firms were selected from the sampling frame. Stratified sampling was adopted in this study. Each 300 firms were selected from American, Japanese, and Taiwanese strata, respectively. However, since the number of European firms is smaller, only 150 firms were selected from European stratum. Respondents were asked to evaluate the relevant strategic operations and strategic contingency variables referred to the conditions of their firms. The target populations are the CEOs, presidents, vice presidents, managers, and strategic staffs of the American, Japanese, European, and Taiwanese firms operating in Taiwan.

Data Collection

A mail survey was conducted to identify managers' perceptions on various strategic related variables. The procedures of the mail survey were as follows:

(1) A pilot study was conducted before the official survey to evaluate the content and reliability of the questionnaire items. Each 200 American and Japanese firms were selected for the pilot study. A cover letter from this researcher was attached, asking the respondents to evaluate some relevant variables for the strategic operations of their firms.

(2) In the pilot study, seventy one usable questionnaires were obtained, producing a response rate of 18.2% for the pilot study. Purification processes, including

factor analysis and correlation analysis, were conducted to identify the reliability of the measurement scales. Revisions of questionnaire items were made and a final survey instrument was concluded.

(3) The results of the pilot study were summarized and sent together with the final survey instrument to the president of sample firms. A cover letter from this researcher and the advisor of this study - Dr. Stephen J. Miller was attached, asking the respondents to evaluate relevant strategic operation and strategic contingency variables. A pre-stamped business reply envelope was included.

(4) To substantiate the response rate and response quality, follow-up telephone calls were conducted for most of sample firms during the final survey period.

(5) The total data collection period including the pilot study, the analysis and summary of the pilot study, and the final survey, took a seven and one half month span of time.

Data Analysis Procedures

Analyses of the data were conducted in two major steps. In the first step, Churchill's (1979) "procedures for Developing Better Measures" was adopted to purify the measurement scales and to identify their dimensionality.

Three techniques were used for the purpose of purification: item to total correlation, coefficient alpha, and factor analysis (Nunally 1976).

(1) Item to total correlation was used to identify the extent of the common core that a variable belongs to the domain of the concept (i.e., the dimension). Coefficient alpha is used to measure the internal consistency of each dimension;

(2) Principal components factor analysis with varimax rotation was conducted to confirm the dimensionality of the construct;

(3) Reliability of the measures was assessed by coefficient alpha (Zeller and Carmines 1980).

This step of analysis aims at verifying the reliability and dimensionality of the constructs.

In the second step, the relationships between research variables were assessed to test the hypotheses as stated above. The following statistical techniques were employed:

(1) Analysis of variance (ANOVA) was employed to distinguish the differences among variables or groups. The F-ratios were calculated to tell whether there were differences among various comparison groups. If it showed that the differences were significant, then Duncan's multiple range comparison test was used to discover the differences among groups;

(2) Multiple regression analyses (MRA) were employed to

verify the relationships among strategy-related constructs and the relationships between strategic variables and contingency variables.

The above forms of data analysis were conducted from SAS statistical packages. Table VI shows the statistical techniques employed in this study to test each of the above-mentioned hypotheses:

TABLE VI

THE STATISTICAL TECHNIQUES FOR THE HYPOTHESES

Item No.	Hypothesized Relationships	Statistical Techniques
H1	Investment origins VS Strategic components	ANOVA,MT
H2	Company objective VS Competitive strategy	ANOVA,MRA* MT
H3	Competitive strategy VS P-A dependency	ANOVA,MRA MT
H4	Company objectives VS P-A dependency	ANOVA,MRA MT
H5	Competitive environments VS Strategic operation	ANOVA,MRA MT
	Product/market opportunities VS Strategic operation	ANOVA,MRA MT
	Company positions VS Strategic operation	ANOVA,MRA MT

* Note: ANOVA = Analysis of Variance
MRA = Multiple Regression Analysis
MT = Duncan's Multiple "T" Comparisons Test

CHAPTER IV

DESCRIPTIVE ANALYSIS AND RELIABILITY TESTS

Introduction

This chapter presents the first part of the empirical results. The first section is the descriptive analysis of the respondents including the response rates of the mailed questionnaires, the attributes of the respondents, and the results of the measurement variables. The second section is the reliability tests of measurement scales. It consists of the evaluations of the item to total correlation, principal components factor analysis, and coefficient alpha.

Descriptive Analysis

Preliminary analyses were conducted in this section to provide information about the characteristics of respondents and sample firms, and the results of relevant strategy-related variables.

Response Rates

The data were gathered over a seven and one half month period beginning in late December of 1989 and ending in middle July of 1990, including one pilot test and one final

survey. For the final survey, a total of 1050 survey questionnaires were mailed to the president of sample firms which include 300 American MNC subsidiaries, 300 Japanese MNC subsidiaries, 150 European MNC subsidiaries, and 300 Taiwanese firms all operating in Taiwan.

Out of 1050 sample firms, with follow-up telephone calls, 21 could not be contacted and 283 completed and returned the answers. A total of 256 questionnaires were usable, producing a response rate of 24.88 percent. Compared to a response rate between 15 to 35 percent from previous surveys, the response rate of this study may be considered to be slightly low, but not unusual (Yeh 1986, Kim and Lim 1988, Dess 1987, Hwang 1986). This is especially the case since the survey is conducted in the overseas marketplace with different investment origins. The details of the response rates are shown in Table VII.

Characteristics of Sample Firms and Respondents

Table VIII shows the basic attributes of the sample firms. These include five major items in the study:

(1) Ownership structure

(2) Size of the firm

(3) Distribution of products

(4) Operation history (age)

(5) Product types

TABLE VII

POPULATIONS, SAMPLES, AND RESPONSE RATES OF THE SAMPLE FIRMS

Investment Origins	Population No.	Sample No.	Returns No.	Response Rate (%)
American MNC Subsidiaries	426	291	66	22.68
Japanese MNC Subsidiaries	816	294	74	25.17
European MNC Subsidiaries	219	146	40	27.40
Taiwanese Firms	1000	298	76	25.50
Total	2461	1029	256	24.88

The ownership structure of sample firms is measured by: (1) the percentage of capital provided by the parent firm; and (2) the percentage of capital provided by Taiwanese shareholders. It is shown that American and European MNC subsidiaries tend to have a higher ownership structure (85-86%) than that of Japanese subsidiaries (75%).

The size of sample firms is measured by: (1) the total capital; (2) the annual sales volume; and (3) the number of employees of the firm. It is shown that participating

firms ranging in annual sales from 2 million to 1000 million U.S. dollars, with an average annual sales of 77 million U.S. dollars. The total number of employees ranging from 50 to 8000, with an average number of 556 employees.

The distribution of products is measured by: (1) amount percent of the sales volume transferred to the parent company; (2) amount percent of the sales volume exported to other foreign countries; (3) amount percent of the sales volume sold locally. It is shown that on the average 9.1% of the firm's sales transferred to the parent firm, 24.7% exported to other countries, and 66.2% sold locally.

The operation history is measured by the age of the sample firm operating in Taiwan. The average age of the participating firms is approximately 16.6 years. Based on the list of main products provided by the respondents, the type of products is classified into industry product category or consumer product category. It is shown that 56% of the participating firms are industry product manufacturers and 44% are consumer product manufacturers.

The results of comparisons for company characteristics among American, Japanese, European, and Taiwanese firms could be summarized as follows:

(1) American MNC subsidiaries are comparatively larger in terms of annual sales volume (USD 69.4 millions), and

TABLE VIII

BASIC CHARACTERISTICS OF THE SAMPLE FIRMS

Character-istics	American Firms Means (S.D.)	Japanese Firms Means (S.D.)	European Firms Means (S.D.)	Taiwanese Firms Means (S.D.)	F*
1. Ownership Structure (%)	84.53 (19.8)	75.53 (19.4)	86.40 (19.3)	4.54 (11.9)	342.3[c]
2. Firm's Size					
. Sales volume (USD x 10^6)	69.4 (131.2)	42.6 (67.3)	29.4 (36.3)	142.5 (192.7)	2.2
. Employee (#)	418.9 (772.2)	485.5 (836.9)	189.7 (104.1)	939.2 (1241.8)	7.4[c]
3. Product Distribution					
. Parent (%)	13.1 (26.3)	15.0 (23.9)	8.1 (18.5)	0.6 (2.1)	7.76[c]
. Export (%)	18.2 (25.4)	29.6 (32.3)	14.9 (24.1)	30.8 (33.7)	4.19[b]
. Local (%)	68.9 (36.6)	55.4 (38.3)	77.0 (29.5)	68.7 (33.8)	3.79[a]
4. Operation History (Age)	12.7 (7.1)	17.8 (10.1)	10.8 (6.9)	21.9 (12.8)	15.56[c]
5. Industry Types					
. Industry	31	42	27	43	
. Consumer	35	32	13	33	

* Note: a: $P < 0.05$
b: $P < 0.01$
c: $P < 0.001$

have a higher percentage of capital invested by their parent firms (ownership structure = 84.5%). Their products tend to concentrate on the domestic markets (domestic sales = 68.9%) rather than transfer back to the parent firms or export to other foreign countries.

(2) Japanese MNC subsidiaries tend to have a comparatively lower level of ownership structure (75.5%) and smaller sales volume (USD 42.6 millions). However, comparatively higher percentage of the sales is transferred back to their parent firms and/or exported to foreign countries. The operation history of Japanese MNC subsidiaries (17.8 years) in Taiwan is significantly higher than other subsidiaries.

(3) European MNC subsidiaries are comparatively smaller in terms of the annual sales volume (USD 29.4 millions) and the number of employees (189 people per firm). They have shorter operation history (10.8 years) but higher ownership structure (86.4%). Their products tend to concentrate on the domestic markets.

(4) Taiwanese firms are comparatively larger in terms of the sales volume (USD 142.5 millions) and employee number (average 939 people per firm), with longest operation history (21.9 years). Their products tend to focus on both domestic and export markets.

Measurement Results for Relevant Variables

Table IX provides descriptive statistics by questionnaire items for the participating firms. These include four items of industry competition, six items of product/market opportunities, 16 items of company objectives, 26 items of competitive strategies, and 10 items of parent-affiliate dependency.

The results show that, in general, since most products have reached the mature stage of product life cycle, firms tend to have a very intensive competition environment, with lower buyer fragmentation. Respondents tend to perceive a very high level of importance on company objectives with average scores over 4.0 for most of the 16 variables. They only perceive a relatively lower level of importance on (1) contributions to shareholders (dividends distributed) and (2) contributions to the society (community service).

In addition, for competitive strategies, respondents tend to perceive a relatively higher degree of emphasis on new product development, customer services, quality control, cost advantages, production efficiency, reputation building, and high-caliber work force acquiring. They tend to perceive a relatively lower degree of emphasis on lower price segment, pricing below competitors, market penetration, narrow range product and market segment, and marketing by credit and discount.

Finally, MNC parent firms tend to have a good

communication channel with their subsidiaries in providing various supporting activities, rules and policies, operation manuals, and bilateral visiting. However, they are unwilling to delegate the decision authorities to the subsidiary firms.

TABLE IX

DESCRIPTIVE ANALYSIS FOR QUESTIONNAIRE ITEMS

Items	Description	Mean*	S.D.
1. Industry Competition			
INDU 1	Competition intensity	3.77	0.98
INDU 2	Industry concentration	3.10	1.24
INDU 3	Industry attractiveness	3.16	1.00
INDU 4	Industry growth	3.17	0.93
2. Product/Market Opportunities			
INDU 5	Product/market growth	3.27	0.93
INDU 6	Product/market maturity	3.41	0.93
INDU 7	Market share	3.32	0.95
INDU 8	Market share growth	3.19	0.87
INDU 9	Buyer fragmentation	2.75	1.16
INDU 10	Service requirement	3.21	1.09

TABLE IX (Continued)

Items	Description	Mean*	S.D.
3. Company Objectives			
OBV 1	Increasing market share	3.98	0.86
OBV 2	Aggressiveness on sales growth	4.14	0.73
OBV 3	Improving profitability (Net profit)	4.34	0.71
OBV 4	Increasing cash flow	4.09	0.72
OBV 5	Emphasis on resources utilization (e.g., ROE or ROI)	4.30	0.72
OBV 6	Recognition as an innovative firm	3.88	0.86
OBV 7	Retaining key personnel	4.07	0.84
OBV 8	Employee satisfaction/morale	4.15	0.76
OBV 9	Technological leadership	4.07	0.89
OBV 10	Enhance firm's prestige/reputation	4.18	0.79
OBV 11	Contributions to customers (e.g., quality/price)	4.27	0.65
OBV 12	Management development/selection	4.04	0.81
OBV 13	Employee compensation and benefits	4.00	0.82
OBV 14	Growth in assets and reserves	4.07	0.75
OBV 15	Contributions to shareholders (e.g., dividends distributed)	3.64	0.95
OBV 16	Contributions to society (e.g., community services)	3.43	1.01
4. Competitive Strategies			
SCV 1	Pricing below competitors	2.59	0.91
SCV 2	Developing new products	4.21	0.72
SCV 3	Providing a broad assortment of products	3.86	0.76
SCV 4	Providing extensive customer services	4.36	0.71
SCV 5	Strict product quality control	4.46	0.68
SCV 6	Achieving the lowest cost position in the industry	4.18	0.92
SCV 7	Providing narrow range of products	2.71	1.01
SCV 8	Building brand identification	3.98	0.88
SCV 9	Refining existing products	3.98	0.81
SCV 10	Control over channels of distribution	3.64	0.93

TABLE IX (Continued)

Items	Description	Mean*	S.D.
SCV 11	Major expenditure on production process-oriented R & D	3.77	1.05
SCV 12	Focusing on a few segments within our geographic market	2.64	1.09
SCV 13	Promotion advertising expenditures above the industry average	2.91	1.02
SCV 14	Manufacturing of specialty products	3.24	1.07
SCV 15	Concerted effort to build reputation within industry	4.16	0.82
SCV 16	Innovation in manufacturing process	3.89	1.04
SCV 17	Offering products in higher priced market segments	3.68	0.97
SCV 18	Offering products in lower priced market segments	2.80	1.02
SCV 19	Innovation in marketing techniques and methods	3.82	0.95
SCV 20	Emphasis market penetration	3.20.	1.07
SCV 21	Quick delivery and immediate response to customer orders	4.21	0.71
SCV 22	Acquiring high-caliber work force	4.05	0.79
SCV 23	Marketing by credit and discount	2.67	1.00
SCV 24	Investing in new facilities to gain a competitive advantage	3.73	0.90
SCV 25	Emphasis on production efficiency	4.08	0.95
SCV 26	Extensive marketing research	3.81	0.96
5. Parent-Affiliate Dependency			
PAD 1	Delegation of authority	3.16	1.67
PAD 2	Provide supporting activities	3.58	1.16
PAD 3	Bilateral visiting	3.65	1.16
PAD 4	Well-defined rules/polices	3.54	1.08
PAD 5	Provide operation manuals	3.08	1.18
PAD 6	Involved in planning process	3.04	1.06
PAD 7	Continue monitoring	3.20	1.01
PAD 8	Tough cost and budget control	3.24	1.11
PAD 9	Communication and coordination	3.77	0.79
PAD 10	Flexibility/adaptation	3.69	0.84

* Note:

(1) For Company Objectives
1 = Not important at all
5 = Extremely important

(2) For Competitive Strategies
1 = Not Considered
5 = Major, constant emphasis

(3) For Industry competition, product/market opportunities, and parent-affiliate dependency
1 = Strongly disagree
5 = Strongly agree

Reliability Tests

To verify the dimensionality and reliability of strategy-related constructs, purification processes including factor analysis, correlation analysis, and coefficient alpha analysis were conducted in this study. Factor analysis examined the basic structure of the data. Correlation analysis assessed the degree of multicollinearity among variables. Coefficient (Cronbach) alpha measured the internal consistency of each identified dimension.

For each strategy-related construct, factor analysis was first employed to identify the dimensionality of the construct, to select questionnaire items with high factor loadings, and to compare these selected items with items suggested theoretically. Item to total correlation, coefficient alpha, and correlation matrix are then assessed to identify the internal consistency and reliability of the construct.

Company Objectives

As shown in Chapter III, sixteen variables were selected to measure the goals and objectives of the firm. Principal factor analysis with Varimax rotation was undertaken to identify a set of underlying dimensions of the construct. Latent roots (Eigenvalues), Scree test, and other criteria were used to determine the number of dimensions to be extracted from the principal component factor analysis.

Table X presents the results of factor loadings for measurements of company objectives. With Eigenvalues greater than 1.0, there appear to be three distinctive factors to characterize the construct of company objectives. These three factors reflect three consistent patterns of focus on the company goals and objectives across interindustry samples of American, Japanese, European, and Taiwanese firms operating in Taiwan. It is shown that 14 variables have significantly high loading scores (higher than $\pm$ 0.495) on one dimension and low loading scores on others (as suggested by Hair, Anderson, and Tatham 1987, factor loadings greater than $\pm$ 0.50 are considered to be very significant). Two items (i.e., OBV13 = Employee compensation and benefits, and OBV16 = contributions to society) were deleted from further analysis since they showed high loading scores on more than two factors. The total variance explained by these three

TABLE X

VARIMAX ROTATED FACTOR PATTERNS FOR COMPANY OBJECTIVES

Dimensions and Variables		Factor 1	Factor 2	Factor 3
Organizational Development				
OBV6	Innovative firm	0.690	0.165	0.079
OBV7	Retain key personnel	0.729	0.125	-0.115
OBV8	Employee satisfaction/ morale	0.773	- 0.073	0.073
OBV9	Technological leadership	0.707	- 0.079	0.145
OBV10	Firm's prestige/reputation	0.641	0.019	0.145
OBV11	Contributions to customers	0.607	0.009	0.191
OBV12	Mgmt development/selection	0.721	0.020	0.244
Financial Orientation				
OBV3	Improve net profit	- 0.053	0.761	0.237
OBV4	Increase cash flow	- 0.173	0.604	0.017
OBV5	Resources utilization	0.040	0.792	0.034
OBV14	Growth in assets/reserves	0.221	0.711	-0.243
OBV15	Dividend distributions	0.114	0.495	0.088
Market Growth				
OBV1	Increase market share	0.285	0.141	0.747
OBV2	Increase sales growth	0.167	0.035	0.835
Eigenvalues		3.609	2.398	1.542
Explained Variance (%)		25.78	17.13	11.01
Cumulative Exp. Variance (%)		25.78	42.91	53.92

factors is approximately 53.92%.

For the purpose of this study, we have named the three factors as follows:

(1) Organizational development orientation

(2) Financial orientation

(3) Market growth orientation

Firms with an organizational development orientation focus on retaining key personnel, management development/ selection, and employee satisfaction/morale so as to build up strengths on technological leadership, process and product innovation, and customer services. This pattern of firms concentrate on establishing long-run prestige and reputation so that they can lead in the long run competition. Firms with a financial focus are more short run oriented in pursuing immediate cash flow and profitability through limited resource allocation. This pattern of firms is concerned more with dividends distribution and assets growth. Finally, firms with a market growth orientation focus their efforts on market and sales growth, though these growth activities should always be achieved by the expenses of short term cash flow and profitability.

Table XI shows the internal consistency for the factors. It is shown that all variables within a factor tend to have a very high coefficient of item to total correlation. This suggests a high degree of internal consistency for each dimension. In addition, the high coefficient of Cronbach alpha further confirms the

reliability of the measurement items. Table XII further shows the correlation matrix for variables of the construct of company objectives. It is shown that the correlations between monotrait items (e.g., factor 1 variables versus factor 1 variables, factor 2 variables versus factor 2 variables) are significantly higher than those of hetero-trait items (e.g., factor 2 variables versus factor 1 variables, factor 3 variables versus factor 1 variables). As suggested by Churchill (1978), since the monotrait variance is far greater than the heterotrait variance, it further confirms that the construct of company objectives is reliable.

TABLE XI

ITEM TO TOTAL CORRELATION AND CRONBACH ALPHA FOR COMPANY OBJECTIVES

Factor Pattern	Variable	Item to Total Correlation*	Cronbach Alpha Coefficient
Organizational Development	OBV6	0.713	0.701
	OBV7	0.704	
	OBV8	0.749	
	OBV9	0.735	
	OBV10	0.681	
	OBV11	0.619	
	OBV12	0.747	
Financial Orientation	OBV3	0.724	0.693
	OBV4	0.605	
	OBV5	0.735	
	OBV14	0.687	
	OBV15	0.636	
Market Growth Orientation	OBV1	0.882	0.637
	OBV2	0.834	

* All figures significant at 0.0001 level

Table XII

CORRELATION MATRIX FOR
COMPANY OBJECTIVES*

Goals and Objectives	Organizational Development						
	OBV6	OBV7	OBV8	OBV9	OBV10	OBV11	OBV12
Organizational Development							
OBV6	1.00						
OBV7	0.46	1.00					
OBV8	0.45	0.53	1.00				
OBV9	0.45	0.34	0.43	1.00			
OBV10	0.43	0.36	0.40	0.46	1.00		
OBV11	0.32	0.28	0.45	0.42	0.27	1.00	
OBV12	0.37	0.48	0.49	0.49	0.43	0.45	1.00
Financial Orientation							
OBV3	0.09	0.04	-0.06	-0.01	0.05	0.05	0.02
OBV4	0.04	-0.01	-0.16	-0.15	-0.04	-0.13	-0.08
OBV5	0.11	0.11	-0.01	-0.03	0.06	0.08	0.02
OBV14	0.21	0.20	0.11	0.06	0.04	0.11	0.11
OBV15	0.10	0.07	0.03	0.09	0.08	0.05	0.21
Market Growth							
OBV1	0.33	0.18	0.30	0.21	0.21	0.29	0.32
OBV2	0.18	0.12	0.19	0.23	0.22	0.19	0.32

TABLE XII (Continued)

Company Objectives	Financial Orientation					Market Growth	
	OBV3	OBV4	OBV5	OBV14	OBV15	OBV1	OBV2
Financial Orientation							
OBV3	1.00						
OBV4	0.33	1.00					
OBV5	0.60	0.24	1.00				
OBV14	0.33	0.29	0.49	1.00			
OBV15	0.25	0.23	0.23	0.25	1.00		
Market Growth							
OBV1	0.16	0.04	0.13	0.05	0.17	1.00	
OBV2	0.17	0.01	0.06	-0.03	0.02	0.47	1.00

* Figures underlined are significant at 0.0001 level

Competitive Strategies

Twenty-six variables were selected to characterize different competitive methods for the firm. With similar procedures as described in the last section, principal factor analysis, correlation analysis, and coefficient alpha were employed to identify the dimensionality and reliability of the construct.

Among 26 competitive methods, eight were deleted from

further analysis since these variables either show medium loading scores on two or more factors simultaneously, or have low loading scores on all factors. These variables include:

(1) SCV5 Strict product quality control (loaded on two factors)

(2) SCV8 Building brand identification (loaded on two factors)

(3) SCV9 Refining existing product (loaded on two factors)

(4) SCV10 Control over channels of distribution (loaded on three factors)

(5) SCV17 Offering products in lower priced market segment (loaded on two factors)

(6) SCV21 Quick delivery and response to customer orders (loaded on three factors)

(7) SCV22 Acquiring high-caliber work force (loaded on two factors)

(8) SCV24 Invest new facilities to gain competitive advantages (loaded on two factors)

Eventually a total of 18 (out of 26) competitive methods have been taken into account for further analysis. Table XIII presents the results of factor loadings for the variables of competitive strategies. Using Eigenvalue of 1.0 as a minimum cut-off, it appears to have five distinctive factors to identify the construct of competitive strategies. These five factors represent five distinctive patterns of strategic orientation across sample firms. It is shown that all 18 variables have significantly high

TABLE XIII

VARIMAX ROTATED FACTOR PATTERNS FOR COMPETITIVE STRATEGIES

Dimensions and Indicators		Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
1. Process Innovation						
SCV6	Achieve low cost position	0.68	- 0.05	0.17	0.03	-0.01
SCV11	Productn process oriented R & D	0.85	0.13	0.02	0.16	0.14
SCV16	Innovation in manufacturing	0.86	0.12	- 0.07	0.13	0.04
SCV25	Production effic.	0.72	0.10	0.06	0.02	0.29
2. Product Development						
SCV2	New P/D develop	0.10	0.73	- 0.05	0.01	0.06
SCV3	Broad assortment of products	-0.07	0.72	0.07	0.13	0.05
SCV4	customer services	0.17	0.69	- 0.07	0.05	0.17
SCV15	Build reputation	0.04	0.68	0.13	- 0.06	0.25
3. Price Leadership						
SCV1	Pricing below competitors	- 0.03	- 0.01	0.82	0.10	-0.05
SCV18	Lower price MKT segment	0.26	- 0.02	0.66	0.05	-0.03
SCV20	MKT penetration	- 0.07	0.18	0.78	- 0.02	-0.06
SCV23	MKTG by credit and discount	0.08	- 0.09	0.61	0.07	0.34
4. Focus						
SCV7	Provide narrow range products	0.08	- 0.07	0.13	0.88	0.01
SCV12	Focus on a few geographic MKT	- 0.01	0.01	- 0.01	0.91	0.01
SCV14	Manufacturing specialty P/D	0.17	0.22	0.06	0.69	0.07
5. Market Development						
SCV13	High promotion AD. expenditure	0.07	0.01	- 0.03	0.11	0.81
SCV19	Innovative MKTG techniques/methods	0.15	0.28	0.05	- 0.05	0.73
SCV26	MKTG research	0.14	0.33	0.03	0.01	0.75
Eigenvalues		2.64	2.33	2.19	2.17	2.08
Explained Variance (%)		14.67	12.94	12.17	12.06	11.56
Cumul. Exp. Variance(%)		14.67	27.61	39.78	51.84	63.40

loading scores on one dimension and low loading scores on other dimensions. The total variance explained by these five factors is approximately 63.40%.

For the purpose of this study, we have named these five strategic patterns as follows:

(1) Process innovation orientation

(2) Product development orientation

(3) Market development orientation

(4) Price leadership orientation

(5) Focus

Process innovation strategy aims at achieving cost competitiveness through manufacturing innovation, production process R&D, and production efficiency. Product development strategy focuses on building reputation within industry through providing unique and broad assortment of products, continued new product development, and extensive customer services. Market development strategy emphasizes marketing activities through engaging in extensive marketing research, innovative marketing techniques and methods, and above average promotion and advertising expenditures. Price leadership strategy focuses on lower price market segments, market penetration, pricing below competitors, and marketing by credit and discount. Finally, focus strategy concentrates on the firm's concentration of efforts on narrow range of products or manufacturing specialty products, and providing products to limited geographic markets.

To evaluate the internal consistency and reliability of the construct, correlation analysis and coefficient alpha are calculated. Table XIV shows the coefficients of item to total correlation and Cronbach alpha for each factor pattern of competitive strategies. The high scores of item to total correlation and Cronbach alpha suggest a high internal consistency and reliability of the construct of competitive strategy.

Table XV further shows the correlation matrix for the construct of competitive strategies. It is apparent that the monotrait variance is significantly higher than the heterotrait variance. This further confirms that the construct of competitive strategies is reliable.

Parent-Affiliate Dependency

Ten items were selected to identify the relationships between MNC parent firms and their overseas affiliates. Similar purification procedures as shown in the last two sections were conducted to evaluate the dimensionality and reliability of the construct. Among 10 variables, two (i.e., PAD2 = providing supporting activities, and PAD3 = bilateral visiting) were deleted from further analysis since they show high loading scores on two factors. Table XVI presents the results of factor loadings for the measurements of parent-affiliate dependency. Using Eigenvalue of 1.0 as a minimum cut-off, it suggests to have

TABLE XIV

ITEM TO TOTAL CORRELATION AND CRONBACH ALPHA FOR COMPETITIVE STRATEGIES

Factor Pattern	Variable	Item to Total Correlation*	Cronbach Alpha
Process Innovation	SCV6	0.677	0.713
	SCV11	0.872	
	SCV16	0.862	
	SCV25	0.776	
Product Development	SCV2	0.724	0.712
	SCV3	0.722	
	SCV4	0.742	
	SCV15	0.747	
Market Development	SCV13	0.793	0.749
	SCV19	0.813	
	SCV26	0.840	
Price Leadership	SCV1	0.778	0.628
	SCV18	0.711	
	SCV20	0.749	
	SCV23	0.684	
Focus	SCV7	0.867	0.711
	SCV12	0.884	
	SCV14	0.768	

* All figures significant at 0.0001 level

TABLE XV

CORRELATION MATRIX FOR COMPETITIVE STRATEGIES*

Competitive Strategy	Process Innovation				Product Development			
	SCV6	SCV11	SCV16	SCV25	SCV2	SCV3	SCV4	SCV15
Process Innovation								
SCV6	1.00							
SCV11	0.44	1.00						
SCV16	0.42	0.74	1.00					
SCV25	0.35	0.57	0.56	1.00				
Product Development								
SCV2	0.04	0.22	0.13	0.11	1.00			
SCV3	0.04	0.03	0.05	0.04	0.38	1.00		
SCV4	0.05	0.23	0.22	0.25	0.41	0.38	1.00	
SCV15	-0.01	0.16	0.16	0.17	0.28	0.35	0.42	1.00
Price Leadership								
SCV1	0.08	0.04	-0.04	0.08	-0.06	0.01	-0.06	0.11
SCV18	0.26	0.19	0.14	0.13	0.02	0.06	0.01	0.00
SCV20	0.06	-0.01	-0.07	0.05	0.05	0.13	0.00	0.16
SCV23	0.11	0.14	0.08	0.13	0.01	0.02	0.08	0.08
Focus								
SCV7	0.10	0.18	0.14	0.08	-0.02	0.08	0.02	-0.07
SCV12	0.01	0.12	0.11	0.01	0.01	0.10	0.09	0.01
SCV14	0.04	0.29	0.25	0.21	0.18	0.18	0.14	0.14
Market Development								
SCV13	0.20	0.21	0.12	0.24	0.13	0.12	0.18	0.17
SCV19	0.06	0.25	0.20	0.31	0.25	0.19	0.27	0.37
SCV26	0.13	0.24	0.17	0.36	0.28	0.29	0.34	0.36

TABLE XV (Continued)

	Price Leadership				Focus			Market Development	
	SCV 1	SCV 18	SCV 20	SCV 23	SCV 7	SCV 12	SCV 14	SCV 13	SCV 19
Price Leadership									
SCV1	1.00								
SCV18	0.37	1.00							
SCV20	0.57	0.33	1.00						
SCV23	0.37	0.37	0.27	1.00					
Focus									
SCV7	0.17	0.16	0.06	0.12	1.00				
SCV12	0.10	0.05	-0.04	0.06	0.75	1.00			
SCV14	0.09	0.09	0.16	0.07	0.45	0.47	1.00		
Market Development									
SCV13	0.00	-0.02	-0.05	0.21	0.06	0.09	0.16	1.00	
SCV19	-0.06	0.14	0.06	0.16	-0.01	-0.03	0.12	0.43	1.00
SCV26	0.00	0.13	0.08	0.16	0.06	0.01	0.13	0.49	0.31

* Figures underlined are significant at 0.0001 level

two distinctive factors to characterize the construct of parent-affiliate dependency. All eight variables (out of 10) have significant high loading scores on one dimension and low loading scores on the other dimension. The total variance explained by these two factors is approximately 60.65%.

Contrary to previous research, the results of factor analysis in this study suggest that centralization and formalization seem to be collapsed into one dimension

(rather than two independent dimensions as shown in many previous studies). Coordination and integration constitute another dimension. Centralization and formalization of parent-affiliate dependency emphasize the delegation of decision making authorities from the parent firms, the providing and establishing of well-defined rules and policies and operation manuals by the parent firms, the involvement in strategic planning process of the parent firms, the tough cost and budget control programs and continued monitoring of business activities from the parent firms to their overseas subsidiaries. This factor explains about 43.65% of the total variance of parent-affiliate dependency. Coordination and integration are concerned with two major items. One is the capability of communication between parent firms and their affiliates. Another is the degree of flexibility to adapt to dynamic overseas competition environments.

Table XVII shows the coefficients of item to total correlation and Cronbach alpha for each factor pattern of parent-affiliate dependency. It is shown that variables for centralization/formalization tend to have a very high item to total correlation and Cronbach alpha coefficient. However, the coefficient of Cronbach alpha for coordination/integration is lower than anticipated.

Table XVIII further shows the correlation matrix for the construct of parent-affiliate dependency. It is shown that the monotrait variance is significantly higher than

the heterotrait variance. This further confirms the reliability and acceptability of the construct.

TABLE XVI

VARIMAX ROTATED FACTOR PATTERNS FOR PARENT-AFFILIATE DEPENDENCY

Dimensions and Variables		Factor 1	Factor 2
1. Centralization/Formalization			
PAD1	Delegation of authority	0.575	-0.249
PAD4	Well-defined rules/policies	0.758	0.061
PAD5	Operation manuals	0.845	-0.052
PAD6	Involved in planning process	0.716	0.125
PAD7	Continued monitoring	0.834	0.060
PAD8	Cost and budget control	0.764	-0.041
2. Coordination/Adaptation			
PAD9	P-A communication	0.217	0.825
PAD10	Flexibility to adapt to dynamic environments	- 0.184	0.768
Eigenvalues		3.492	1.360
Explained Variance (%)		43.65	17.00
Cumulative Exp. Variance (%)		43.65	60.65

TABLE XVII

ITEM TO TOTAL CORRELATION AND CRONBACH ALPHA FOR PARENT-AFFILIATE DEPENDENCY

Factor Pattern	Variable	Item to Total Correlation*	Cronbach Alpha Coefficient
Centralization/ Formalization	PAD1	0.635	0.844
	PAD4	0.755	
	PAD5	0.843	
	PAD6	0.716	
	PAD7	0.809	
	PAD8	0.752	
Coordination/ Integration	PAD9	0.796	0.472
	PAD10	0.822	

* All figures significant at 0.0001 level

TABLE XVIII

CORRELATION MATRIX FOR PARENT-AFFILIATE DEPENDENCY

P-A	Centralization Formalization						Coordination/ Integration	
Dependency	PAD1	PAD4	PAD5	PAD6	PAD7	PAD8	PAD9	PAD10
Centralization/ Formalization								
PAD1	1.00							
PAD4	0.40	1.00						
PAD5	0.42	0.64	1.00					
PAD6	0.39	0.41	0.50	1.00				
PAD7	0.33	0.56	0.61	0.51	1.00			
PAD8	0.28	0.41	0.60	0.45	0.67	1.00		
Coordination/ Integration								
PAD9	-0.07	0.18	0.10	0.23	0.21	0.11	1.00	
PAD10	-0.12	-0.08	-0.14	-0.08	-0.13	-0.16	0.31	1.00

* Figures underlined are significant at 0.0001 level

This Chapter evaluates the characteristics of the respondents, the empirical results of measurement scales, and the internal consistency and reliability of strategy-related constructs. It is shown that, based on the structure of factor loadings, the coefficients of correlation analysis, and the coefficients of Cronbach alpha analysis, the constructs of company objectives, competitive strategies, and parent-affiliate dependency are quite reliable and acceptable. Thus, using these constructs, tests of hypotheses are undertaken in the next Chapter to assess the relationships between strategic related variables and/or factors among American, Japanese, European, and Taiwan firms operating in Taiwan.

CHAPTER V

RESEARCH ANALYSIS AND RESULTS

Introduction

This Chapter presents the results of data analysis associated with each research question. First, the competitive climate is examined. Comparisons of various strategy-related variables are then conducted to identify the similarities and differences among American, Japanese, European, and Taiwanese firms in Taiwan. The empirical relationships among strategic operation components, including company objectives, competitive strategies, parent-affiliate dependency, and investment origins are evaluated. Finally, the empirical relationships between strategic operation variables and strategic contingency variables are discussed. Five hypotheses as addressed in Chapter III are tested sequentially through empirical results in the following sections.

Competitive Climate

As a prelude to the formal test of research hypotheses, it is relevant to examine the competitive climate as perceived by the multinational subsidiaries. These may well reflect that investment origin for firms

can be explained quite different marketplace settings. That is, for example, U.S. firms may be competing primarily in mature markets while Japanese firms operate in high tech markets. These same climate items will be examined later as contingency variables.

Table XIX shows the comparisons of variables for industry competition and product/market opportunities among American, Japanese, European, and Taiwanese firms operating in Taiwan. The data indicates that for six of the ten variables examined, firms with different investment origins tend to perceive differently on these environmental subjects.

American firms tend to perceive higher level of industry competition intensity, industry concentration, industry attractiveness, industry growth, and market share. Japanese firms tend to perceive lower level of competition in terms of the above variables. European firms typically perceive higher level of competition intensity, product/market growth, buyer fragmentation, and service requirement. Statistically significant differences among investment origins don't appear for the latter two variables. Taiwanese firms tend to perceive higher level of market share but lower level of buyer fragmentation, although, again, differences based on investment among origin are not statistically significant for the latter variables.

TABLE XIX

COMPARISONS OF THE COMPETITIVE CLIMATE AMONG FIRMS

Relevant Variables	American Firms Means	Japanese Firms Means	European Firms Means	Taiwanese Firms Means	F*
Competition Intensity	4.18	3.35	4.15	3.61	12.68[c]
Industry Concentration	3.88	2.78	2.98	2.79	13.80[c]
Industry Attractiveness	3.82	2.78	3.38	2.83	20.22[c]
Industry Growth	3.50	2.89	3.28	3.09	5.58[b]
Product/market Growth	3.56	3.19	3.55	2.96	6.77[b]
Product/market Maturity	3.36	3.55	3.40	3.30	0.98
Market share	3.62	3.17	2.98	3.39	5.09[a]
Market share Growth	3.32	3.04	3.28	3.17	1.35
Buyer Fragmentation	2.94	2.65	3.15	2.49	3.76
Service Requirement	3.30	3.08	3.43	3.14	1.12

Note: a: $P < 0.01$
b: $P < 0.001$
c: $P < 0.0001$

Strategic Orientations Among Sample Firms

The main hypothesis to be tested in this section is that firms with different investment origins tend to select different patterns of strategic operation. The hypothesis is stated as follows:

Hypothesis I: Comparisons of strategic variables among American, Japanese, European, and Taiwanese firms operating in Taiwan.

H1 : Firms with different investment origins tend to operate differently on the strategic components of company objectives, competitive strategies and parent-affiliate dependency.

H1-1 : American MNC subsidiaries in Taiwan tend to operate in the following ways:

- . More financial oriented;
- . Emphasize product development and market development strategies;
- . Have a parent-affiliate dependency with higher levels of centralization/formalization but lower levels of coordination/integration.

H1-2 : Japanese MNC subsidiaries in Taiwan tend to operate in the following ways:

- . More organizational development oriented;
- . Emphasize process innovation and product development strategies;
- . Have a parent-affiliate dependency with lower levels of centralization/formalization but higher levels of coordination/integration.

H1-3 : European MNC subsidiaries in Taiwan tend to operate in the following ways:

- . More organizational development oriented;
- . Emphasize product development and focus

strategies;

- Have a parent-affiliate dependency with lower levels of centralization/formalization but higher levels of coordination/integration.

H1-4 : Taiwanese firms in Taiwan tend to operate in the following ways:

- More market growth oriented;
- Emphasize price leadership and market development strategies.

Investment Origins and
Company Objectives

Table XX shows the comparisons for variables of company objectives and investment origins. It indicates that there are significant differences in attention to objectives of organizational development, financial orientation, and market growth. Japanese and Taiwanese firms stress the organizational development objective more than do American and European firms. Japanese firms specifically emphasize the retention of key personnel, providing employee satisfaction and morale, and ensuring management development and selection to achieve technological leadership so that they can be recognized by the customers as high prestige and innovative firms.

On the other hand, American firms concentrate more on financial objective such as improved net profit, increased

TABLE XX

COMPARISONS FOR VARIABLES OF COMPANY OBJECTIVES

Dimensions and Indicators	American Firms Means	Japanese Firms Means	European Firms Means	Taiwanese Firms Means	F*
Organizational Development	3.89	4.24	3.97	4.18	5.96[c]
. Innovative firm	3.79	3.89	3.75	4.01	
. Retain key persons	4.03	4.02	4.15	4.09	
. Employee satisfaction/morale	3.92	4.36	4.08	4.17	
. Technological leadership	3.68	4.32	3.88	4.26	
. Firm's prestige/ reputation	4.09	4.35	3.88	4.24	
. Contributions to customers	4.03	4.47	4.15	4.34	
. MGMT development/ selection	3.73	4.28	3.93	4.14	
Financial Orientation	4.47	3.88	3.91	4.06	21.96[c]
. Improve net profit	4.77	4.11	4.05	4.36	
. Increase cash flow	4.45	3.78	4.08	4.09	
. Resource utilizatn	4.71	4.15	4.05	4.23	
. Growth in assets/reserves	4.42	4.04	3.93	3.88	
. Dividends distribution	4.00	3.32	3.45	3.72	
Growth Orientation	3.95	4.02	3.91	4.26	3.59[a]
. Increase MKT share	3.91	3.96	3.80	4.16	
. Increase sales growth	4.00	4.08	4.03	4.37	

* Note: a : $P < 0.05$
b : $P < 0.01$
c : $P < 0.001$

cash flow, and improved resource utilization. so that they can contribute to the firm's growth of assets and reserves and dividends distribution. Finally, Taiwanese firms are more growth oriented, focusing on increasing market share and sales growth.

It is argued that company objectives should be contingent upon opportunities and constraints imposed by the environment. In comparing Table XX with Table XIX, It may be that Japanese firms, with lower industry competition intensity, can allocate more resources for organizational development. American firms, with higher industry competition intensity, may have no choice but pursue short term profitability. These results conform with many previous studies (Walker and Ruekert 1987, Dess 1987, Robinson and Pearce 1988, Craig, Douglas and Ready 1987, Hall 1980). Previous studies have indicated that, comparatively, American firms are significantly more short-term oriented in emphasis on immediate profitability, while Japanese firms are significantly more long-term oriented and focus on efficiency and dominating market share (Gates and Egelhoff 1986, Doyle, Saunders, and Wong 1986, Sullivan and Nonako 1986).

Investment Origins and Competitive Strategies

Table XXI shows the comparisons of variables for competitive strategies among American, Japanese, European,

TABLE XXI

COMPARISONS FOR VARIABLES OF COMPETITIVE STRATEGIES

Dimensions and Indicators	American Firms Means	Japanese Firms Means	European Firms Means	Taiwanese Firms Means	F*
Process Innovation	3.84	4.23	3.29	4.23	19.10c
. Achieve low cost position	3.95	4.47	3.40	4.50	
. Productn process R & D	3.52	4.12	3.05	4.04	
. Innovation in manufacturing	3.71	4.18	3.20	4.12	
. Production effici.	4.17	4.14	3.50	4.26	
Product Development	4.27	4.07	4.14	4.12	1.81
. Develop new product	4.26	4.12	4.38	4.18	
. Broad P/D line	3.94	3.69	3.88	3.93	
. Extensive customer services	4.55	4.45	4.23	4.20	
. Build reputation	4.36	4.01	4.10	4.16	
Price Leadership	2.40	2.88	2.82	3.12	13.46c
. Pricing below competitors	2.47	2.69	2.35	2.74	
. Lower price market segment	2.21	3.05	2.60	3.17	
. Market penetration	2.61	2.99	3.55	3.75	
. MKTG by credit & discount	2.32	2.77	2.78	2.83	
Focus	2.88	2.73	2.83	2.99	1.07
. Provide narrow range products	2.68	2.64	2.55	2.89	
. Focus on a few geographic MKT	2.74	2.59	2.78	2.54	
. Manufacturing specialty products	3.23	2.97	3.18	3.54	
Market Development	3.94	3.30	3.28	3.47	10.50c
. Promotion & AD. expenditure	3.50	2.59	2.68	2.84	
. Innovative MKTG techniques/methods	4.14	3.66	3.50	3.86	
. Extensive MKTG research	4.20	3.65	3.65	3.71	

* Note: a : $P < 0.05$
b : $P < 0.01$
c : $P < 0.001$

and Taiwanese firms. Statistically significant differences are indicated for process innovation, price leadership, and market development strategies. It is shown that American firms stress product development and market development strategies. Japanese firms concentrate more on process innovation and product development strategies. Taiwanese firms focus more on process innovation, product development, and price leadership strategies. European firms tend to have balanced approaches with somewhat more emphasis on product development and focus strategies.

Specifically, American firms emphasize production efficiency, new product development, extensive marketing research, innovative marketing techniques/methods, and customer services to build reputation. Japanese firms emphasize production process R & D, manufacturing innovation, and production efficiency to achieve a lowest cost position. European firms emphasize new product development and customer services to focus on a few specific geographic markets through providing unique products. Taiwanese firms basically follow the patterns of strategic operation of Japanese firms with special emphasis on production efficiency, manufacturing innovation, and new product development so that they can achieve a lowest cost position and penetrate the lower end markets through pricing below competitors, including credit and discount.

To sum up, the comparisons of competitive strategies indicate that Japanese firms tend to build up their strength by cost effectiveness and production efficiency.

American firms pursue their competitive edges through product and market differentiation. European firms focus on specific market segments. Taiwanese firms seek to grow by cost and price leadership.

The U.S. and Japanese conclusions are consistent with the results of many previous studies. Previous findings suggest that the U.S. products place greater emphasis on product quality and promotional expenditures in the overseas markets, while Japanese firms emphasize incremental process innovation and seek to exploit the market through technological advancement and productivity enhancement. Furthermore, as emphasized by previous research (Kotler, Fahey, and Jatusripitak 1985, Kagono et al. 1989, Ouchi 1981, Craig, Douglas, and Reddy 1987, and Ouchi and Johnson 1978), American firms tend to emphasize short-term resource utilization, thus focusing on product and market development strategies. On the other hand, Japanese firms emphasize long-term resource accumulation and are slow to follow a withdrawal strategy. Thus production oriented strategy is appropriate.

Investment Origins and Parent-Affiliate Dependency

Table XXII shows the comparisons for parent-affiliate dependency based on investment origin. It is shown that there is a significant difference on the dependency between MNC parent firms and their affiliates among American,

Japanese, and European firms with regard to centralization/ formalization. Japanese firms tend to have significant

TABLE XXII

COMPARISONS FOR VARIABLES OF PARENT-AFFILIATE DEPENDENCY

Dimensions and Indicators of P-A Dependency	American Firms Means	Japanese Firms Means	European Firms Means	F*
Centralization/ Formalization	3.04	3.52	2.93	9.71[c]
. Delegation of authority	2.89	3.49	2.98	
. Well-defined rules/ policies	3.24	3.92	3.35	
. Operation manuals	2.88	3.57	2.68	
. Involved in planning process	2.94	3.18	2.95	
. Continued monitoring	3.14	3.45	2.85	
. Cost and budget control	3.23	3.51	2.78	
Coordination/Integration	3.79	3.70	3.68	0.45
. P-A communication	3.73	3.81	3.75	
. Flexibility to adapt environment	3.85	3.59	3.60	

* Note: a : $P < 0.05$
b : $P < 0.01$
c : $P < 0.001$

higher scores on centralization and formalization than those of American and European firms. American and European firms in Taiwan are more independent from their parent firms on the decision makings of various business activities. Specifically, Japanese MNC parent firms emphasize centralization of decision making authority, providing well-defined rules and policies and operation manuals, involvement in strategic planning process, and continuous monitoring business activities of their subsidiaries, including a tough cost and budget control program.

There do not appear to be significant differences regarding coordination and integration based on investment origins. All these groups of sample firms perceive an above average degree of agreement on parent-affiliate communication and flexibility with very small variance.

The above results are not in conformity with those of most previous studies. It has been shown earlier that the U.S. parent firms exercised higher centralization, formalization, and control over their affiliate than the non-U.S. parent firms (Negandhi and Welge 1984, Negandhi and Prasad 1971). This contradiction may be due to the following reasons:

(1) Taiwan is geologically more adjacent to Japan than to the U.S. and Europe.

(2) Taiwan was the colony of Japan for more than 50 years during 1895-1945.

(3) The industry structure and economic development patterns of Taiwan are more similar to Japan than to the U.S. and Europe.

These issues are subject to further studies.

In sum, the comparisons of strategy-related variables among American, Japanese, European, and Taiwanese firms indicate that Hypotheses I is supported on two of the three strategic factors (i.e., company objectives and competitive strategies). American firms are more financial oriented emphasizing product and market development strategies. Japanese firms are more organizational development oriented focusing on process innovation and product development strategies. European firms emphasize product development and focus strategies. Taiwanese firms are more market growth oriented emphasizing price leadership strategy.

Hypotheses related to parent-affiliate dependency among sample firms are not fully supported. Contrary to previous studies, Japanese firms tend to have higher levels of parent-affiliate dependency than do American and European firms. Additionally, although coordination/ integration is strong, there are not significant differences. Figure 3 shows the empirical comparisons among sample firms.

Relationships Among Strategy-Related Constructs

Previous research has shown that a consensus on the

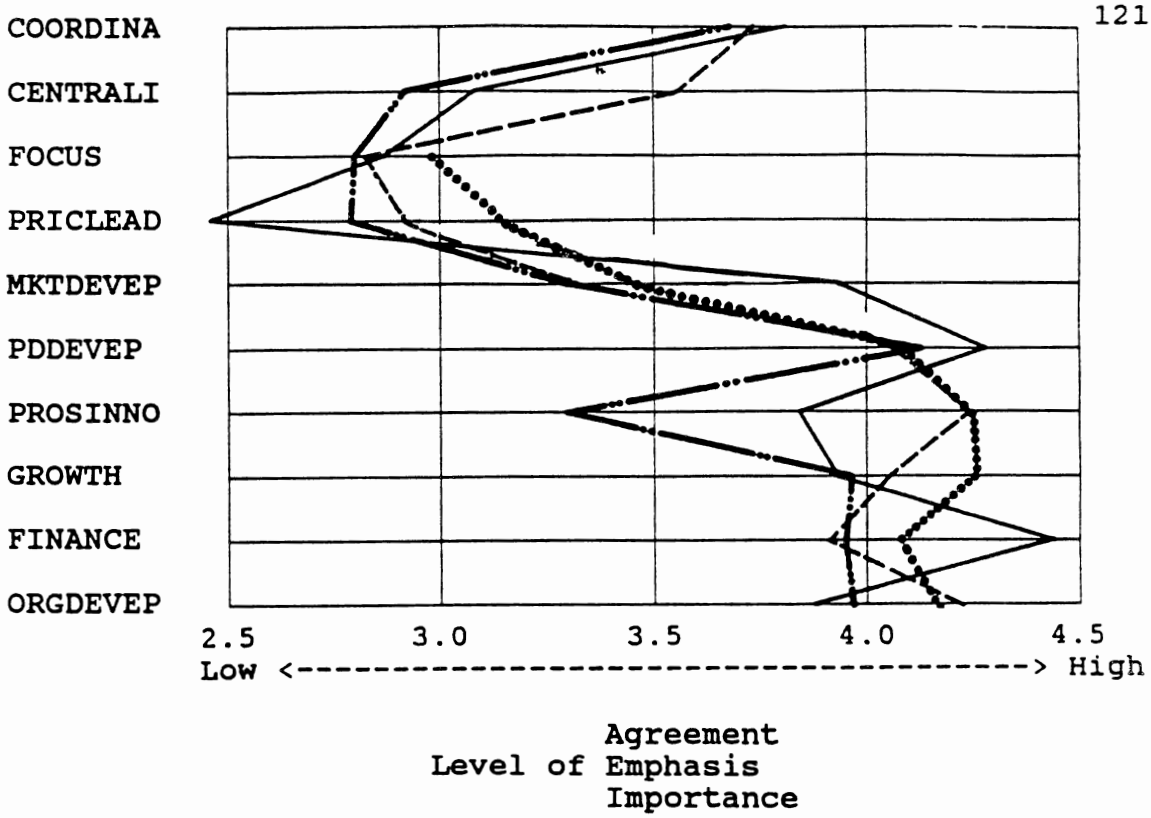

Figure 3. Graphical Comparisons of Strategic Components

selection of strategy-related factors would result in better performance (Dess 1987, Bourgeois 1984, Ghoshal and Nohria 1989). The main hypotheses in this subject are that firms tend to select strategic components on company objectives, competitive strategies, and parent-affiliate dependency that are compatible. The research hypotheses are stated as follows:

Hypothesis II: Relationships between competitive strategies and company objectives.

H2 : MNC subsidiaries with different company objectives tend to chose different competitive strategies.

H2-1 : MNC subsidiaries identifying a market growth objective tend to emphasize price leadership and market development strategies.

H2-2 : MNC subsidiaries identifying a financial objective tend to emphasize product development and market development strategies.

H2-3 : MNC subsidiaries identifying an organizational development objective tend to emphasize process innovation and product development strategies.

Hypothesis III: Relationships between competitive strategies and parent-affiliate dependency.

H3 : MNC subsidiaries with different parent-affiliate dependency tend to emphasize different competitive strategies.

H3-1 : MNC subsidiaries having a parent-affiliate dependency with lower levels of centralization/ formalization but higher levels of coordination/ integration tend to emphasize process innovation and product development strategies.

H3-2 : MNC subsidiaries having a parent-affiliate dependency with higher levels of centralization/ formalization and higher levels of coordination/ integration tend to emphasize market development

strategy.

H3-3 : MNC subsidiaries having a parent-affiliate dependency with higher levels of centralization/ formalization but lower levels of coordination/ integration tend to emphasize price leadership and focus strategies.

Hypothesis IV: Relationships between company objectives and parent-affiliate dependency.

H4 : MNC subsidiaries with different parent-affiliate dependency tend to identify different company objectives.

H4-1 : MNC subsidiaries having a parent-affiliate dependency with higher levels of centralization/ formalization and higher levels of coordination/ integration tend to identify market growth objectives.

H4-2 : MNC subsidiaries having a parent-affiliate dependency with higher levels of centralization/ formalization but lower levels of coordination/ integration tend to identify financial objectives.

H4-3 : MNC subsidiaries having a parent-affiliate dependency with lower levels of centralization/ formalization but higher levels of coordination/ integration tend to identify organizational development objectives.

Company Objectives and Competitive Strategies

A cursory view of Tables XX and XXI indicates that firms with high attention to financial objectives tend to emphasize product development and market development strategies. Firms identifying organizational development objectives tend to concentrate on a process innovation strategy. Firms selecting growth objectives tend to focus on process innovation and price leadership strategies.

To formally examine these relationships, this study used the various components of competitive strategy as the dependent variables and the company objectives as independent variables in the following regression models:

1. Model #1:

$$Y = a + b_1 X_h$$

Where Y = The competitive strategy (i.e., process innovation strategy, product development strategy, and price leadership strategy). Since none of the sample groups paid much attention on focus strategy, it is eliminated from further analysis.

X_h = The single company objective that has the highest correlation with the specific element of competitive strategy.

2. Model #2:

$$Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 \text{ Dummy 1 (American)} + b_5 \text{ Dummy 2 (Japan)} + b_6 \text{ Dummy 3 (Europe)}$$

Where Y = The competitive strategy as stated above

X_1 = Organizational development objective

X_2 = Financial objective

X_3 = Growth objective

Dummy 1 = The American sample group

Dummy 2 = The Japanese sample group

Dummy 3 = The European sample group

a = Intercepts

b = Standardized Beta coefficients

Model #1 explains the competitive strategy by a single company objective that has the most significant impact on the emphasis of strategy. Model #2 is the elaborated model that explains the competitive strategy by all explanatory variables of the company objectives. In addition, dummy variables are included in the model to investigate the effects of investment origins. The Taiwanese sample group is used as a reference base to analyze the impact of the dummy variables.

Table XXIII presents the results of the regression analyses for each of the four competitive strategies studied. It is shown through the various Model #1 analyses that competitive strategies are associated with company objectives for every strategy. Statistically significant R-square values were found for each model considered. Also, the total explained variance ranges from the low level of 0.047 for one Model #1 to the high level of 0.452 for a Model #2 over the strategies examined. While the R-square is low for some models, it is statistically

significant for all.

In every instance, Model #2 has higher level of explained variance than did Model #1. The improvement of explanation ranges from an incremental change in explanation from R-square value of 0.098 for product

TABLE XXIII

RELATIONSHIPS BETWEEN COMPETITIVE STRATEGIES AND COMPANY OBJECTIVES

	Dependent Variables			
Model	Process Innovation #1	#2	Product Development #1	#2
ORGDEVEP	.363	.268	.595	.637
FINANCE	--	.169	--	.040
MKTSHARE	--	-.007	--	.075
American (Dummy)	--	-.219	--	.267
Japan (Dummy)	--	-.088	--	-.057
Europe (Dummy)	--	-.380	--	.120
Model R^2	.132	.290	.354	.452
F	38.4	16.9	139.	34.2
P Value	.000	.000	.000	.000
n	256	256	256	256

TABLE XXIII (Continued)

Model	Dependent Variables: Market Development #1	Market Development #2	Price Leaderships #1	Price Leaderships #2
ORGDEVEP	--	.326	--	-.019
FINANCE	.385	.202	-.038	.128
MKTSHARE	--	.094	.198	.151
American (Dummy)	--	.276	--	-.452
Japan (Dummy)	--	-.066	--	-.109
Europe (Dummy)	--	-.007	--	-.112
Model R^2	.148	.300	.047	.176
F	44.1	17.8	12.5	8.9
P Value	.000	.000	.000	.000
n	256	256	256	256

Note:
(1). All regression coefficients are the standardized beta estimates. Coefficient values statistically significant at 0.05 level or above are underlined.

(2). ORGDEVEP = Organizational Development Orientation
FINANCE = Financial Orientation
MKTSHARE = Growth Orientation

development strategy to a 0.158 for process innovation strategy.

Specifically, process innovation strategy can be explained by the objectives of organizational development and financial orientation. Product development strategy can be explained by the objective of organizational development. Market development strategy can be explained by the objectives of organizational development and financial profitability. None of the objectives are statistically significant for price leadership in the elaborated model although growth orientation has significant beta weight in the Model #1 format.

Furthermore, the results also show that investment origins tend to have an impact on the relationships between competitive strategies and company objectives. Compared to the Taiwanese group, American firms tend to have significantly negative impacts on the standardized beta estimates of company objective variables for the models of process innovation and price leadership strategies, but have positive impacts on the standardized beta estimates for the models of product development and market development strategies. In addition, European sample firms appears to have significant negative impacts on the beta estimates for the model of process innovation strategy, but positive impacts on the beta estimates for the model of product development strategy. Japanese sample firms do not show a dominated influence on the relationships between the emphasis of competitive strategies and the selection of company objectives. This may indicate that the patterns of

strategic operation of the Japanese firms do not show a statistically significant difference from those of the Taiwanese firms.

The above results are also supported by previous studies (Dess 1987, McDaniel and Kolari 1987). They argued that the consensus of the firm's objectives and competitive methods would result in better performance. Firms that do not follow such a rule may become "strategic misses" and be eventually dropped from the marketplace. Thus from the above discussions, it is evident that Hypothesis II is highly supported.

Competitive Strategies and Parent-Affiliate Dependency

To examine the relationship between the firms' emphasis on competitive strategies and their parent-affiliate dependency, this study used the various components of competitive strategy as the dependent variables and the elements of parent-affiliate dependency as independent variables in the following regression models:

1. Model #1:

$$Y = a + b_1 X_h$$

Where Y = The competitive strategy (i.e., process innovation, product development, market development, price leadership and focus) as stated above

X_h = The single parent-affiliate dependency that has higher correlation with the

specific element of competitive strategy.

2. Model #2:

$$Y = a + b_1 X_1 + b_2 X_2 + b_3 \text{ Dummy 1 (American)} + b_4 \text{ Dummy 2 (Japan)}$$

Where Y = The competitive strategy.

X_1 = Centralization/formalization

X_2 = Coordination/integration

Dummy 1 = The American sample group

Dummy 2 = The Japanese sample group

a = Intercepts

b = Standardized Beta coefficient

As shown in the earlier strategy analyses, Model #1 explains the competitive strategy for the element of parent-affiliate dependency that has the highest correlation with the strategy. Model #2 is the elaborated model that explains the competitive strategy by both elements of the parent-affiliate dependency and two dummy variables for investment origin. The European sample group is used as a reference base to analyze the impact of the dummy variables.

Table XXIV presents the results of the regression analyses. It is shown that competitive strategies are associated with parent-affiliate dependency. Statistically significant R-square values were found for six of the eight models considered. The total explained variance for the statistically significant models ranges from 0.100 for

Model #2 of price leadership strategy to 0.282 for model #2 of process innovation strategy. In every instance, model #2 had high level of explained variance than did Model #1 and all elaborated models are statistically significant. The improvement of explanation ranges from an incremental change in explanation from R-square value of 0.028 for product development strategy to 0.167 for market development strategy.

TABLE XXIV

RELATIONSHIPS BETWEEN COMPETITIVE STRATEGIES AND PARENT-AFFILIATE DEPENDENCY

	Dependent Variables			
	Process Innovation		Product Development	
Model	#1	#2	#1	#2
CENTRALI	.421	.340	--	.075
COORDINA	--	-.019	.226	.215
American (Dummy)	--	.299	--	.092
Japan (Dummy)	--	.431	--	-.096
Model R^2	.178	.282	.051	.079
F	38.4	17.2	9.6	3.7
P Value	.000	.000	.002	.006
n	180	180	180	180

TABLE XXIV (Continued)

Model	Dependent Variables: Market Development #1	Market Development #2	Price Leaderships #1	Price Leaderships #2
CENTRALI	.128	<u>.208</u>	.067	.010
COORDINA	--	.001	--	.066
American (Dummy)	--	<u>.380</u>	--	<u>-.274</u>
Japan (Dummy)	--	-.053	--	.032
Model R^2	.016	.183	.044	.100
F	3.0	9.8	0.8	4.4
P Value	.087	.000	.374	.002
n	180	180	180	180

Note:
(1). All regression coefficients are the standardized beta estimates. Coefficient values statistically significant at 0.05 level or above are underlined.

(2). CENTRALI = Centralization/Formalization
COORDINA = Coordination/Integration

Furthermore, the results also show that investment origins tend to impact the relationships between competitive strategies and parent-affiliate dependency. Compared to the European firms, American firms tend to have significantly positive impacts on the standardized beta

estimates of the parent-affiliate dependency variables for the models of process innovation and market development strategies, but have negative impacts on the standardized beta estimates for the model of price leadership strategy. In addition, Japanese firms appears to have significantly positive impacts on the standardized beta estimates for the model of process innovation strategy.

Company Objectives and Parent-Affiliate Dependency

To examine the relationships between company objectives and parent-affiliate dependency, this study used the various components of company objectives as the dependent variables and the elements of parent-affiliate dependency as the independent variables in the following regression models:

1. Model #1:

$$Y = a + b_1 X_h$$

Where Y = The company objectives (i.e., organizational development orientation, financial orientation, and growth orientation).

X_h = The element of parent-affiliate dependency that has higher correlation with the company objective.

2. Model #2:

$$Y = a + b_1 X_1 + b_2 X_2 + b_3 \text{ Dummy 1 (American)} + b_4 \text{ Dummy 2 (Japan)}$$

Where Y = The company objectives

X_1 = Centralization/formalization

X_2 = Coordination/integration

Dummy 1 = The impact of the American sample group

Dummy 2 = The impact of the Japanese sample group

a = Intercept

b = Standardized Beta coefficients

As shown in the earlier analyses, Model #1 explains the company objective by the element of parent-affiliate dependency that has higher impact on the perceived importance of the company objective. Model #2 is the elaborated model that explains the company objective by the two elements of the parent-affiliate dependency and by two dummy variables. Again the European sample group is used as a reference base to analyze the impact of the dummy variables.

Table XXV shows the results of the regression analyses for each of the three company objectives studied. Company objectives are somewhat associated with parent-affiliate dependency. Statistically significant R-square values were found for two of the six models considered.

Specifically, the total explained variance for the significant models ranges from 0.12 for model #2 of organizational development objective to 0.27 for model #2 of financial objectives. It is suggested that the objective of organizational development can be explained by coordination/integration. The objective of financial

TABLE XXV

RELATIONSHIPS BETWEEN COMPANY OBJECTIVES AND PARENT-AFFILIATE DEPENDENCY

	Dependent Variables					
	ORGDEVEP		FINANCE		MKTSHARE	
Model	#1	#2	#1	#2	#1	#2
CENTRALI	.13	.05	.05	.15	.10	.09
COORDINA	--	.20	--	.00	--	.18
American (Dummy)	--	-.08	--	.48	--	.01
Japan (Dummy)	--	.22	--	-.07	--	.04
Model R^2	.02	.12	.00	.27	.01	.04
F	3.0	6.1	.41	16.	1.9	1.9
P Value	.08	.00	.54	.00	.18	.11
n	180	180	180	180	180	180

Note:

(1). All regression coefficients are the standardized beta estimates. Coefficient values statistically significant at 0.05 level or above are underlined.

(2). ORGDEVEP = Organizational Development
FINANCE = Financial Orientation
MKTSHARE = Growth Orientation
CENTRALI = Centralization/Formalization
COORDINA = Coordination/Integration

orientation can be explained by centralization/ formalization.

Furthermore, the results also suggest that compared to European sample groups, American sample firms tend to have significant impacts on the standardized beta estimates for the model of financial objective. Japanese sample firms tend to have significant impacts on the standardized beta estimates for the model of organizational development objective. Thus, from these results, it is shown that Hypothesis IV is partially supported.

Strategic Components and Strategic Contingencies

A research hypothesis was examined regarding the relationships between strategic components and selected contingency factors. The hypothesis is tested as follows:

Hypothesis V: Relationships between strategic operation variables and strategic contingency variables.

H5 : MNC subsidiaries facing different contingency environments tend to identify different company objectives, competitive strategies, and parent-affiliate dependency.

H5-1 : The characteristics of the competitive environment (industry competition, industry attractiveness, and industry growth) will influence the selection of company objectives, competitive strategies, and

parent-affiliate relationships of MNC subsidiaries.

H5-2 : The characteristics of product/market opportunities (product market growth, product maturity, market share, market share growth, buyer fragmentation, and service requirements) will influence the selection of company objectives, competitive strategies, and parent-affiliate relationships of MNC subsidiaries.

H5-3 : The characteristics of company positions (ownership structure, annual sales volume, number of employees, operational dependency, operation history (age), and product types) will influence the selection of company objectives, competitive strategies, and parent-affiliate relationships of MNC subsidiaries.

To examine the effects of various environments on strategy, four concepts were selected. These are:

(1) SIZE = The size of the firm as measured by the sales volume of the MNC subsidiaries and local firms.

(2) EXPORT = Export orientation of the firm as measured by the percentage of the amount of the firm's products exported to the foreign countries.

(3) LOCAGROW = The growth of the industry as measured by the sales growth in recent years.

(4) PDMATURE = The degree to which the firm's products are in the mature stage of product life cycle.

Two sets of analytical models were examined to evaluate the relationships between strategic operation components and the above variables:

1. Model #1:

$$Y = a + b_1 \text{ SIZE} + b_2 \text{ EXPORT} + b_3 \text{ LOCAGROW} + b_4 \text{ PDMATURE}$$

Where Y = The following strategic component:

- Competitive strategies include process innovation, product development, market development, and price leadership strategies;
- Company objectives include organizational development orientation, financial orientation, and market growth orientation;
- Two components of parent-affiliate dependency includes centralization/ formalization and coordination/ integration.

2. Model #2:

$$Y = a + b_1 \text{ SIZE} + b_2 \text{ EXPORT} + b_3 \text{ LOCAGROW} + b_4 \text{ PDMATURE} + b_5 \text{ Dummy 1 (American)} + b_6 \text{ dummy 2 (Japan)} + b_7 \text{ Dummy 3 (Europe)}$$

Where Y = The strategic components for competitive strategies and company objectives as stated above.

Dummy 1, Dummy 2, and Dummy 3 are the impacts of American, Japanese, and European sample group, respectively.

3. Model #3:

$$Y = a + b_1 \text{ SIZE} + b_2 \text{ EXPORT} + b_3 \text{ LOCAGROW} + b_4 \text{ PDMATURE} + b_5 \text{ Dummy 1 (American)} + b_6 \text{ dummy 2 (Japan)}$$

Where Y = The strategic components for parent affiliate dependency

Dummy 1, Dummy 2, and Dummy 3 are the impacts of American, Japanese, and European sample group, respectively.

a = Intercepts

b = Standardized Beta coefficients

Company Objectives and Strategic Contingencies

Table XXVI presents the results of regression analysis using company objectives as dependent variables and strategic contingencies as independent variables. The models are examined through the use of multiple regression analysis. All six of the models are statistically significant at the 0.05 level. The R-square values range from 0.046 for Model #1 of growth orientation to 0.240 for Model #2 of financial orientation. In every instance, the elaborated model (Model #2) using dummy variables for investment origins increases the variations explained for the company objectives.

The size of the firm appears to be related to the selection of all the company objectives (i.e., organizational development orientation, financial orientation, and growth orientation) for each objective as evidenced by statistically significant beta coefficients. The one exception is for Model #2 of the financial orientation objective.

The growth of the market appears to have explanatory value for organizational development and financial orientation. The maturity of the products

TABLE XXVI

RELATIONSHIPS BETWEEN COMPANY OBJECTIVES AND STRATEGIC CONTINGENCIES

	Dependent Variables					
	Organizational Development		Financial Orientation		Growth Orientation	
Model	#1	#2	#1	#2	#1	#2
SIZE	.153	.163	.135	.106	.190	.144
EXPORT	.102	.064	.023	.054	-.013	-.046
LOCAGROW	.114	.180	.211	.118	.120	.143
PDMATURE	-.072	-.072	.126	.124	.036	.050
American (Dummy)	--	-.202	--	.358	--	-.202
Japan (Dummy)	--	.134	--	-.122	--	-.107
Europe (Dummy)	--	.083	--	-.075	--	-.164
Model R^2	.047	.124	.061	.240	.046	.078
F	3.1	5.0	4.1	11.2	3.0	3.0
P Value	.016	.000	.003	.000	.019	.005
n	256	256	256	256	256	256

Note:

(1). All regression coefficients are the standardized beta estimates. Coefficient values statistically significant at 0.05 level or above are underlined.

(2). SIZE = Size of MNC Subsidiaries
EXPORT = Export Orientation of MNC Subsidiaries
LOCAGROW = Local Market Growth
PDMATURE = Maturity of the Firm's Products

is significant for the firms' financial objective. Finally, compared to Taiwanese firms, for the American sample firms there is a significantly negative impact on the relationships for the organizational development objective, market growth objective, and the strategic contingency variables. On the other hand, for American sample firms there is a significantly positive impact on the relationships for financial objective and the strategic contingency variables. For the European firms, there is a significantly negative impact on the relationships for financial objective, growth objective, and strategic contingency variables. As a final note, export activities and Japan as an investment origin appear to have no explanatory value.

Competitive Strategies and Strategic Contingencies

Table XXVII presents the results of regression analysis using competitive strategies as dependent variables and strategic contingencies as independent variables. Seven of the eight models are statistically significant at the 0.05 level. The R-square values range from 0.051 for model #1 of product development strategy to 0.222 for model #2 of process innovation strategy. In every instance, the elaborated model increased the variation explained for the objectives.

TABLE XXVII

RELATIONSHIPS BETWEEN COMPETITIVE STRATEGIES AND STRATEGIC CONTINGENCIES

	Dependent Variables							
	Process Innovation		Product Develop		Market Develop		Price Leaders	
Model	#1	#2	#1	#2	#1	#2	#1	#2
SIZE	.181	.127	.136	.149	.161	.142	.032	-.027
EXPORT	.134	.063	.042	.061	-.162	-.151	.103	.051
LOCAGROW	-.025	.022	.199	-.174	.250	.199	.038	.099
PDMATURE	.125	.135	.082	.076	.108	.106	.112	.136
American (Dummy)	--	-.184	--	.136	--	.221	--	-.453
Japan (Dummy)	--	.027	--	.016	--	-.045	--	-.169
Europe (Dummy)	--	-.388	--	.058	--	-.093	--	-.162
Model R^2	.076	.222	.051	.066	.116	.189	.025	.164
F	5.1	10.1	3.4	2.6	8.3	8.2	1.6	6.9
P Value	.000	.000	.009	.016	.000	.000	.175	.000
n	256	256	256	256	256	256	256	256

Note:

(1). All regression coefficients are the standardized beta estimates. Coefficient values statistically significant at 0.05 level or above are underlined.

(2). SIZE = Size of MNC Subsidiaries
EXPORT = Export Orientation of MNC Subsidiaries
LOCAGROW = Local Market Growth
PDMATURE = Maturity of the Firm's Products

The size of the firms appears to be positively related to strategies of process innovation, product development, and market development as noted by significant betas. The export orientation of the firm seems to be positively related to process innovation and negatively related to market development. The growth of the market is positively related to product development strategy and market development strategy. The maturity of the product appears to be positively related to process innovation strategy and price leadership strategy. However, these relationships only appear with the elaborated models.

Compared to Taiwanese firms, American firms tend to have a significantly negative impact on the relationships between strategic contingencies, process innovation strategy, and price leadership strategy. The relationship is positive for market development. Furthermore, Japanese sample firms tend to have a significantly negative impact on the relationships between the price leadership strategy and strategic contingencies. Finally, European sample firms tend to have a significantly negative impact on the relationships between process innovation strategy, price leadership strategy, and strategic contingencies.

Parent-Affiliate Dependency and Strategic Contingencies

Table XXVIII presents the results of regression

analysis using parent-affiliate dependency as dependent variables and strategic contingencies as independent variables. The only relationship between parent-affiliate dependency and strategic contingencies that is statistically significant is the elaborated model for centralization/formalization with an R-square value of 0.124.

The only significant beta for the model is Japan as the investment origins. Japanese firms tend to have a significant impact on the relationships between parent-affiliate dependency and strategic contingencies. These results may indicate that the degree of dependency between the subsidiaries and their parent firms is independent from strategic contingency variables.

Path Analysis for Hypothetical Relationships

A key question is whether the relationships between concepts, as discussed earlier, result from the direct effects of relevant variables and/or from indirect effects among variables. This study used the strategic contingencies as the predetermined variables and selected dimension of company objectives, competitive strategies, and parent-affiliate dependency as dependent variables. The dimensions selected are those that had highest

TABLE XXVIII

RELATIONSHIPS BETWEEN PARENT-AFFILIATE DEPENDENCY AND STRATEGIC CONTINGENCIES

	Dependent Variables			
	Centralization/ Formalization		Coordination/ Integration	
Model	#1	#2	#1	#2
SIZE	.106	.121	-.033	-.044
EXPORT	-.019	-.069	.118	.120
LOCAGROW	-.062	.009	.123	.109
PDMATURE	.124	.114	.052	.053
American (Dummy)	--	.024	--	.073
Japan (Dummy)	--	<u>.334</u>	--	.011
Model R^2	.032	.124	.024	.028
F	1.4	4.1	1.1	.82
P Value	.222	.000	.381	.557
n	180	180	180	180

Note:

(1). All regression coefficients are the standardized beta estimates. Coefficient values statistically significant at 0.05 level or above are underlined.

(2). SIZE = Size of MNC Subsidiaries
EXPORT = Export Orientation of MNC Subsidiaries
LOCAGROW = Local Market Growth
PDMATURE = Maturity of the Firm's Products

bivariate correlations with the dependent variables in the model. Detailed results of the path analyses is shown in Appendix B.

Paths for Process Innovation Strategy

For process innovation strategy, the relationships examined include those concepts indicated in Figure 4. The following models are examined:

1. Model #1:

$$Y = a + b_1 \text{ SIZE} + b_2 \text{ EXPORT} + b_3 \text{ LOCAGROW} + b_4 \text{ PDMATURE} + b_5 \text{ Dummy 1 (American)} + b_6 \text{ Dummy 2 (Japan)}$$

Where Y = Centralization/formalization of the parent-affiliate dependency

2. Model #2:

$$Y = a + b_1 \text{ SIZE} + b_2 \text{ EXPORT} + b_3 \text{ LOCAGROW} + b_4 \text{ PDMATURE} + b_5 X_1 + b_6 \text{ Dummy 1 (American)} + b_7 \text{ Dummy 2 (Japan)}$$

Where Y = Organizational development of the company objectives

X_1 = Centralization/formalization

3. Model #3

$$Y = a + b_1 \text{ SIZE} + b_2 \text{ EXPORT} + b_3 \text{ LOCAGROW} + b_4 \text{ PDMATURE} + b_5 X_1 + b_6 X_2 + b_7 \text{ Dummy 1 (American)} + b_8 \text{ Dummy 2 (Japan)}$$

Where Y = Process innovation of the competitive strategies.

X_1 = Centralization/formalization

X_2 = Organizational development objective

a = Intercepts

b = Standardized Beta coefficients

The beta coefficients are examined by the use of multiple regression analysis. The regression results for Model #1 -- Model #3 as paths to process innovation strategy are provided in Table XXIX. Figure 4 shows the significant path coefficients for process innovation strategy.

TABLE XXIX

PATH COEFFICIENTS FOR PROCESS INNOVATION STRATEGY*

	Dependent Variables		
Model	5. Centralization/ Formalization #1	6. Organizational Development #2	7. Process Innovation #3
1. Sales	0.1210	0.1376	0.0812
2. Export	-0.0693	0.0973	0.0218
3. Market Growth	0.0089	0.1243	-0.0440
4. Product Maturity	0.1136	-0.0551	0.1899
5. Centralization/ Formalization	--	0.0463	0.2983
6. Organizational Development	--	--	0.2189
C1. American Firms (Dummy)	0.0235	-0.1159	0.3035
C2. Japanese Firms (Dummy)	0.3341	0.2190	0.3567

* Coefficient values underlined are significant at 0.10 level or above

The number and quantity of the significant direct and indirect effects of path coefficients are as follows:

1. Direct effects:

P51 = 0.1210 (P < 0.096) P75 = 0.2983 (P < 0.0001)
P61 = 0.1376 (P < 0.061) P76 = 0.2189 (P < 0.0009)
P74 = 0.1899 (P < 0.028)

2. Indirect effects:

P61 X P76 = 0.1376 x 0.2189 = 0.0301
P51 X P75 = 0.1210 x 0.2893 = 0.0350

The results indicate that process strategy is directly influenced by the organizational development objective, centralization/centralization, size, and product maturity, and indirectly influenced by the size of the firm.

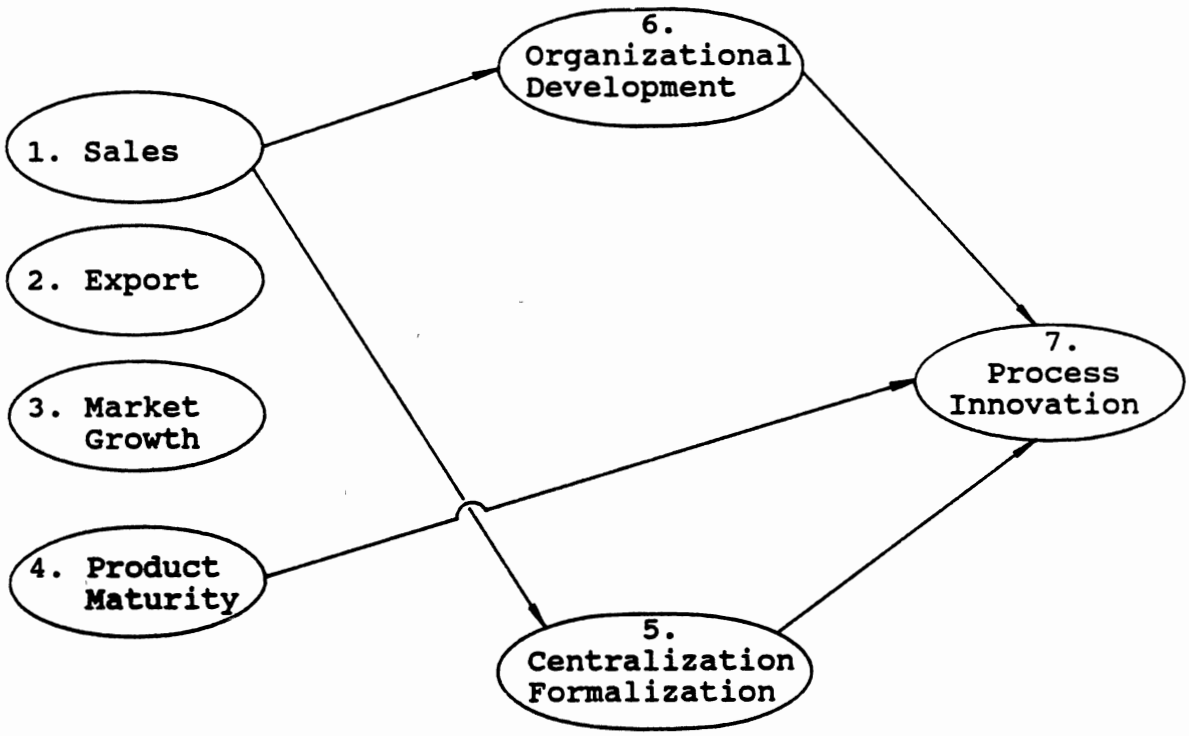

Figure 4. Significant Path Coefficients for Process Innovation Strategy

Paths for Product Development Strategy

For product development strategy, the relationships examined include those concepts indicated in Figure 5. The following models are examined:

1. Model #1:

$$Y = a + b_1 \text{ SIZE} + b_2 \text{ EXPORT} + b_3 \text{ LOCAGROW} + b_4 \text{ PDMATURE} + b_5 \text{ Dummy 1 (American)} + b_6 \text{ Dummy 2 (Japan)}$$

Where Y = Coordination/integration of the parent-affiliate dependency

2. Model #2:

$$Y = a + b_1 \text{ SIZE} + b_2 \text{ EXPORT} + b_3 \text{ LOCAGROW} + b_4 \text{ PDMATURE} + b_5 X_1 + b_6 \text{ Dummy 1 (American)} + b_7 \text{ Dummy 2 (Japan)}$$

Where Y = Organizational development of the company objectives

X_1 = Coordination/integration

3. Model #3

$$Y = a + b_1 \text{ SIZE} + b_2 \text{ EXPORT} + b_3 \text{ LOCAGROW} + b_4 \text{ PDMATURE} + b_5 X_1 + b_6 X_2 + b_7 \text{ Dummy 1 (American)} + b_8 \text{ Dummy 2 (Japan)}$$

Where Y = Product development of the competitive strategies.

X_1 = Coordination/integration

X_2 = Organizational development objective

a = Intercepts

b = Standardized Beta coefficients

The regression results for Model #1 -- Model #3 as paths to

product development strategy are provided in Table XXX. Figure 5 shows the significant path coefficients for product development strategy.

TABLE XXX

PATH COEFFICIENTS FOR PRODUCT DEVELOPMENT STRATEGY*

Model	Dependent Variables		
	5. Coordination/ Integration #1	6. Organizational Development #2	7. Product Development #3
1. Sales	-0.0438	0.1517	0.0416
2. Export	0.1197	0.0707	0.0454
3. Market Growth	0.1089	0.1033	0.0783
4. Product Maturity	0.0528	-0.0602	0.1395
5. Coordination/ Integration	--	0.1955	0.0748
6. Organizational Development	--	--	0.6456
C1. American Firms (Dummy)	0.0734	-0.1292	0.1308
C2. Japanese Firms (Dummy)	0.0114	0.2323	-0.2318

* Coefficient values underlined are significant at 0.1 level or above

The number and quantity of the significant direct and indirect effects of path coefficients are as follows:

1. Direct effects:

P61 = 0.1517 (P < 0.034) P74 = 0.1395 (P < 0.016)
P65 = 0.1955 (P < 0.006) P76 = 0.6456 (P < 0.0001)

2. Indirect effects:

P61 X P76 = 0.1517 x 0.6456 = 0.0979
P65 X P75 = 0.1955 x 0.6456 = 0.1262

The results indicate that product development strategy is directly influenced by organizational development objective, coordination/integration, size, and product maturity, and indirectly influenced by the size of the firm.

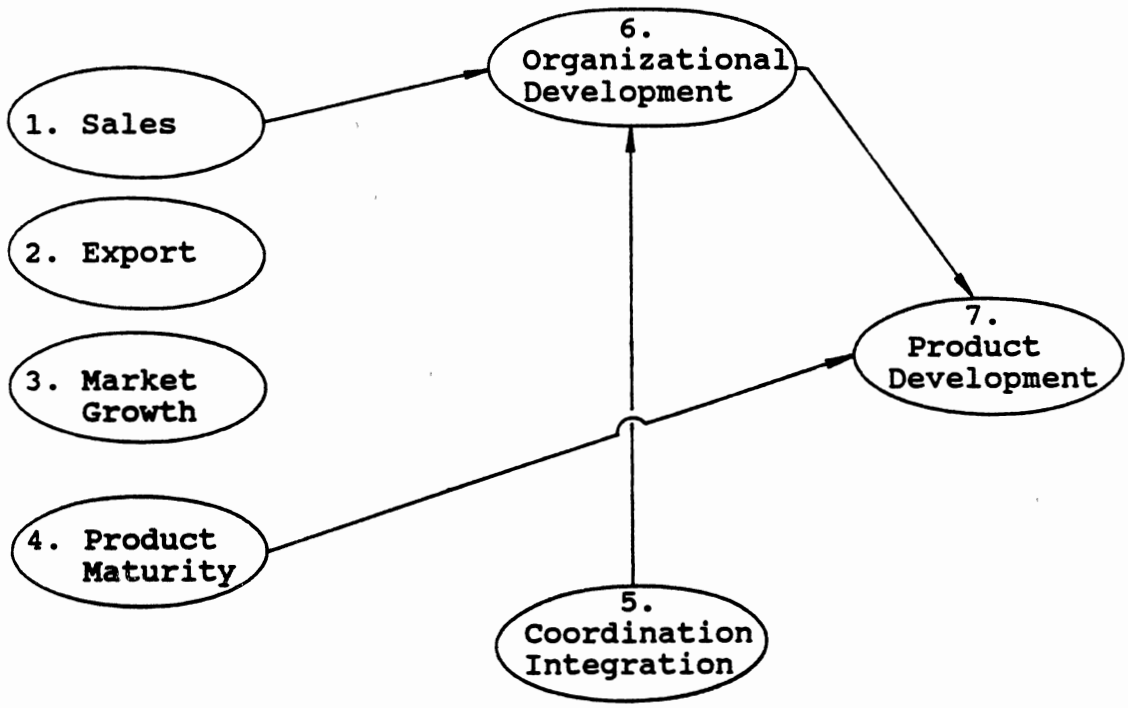

Figure 5. Significant Path Coefficients for Product Development Strategy

Paths for Market Development Strategy

For market development strategy, the relationships examined include those concepts indicated in Figure 6. The following models are examined:

1. Model #1:

$$Y = a + b_1 \text{ SIZE} + b_2 \text{ EXPORT} + b_3 \text{ LOCAGROW} + b_4 \text{ PDMATURE} + b_5 \text{ Dummy 1 (American)} + b_6 \text{ Dummy 2 (Japan)}$$

Where Y = Centralization/formalization of the parent-affiliate dependency

2. Model #2:

$$Y = a + b_1 \text{ SIZE} + b_2 \text{ EXPORT} + b_3 \text{ LOCAGROW} + b_4 \text{ PDMATURE} + b_5 X_1 + b_6 \text{ Dummy 1 (American)} + b_7 \text{ Dummy 2 (Japan)}$$

Where Y = Financial orientation of the company objectives

X_1 = Centralization/formalization

3. Model #3

$$Y = a + b_1 \text{ SIZE} + b_2 \text{ EXPORT} + b_3 \text{ LOCAGROW} + b_4 \text{ PDMATURE} + b_5 X_1 + b_6 X_2 + b_7 \text{ Dummy 1 (American)} + b_8 \text{ Dummy 2 (Japan)}$$

Where Y = Market development of the competitive strategies.

X_1 = Centralization/formalization

X_2 = Financial objective

a = Intercepts

b = Standardized Beta coefficients

The regression results for Model #1 -- Model #3 as paths to

market development strategy are provided in Table XXXI. Figure 6 shows the significant path coefficients for market development strategy.

TABLE XXXI

PATH COEFFICIENTS FOR MARKET DEVELOPMENT STRATEGY*

	Dependent Variables		
	5. Centralization/ Formalization #1	6. Financial Orientation #2	7. Market Development #3
1. Sales	0.1210	0.0532	0.1051
2. Export	-0.0693	0.0288	-0.2066
3. Market Growth	0.0089	0.0866	0.1181
4. Product Maturity	0.1136	0.1525	0.0726
5. Centralization/ Formalization	--	0.1281	0.1430
6. Financial Orientation	--	--	0.1951
C1. American Firms (Dummy)	0.0235	0.4561	0.2664
C2. Japanese Firms (Dummy)	0.3342	-0.0737	0.0363

* Coefficient values underlined are significant at 0.1 level or above

The number and quantity of the significant direct and indirect effects of path coefficients are as follows:

1. Direct effects:

P51 =	0.1210 (P < 0.096)	P76 =	0.1951 (P < 0.02)
P64 =	0.1525 (P < 0.022)	P73 =	0.1181 (P < 0.097)
P65 =	0.1281 (P < 0.063)	P75 =	0.1430 (P < 0.04)
P72 =	-0.2066 (P < 0.003)		

2. Indirect effects:

P65 X P76 = 0.1281 x 0.1951 = 0.0250
P64 X P76 = 0.1525 x 0.1951 = 0.0298

The results indicate that market development strategy is directly influenced by financial objective, centralization/ formalization, size, and product maturity, and indirectly influenced by the size and product maturity of the firm.

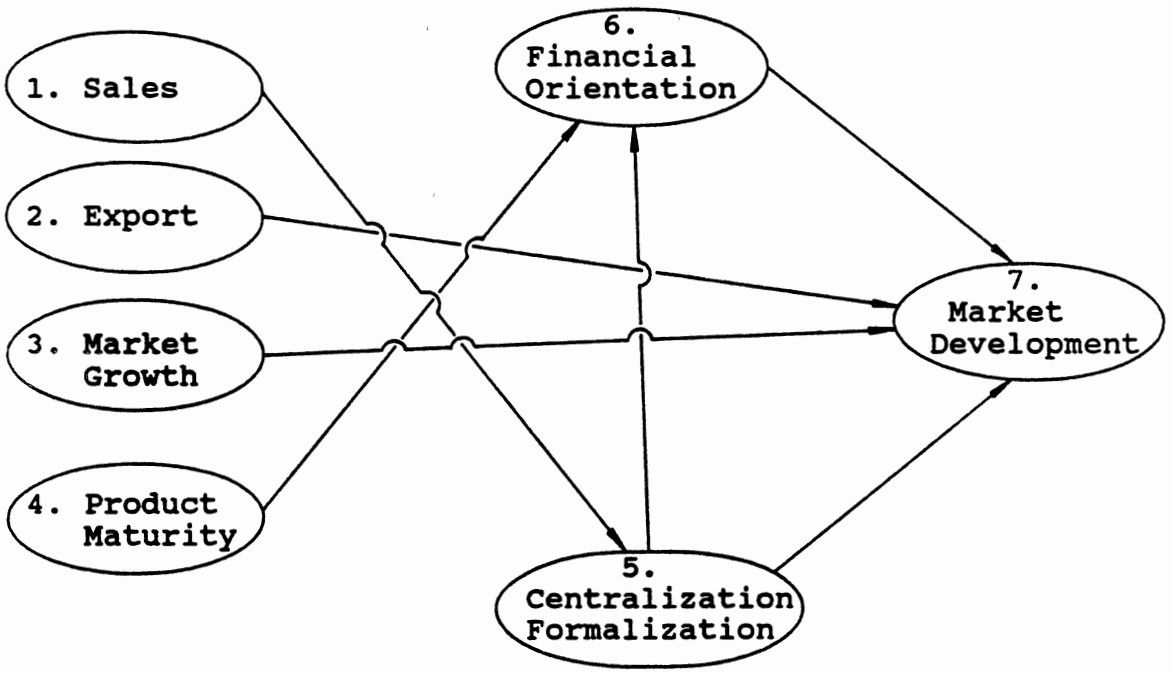

Figure 6. Significant Path Coefficients for Market Development Strategy

Paths for Price Leadership Strategy

For price leadership strategy, the relationships examined include those concepts indicated in Figure 7. The following models are examined:

1. Model #1:

$$Y = a + b_1 \text{ SIZE} + b_2 \text{ EXPORT} + b_3 \text{ LOCAGROW} + b_4 \text{ PDMATURE} + b_5 \text{ Dummy 1 (American)} + b_6 \text{ Dummy 2 (Japan)}$$

Where Y = Centralization/formalization of the parent-affiliate dependency

2. Model #2:

$$Y = a + b_1 \text{ SIZE} + b_2 \text{ EXPORT} + b_3 \text{ LOCAGROW} + b_4 \text{ PDMATURE} + b_5 X_1 + b_6 \text{ Dummy 1 (American)} + b_7 \text{ Dummy 2 (Japan)}$$

Where Y = Growth orientation of the company objectives

X_1 = Centralization/formalization

3. Model #3

$$Y = a + b_1 \text{ SIZE} + b_2 \text{ EXPORT} + b_3 \text{ LOCAGROW} + b_4 \text{ PDMATURE} + b_5 X_1 + b_6 X_2 + b_7 \text{ Dummy 1 (American)} + b_8 \text{ Dummy 2 (Japan)}$$

Where Y = Price leadership of the competitive strategies.

X_1 = Centralization/formalization

X_2 = Growth objective

a = Intercepts

b = Standardized Beta coefficients

The regression results for Model #1 -- Model #3 as paths to process innovation strategy are provided in Table XXXII.

Figure 7 shows the significant path coefficients for price leadership strategy.

TABLE XXXII

PATH COEFFICIENTS FOR PRICE LEADERSHIP STRATEGY*

Model	Dependent Variables		
	5. Centralization/ Formalization #1	6. Growth Orientation #2	7. Price Leaderships #3
1. Sales	0.1210	0.0318	-0.0108
2. Export	-0.0693	0.0164	-0.0135
3. Market Growth	0.0089	0.1157	0.0261
4. Product Maturity	0.1136	0.0177	0.1407
5. Centralization/ Formalization	--	0.0870	-0.0214
6. Growth Orientation	--	--	0.1875
C1. American Firms (Dummy)	0.0235	0.0042	-0.2702
C2. Japanese Firms (Dummy)	0.3342	0.062	0.0279

* Coefficient values underlined are significant at 0.10 level or above

The number and quantity of the significant direct effects of path coefficients are as follows:

P51 = 0.1210 (P < 0.096)
P74 = 0.1407 (P < 0.056)
P76 = 0.1875 (P < 0.001)

No indirect effects to price leadership strategy has been found. The results indicated that price leadership strategy is directly influenced by growth objective, centralization/formalization, and product maturity of the firm.

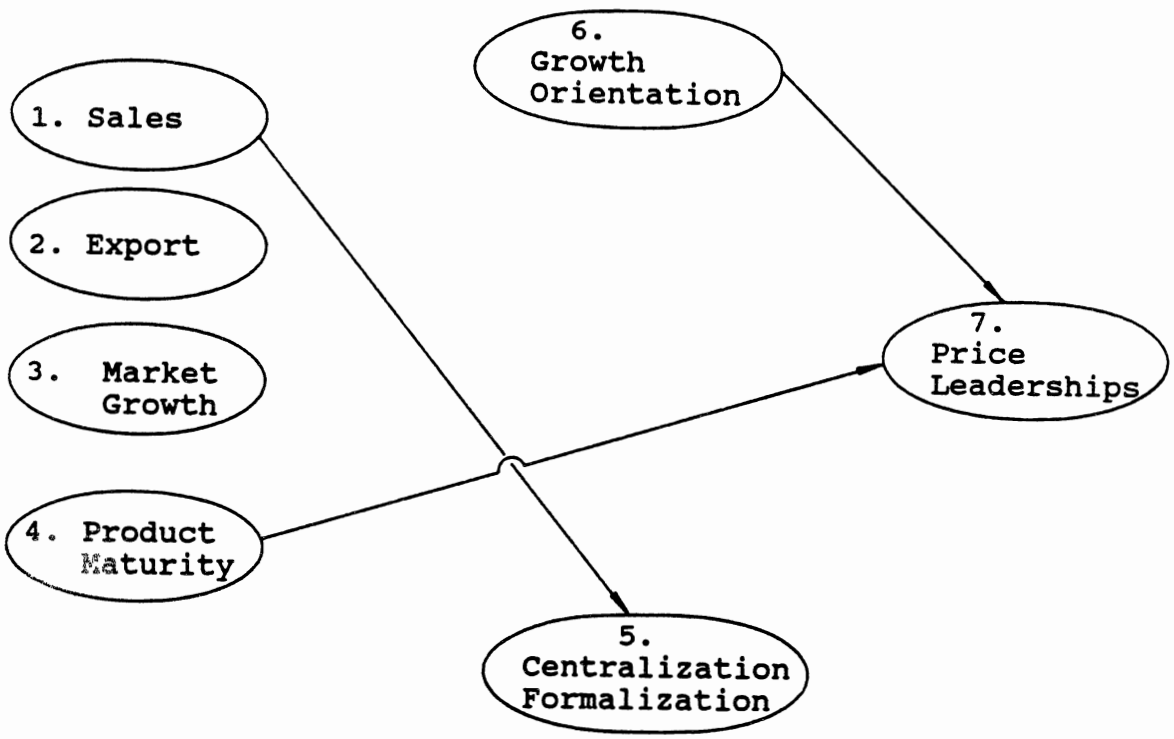

Figure 7. Significant Path Coefficients for Price Leadership Strategy

A Summary of the Findings

This study focuses on the following three major issues of interest: (1) the similarities and differences of strategic operations among American, Japanese, European, and Taiwanese firms operating in Taiwan; (2) the interrelationships among strategy-related constructs; and (3) the relationships between strategic contingency variables and strategic operation variables. To examine these issues, each of the five hypotheses, as described in Chapter III, is evaluated based on the survey results.

Hypothesis I proposes that firms with different investment origins tend to operate differently on the strategic components of company objectives, competitive strategies, and parent-affiliate dependency. The results indicate that American firms are more financial oriented emphasizing product and market development strategies, Japanese firms are more organizational development oriented emphasizing process innovation strategy, and Taiwanese firms typically seek to grow through process innovation and price leadership strategies. Thus the hypotheses for the comparisons of company objectives and competitive strategies as listed in H1-1, H1-2, and H1-3 are fully supported. On the other hand, the hypothesized direction for parent-affiliate dependency is not supported. Contrary to prior research, this study shows that Japanese firms tend to have a higher level of centralization/

formalization, while American firms tend to have a lower level of centralization/formalization. No difference is found for coordination/integration among American, Japanese, and European groups.

Hypotheses II proposes that relationships exist between strategic objectives and competitive strategies. There appears to be such relationships. Process innovation strategy and product development strategy are significantly associated with an organizational development objective, market development strategy is significantly associated with a financial objective, and price leadership strategy is significantly associated with a market growth objective. No company objectives were found to be associated with a focus strategy. Thus, Hypothesis II is highly supported.

Hypothesis III proposes that relationships exist between parent-affiliate dependency and competitive strategies. The results indicate that the selected competitive strategies are associated with parent-affiliate dependency. It is shown that the emphasis of a process innovation strategy is associated with the level of centralization/formalization, the emphasis of product development strategy is associated with the level of coordination/integration, and the emphasis of a market development strategy is associated with the level of centralization/formalization. Price leadership and focus strategies even not found to be associated with parent-affiliate factors. From this respect, Hypothesis H3-1 is

not supported, H3-2 is highly supported, and H3-3 is not supported.

Hypothesis IV proposes that relationships exist between parent-affiliate dependency and company objectives. The results indicate that the selection of company objectives is significantly associated with parent-affiliate dependency. It is shown that organizational development and financial objectives are positively associated with the level of centralization/formalization, and the growth objective is associated with the level of coordination/integration. From this respect, Hypothesis H4-1 and H4-3 are partially supported, and H4-2 is not supported.

Hypothesis V proposes that relationships exist between strategic operation variables and strategic contingency variables. The results indicate that the environmental conditions operate as contingencies on the selection of strategic operation components (company objectives, competitive strategies, and parent-affiliate dependency). The size of the firm is related to all three company objectives and three of the five competitive strategies. The relationships between the size of the firm and the components of parent-affiliate dependency are not confirmed. In addition, the export orientation of the firm is positively related to a process innovation strategy but negatively related to a market development strategy. The growth of the local market is positively related to the

importance of the organizational development and financial objectives and the emphasis on product development and market development strategies. The maturity of products within the line is related to the financial objective and the emphasis on process innovation and price leadership strategies. Thus, Hypothesis V is partially supported from statistical analysis, although most of the coefficients of determination (R^2) for these relationships are lower than anticipated.

The results as shown in the above paragraphs provide an insightful contribution to understanding the patterns of the strategic operations of MNC subsidiaries. The final Chapter explores the implications of these findings.

CHAPTER VI

DISCUSSION, LIMITATIONS, AND FUTURE RESEARCH DIRECTIONS

This Chapter presents the implications of the research findings of this study. Limitations of the study and directions for future research are also included.

Discussion of Major Findings

The major objectives of this study have been to describe the competitive environment for multinational firms operating in Taiwan and patterns of strategic orientations for these firms. Additionally, the study has evaluated the nature of relationships among these strategy-related constructs. These results should contribute to our understanding of both the strategy concepts and the practices of international business strategy. This is especially the case for the strategic patterns of business operation among American, Japanese, European, and Taiwanese firms operating in the Far East.

Three research questions have guided this study. First, what are the similarities and differences on patterns of strategic operations among MNC subsidiaries and Taiwanese firms operating in Taiwan? Second, what are the

general relationships among strategy-related constructs (i.e., company objectives, competitive strategies, and parent-affiliate dependency)? Third, what competitive environment contingency conditions are associated with specific patterns of strategic operations? The findings regarding these questions have been summarized on the last section of Chapter V. Several conclusions follow from the analysis guided by these basic research questions.

A major conclusion that can be drawn from this study is that the investment origin is an important factor in explaining the strategic operations of MNC subsidiaries. American-based MNC subsidiaries favor a financial management objective. They seek to establish competitive advantages through product and market development strategies. Japanese-based MNC subsidiaries emphasize on organizational development objective and seek to achieve superiority through incremental process innovation and product development strategies. Taiwanese firms typically focus on a growth objective and seek to grow through process innovation and price leadership strategies. Regarding the operating unit's link to the home office, Japanese-based firms tend to have a higher level of parent-affiliate dependency, while American-based firms tend to have a lower level of parent-affiliate dependency. European-based firms, with their diversity of nationalities, do not show a unique orientation on company objective and competitive strategy or link to home offices.

Several reasons may contribute to the above findings. First, as previous studies have shown (Kagono et al. 1989, Kotler, Fahey, and Jatusripitak 1985), American managers are extremely sensitive about the short-term earnings and the threats of takeovers. They are in many cases encouraged by bonus systems and stock option plans. Takeovers can occur quite easily, even in a very large company. Thus, management emphasizes stock prices, dividend distribution, and short-term performance. On the other hand, Japanese firms are more interested in capital gains rather than dividend distribution, since the stock option arrangement has not been broadly adopted and the threats of takeovers are much less than those in the United States.

In addition, another factor in explaining the findings may be the differences in mobility of the labor markets in the parent countries. American firms tend to procure from their labor markets managers and engineers with special expertise as required and lay them off as circumstances change. Japanese firms, with the traditions of long-term employment and non-layoff policy, tend to place more emphasis on educating and activating human resources and promoting from within.

Furthermore, previous studies have shown that American firms tend to establish competitive advantages through approaches of logical and deductive fashion, while Japanese firms seek to achieve competitive superiority through

inductive and incremental reasoning (Kagono et al. 1989). American firms tend to be more market oriented and seek to lead through product innovation and differentiation. Thus, a detailed analysis on environmental opportunities and resource deployment alternatives is typically done before the program is carried out. Japanese firms tend to be more human resources oriented and aim at the accumulations of resources and experience. They tend to establish superiority through process innovation, cost advantage, and reliability.

All the above explanations contribute to the difference of strategic operations between American and Japanese MNC subsidiaries. This conclusion may not mean that American firms are more short-sighted. However, as short-term incentives are stressed, it is very easy for the managers to shift funds from long-term oriented projects to short-term ones.

The second conclusion derived from this study is that there are significant relationships between the components of strategy-related constructs. It is shown that the emphasis of competitive strategies is associated with the selection of company objectives and the level of parent-affiliate dependency. It is also shown that the selection of company objectives is associated with the level of parent-affiliate dependency.

There are many examples of interrelationships that were discerned from the analyses. Process innovation and

product development strategies are found to be associated with an organizational development objective. A market development strategy is associated with a financial objective. Price leadership as a strategy is associated with a growth objective. In addition, process innovation and market development strategies are associated with the level of centralization/formalization while a product development strategy is associated with the level of coordination/integration.

These findings have important implications. First, environment, strategy, and structure are regarded as three major factors for the success of business operations. The concept of "strategic fit" among these three factors has been widely discussed in the literature. However, this concept is rarely extended to the components of strategy itself. This study shows that the "strategic fit" concept is applicable to the components of international strategic operations (i.e., company objectives, competitive strategies, and parent-affiliate dependency).

In addition, the vast majority of previous studies have been conducted in the U.S. and focus on U.S. businesses. This study extends the focus from domestic U.S. businesses to MNC subsidiaries with different investment origins in newly industrializing countries. The results of this study generally support the theoretical and empirical relationships developed by previous studies.

Finally, previous studies on international strategy

tend to concentrate on a relatively small number of firms with limited research variables (Kagono et al. 1989). This study goes one step further to establish reliable measurement scales and employ scientific methodologies on sampling, data gathering, and data analyzing to identify the relationships among strategic components of international strategy. The empirical results are encouraging and should provide a fundamental basis for further hypothesis testing and validation.

The third conclusion derived from this research is that the conditions of environmental contingencies are associated with the selection of strategic components for international business operation. It is shown that the size and structure of the firm; the competition intensity, concentration, growth, and attractiveness of the industry; and the market share, market share growth, and maturity of the product are among the most critical variables for the selection of company objectives, the emphasis of competitive strategies, and the degree of parent-affiliate dependency.

These results on contingencies should be interpreted with appropriate caution. First, many of the relationships noted in the above paragraphs are not statistically significant. In addition, as noted by Ginsberg and Venkatraman (1985), the study results should be evaluated based on both the level of statistical significance and the level of scientific significance. The statistical

significance simply tells us the probability of finding in the general population what we found in our sample. Statistical certainty is directly dependent upon the size of the sample. Thus, the scientific significance or the magnitude of the effect that determines the contribution of relevant relationships should be seriously considered. Since the coefficients of determination (R^2) are lower than anticipated, the explanatory power of regression models is limited. However, these results still provide guidelines on the relationships between environmental variables and strategic variables.

Limitations

Although the research results are interesting, several limitations exist in this study. These limitations suggest areas and directions for future research. The cross-sectional research design, the composition of the sample, the different versions (language) of research questionnaire, and the response rates all serve to temper the results of this study.

First, this study adopts the cross-sectional research design and examines firms at one point in time. As a result, directional relationships are not clear and must be inferred from logically thought. Due to the constraints of time and data availability, a longitudinal research is not viable in this study.

Second, the respondents of this study consist of

management people with different nationalities. The cultural differences among respondents may cause bias on the perceptions of attitudinal questionnaire items. Furthermore, the English, Japanese, and Taiwanese versions of questionnaires have been developed for the convenience of the respondents with different nationalities. Thus, one must assume that construct validity exists over nationalities. Thus, the generalizability of the results should be restricted since it is limited to these four groups of population (sample) only.

Third, though it is not unusual for similar surveys to have a response rate lower than 25%, the rate for this study should be considered as relatively low. Thus, the issues of non-response bias needs to be further considered.

Finally, the amount of variation explained (i.e., R^2) for some regression models is low. This indicates that the strategic components addressed in this study are not exclusively explanatory. However, the selected strategic variables do reflect the dimensions of greatest theoretical interest for this study.

In spite of the above limitations, this study makes contributions to the literature of international strategy. The limitations do suggest methodological issues as the basis for future research.

Recommendations for Future Research

Several future research areas for international

strategy can be suggested. First, since the findings are encouraging, the same questionnaire or an abbreviated form could be used in other countries, such as Japan, Korea, Mainland China and Southeastern Asian countries for MNC subsidiaries with American, Japanese, European, and Taiwanese investment origins. The questionnaire could also be used for the parent firms of MNC subsidiaries to confirm the validity and generalizability of the findings.

Second, this study focuses on the relationships between components of strategy-related constructs and the relationships between environmental contingencies and strategic components. The relationships between strategic operation and business performance are not included in this study. Furthermore, since the patterns of strategic operation adopted by the firms are basically long-term in nature (but could be changed in the rapidly changing environments), the impacts and results of strategic turnaround may only be identified many years after the actions. Thus, it is recommended for future research to carry out longitudinal studies covering the relationships between strategic components and business performance. This approach could further confirm the theoretical relationships between the emphasis of strategic components and the success of business performance.

Third, this study encompasses a variety of manufacturing industries. However, previous studies have argued that the characteristics of the industry may play an

important role in business operation. Thus, it would be more desirable for future research to focus on the strategic operations of firms within a single industry, the comparisons of strategic operations between firms of different industries, or the comparisons of strategic operations between firms of manufacturing industries and non-manufacturing industries.

Fourth, this study included only one questionnaire to each sample firm. To improve response rate and reduce possible non-response bias, one might send more than one set of questionnaires to each sample firm and then measure the perceptions of management people from different levels and different functional areas of the firms as the inputs to analysis.

Finally, this study adopts a survey methodology to empirically test the underlying relationships and hypotheses. This "coarse-grained" approach is excellent in capturing the statistically significant findings and exploring the "law of the marketplace" (Harrigan 1983). However, it may lose unexplained variance that could offer richer characterizations of strategy. Thus, it is recommended that, in addition to the structured survey approach, a "fine-grained" methodology, such as intensive case study or in-depth interviews should be employed to identify the insight of strategic operations at the dynamic environments. The comparisons of the results of the "coarse-grained" approach and the "fine-grained" approach

will further discern the causal relationships between strategic components and other variables.

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APPENDIX A

SURVEY QUESTIONNAIRE FOR THIS STUDY

OSU

Oklahoma State University

COLLEGE OF BUSINESS ADMINISTRATION
Research in Taiwan

P. O. BOX 47-59
Kaohsiung, Taiwan
Republic of China

June 1, 1990

Dear Sirs:

As researchers in the area of international businesses, we understand that your firm is an outstanding foreign based multinational firm operating in Taiwan.

We are interested in your opinions about strategic operations for your firm. Your cooperation in this study would be very beneficial to our understanding of business operations for multinational corporations. An overview of this research project is attached for your reference. Your organization may have participated in a preliminary study conducted earlier this year.

It will take very few minutes to completely answer this questionnaire. Your response will be used for academic studies only and kept strictly confidential. Only summary results for all respondents will be reported. Please complete the attached questionnaire and return it in the enclosed postage-paid envelope. Upon your request, a summary of this research will be returned to you at no charge.

Very Sincerely Yours,

Wann-Yih Wu
Ph. D. Candidate
College of
Business Administration
Oklahoma State University

Stephen J. Miller
Professor and Head
Department of Marketing
Oklahoma State University

I. *Summary of the Firm*

In this section, we wish to know the basic characteristics of your firm. Please check and/or answer each of the following items:

1. Ownership structure of your firm

- **Percent of capital provided by your parent firm** _____ %
- **Percent of capital provided by Taiwanese shareholders** _____ %

2. Size of your firm

- **Total capital US$** _____ %
- **Total number of employees** _____
- **Annual sales volume US$** _____ %

3. Distribution of the customers

- **Amount % transferred to parent company** _____ %
- **Amount % exported to other foreign countries** _____ %
- **Amount % sold locally** _____ %

4. Operation history (Age of your firm in Taiwan) _____ **years**

5. Main products of your firm (Please list 5 major ones)

_____

_____

Ⅱ. *Industry Competition and Product/Market Characteristics*

In this section, We are interested in your opinions about several industry competition and product/market variables that your firm faces. For each item, please indicate:

"To what extent do you agree or disagree with each of the following statements?"

Compared to Other Manufacturing Industries During the Past few years	Level of Agreement				
	Strongly disagree	Moderately disagree	Neutral	Moderately agree	Strongly agree
1.Competition among firms in our industry was very intense	1	2	3	4	5
2.Most sales in our industry were made by just a few firms	1	2	3	4	5
3.Our industry was very attractive in terms of size, growth, and margins	1	2	3	4	5
4.The sales growth of our industry was very high	1	2	3	4	5
5.Our products / markets grew substantially	1	2	3	4	5
6.Most of our products / markets were in mature stage of product life cycle	1	2	3	4	5
7.The market share of our products is very high	1	2	3	4	5
8.The market share of our products grew rapidly	1	2	3	4	5
9.Our product / market consisted of many small volume buyers	1	2	3	4	5
10.Our products need more services	1	2	3	4	5

Ⅲ. *Company Objectives and Management Philosophy*

In this section, We are interested in the company objectives and management philosophy of your firm. Listed below are several items that might be the objectives / philosphy of your firm. For each item, please indicate:

"How important each of the following objectives/management philosophy is to your firm?"

Company objectives & Management philosophy	Degree of Importance				
	Not important at all	A little important	Some important	Quite important	Extremely important
1.Increasing market share	1	2	3	4	5
2.Aggressiveness on sales growth	1	2	3	4	5
3.Improving profitability (Net profit)	1	2	3	4	5
4.Increasing cash flow	1	2	3	4	5
5.Emphasis on resources utilization (e.g., ROE or ROI)	1	2	3	4	5
6.Recognition as an innovative firm	1	2	3	4	5
7.Retaining key personnel	1	2	3	4	5
8.Employee satisfaction/morale	1	2	3	4	5
9.Technological leadership	1	2	3	4	5
10.Enhance firm's prestige/reputation	1	2	3	4	5
11.Contributions to customers (e.g., quality/price)	1	2	3	4	5
12.Management development/selection	1	2	3	4	5
13.Employee compensation and benefits	1	2	3	4	5
14.Growth in assets and reserves	1	2	3	4	5
15.Contributions to shareholders (e.g., dividends distributed)	1	2	3	4	5
16.Contributions to society (e.g., community services)	1	2	3	4	5

IV. *Strategic Competitive Methods*

It is rather common for firms competing in the same industry to choose different methods through which to compete. Listed below are several factors that might be used as methods of competing in your industry. Please indicate the degree to which your firm emphasized each of following competitive methods over the past few years (Circle one number beside each competitive method.)

Competitive methods	Degree of Emphasis				
	Not considered	Very limited emphasis	Some emphasis	Considerable emphasis	Major, constant emphasis
1.Pricing below competitors	1	2	3	4	5
2.Developing new products	1	2	3	4	5
3.Providing a broad assortment of products	1	2	3	4	5
4.Providing extensive customer services	1	2	3	4	5
5.Strict product quality control	1	2	3	4	5
6.Achieving the lowest cost position in the industry	1	2	3	4	5
7.Providing narrow range of products	1	2	3	4	5
8.Building brand identification	1	2	3	4	5
9.Refining existing products	1	2	3	4	5
10.Control over channels of distribution	1	2	3	4	5
11.Major expenditure on production process-oriented R & D	1	2	3	4	5
12.Focusing on a few segments within our grographic market	1	2	3	4	5
13.Promotion advertising expenditures above the industry average	1	2	3	4	5
14.Manufacturing of specialty products	1	2	3	4	5
15.Concerted effort to build reputation within industry	1	2	3	4	5
16.Innovation in manufacturing process	1	2	3	4	5
17.Offering products in higher priced market segments	1	2	3	4	5
18.Offering products in lower priced market segments	1	2	3	4	5
19.Innovation in marketing techniques and methods	1	2	3	4	5
20.Emphasis market penetration	1	2	3	4	5
21.Quick delivery and immediate response to customer orders	1	2	3	4	5
22.Acquiring high-caliber work force	1	2	3	4	5
23.Marketing by credit and discount	1	2	3	4	5
24.Investing in new facilities to gain a competitive advantage	1	2	3	4	5
25.Emphasis on production efficiency	1	2	3	4	5
26.Extensive marketing research	1	2	3	4	5

V. *Parent-Affiliate Dependency*

In this section, we wish to know the relationships between your firm and your parent firm. Specifically, we want you to answer the following question:

> *" To what extent do you agree or disagree with each of the following statements of the relationship between your firm and your parent firm ? "*

Parent-Affiliate Relationships	Level of Agreement				
	Strongly disagree	Moderately disagree	Neutral	Moderately agree	Strongly agree
1. In general, delegation of authority from the parent firm for major decision makings is limited	1	2	3	4	5
2. The parent firm has provided a lot of supporting activities to our firm	1	2	3	4	5
3. The parent firm frequently sent people to our firm, and vice versus	1	2	3	4	5
4. The parent firm has provided a fairly well-defined set of rules and policies	1	2	3	4	5
5. There are manuals provided from parent firm to define most of the courses of action to be taken under different situation	1	2	3	4	5
6. The parent firm has higly involved in the planning process of our firm	1	2	3	4	5
7. The parent firm continuously monitors to ensure that rules and policies are not violated	1	2	3	4	5
8. The parent firm has a very tough cost and budget control system to our firm	1	2	3	4	5
9. The communication and coordination between our firm and the parent firm is good	1	2	3	4	5
10. The parent firm gave us a very high flexibility to adapt to dynamic environment	1	2	3	4	5

VI. *Conclusions*

1. Now that you have filled the questionnaire, we sincerely appreciate your time and efforts to answer the above questions. Your answers will be treated in stricly confidence. For our information, would you please indicate your current position in your firm,

   _____ (1) CEO, President
   _____ (2) Vice President
   _____ (3) Manager
   _____ (4) Strategic planning staff
   _____ (5) Others, please specify _____

2. Please state any other comments that you would like to make in the following space

   _____

   _____

   _____

   _____

3. If you would like to have the results of our study, please leave your name and address in the following space

   _____

   _____

   _____

   _____

Please check again to verify that you have filled all the items and return the questionnaire by the enclosed postage-paid envelop.

Thank you for your time and good luck.

OSU

Oklahoma State University

COLLEGE OF BUSINESS ADMINISTRATION

Research in Taiwan
P. O. Box 47-59
Kaohsiung, Taiwan
Republic of China

策略企画の意見調査 リスト

前略：

私達は米国,オクラホマ州立大学(Oklahoma State University)の企業管理研究所の国際企業研究員てす。 貴社のすばらしい管理成積と効率をよくききますので,当校の先生と学生達は貴社に対して強い研究動機を持つています。 この為に,貴社の経営策略及び管理の見方を御提供願えないてしようか。

当研究の重点は台湾国内の会社及び駐台外資企業の経営策略を研討する物てす。調査リストは匿名の方式て行います。 すへてのデ-タは学術的に全体分析として使うだけで絶対に個別て外に公示しません。是非御安心して書き入れて下さい。

私達は今年米国と日本の在台企業の間にその競争策略の調査研究を行ったことがあります。御参考の為に,その研究結果を同封します。 貴社は以前この研究に御参加した経験の有無を問わず,私達は貴社が是非,今回の意見調査に御参加出来ることを強く期待しています。その研究の結果について,若し,貴社は必要と認めれば, 私達はその結果を郵便て送呈します。

当調査リストの書き入れは約数分間しかかかりません。リスト上の問題には限定された正解が御ざいませんので是非,真実な御考え方に依り, その解答を書き入れて,同封された郵便料支払済の封筒て御返送下さい。御貴重な意見は必ず私達の研究にもっと充実な結果をもたらします。是非,御協力をお願いします。どうも有難う御ざいました。

以上

研究企画執行者敬具

吴　萬　益

米国オクラホマ州立大学
企業管理研究所
博士課程研修人

史蒂芬、米勒

米国オクラホマ州立大学
市場学科
教授且っ,学部長を担当

第一部分　　会社の基本デ-タ

当部分には五っの問題があり,貴社の実際デ-タを書き入れて下さい。

1.貴社は外資の割合がどれ位うですか。

(1) 外資の割合_____ %
(日本サィドの資金)

(2) 台湾サィドの株主 _____ %
(資金の割合)

2. 貴社の規模はどうですか。

(1) 総資本金 NT$_____

(2) 従業員数 _____

(3) 毎年平均の売上げ金額 NT$ _____

3. 貴社の主な客先の割合?

(1) 製品の本社へ輸出する割合 _____ %

(2) 製品の海外へ輸出する割合 _____ %

(3) 製品の国内販売の割合 _____ %

4. 貴社の台湾にての設立年数：_____ 年。

5. 貴社の主な製品は何ですか.五項目をあげて下さい。

_____

_____

_____

第二部分　　産業競争及び製品特徴

此の部分の問題は貴社と同業者間の競争状態及び貴社の製品特性を了解するために,どうか,貴社目前の経営状態に基いて,以下各問題の同意具合いを,チェツク願ひます。

	同意の程度				
	非常に不同意	不同意	普通	同意	非常に同意する
他の製造業と比較すると結果	1	2	3	4	5
1. 他の製造業と比較した結果,他の産業より競争力が強い。	□	□	□	□	□
2. 本産業の大部份の製品は少数のお客様に売っている。	□	□	□	□	□
3. 他の産業と規模及び利益を比較すると,本産業がすぐれている。	□	□	□	□	□
4. 本産業の成長率が高い。	□	□	□	□	□
5. 当社の大部份の製品の売上げ成長がはやい。	□	□	□	□	□
6. 当社の大部份の製品は成熟期に達している。	□	□	□	□	□
7. 当社の大部份の製品は市場占有率(Market Share)が高い。	□	□	□	□	□
8. 当社の大部份の製品はMarket Shareの成長率が高い。	□	□	□	□	□
9. 当社の客先は多数有りほとんどか直接使用者です。	□	□	□	□	□
10.当社の製品はいっもアフター-サービスを必要とする。	□	□	□	□	□

第三部分　　会社の目標と管理哲学

会社の目標と管理哲学には,常に会社の主観的な経営理念又は客観的な内外環境の影響に依り変ります。従って,何卒,貴社の目下の経営情況に基き,下記の十六項目の経営目標又は理念について評価し且つ各項目の重要性程度を選んで記入して下さい。

	重要性程度				
	非常に重要ではない	重要ではない	普通	重要	非常に重要です
会社の目標と管理	1	2	3	4	5
1. 製品の市場占有率(Market Share)を向上する	□	□	□	□	□
2. 会社の売上げの向上を重視する	□	□	□	□	□
3. 会社のProfit（利益）を向上させる	□	□	□	□	□
4. 会社の資金の流動率を向上させる	□	□	□	□	□
5. 資源利用の効率を重視する	□	□	□	□	□
6. 会社のイメージを重視する	□	□	□	□	□
7. 優秀な重要幹部の募集を重視する	□	□	□	□	□
8. 従業員の満足と士気を重視する	□	□	□	□	□
9. 技術のリーダシップと開発を重視する	□	□	□	□	□
10.会社の名誉を向上させる	□	□	□	□	□
11.お客様の満足度を重視する	□	□	□	□	□
12.社員の管理知能を重視する	□	□	□	□	□
13.従業員の待遇と福祉を重視する	□	□	□	□	□
14.会社の資産の成長を重視する	□	□	□	□	□
15.株主の利益を重視する	□	□	□	□	□
16.地元に対する貢献を重視する	□	□	□	□	□

第四部分　　策略的な競争方法

会社の目標に達するためにいろいろな方法を取って同業者と競争します，貴社の経営状況に基いて，下記の26項目の競争の方法に対する重視の程度で選んで下さい。

	重視の程度				
競争の方法	非常に不重視 1	不重視 2	普通 3	重視 4	非常に重視 5
1. 低価額で販売する	□	□	□	□	□
2. 先端の製品の開発を積極的に推進する	□	□	□	□	□
3. 製品の種類を拡大する	□	□	□	□	□
4. お客様に良いサービスを提供する	□	□	□	□	□
5. 製品の品質を厳しくコントロールする	□	□	□	□	□
6. 生産力を向上しコストを下げる	□	□	□	□	□
7. 製品の種類を少なくする	□	□	□	□	□
8. 製品のトレードマークと会社のイメージを向上させる	□	□	□	□	□
9. 製品の性能と品位を向上させる	□	□	□	□	□
10. 積極的にセールスのルートを開拓する	□	□	□	□	□
11. 生産プロセスのR＆Dを重視する	□	□	□	□	□
12. 製品を限定地域のお客様に販売する	□	□	□	□	□
13. 広告と払販の費用を上げる	□	□	□	□	□
14. 特殊な製品を作ることを重視する	□	□	□	□	□
15. 会社の名誉を向上させる	□	□	□	□	□
16. 生産プロセスの改良を重視する	□	□	□	□	□
17. 高価額製品指向の客層を重視する	□	□	□	□	□
18. 低価額製品指向の客層を重視する	□	□	□	□	□
19. セールスの技術と方法の革新を重視する	□	□	□	□	□
20. 市場の浸透の成長を重視する	□	□	□	□	□
21. 納期の厳守とお客様の反応を重視する	□	□	□	□	□
22. 優秀な人員の募集を重視する	□	□	□	□	□
23. 月賦、贈品、割引などでセールスする	□	□	□	□	□
24. 設備投資を重視し，競争力を強くする	□	□	□	□	□
25. 生産と操作作業の効率を重視する	□	□	□	□	□
26. セールスの研究を重視する	□	□	□	□	□

第五部分　　貴社と本社との依存関係

貴社と本社との依存関係を了解するために.貴社の経営状況に依って下記の各項目の同意レベルを選んで下さい。

	同意の程度				
	非常に不同意	不同意	普通	同意	非常に同意
貴社と本社との依存関係	1	2	3	4	5
1. 一般的に本社は当社に決定権をあまりあたえない。	□	□	□	□	□
2. 本社は当社に多くのソフトとハードの技術援助を提供する。	□	□	□	□	□
3. 当社と本社との間に交互よく人員を派遣する。	□	□	□	□	□
4. 会社の制度の上,本社はいろいろな行動規範と政策上の規準を提示する。	□	□	□	□	□
5. 当社がいろいろな状況に対応出来るために本社はくわしいインストラクション、マニュルを提供する。	□	□	□	□	□
6. 当社が経営の計画を立てる過程には本社はよく参与し,又決定権を握つています。	□	□	□	□	□
7. 本社はよく当社の活動を監督し,各社員が行動規範の通り行動することを確認する。	□	□	□	□	□
8. 本社はコストと予算をコントロールするシステムがあり,当社の経営の実績をコントロールする。	□	□	□	□	□
9. 当社と本社間のコンミュニケーションとコーデイネーションは順調で有る。	□	□	□	□	□
10. 多変な外在環境に対応するために本社は当社に多大な弾力性をさずけている。	□	□	□	□	□

第六部份　　結　　論

御回答大変有りがとうございます,おそれいりますか

1.あなたの肩書は

_____(1)社長,取締役

_____(2)副社長

_____(3)部課長

_____(4)企画幹部

_____(5)スタッフ其の他　_____

2.ほかの御考え方あるいは御意見があれば書いて下さい。

_____

_____

_____

3.サインしなくてもかまいませんが,もし当研究の結果の送付を御希望でしたら,御名前と御住所を書いて下さい。

_____

_____

_____

ご協力ありがとうございました。封筒に入れて御郵送願ひます。

OSU

Oklahoma State University

COLLEGE OF BUSINESS ADMINISTRATION
Research in Taiwan

P. O. BOX 47-59
Kaohsiung, Taiwan
Republic of China

策略規劃諮詢意見調查

親愛的 女士 / 先生 ：

我們是美國奧克拉荷馬州立大學（*Oklahoma State University*）企管研究所國際企業研究員，素聞貴公司績效卓著，乃引發本校師生之研究動機，擬請 台端提供對於公司經營策略及管理的一些看法。

本研究之重點在於探討台灣本地公司及外商在台分公司之經營策略，問卷係採匿名方式，所有資料將僅做爲學術性整體分析之用，絕不個別對外披露公開，敬請放心填答。

我們曾在今年初做過美國及日本在台分公司之競爭策略調查研究，僅附上研究結果供 台端參考，但不論貴公司是否曾參加上次之研究，我們誠摯希望您參加此次之意見調查，研究之結果，若 台端認爲有需要，亦可郵寄貴公司參考。

回答本份問卷僅需約數分鐘之時間，問卷中之問題，並無所謂"對"或"錯"之答案，因此請依照您眞實的想法或感受做答，並將答案填寫後裝入已預付郵資之回郵信封內寄回，您的寶貴意見將使本研究更趨充實完整。謝謝您的熱心協助。

敬祝您　　健康愉快

研究計劃執行人　敬上

吳萬益
美國奧克拉荷馬州立大學
企管研究所
博士候選人

史蒂芬・米勒
美國奧克拉荷馬州立大學
行銷學系
教授兼系主任

CENTENNIAL 1890・1990
Celebrating the Past　Preparing for the Future

第一部分　公司基本資料

本部分有五個問題，請填入貴公司之實際資料

1．請問貴公司之外資比例如何？

(1) 外資部分比例 _____ %

(2) 台灣股東持股比例 _____ %

2．請問貴公司之經營規模如何？

(1) 總資本額 NT$ _____

(2) 總員工人數 _____

(3) 每年平均營業額 NT$ _____

3．請問貴公司之主要顧客在那裡？

(1) 產品運回母公司之比例 _____ %

(2) 產品外銷至其他國家之比例 _____ %

(3) 產品內銷之比例 _____ %

4．公司在台灣成立之年數：_____ 年

5．請問貴公司之主要產品如何（請列舉主要五項或以上）？

_____

_____

_____

第二部分　產業競爭及產品特性

本部分之問題係希望了解貴公司之行業競爭情形及貴公司之產品特性。敬請依貴公司目前經營之狀況，針對下列各題，評估並圈選你對以下各題之同意程度。

與其他製造業比較結果	同意程度				
	非常不同意 1	不同意 2	普通 3	同意 4	非常同意 5
1. 與其他產業比較，本產業之競爭強度（*intensity*）較大	□	□	□	□	□
2. 本產業之產品大部分出售給極少數之顧客	□	□	□	□	□
3. 以產業規模及利潤來比較，本產業之吸引力極佳	□	□	□	□	□
4. 本產業之成長極爲迅速	□	□	□	□	□
5. 本公司之大部分產品成長極爲迅速	□	□	□	□	□
6. 本公司之產品大部分均已到達成熟期	□	□	□	□	□
7. 本公司之產品大部分均有極高之市場佔有率（*Market Share*）	□	□	□	□	□
8. 本公司大部分產品市場佔有率之成長相當迅速	□	□	□	□	□
9. 本公司之顧客群極多，且大部分均爲零星購買者	□	□	□	□	□
10. 本公司之產品必須有較多之售後服務	□	□	□	□	□

第三部分　公司目標與管理哲學

不同的公司因主觀之經營理念或客觀之內外在環境影響，可能訂定不同之公司目標及管理哲學，敬請依貴公司目前之經營情況，針對下列16項經營目標或理念，評估並圈選每一項之重要性等級。

公司目標與管理哲學	重要性程度				
	非常不重要	不重要	普通	重要	非常重要
	1	2	3	4	5
1. 提升產品市場佔有率	□	□	□	□	□
2. 注重公司營業額之成長	□	□	□	□	□
3. 提高公司之淨利	□	□	□	□	□
4. 提高公司之資金流量	□	□	□	□	□
5. 重視資源運用之效率(如投資報酬率)	□	□	□	□	□
6. 重視塑造公司之創新形象	□	□	□	□	□
7. 注重聘請優秀重要幹部	□	□	□	□	□
8. 重視員工之滿足及士氣	□	□	□	□	□
9. 注重技術之領先及開發	□	□	□	□	□
10.注重提升公司之聲譽	□	□	□	□	□
11.重視顧客之滿足(如提供高品質低成本之產品)	□	□	□	□	□
12.重視員工管理知能之發展	□	□	□	□	□
13.注重員工之待遇及福利	□	□	□	□	□
14.重視公司資產及公積之成長	□	□	□	□	□
15.重視股東權益(如股利分配)	□	□	□	□	□
16.注重對本地社區之服務貢獻	□	□	□	□	□

第四部分　策略性競爭方法

爲達成公司之目標，常常要使用不同之競爭方法來與同業競爭，敬請依貴公司目前之經營狀況，針對下列26項可能之競爭方法，評估並圈選貴公司對於每一競爭方法之重視程度。

可能之競爭方法	貴公司重視程度				
	非常不重視	不重視	普通	重視	非常重視
	1	2	3	4	5
1. 以低價位方式行銷	□	□	□	□	□
2. 積極推動新產品之開發	□	□	□	□	□
3. 擴大產品種類	□	□	□	□	□
4. 推動高品質之顧客服務	□	□	□	□	□
5. 嚴格控制產品品質	□	□	□	□	□
6. 長期提升生產力，降低單位成本	□	□	□	□	□
7. 發展較窄而有限度之產品種類	□	□	□	□	□
8. 建立品牌知覺與形象	□	□	□	□	□
9. 積極改進現有產品之功能及品級	□	□	□	□	□
10. 積極介入並控制配銷通路	□	□	□	□	□
11. 重視製程上之研究發展	□	□	□	□	□
12. 公司產品僅限銷某一地區市場之顧客	□	□	□	□	□
13. 提高廣告及推銷之費用	□	□	□	□	□
14. 重視特殊產品之開發製造	□	□	□	□	□
15. 努力提升公司之聲譽	□	□	□	□	□
16. 重視製程上之創新改良	□	□	□	□	□
17. 重視高價位市場之顧客群	□	□	□	□	□
18. 重視低價位市場之顧客群	□	□	□	□	□
19. 重視行銷技術及方法之創新	□	□	□	□	□
20. 重視市場滲透成長	□	□	□	□	□
21. 重視交貨日期之準確及顧客之反應	□	□	□	□	□
22. 重視優秀工作人力之取得	□	□	□	□	□
23. 以信用貸款，贈品及折扣等方式行銷	□	□	□	□	□
24. 重視投資新製程新設備，以取得競爭優勢	□	□	□	□	□
25. 重視生產及操作之效率	□	□	□	□	□
26. 重視行銷研究	□	□	□	□	□

第六部分　　結　　論

1．現在您已填完所有之問題，我們非常感謝您的協助，可否請您示知您目前在貴公司之職位。

———— (1) 董事長，總經理

———— (2) 部門副總

———— (3) 經理

———— (4) 企劃幹部

———— (5) 其他，請說明 ————————————

2．您是否有其他之想法或建議可供本研究之參考，敬請寫在以下之空間或背面

_____

_____

_____

3．本問卷採匿名方式，請不用在問卷上簽名，惟若您希望收到本研究之結果，請留下您的大名及住址，以便日後郵寄研究報告。

_____

_____

_____

再次謝謝您的協助，請填妥後將問卷裝入預付郵資之回郵信封，擲入郵筒，謝謝您，並祝

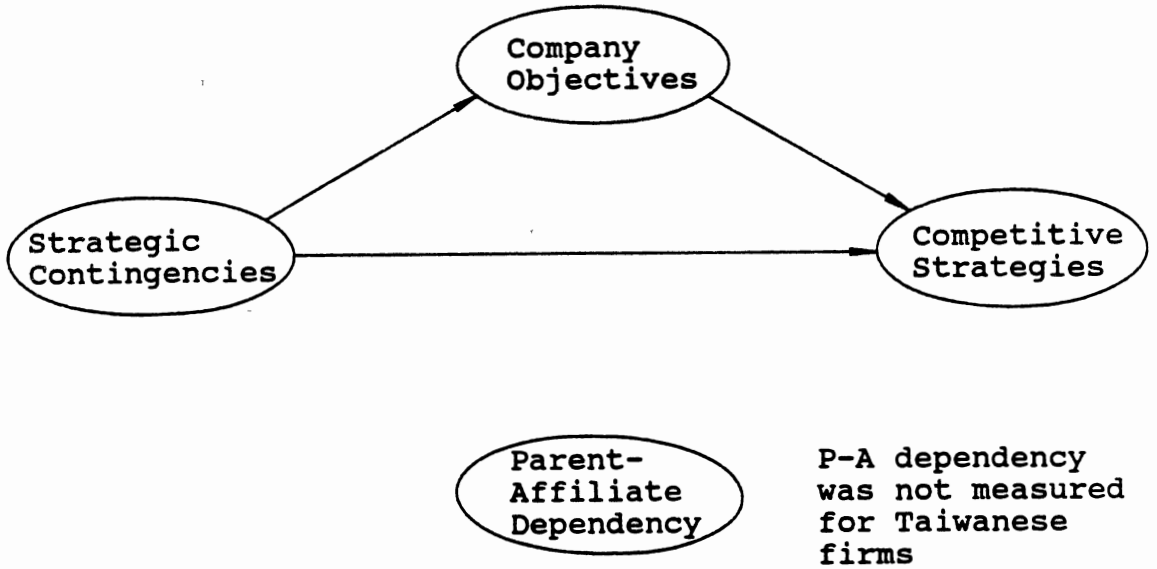
萬 事 如 意

APPENDIX B

PATH COEFFICIENTS FOR HYPOTHETICAL RELATIONSHIPS

Part I. Path Coefficients Excluding the Effets of Parent-Affiliate Dependency

I. Basic Explanation of the Model



1. Major Dimensions for Each Construct

1). Strategic contingencies (16 variables): Four surrogate variables were selected based on factor analysis.
- Sales
- Percent of products exported
- Market growth
- Maturity of the products

2). Company objectives (16 variables): Three dimensions were resulted. Dimension score was the average of variable scores loading on the same factor.
- Organizational development
- Financial orientation
- Growth orientation

3). Competitive strategies (26 variables): Five dimensions.
- Process innovation
- Product development
- Market development
- Price leaderships
- Focus

4). Parent-Affiliate dependency (10 variables): Two dimensions.

. Centralization/Formalization
. Coordination/Integration

2. Major Significant Associations Found by Regression Analysis

1). Process Innovation <---> Organizational Development <--> Centralization Formalization

2). Product Development <---> Organizational Development <--> Coordination Integration

3). Market Development <---> Financial Orientation <--> Centralization Formalization

4). Price Leadership <---> Growth Orientation <--> Centralization Formalization

5). Focus (Associations for focus strategy are not significant, thus it will not be included in further analyses).

6). All the above components shown a mild associations with several strategic contingency variables.

3. Purposes of Path Analysis

1). To identify the direct and indirect effects of contingency variables, company objective variables, and parent-affiliate variables to competitive strategy variables.

2). To identify the magnitude of coefficients and the correlations between variables and/or factors.

II. Paths for Process Innovation Strategy

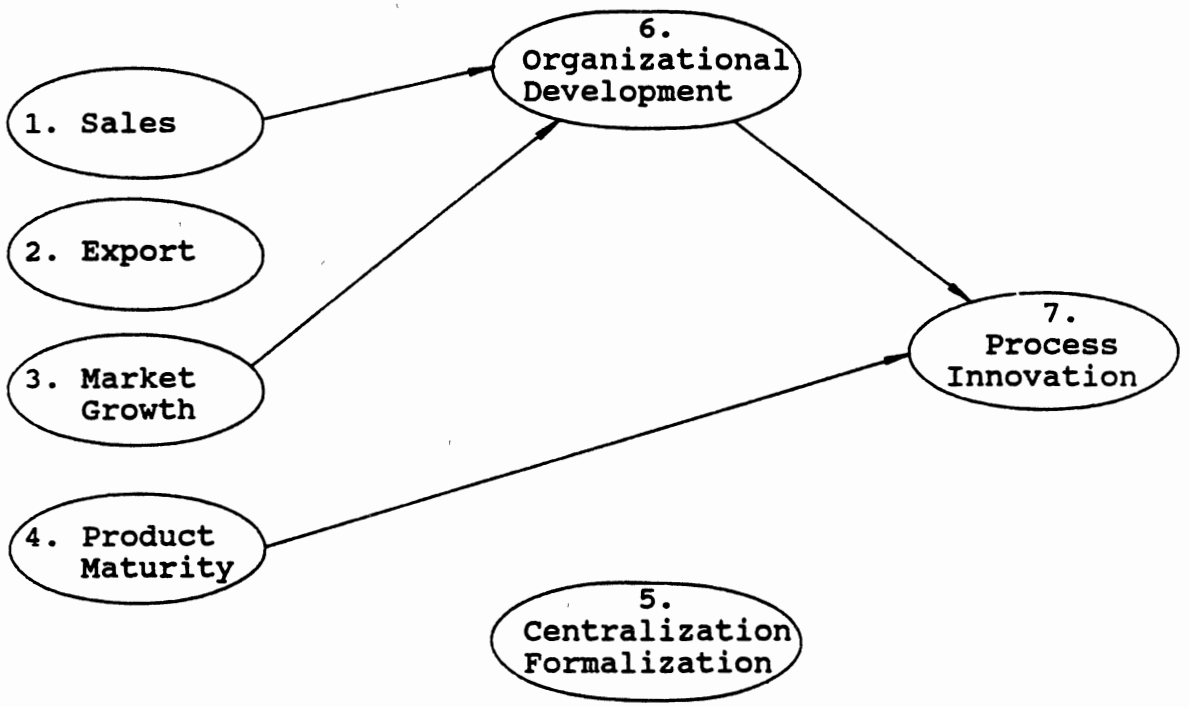


TABLE BI

CORRELATION COEFFICIENTS FOR RELATED VARIABLES*

Variables	1	2	3	4	5	6	7
1. Sales	1.00						
2. Export	.029	1.00					
3. Market Growth	.102	-.189	1.00				
4. Product Maturity	.003	.110	-.223	1.00			
5. Centralization/ Formalization	.101	.006	.081	.131	1.00		
6. Organizational Development	.144	.077	.095	-.086	.130	1.00	
7. Process Innovation	.187	.157	-.096	.146	.421	.363	

* Figures underlined are significant at 0.05 level or above

TABLE BII

PATH COEFFICIENTS FOR PROCESS INNOVATION

Predetermined Variables	Dependent Variables	
	6. Organizational Development	7. Process Innovation
1. Sales	.1635	.0765
2. Export	.0635	.0435
3. Market Growth	.1796	-.0339
4. Product Maturity	-.0722	.1568
5. Centralization/ Formalization	--	--
6. Organizational Development	--	.3093
C1. American (Dummy)	-.2020	-.1213
C2. Japan (Dummy)	.1336	-.0146
C3. Taiwan (Dummy)	-.0828	-.3628

Note: 1. Figures underlined are significant at 0.10 level or above

2. Direct effects (Significant ones):

P61= 0.1635 (P<0.0104) P74=0.1568 (P<0.0047)
P63= 0.1796 (P<0.0053) P76=0.3093 (P<0.0001)

3. Indirect effects:

1). Effects of sales to process innovation through organizational development

= 0.1635 X 0.3093 = 0.0506

2). Effects of market growth to process innovation through organizational development

= 0.1796 x 0.3093 = 0.0556

III. Paths for Product Development Strategy

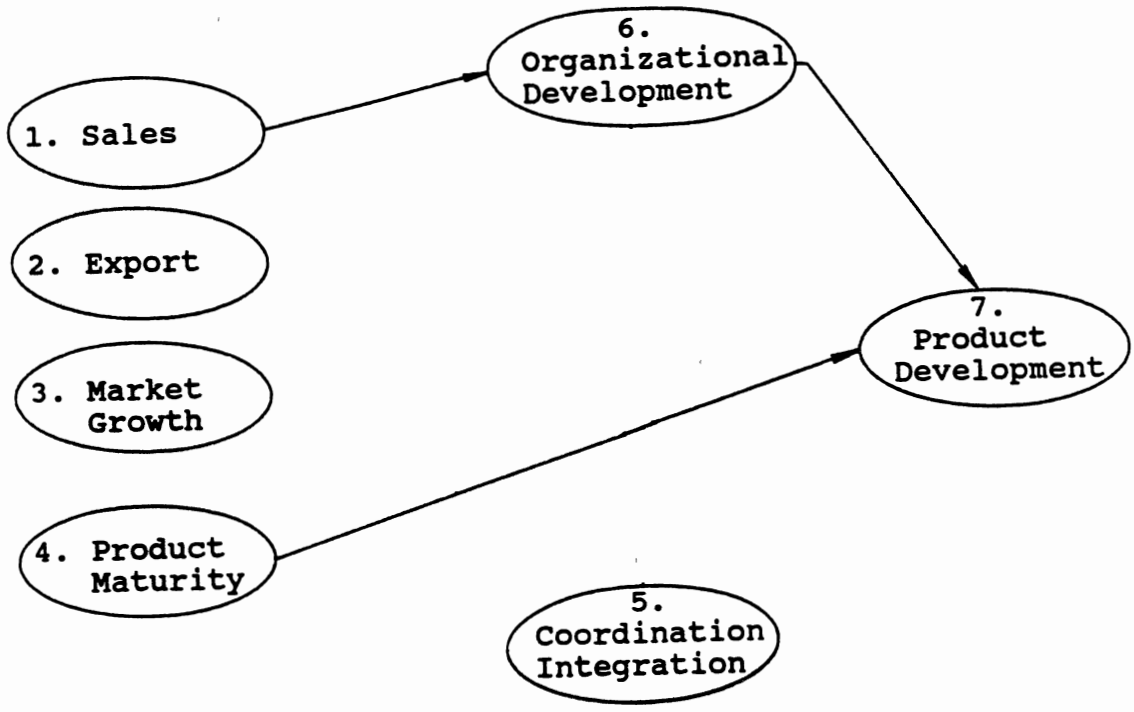


TABLE BIII

CORRELATION COEFFICIENTS FOR RELATED VARIABLES*

Variables	1	2	3	4	5	6	7
1. Sales	1.00						
2. Export	.029	1.00					
3. Market Growth	-.102	-.189	1.00				
4. Product Maturity	.003	.110	-.223	1.00			
5. Coordination/ Integration	-.034	.089	.080	.037	1.00		
6. Organizational Development	.144	.077	.095	-.086	.187	1.00	
7. Product Development	.117	.017	.159	.042	.226	.595	

* Figures underlined are significant at 0.05 level or above

TABLE BIV

PATH COEFFICIENTS FOR PRODUCT DEVELOPMENT

Predetermined Variables	Dependent Variables	
	6. Organizational Development	7. Product Development
1. Sales	.1635	.0388
2. Export	.0635	.0184
3. Market Growth	.1796	-.0537
4. Product Maturity	-.0722	.1248
5. Centralization/ Formalization	--	--
6. Organizational Development	--	.6721
C1. American (Dummy)	-.2020	.2717
C2. Japan (Dummy)	.1336	-.0735
C3. Taiwan (Dummy)	-.0828	.1133

Note: 1. Figures underlined are significant at 0.10 level or above

2. Direct effects (Significant ones):

P61= 0.1635 (P<0.0104) P74= 0.1248 (P<0.0104)
P63= 0.1796 (P<0.0053) P76= 0.6721 (P<0.0001)

3.Indirect effects:

1). Effects of sales to product development through organizational development

= 0.1635 x 0.6721 = 0.1099

2). Effects of market growth to product development through organizational development

= 0.1796 x 0.6721 = 0.1207

III. Paths for Market Development Strategy

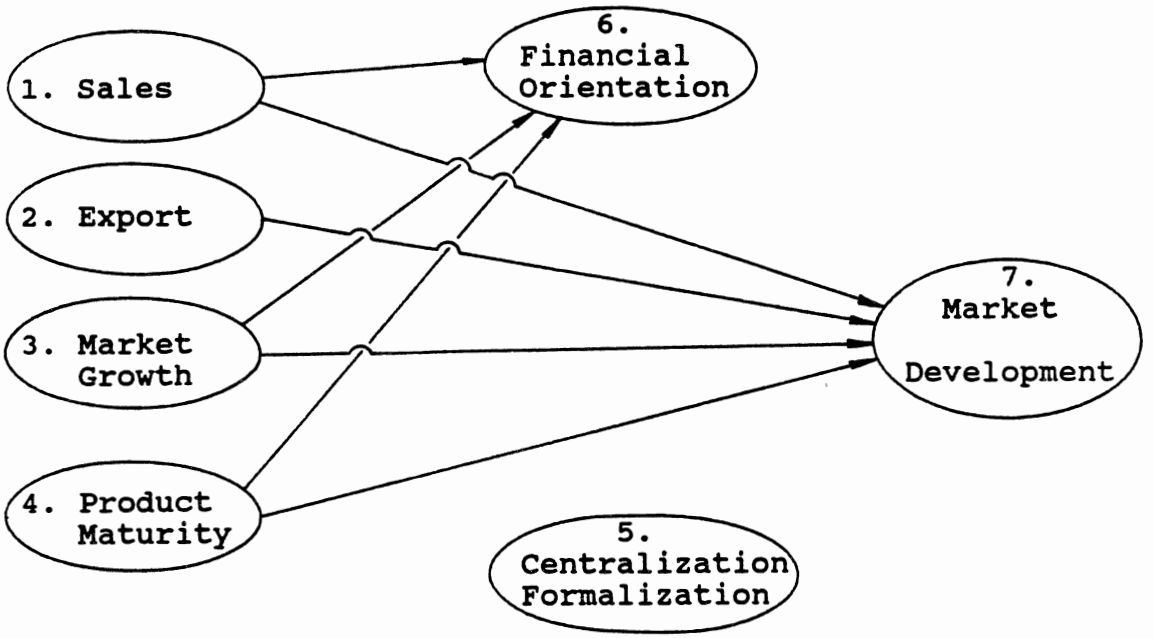


TABLE BV

CORRELATION COEFFICIENTS FOR RELATED VARIABLES*

Variables	1	2	3	4	5	6	7
1. Sales	1.00						
2. Export	.029	1.00					
3. Market Growth	-.102	-.189	1.00				
4. Product Maturity	.003	.110	-.223	1.00			
5. Centralization/ Formalization	.101	.005	-.081	.131	1.00		
6. Financial Orientation	.115	.001	.164	.082	.048	1.00	
7. Market Development	.131	-.193	.240	.035	.128	.385	1.00

* Figures underlined are significant at 0.05 level or above

TABLE BVI

PATH COEFFICIENTS FOR MARKET DEVELOPMENT

Predetermined	Dependent Variables	
	6. Financial Orientation	7. Market Development
1. Sales	.1063	.1133
2. Export	.0540	-.1658
3. Market Growth	.1183	.1674
4. Product Maturity	.1243	.0722
5. Centralization/ Formalization	--	--
6. Organizational Development	--	.2704
C1. American (Dummy)	.3538	.1244
C2. Japan (Dummy)	-.1220	-.0117
C3. Taiwan (Dummy)	-.0749	-.0729

Note: 1. Figures underlined are significant at 0.10 level or above

2. Direct effects (Significant ones):

P61= 0.1063 (P<0.073) P72= -0.1658 (P<0.005)
P63= 0.1183 (P<0.048) P73= 0.1674 (P<0.006)
P64= 0.1243 (P<0.0031) P74= 0.2704 (P<0.0001)
P71= 0.1133 (P<0.058)

3. Indirect effects:

1). Effects of sales to market development through financial orientation

= 0.1063 x 0.2704 = 0.0287

2). Effects of market growth to market development through financial orientation

= 0.1183 x 0.2704 = 0.0320

3). Effects of product maturity to market development through financial orientation

= 0.1243 x 0.2704 = 0.0336

V. Paths for Price Leaderships Strategy

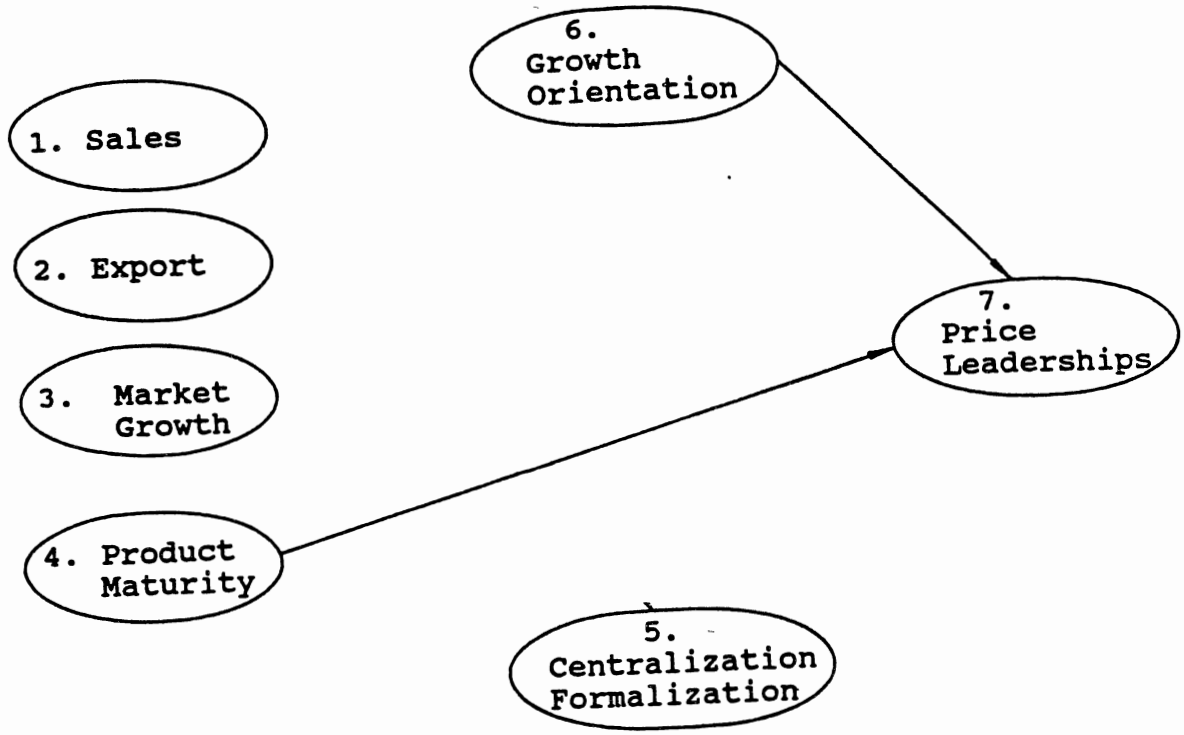


TABLE BVII

CORRELATION COEFFICIENTS FOR RELATED VARIABLES*

Variables	1	2	3	4	5	6	7
1. Sales	1.00						
2. Export	.029	1.00					
3. Market Growth	-.102	<u>-.189</u>	1.00				
4. Product Maturity	.003	.110	<u>-.223</u>	1.00			
5. Centralization/ Formalization	.101	.006	-.081	<u>.131</u>	1.00		
6. Growth Orientation	<u>.177</u>	-.026	.095	.009	.101	1.00	
7. Price Leaderships	.032	.109	.010	.115	.067	<u>.217</u>	1.00

* Figures underlined are significant at 0.05 level or above

TABLE BVIII

PATH COEFFICIENTS FOR PRICE LEADERSHIPS

Predetermined	Dependent Variables	
	6. Growth Orientation	7. Price Leadership
1. Sales	.1444	-.0505
2. Export	-.0463	.0588
3. Market Growth	.1429	.0758
4. Product Maturity	.0501	.1282
5. Centralization/ Formalization	--	--
6. Organizational Development	--	.1633
C1. American (Dummy)	-.2017	-.4202
C2. Japan (Dummy)	-.1068	-.1514
C3. Taiwan (Dummy)	-.1644	-.1351

Note: 1. Figures underlined are significant at 0.10 level or above

2. Direct effects (Significant ones):

P61= 0.1444 (P<0.027) P74= 0.1282 (P<0.032)
P63= 0.1429 (P<0.03) P76= 0.1633 (P<0.007)

3. Indirect effects:

1). Effects of sales to price leadership through growth orientation

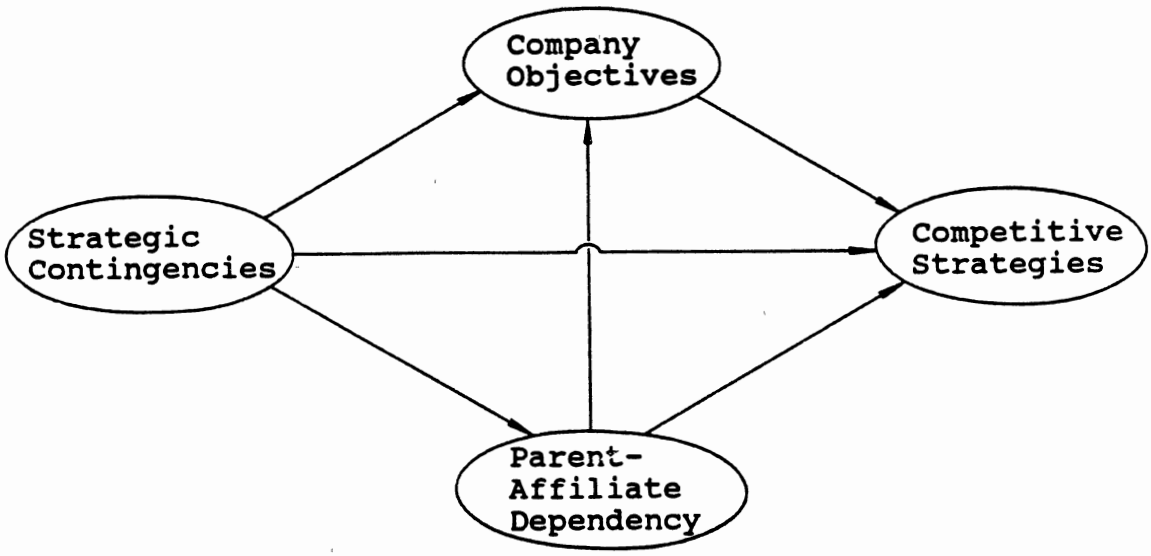
= 0.1444 x 0.1633 = 0.0236

2). Effects of market growth to price leadership through growth orientation

= 0.1429 x 0.1633 = 0.0233

Part II. Path Coefficients Including the Effects of Parent-Affiliate Dependency

I. Basic Explanation of the Model



1. Major Dimensions for Each Construct

1). Strategic contingencies (16 variables): Four surrogate variables were selected based on factor analysis.
- Sales
- Percent of products exported
- Market growth
- Maturity of the products

2). Company objectives (16 variables): Three dimensions were resulted. Dimension score was the average of variable scores loading on the same factor.
- Organizational development
- Financial orientation
- Growth orientation

3). Competitive strategies (26 variables): Five dimensions.
- Process innovation
- Product development
- Market development
- Price leaderships
- Focus

4). Parent-Affiliate dependency (10 variables): Two dimensions.

- Centralization/Formalization
- Coordination/Integration

2. Major Significant Associations Found by Regression Analysis

1). Process Innovation <---> Organizational Development <--> Centralization Formalization

2). Product Development <---> Organizational Development <--> Coordination Integration

3). Market Development <---> Financial Orientation <--> Centralization Formalization

4). Price Leadership <---> Growth Orientation <--> Centralization Formalization

5). Focus (Associations for focus strategy are not significant, thus it will not be included in further analyses).

6). All the above components shown a mild associations with several strategic contingency variables.

3. Purposes of Path Analysis

1). To identify the direct and indirect effects of contingency variables, company objective variables, and parent-affiliate variables to competitive strategy variables.

2). To identify the magnitude of coefficients and the correlations between variables and/or factors.

II. Paths for Process Innovation Strategy

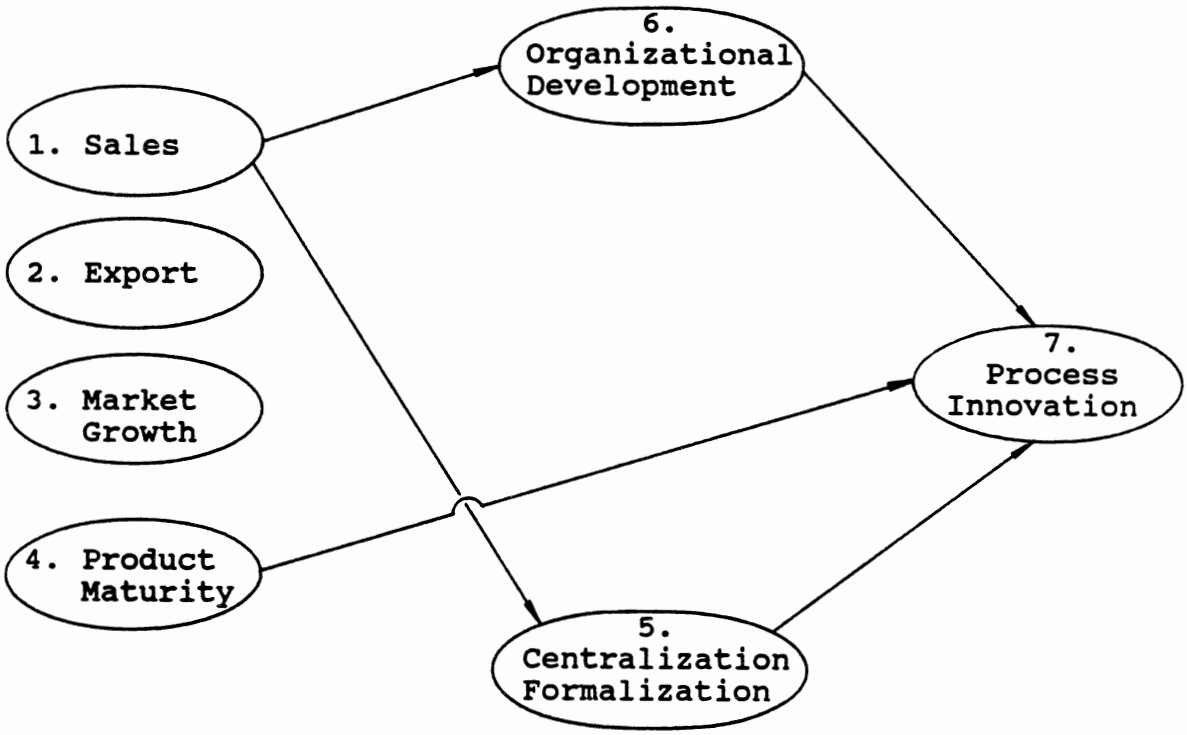


TABLE BIX

CORRELATION COEFFICIENTS FOR RELATED VARIABLES*

Variables	1	2	3	4	5	6	7
1. Sales	1.00						
2. Export	.029	1.00					
3. Market Growth	.102	-.189	1.00				
4. Product Maturity	.003	.110	-.223	1.00			
5. Centralization/ Formalization	.101	.006	.081	.131	1.00		
6. Organizational Development	.144	.077	.095	-.086	.130	1.00	
7. Process Innovation	.187	.157	-.096	.146	.421	.363	

* Figures underlined are significant at 0.05 level or above

TABLE BX

PATH COEFFICIENTS FOR PROCESS INNOVATION

Predetermined Variables	Dependent Variables		
	5. Centralization/ Formalization	6. Organizational Development	7. Process Innovation
1. Sales	<u>0.1210</u>	<u>0.1376</u>	0.0812
2. Export	-0.0693	0.0973	0.0218
3. Market Growth	0.0089	0.1243	-0.0440
4. Product Maturity	0.1136	-0.0551	<u>0.1899</u>
5. Centralization/ Formalization	--	0.0463	<u>0.2983</u>
6. Organizational Development	--	--	<u>0.2189</u>
C1. American Firms (Dummy)	0.0235	-0.1159	<u>0.3035</u>
C2. Japanese Firms (Dummy)	<u>0.3341</u>	<u>0.2190</u>	<u>0.3567</u>

Note: 1. Figures underlined are significant at 0.10 level or above

2. Direct effects (Significant ones):

P51= 0.1210 (P<0.096) P75=0.2983 (P<0.0001)
P61= 0.1376 (P<0.061) P76=0.2189 (P<0.0009)
P74= 0.1899 (P<0.028)

3. Indirect effects:

1). Effects of sales to process innovation through organizational development

= 0.1376 X 0.2189 = 0.0301

2). Effects of sales to process innovation through centralization

= 0.1210 x 0.2893 = 0.0350

III. Paths for Product Development Strategy

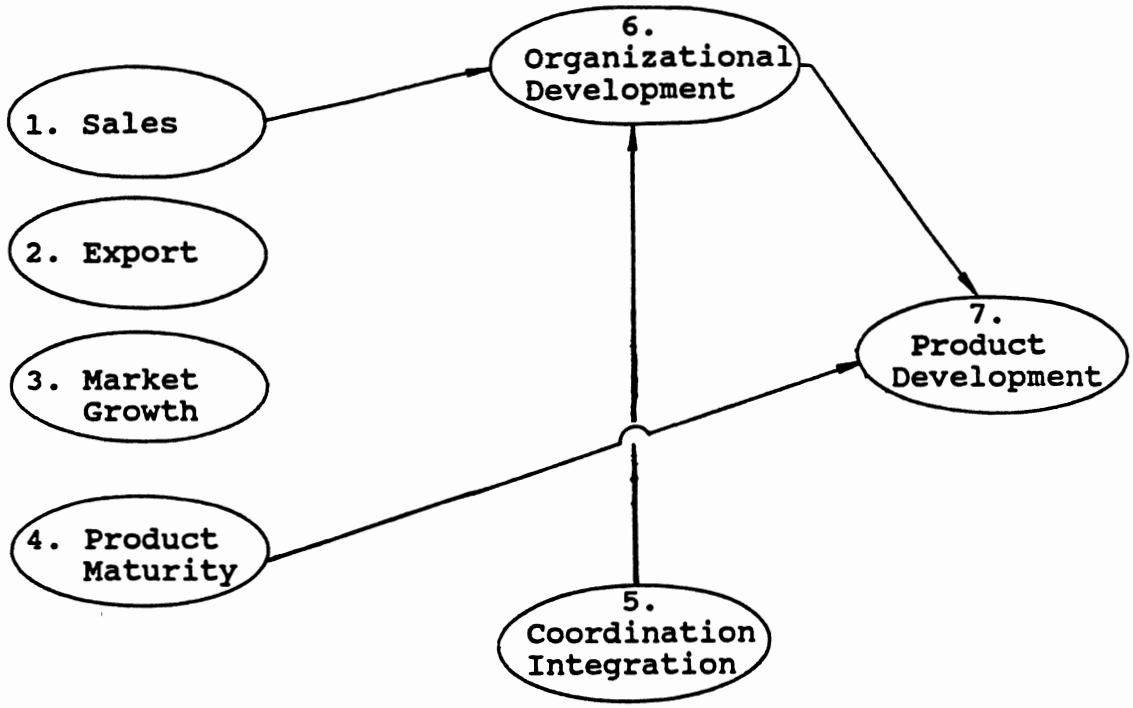


TABLE BXI

CORRELATION COEFFICIENTS FOR RELATED VARIABLES*

Variables	1	2	3	4	5	6	7
1. Sales	1.00						
2. Export	.029	1.00					
3. Market Growth	-.102	-.189	1.00				
4. Product Maturity	.003	.110	-.223	1.00			
5. Coordination/ Integration	-.034	.089	.080	.037	1.00		
6. Organizational Development	.144	.077	.095	-.086	.187	1.00	
7. Product Development	.117	.017	.159	.042	.226	.595	

* Figures underlined are significant at 0.05 level or above

TABLE BXII

PATH COEFFICIENTS FOR PRODUCT DEVELOPMENT

Predetermined Variables	Dependent Variables		
	5. Coordination/ Integration	6. Organizational Development	7. Product Development
1. Sales	-0.0438	0.1517	0.0416
2. Export	0.1197	0.0707	0.0454
3. Market Growth	0.1089	0.1033	0.0783
4. Product Maturity	0.0528	-0.0602	0.1395
5. Coordination/ Integration	--	0.1955	0.0748
6. Organizational Development	--	--	0.6456
C1. American Firms (Dummy)	0.0734	-0.1292	0.1308
C2. Japanese Firms (Dummy)	0.0114	0.2323	-0.2318

Note: 1. Figures underlined are significant at 0.10 level or above

2. Direct effects (Significant ones):

P61= 0.1517 (P<0.034) P73= 0.1395 (P<0.016)
P65= 0.1955 (P<0.006) P76= 0.6456 (P<0.0001)

3. Indirect effects:

1). Effects sales to product development through organizational development

= 0.1517 x 0.6456 = 0.0979

2). Effects coordination to product development through organizational development

= 0.1955 x 0.6456 = 0.01262

IV. Paths for Market Development Strategy

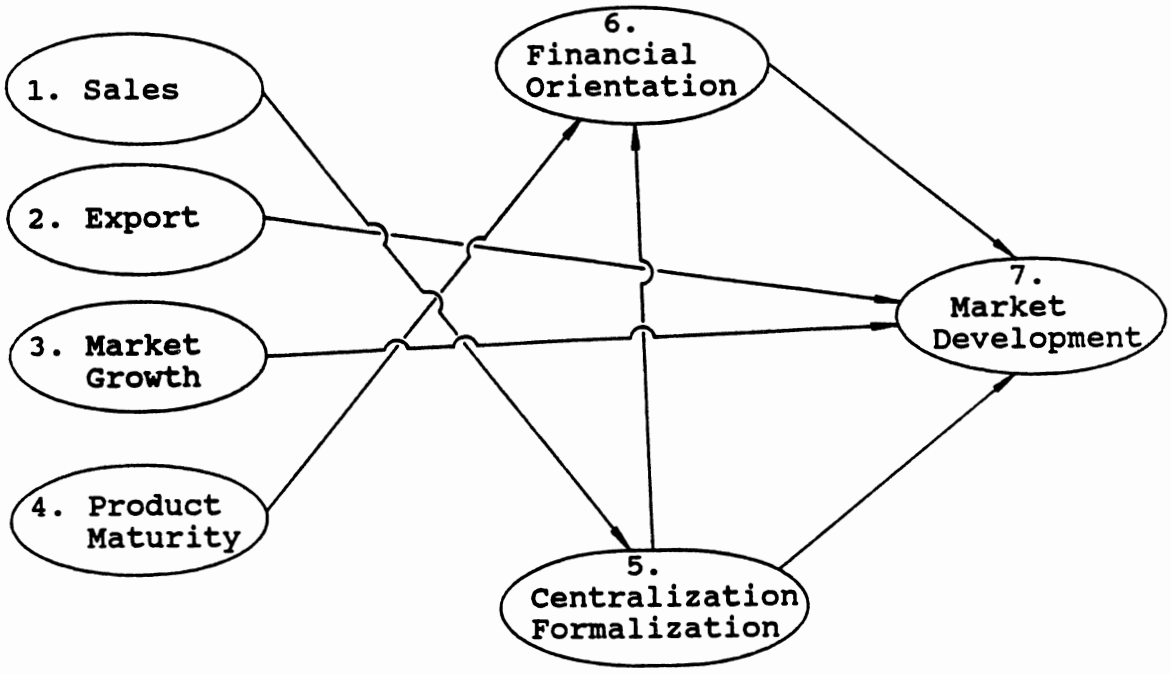


TABLE BXIII

CORRELATION COEFFICIENTS FOR RELATED VARIABLES*

Variables	1	2	3	4	5	6	7
1. Sales	1.00						
2. Export	.029	1.00					
3. Market Growth	-.102	-.189	1.00				
4. Product Maturity	.003	.110	-.223	1.00			
5. Centralization/ Formalization	.101	.005	-.081	.131	1.00		
6. Financial Orientation	.115	.001	.164	.082	.048	1.00	
7. Market Development	.131	-.193	.240	.035	.128	.385	

* Figures underlined are significant at 0.05 level or above

TABLE BXIV

PATH COEFFICIENTS FOR MARKET DEVELOPMENT

Predetermined Variables	Dependent Variables		
	5. Centralization/ Formalization	6. Financial Orientation	7. Market Development
1. Sales	<u>0.1210</u>	0.0532	0.1051
2. Export	-0.0693	0.0288	<u>-0.2066</u>
3. Market Growth	0.0089	0.0866	<u>0.1181</u>
4. Product Maturity	0.1136	<u>0.1525</u>	0.0726
5. Centralization/ Formalization	--	<u>0.1281</u>	<u>0.1430</u>
6. Financial Orientation	--	--	<u>0.1951</u>
C1. American Firms (Dummy)	0.0235	<u>0.4561</u>	<u>0.2664</u>
C2. Japanese Firms (Dummy)	<u>0.3342</u>	-0.0737	0.0363

Note: 1. Figures underlined are significant at 0.10 level or above

2. Direct effects (Significant ones):

P51= 0.1210 (P<0.096) P72= -0.2066 (P<0.003)
P64= 0.1525 (P<0.022) P73= 0.1181 (P<0.097)
P65= 0.1281 (P<0.063) P75= 0.1430 (P<0.04)
P76= 0.1951 (P<0.02)

3. Indirect effects:

1). Centralization to market development through financial orientation

= 0.1281 x 0.1951 = 0.0250

2). Product maturity to market development through financial orientation

= 0.1525 x 0.1951 = 0.0298

V. Paths for Price Leaderships Strategy

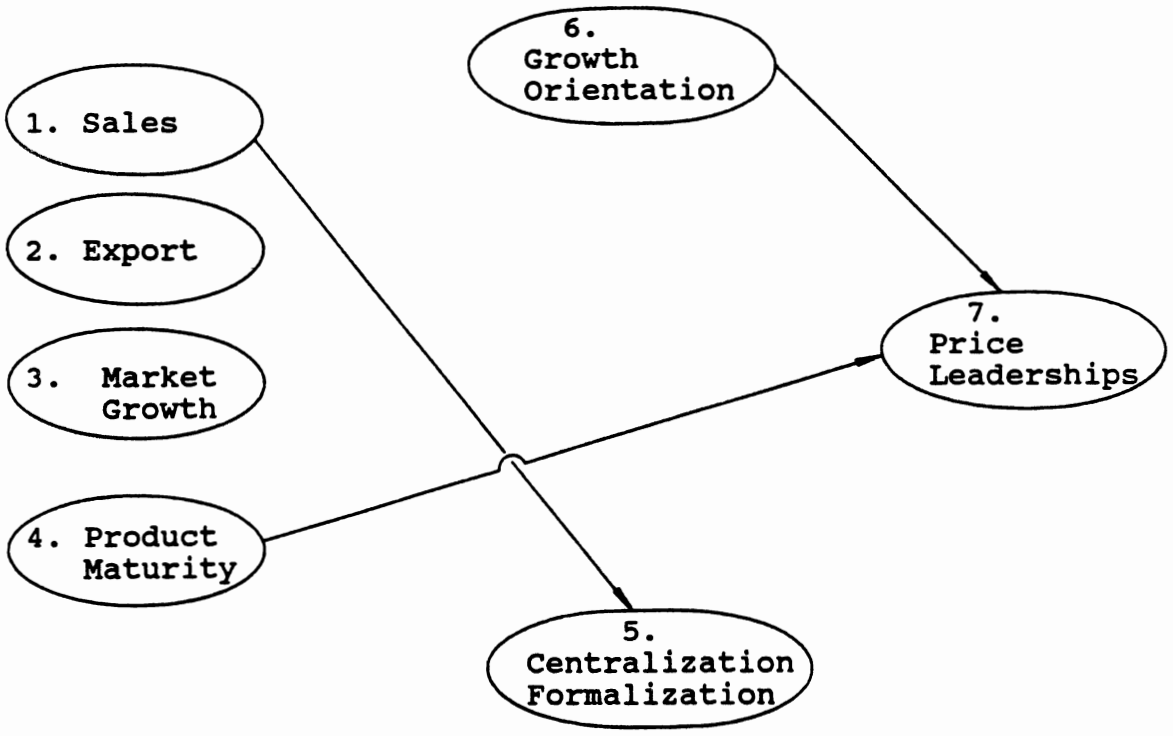


TABLE BXV

CORRELATION COEFFICIENTS FOR RELATED VARIABLES*

Variables	1	2	3	4	5	6	7
1. Sales	1.00						
2. Export	.029	1.00					
3. Market Growth	-.102	-.189	1.00				
4. Product Maturity	.003	.110	-.223	1.00			
5. Centralization/ Formalization	.101	.006	-.081	.131	1.00		
6. Growth Orientation	.177	-.026	.095	.009	.101	1.00	
7. Price Leaderships	.032	.109	.010	.115	.067	.217	

* Figures underlined are significant at 0.05 level or above

TABLE BXVI

PATH COEFFICIENTS FOR PRICE LEADERSHIPS

Predetermined	Dependent Variables		
	5. Centralization/ Formalization	6. Growth Orientation	7. Price Leaderships
1. Sales	0.1210	0.0318	-0.0108
2. Export	-0.0693	0.0164	-0.0135
3. Market Growth	0.0089	0.1157	0.0261
4. Product Maturity	0.1136	0.0177	0.1407
5. Centralization/ Formalization	--	0.087	-0.0214
6. Growth Orientation	--	--	0.1875
C1. American Firms (Dummy)	0.0235	0.0042	-0.2702
C2. Japanese Firms (Dummy)	0.3342	0.062	0.0279

Note: 1. Figures underlined are significant at 0.10 level or above

2. Direct effects (Significant ones):

P51= 0.1210 (P<0.096)
P74= 0.1407 (P<0.056)
P76= 0.1875 (P<0.001)

3. Indirect effects:

There is no indirect effects to price leadership strategy.

2

VITA

Wann-Yih Wu

Candidate for the Degree of

Doctor of Philosophy

Thesis: COMPETITIVE STRATEGIES FOR SUBSIDIARIES OF MULTINATIONAL COMPANIES: A COMPARATIVE STUDY OF AMERICAN, JAPANESE, EUROPEAN, AND TAIWANESE FIRMS IN TAIWAN

Major Field: Business Administration

Biographical:

Personal Data : Born in Taipei, Taiwan, the Republic of China, January 20, 1951, the son of sen Wu and Shian Wu-Chen. Married to Li-Yueh Lee on March 22, 1980. Become father of two sons and one daughter: Chien-Chi, Chien-Shien, and Day-Lien.

Education: Graduated from Ming-Chi Institute of Technology, Taipei, Taiwan, in June, 1971; received Bachelor of Art in Education from National Kaohsiung Normal University, Kaohsiung, Taiwan, in June, 1979; received Master of Business Administration from Tung Hai University, Taichung, Taiwan, in June, 1984; completed requirements for the Doctor of Philosophy Degree at Oklahoma State University, Stillwater, Oklahoma, in May, 1991.

Professional Experience: Lieutenant of ROTC in the Chinese Army, September, 1971 to July, 1973; Turn Foreman of Fiber Plant at Formosa Chemicals and Fiber Co., Taichung, Taiwan, July, 1973 to October, 1974; Assistant Engineer of Plant Construction Department, October, 1974 to June, 1976; General Foreman of Iron Making Department, June, 1976 to July, 1978, Manager of Engineering Department, July, 1978 to April, 1986, and Researcher of Corporate Planning Department, April, 1989 to present; at China Steel Corporation, Kaohsiung, Taiwan.