An Empirical Study of Business Strategy and Performance

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Abstract

This study examines the association of corporate strategy with multiply criteria of financial performance across national boundaries. Using data over a four-year period from Korea, the United States, and Japan, the study presents a multidimensional definition of corporate strategy. These dimensions are then modeled as predictors of three corporate performance criteria. The results show that corporate strategy explains a significant portion of financial performance. In addition, corporate strategy relates differently to different performance criteria within and across the three countries.

1. Introduction

This paper examines the association of corporate strategy with financial performance across national boundaries. Throughout the paper corporate strategy is viewed as the plan a firm follows in pursuit of its long-term goals. A viable corporate strategy defines the scope of a company's business and the portfolio of products it must offer. In turn, this definition guides a company's allocation of resources, with the aim of building and maintaining a competitive advantage by developing or acquiring essential skills. These capabilities are functionally-based and emerge from a firm's expertise and excellence in different areas. When the firm possesses such skills, it can build a strong market position.

Evidence suggests that corporate strategy is a major predictor of financial performance within an industry or across economic sectors in one country and across borders. Yet, despite the ever growing interest in comparative corporate practices, only few empirical studies have been conducted to date on the relationship of corporate strategy and financial performance. A possible reason for this paucity of empirical research is the difficulty in collecting data on corporate strategy across countries because of the differences in accounting systems and variations in reporting practices. Not surprisingly, then, the bulk of past research in the area has emphasized such industrialized countries as the United States, Canada, England, West Germany, France, and Italy. While insightful, these studies' findings may not apply to other non-western countries that are at different stages of economic growth or espouse non-western cultural value systems. Moreover, as other regions of the world gain economic power, there is a need to test existing theories of corporate strategy in these new contexts. Findings from such comparative studies can be used to revise or construct theories that guide corporate strategic choices under different national economic structures.

2. Objective

This study examines the association between corporate strategy and financial performance in three countries: Japan, Korea and the United States. To achieve this goal, the study advances a multidimensional definition of corporate strategy and outlines the predicted relationships between the components of corporate strategy and financial performance. We will follow this by presenting the sample, methods, and results of a comparative empirical that uses data from 150 manufacturing companies from each of the three countries, for four years. Finally, the nature and implications of our findings for managerial action and future research are discussed in the last section of the paper.

3. Corporate Strategy

A strategy is best viewed as a stream of decisions made by a company over a finite time horizon. In formulating corporate strategy, executives must define the scope of the firm's business and sources of its competencies and capabilities.

A starting point in mapping corporate strategy is the delineation of the breadth of the firm's domain. The issue revolves around deciding the extent to which a firm will specialize in one industry or compete in multiple industries. This decision is based on the firm's tract record, resources, forecast of industry trends, and preferences of its senior executives.

Once the breadth of the domain (scope) of business has been determined, the next step involves developing the sources of a firm's competitive competence. This is achieved by examining potential sources of excellence in functional areas such as marketing, finance, and production/operations. Other functions can also provide a basis for building a competitive advantage that enables the firm to position itself in its chosen markets.

There are many sources within each functional area that can be used to build and sustain a competitive advantage. As suggested in literature, different components of corporate strategy can determine corporate financial performance. The magnitude and direction of these effects depend on the performance criterion used. These effects vary from one country to another.

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3.1 Breadth and Performance

The breadth of a company's concept of business is usually clarified in the extent of its diversification; i.e., the degree to which a firm pursues different lines of business. Some companies are committed to one, core business while others actively pursue different businesses in related or unrelated fields.

The relationship between corporate diversification and financial performance has been the subject of considerable discussion in the literature. However, the results of past empirical research have been contradictory. Some studies suggest that diversification does not always result in improved financial performance. Benefits - such as improved performance - will result only from the effective implementation of diversification activities and by integrating acquired firms within the business portfolio. Without this integration, diversification may result in poor financial performance.

In this comparative study we expect diversification to be associated with high corporate financial performance for several reasons. Diversification enhances a firm's market power, thus enabling it to control its suppliers, buyers, and resources. Diversification also enables companies to use excess cash and reduce business risk. Diversification helps a firm to shield itself against business and economic adversity by maintaining a balance portfolio. Moreover, when carefully carried out, diversification can take the firm into lucrative fields and high growth industries, thus improving its performance. These observations lead to the study's first hypotheses (H1): *H1: Diversification is positively associated with corporate financial performance.*

Of the three countries examined in this study, Korea remains the least diversified in its manufacturing sector. It was observed that Korean manufacturing firms stress "business groups," a collection of vertically and horizon-tally related enterprises that support one another. A business group, then, reduces the need for extensive diversification activities among its members since many of them function as both suppliers and buyers of each other's goods. Not surprisingly, the statistical results reported in the literature suggest that group-affiliated firms show superior economic performance than those firms that do not belong to a "business group."

The above discussion suggests that significant differences exist in the level of diversification among American, Japanese and Korean companies. This suggests that the association between diversification and company performance (postulated in H1) will vary from one country to another.

3.2 Marketing Activities and Performance

Marketing strategies and practices can enhance a firm's ability to serve its markets or penetrate new segments. There is a growing body of literature centered on the role of strategic marketing in determining company performance. The literature suggests that a firm possessing expertise in marketing is well-poised to make important inroads into its domestic and foreign markets.

Two variables are of interest in this study because they determine a firm's ability to reach its customers: advertising intensity and export levels. Both variables are predicted to be positively associated with corporate financial performance. The rationale for these predicted associations is discussed below.

3.2.1 Advertising Intensity

Research suggests that a firm must be close to its customers while differentiating itself from its rivals to achieve effective financial performance. Advertising enables a firm to attract new customers or increase penetration of existing segments, in domestic and international markets. This means that a corporation must invest heavily in its advertising activities to create a substantial competitive advantage. This advantage is reflected in a strong, positive corporate reputation in the minds of customers, thus creating loyalty to products and brands. A strong, positive reputation also encourages potential customers to "switch," from using competitors' products to using the company's own brands. For these reasons, advertising can be the source of barriers (thus protecting a company's market position) and income by attracting new customers. Consequently, advertising is expected to be associated with high corporate financial performance. For companies whose products are diverse (as is true of the corporations studied here), investment in advertising can be highly profitable. An increase in advertising intensity, defined as the level of that activity's expenditure divided by company sales, leads to higher profits.

It appears American, Japanese and Korean companies view advertising spending as crucial to financial success in their own home markets and overseas as well. This leads to the following hypothesis: *H2a: Advertising intensity is associated positively with corporate financial performance.*

3.2.2 Export Activities

Engaging in exporting provides a firm with several benefits beyond serving solely a domestic market. Exporting is expected to bring more profits when the foreign market is growing or has very few substitutes, or when a company's capacity exceeds the needs of its local market. And, during a domestic business downturn, exports generally tend to help steady financial performance and sometimes can even increase profits during a domestic recession. Selling abroad also helps to gain economy in production at home-economies which can improve a firm's competitive position. For many companies, export business frequently provides the difference between a profit and a loss.

Because of the many benefits of exporting, countries are increasingly active in promoting this strategy. For instance, Japan, Korea, and the United States have adopted several measures to promote their exports. However, the success of the strategies adopted by these countries varies considerably. These very startling differences reflect currency fluctuations and different levels of competence among companies in the two countries in producing and marketing in international markets. Statistics and case studies also suggest that Japanese and Korean firms continue to succeed far more frequently in their export efforts than American companies, significantly raising the deficit in the US balance of trade. No matter the sources of success and failure in exporting, companies in the three countries are increasingly active in pursuing new international markets while strengthening their hold on existing niches in those markets. This emphasis stems from a belief that exporting is a major source of growth in revenue and profitability. Thus: H2b: A higher level of export activities is positively associated with company financial performance.

3.3 Financial Structure and Performance

Traditionally, financial structure is an important dimension of corporate strategy. Its importance stems from the fact that the ability of a firm to acquire financial resources plays a crucial role in determining its success in the marketplace. Two variables, in particular, are emphasized in this study as indicators of corporate success in developing appropriate financial strategies: leverage position and credit efficiency.

3.3.1 Leverage

This variable refers to the portion of a firm's capital secured through long-term debts; it is operationalized as the debt-to-equity ratio. Several studies have reported a negative association between debt leverage and firm profitability. Higher corporate debt loads tend to depress profits because they increase the burden of servicing the debt. In addition, financial risk increases as this ratio rises because of the increased cost of servicing debt. Moreover, it has been compellingly argued that increased leverage frequently reduces risk-taking by the firm's senior executives. This line of reasoning suggests that benefits from leverage (access to financial resources from external sources) may be far lower than the risks associated with it (conservatism and slowness in corporate activities) which, ultimately, leads to lower profits. Therefore, H3a:Increased leverage is negatively associated with corporate financial performance.

3.3.2 Credit Activities

This variable refers to the ability of a firm to collect its accounts receivables efficiently. Failure to manage credit activities dilutes a firm's financial resources and reduces its cash position. The ability of a firm to collect its accounts is usually measured by the average period it takes the company to accomplish this task. The shorter the period, the more efficient the firm and the higher its performance. Efficient management of credit activities reduces reliance on leverage for financing corporate activities. This helps to counteract the negative side effects of high leverage, discussed above. Thus: *H3b: Efficiency of credit is associated positively with corporate financial performance.*

3.4 Operations Activities

The value of manufacturing is becoming increasingly recognized as a competitive tool in global markets. Simply stated, manufacturing can make or break an organization. If well managed, manufacturing can be a potent source of competitive advantage and superior corporate performance. A comprehensive review of the literature on operations strategy suggests that three variables are particularly crucial: capital intensity, inventory efficiency, and employee efficiency.

3.4.1 Capital Intensity

As a component of corporate strategy, this variable represents a firm's long-term commitment to building its technological base and upgrading its productive capacity. Capital intensity is defined as total corporate assets divided by sales. Such investments lead to improved production processes that reduce cost or eliminate waste, thus enhancing company performance.

Capital intensity has been the subject of much research in industrial economics and international business. Interest in this variable stems from the recognition of possible substitution of labor and capital in manufacturing. Typically, the question centers on the optimal combination of these two variables (labor and capital), with other factors of production, that lead to an optimal cost structure.

We expect a positive association between capital expenditure and corporate financial resources. This prediction is based on the assumption that capital expenditure, which may dilute short-term resources, will pay off over time. This positive view of the relationship between capital intensity and corporate performance is supported by several classic empirical studies. Past studies and this discussion suggest the following hypothesis: *H4a: Capital intensity is positively associated with corporate financial profitability*.

3.4.2 Inventory Efficiency

The literature highlights the importance of effectively managing inventory to reduce waste and ensure sufficient supplies for corporate operations. Efficient inventory control is an integral component of an effective operations strategy. As a result, new approaches ensure efficient inventory management. Just-in-time (JIT) techniques and other methods make it possible to plan logistics prudently to improve corporate performance. The popularity of these and similar innovative techniques attests to a growing appreciation by American, Japanese and Korean companies of the implications of inventory management for their profitability and smooth process of manufacturing. Thus: *H4b:Inventory efficiency is positively associated with corporate financial performance.*

3.4.3 Labor Productivity

It has been suggested that labor productivity, measured as the per capita, value added or sales contribution, provides an important indicator of the success of operations strategy. Labor productivity is a major source of corporate performance; the higher this productivity, the higher the corporate performance. This argument rests on a valid assumption: for productivity improvements to occur, successful systems of managing the manufacturing process should exist. Toward this end, American companies have initiated several efforts to reform their managerial practices with the goal of improving labor productivity, as a means of improving their corporate performance. Thus: *H4c: Labor productivity is associated positively with corporate financial performance.*

4. The Moderating Effect of National Boundaries

The literature suggests that the impact of strategy variables on performance varies from one country to another, and even within the same country at different points in time. Therefore, the preceding hypotheses (H1 through H4) should be viewed as contingent (dependent) on country membership.

There are several reasons for expecting the associations to vary by country. First, as argued earlier, the countries vary in their reliance on diversification, use of leverage, capital structure, extent of their export activities, and investment in marketing efforts (e.g., advertising intensity). These differences are expected reflected in different coefficients between individual components of corporate strategy as "predictors" of company performance. Second, companies in the three countries compete in markets that differ significantly in their structure. Japanese and Korean companies are well protected from any massive foreign entry in many segments of their home manufacturing sectors. Such protection enhances the profitability of these firms. American companies do not necessarily enjoy such protected "home base" advantage. Third, the literature suggests that American companies are managed quite differently from Japanese and Korean companies. While differences in the strategic process among companies in different countries are not the focus of this study, we cannot help but wonder if these differences translate into specific sources of competence across countries. Fourth, as mentioned, there are important differences among firms in the three countries in the levels of labor productivity. These differences can be the source of significant cost and price differences in international markets, thus affecting levels of company performance in the three countries differently. These differences, as well as those suggested above in discussing individual hypotheses (H1 though H4), lead to a final hypothesis. H5: Corporate strategy-financial performance associations will vary from one country to another.

5. Method

5.1 Samples and Data Collection

The samples used in this study consisted of the leading 150 publicly listed manufacturing corporations from the United States, Japan and Korea. These countries were selected because of the different stages of their economic development and the variations in the structure of their national economies. Another reason for their selection is the wide recognition of the important role of the three countries in world trade.

To ensure as valid comparisons as feasible, firms were matched by their sales volume, measured in US\$ million. They were chosen from among the leading 500 companies in each country. The data covered the four-year period of 1996-1999.

Data for American companies were collected from COMPU-STAT, annual reports and 10-K Reports. For Japanese corporations, data were gathered from annual reports of listed companies by the Japanese Chamber of Commerce. Finally, annual reports of listed companies by the Korean Chamber of Commerce were the primary sources of data for South Korean corporations.

5.2 Measures

5.2.1 Financial Performance

Corporate performance is multifaceted and, thus, no single measure can fully capture its domain. In addition, preferences for financial performance criteria may vary from one country to another. For example, some Korean firms have opted to forego making significant profits for years to ensure international expansion and growth. Consequently, to gain accurate results and safeguard against the problems associated with any single performance measure, this study employed three indices of major financial performance measures for the 1996-1999 period: return on sales (ROS), return on investment (ROI), and return on assets (ROA), as follows:

- Return on Sales = Operating Profit/Sales
- Return on Investment = Operating Profit/Investment
- Return on Assets = Operating Profit/Assets

5.2.2 Breadth

This study was concerned with the diversification of organization; i.e., reliance on development and specialization of product. Therefore, diversification was operationalized in terms of product specialization. This measure followed the widely-acknowledged entropy measure which emphasized three key elements of a firm's diversification operations: the number of product segments in which the firm operated; the distribution of the firm's total revenues across the product segments; and the degree of relatedness among the various product segments. Accordingly, diversification was operationalized Accordingly, diversification was operationalized in terms of the ratio of the sales of the major product to the total sales of the firm, as follows:

Diversification = 1 - (SPi/TSi) where: SPi is the sales volume of the major product and TSi is the total sales of the firm in a given year. While this measure is widely used in the literature, it must be noted that it is difficult to identify Korean and Japanese companies' major product lines because of the business groups that dominate those two countries' economies. To safeguard against this problem, multiple secondary sources were consulted to cross-validate the data.

5.2.3 Marketing Activities

Two ratios were constructed, using the formula below.

- 1. Advertising Intensity = Corporate Advertising Expenditure/Corporate Sales Volume
- 2. Export Level = Export Volume/Corporate Sales Volume

5.2.4 Financial Structure

Leverage and credit efficiency were measured as follows:

- 1. Leverage = Long-term Debt/Equity
- Credit = (Account Receivables/Total Sales Volume) X 365

5.2.5 Operations Strategy

Three formulae were used to gauge operations strategy, as follows:

- 1. Capital intensity = Fixed Assets/Total Assets
- 2. Inventory efficiency = Inventory (book value)/Sales
- 3. Labor productivity = Corporate Sales Volume/Number of Full-Time Employees

All measures were calculated using the four-year averages. This 4-year average allows us to eliminate extremes in the data and year-to-year variations that might obscure trends. Further, we believe that this time frame is necessary to observe the results of corporate international activities. Shorter time frames do not afford us such an opportunity.

6. Analysis and Results

6.1 Overview

Data for each country were analyzed separately to avoid problems associated with translating currencies using volatile exchange rates. Separate analyses also controlled for variations in accounting conventions among Japanese, Korean and American companies.

As a first step, Pearson's simple correlations among the independent variable set (i.e., components of corporate strategy) for each country were examined to determine lack of multi- colinearity. In the Japanese sample, correlations ranged between -.44 to .23. For the Korean sample, correlations ranged between .02 and .37. For the American corporations, intercorrelations ranged between -.01 and .34. These ranges suggested the independence of predictor variables. Further, we tested for multicolinearity using the procedures outlines in Neter et al. (1989). These analyses suggested that multicolinearity was not a serious issue in the current data.

Multiple regression analysis served as the primary technique for testing hypotheses 1 through 4.

To test the study's fifth and final hypothesis, the Chow test was employed to find whether the results of regression analyses (9 runs = 3 regressions X 3 dependent variables each) were statistically different.

6.2 Japanese Companies

Table 1 shows that the three regression analyses for the Japanese sample were statistically significant (all at p <.05). The explanatory power (R^2) of the regression models varied: R^2 was .19 for ROS, .31 for ROA, and .41 for ROI. These results supported the importance of corporate strategy variables as correlates of corporate financial performance.

Ĩ	able 1		
Relationship between corporate strategy and per-			
formance: Regression of the Japanese sample			
	Performance Criteria		
	ROS	ROA	ROI
Domain Breadth			
Diversification	02	11	.04
Marketing Strategy			
Advertising Intensity	.16*	12	12**
Export Level	08	03	08
Financial Strategy			
Leverage	02	02	06
Credit Policy	.09	23**	39***
Operational Strategy			
Inventory Efficiency	01	46***	.68***
Employee Productivity	32***	06	.07
Capital Intensity	09	36***	16**
Constant	.91	.42	.19
R^2	.19	.31	.41
F	4.15***	8.21***	40.51***
* p < .05			
** p < .01			
*** p < .001			

Table 1 also showed that different dimensions of corporate strategy exhibited different associations with financial performance. This supported the literature suggestion to use multiple performance indicators. For instance, Table 1 shows that advertising intensity was related to ROS positively but employee productivity was negatively associated with this measure. Note that inventory efficiency was associated positively with ROA and ROI whereas a high credit policy and capital intensity were associated with lower ROA and ROI. Finally, advertising intensity was significantly associated with ROI.

6.3 Korean Companies

The Korean sample exhibited different patterns of associations between corporate strategy and financial performance criteria from those observed earlier in the Japanese sample, at least in three aspects (see Table 2). First, Korean firms with higher levels of diversification had higher returns compared to other companies selected for this study. The beta value of the diversification ratio had a strong positive association with the three company financial performance measures: ROS, ROA and ROI.

	Table 2		
Relationship between corporate strategy and per- formance: Regression of the Korean sample			
	Performance Criteria		
	ROS	ROA	ROI
Domain Breadth			
Diversification	1.13***	.53***	.99***
Marketing Strategy			
Advertising Intensity	66***	28**	58***
Export Level	06	.02	02
Financial Strategy			
Leverage	.02	.03	10
Credit Policy	.04	11	.03
Operational Strategy			
Inventory Efficiency	05	.11	16
Employee Productivit	y .06	13	.27
Capital Intensity	.09	.04	.14
Constant	01	1.15	.00
\mathbf{R}^2	.69	.14	.47
F	39.72***	3.12**	15.91***
* p < .05			
** p < .01			
*** p < .001			

Second, the intensity of advertising expenses was negatively related to the three corporate financial performance criteria. In other words, the more money that Korean companies spent on advertising relative to their sales volume, the less return on sales, assets, and investment.

Finally, these dimensions of corporate strategy were fairly powerful in explaining ROS and ROI ($R^2 = .69$ and .47). ROA was primarily affected by other factors beyond those included in this study since the R^2 is equal to .14. Such low R^2 is quite common in many studies of competitive strategy even when the number of predictor variables is very large. Clearly, corporate strategy is one of many factors that influence financial performance.

6.4 US Companies

The three regression models for the American sample were significant (all at p < .05), with R^2 ranging from .21 to .41, as shown in Table 3. These R^2 were smaller than

those observed in the Japanese and Korean samples. The results for the American sample are presented in Table 3. ROS, ROA, and ROI were associated positively with two variables: advertising intensity and inventory efficiency. ROS was also associated positively with credit policy and capital intensity. Clearly, the pattern of relationships in the American sample was different from the preceding results of both the Japanese and Korean corporations.

	mance Crit	
ROS	ROA	ROI
.05	.03	01
.16*	.14*	.13*
.07	.11	.09
02	12	.05
.17*	.02	.00
.37***	.53***	.62***
.07	.10	.01
.02*	.05	00
03	01	-2.21
.21	.35	.41
4.94***	10.05***	12.89***
	.16* .07 02 .17* .37*** .07 .02* 03 .21	.16* .14* .07 .11 02 12 .17* .02 .37*** .53*** .07 .10 .02* .05 03 01

6.5 Comparisons of the Results Across Three Nations

This section will compare and contrast the results of the study's first four hypotheses (H1 through H4). Clearly, the results vary from one country to the next, as summarized in Table 4, which presents a comparison of the three samples.

6.5.1 Breadth (H1)

Diversification strategy is not associated with higher corporate performance for Japanese or American companies, but is significant in Korean firms. Therefore, the general hypothesis of the positive relationship between diversification and corporate performance is not fully supported in this study. A possible explanation for the lack of success of the diversification strategy of Japanese and American firms is that the companies in this sample are, for the most part, multinational enterprises - their product lines are broad. This raises the possibility that diversification in these firms might have taken them away from their core businesses. If this situation is true, diversification is tantamount to wasted resources.

Another possible reason for lack of significant association between diversification and company financial performance emerges from the literature: most diversification efforts fail to enhance company performance and productivity. This failure stems from lack of experience by senior managers in new lines of business, lack of synergy between new and existing units, and differences in organizational cultures among new and old units in the portfolio. Finally, there is the possibility that some diversification efforts pay off handsomely but it takes a considerably longer period (than the period examined here) to do.

Table 4
The relationship between corporate strategy and per-
formance: Regression of three samples

	Perfor	mance Cri	teria *
	Japan	Korea	US
Domain Breadth			
Diversification	NS	S (+)	NS
Marketing Strategy			
Advertising Intensity	XD	S (+)	S (+)
Export Level	NS	NS	NS
Financial Strategy			
Leverage	NS	NS	NS
Credit Policy	M (-)	NS	M (-)
Operational Strategy			
Inventory Efficiency	M (+)	NS	M (-)
Employee Productivity	L (-)	NS	L (-)
Capital Intensity	M (-)	NS	M (-)
*For each sample			
S = Consistently	U	it using the	e three per

	formance criteria
M =	Significant on two performance criteria
L =	Significant on only one criterion
XD =	Mixed support
NS =	Not significant
+ =	Positive relationship
- =	Negative relationship

6.5.2 Marketing Strategy (H2)

Surprisingly, expansion via exporting does not seem to bring a higher return for firms in the three nations examined here. This may be the result of the similar size of the firms in this study and their international experience. Exporting is the first step in entering the global market. Once they have established their export business, companies tend to take advantage of other international activities such as sourcing, offshore production, and direct investment.

The above explanation gains credence as evidence on the export behavior of American, Japanese and Korean firms is reviewed. It appears that Japanese, Korean and Pacific Rim countries have gained prominence in international trade by encouraging their small companies to be active in exporting. So, the benefits for larger companies may be limited whereas smaller firms gain considerably from international commerce.

In contrast to exporting, increasing advertising expenditure brings different financial results depending on where the firm is located. For American firms, a higher advertising expenditure relative to sales is associated with better financial performance. On the other hand, if Korean firms spend more on advertising, their payoff is negative. For the Japanese firms, an increase in advertising expenditure brings mixed results, either improving or decreasing corporate financial performance. These results may reflect the level of the stage of economic development. Developed countries tend to spend more on advertising than developing and newly industrialized nations. While developed countries employ advertising to stimulate consumer demand, in other nations - where supplies of consumer goods are limited - advertising is an important selling tool to diversify demand from supplyconstrained products to those which are plentiful. This is why an increase in advertising intensity has led to negative financial returns in Korea in the current study. For Japanese firms, the impact of advertising on financial performance is inconclusive, although Japan has reached the developed country status. A possible reason for such a mixed signal is that the Japanese market structure is based on imperfect competition between networks of controlled or closed channels of distribution. Consumers have limited choices of what is available in stores.

6.5.3 Financial Strategy (H3)

The results show that financial leverage is not associated with high corporate financial performance. An explanation is that companies (especially in the United States) are sometimes leveraged beyond their optimal level. Therefore, the cost of capital may offset any benefits from their leverage position. Interestingly, the more efficient an American or Japanese firm is in managing the credit it provides, the poorer is its financial performance. An explanation is that the impact of efficiency in managing credit may vary from one line of business to another. This means that the total efficiency index should be "decomposed" to examine the effect of its different components on financial performance. Another, and perhaps, more compelling explanation is that most companies offer credit terms and are generally efficient in managing their accounts receivables; this means that in today's competitive markets the efficient management of credit is required to do business but insufficient on its own merit to improve corporate performance.

6.5.4 Operational Strategy (H4)

For Korean firms, none of the measures under the operations strategy correlate significantly with the three financial performance criteria. For Japanese and American firms, the results are different. Inventory efficiency is positively related to the measures of financial performance; employee productivity is negatively associated with the financial performance; and capital intensity is negatively associated with the financial performance. Japanese firms have mastered the craft of operating inventory efficiently while American firms have imitated Japanese practices to increase their competitiveness. The achievements of firms in these two countries have led to a lower level of inventory in relation to their sales volume. For Korean firms, inventory efficiency has been a less crucial factor to their competitiveness because of their low labor costs, reliance on small enterprise, and their use of many Japanese manufacturing practices.

On the surface, the negative relationship between employee productivity and corporate financial performance for Japanese and American firms is perplexing. Increasing sales per employee does not lead to better financial performance. This result can be explained by using the Leontief paradox. It suggests that developed countries' competitiveness depends on their production using skilled labor which causes exports to have a high labor intensity. Growth opportunities in the global market for firms in developed countries such as Japan and the United States require the use of high-skilled labor. This causes the employee productivity measure (sales volume divided by the number of employees) to be inversely associated with corporate financial performance.

Conversely, firms in newly-industrialized nations like Korea are facing a process of transition to move away from producing less low-tech to more high-tech items. That is probably why the relationship between employee productivity and financial performance is not significant.

One possible reason for a negative relationship between capital intensity and corporate financial performance is that Japanese and American firms rival each other for the position of the global economic leader. Investing in fixed assets to increase future productivity is one way to achieve a leadership status at the expense of short-term financial performance. Therefore, hypotheses H4a-c are partially supported.

6.5.5 Moderating Influence of National Boundaries (H5)

The above discussion of cross-country differences and the statistical results support the fifth hypothesis (H5); the relationship between corporate strategy and financial performance differs in strength and magnitude from one country to another. This was confirmed using the Chow test, where seven of the nine regression runs (3 countries X 3 dependent variables) were statistically significant at p < .05. This suggested that the regression equations reflected very different situations and exhibited different structures.

The different results for each country suggest that theories of corporate strategic behavior need to be grounded in a thorough understanding of the national economy and culture. That is, universalistic assertions should be replaced with a well-crafted contingency model of organizational strategy. This message is consistent with the thrust of Michael E. Porter's (1990) work, as well as the conclusions reached by Alfred Chandler (1990). Using very different research designs and methods, both Chandler and Porter reach essentially the same conclusion: countries employ very different strategies to establish their lead in particular industries. These strategies build on the unique features of the domestic economy, national character and resource advantage. This implies that American, Japanese and Korean firms would employ very different strategies in asserting their competitive lead in international markets. Companies in these countries have expanded internationally at very different points in time, taking advantage of the distinct skills and competencies they developed in their home base or acquired through international trade. The point is: a theory of international competitiveness would benefit greatly from reviewing existing evidence and then postulating specific country-by-country hypotheses depending on the nature of the national economy and its stage of evolution.

7. Conclusions and Suggestions

This study has examined the relationship between corporate strategy and financial performance in three countries. As we expected, components of corporate strategy are correlated differently with different financial performance criteria within and across the three countries. That is, the relative significance and magnitude of the component of strategy have varied according to the criteria used and the country under consideration. Diversification emerges as the key strategy for Korean corporations in their effort to increase financial performance. For American firms, and to a certain extent Japanese firms, advertising is the major correlate of financial performance.

Future research on the topic would benefit from using different measures of corporate strategy variables. For instance, an alternative or more detailed measure of the diversification, financial, marketing and operations components may yield very different results from those found in this study.

Another useful study would be to look at the complete life-cycle of overseas corporate strategy. Although most of our hypotheses were partially supported by the results, the data provided only a snapshot of the corporate strategies under consideration. Strategy is drawn from a series of decision making. Better parallels can be drawn if comparisons are made at similar points in the corporate histories under examination. It would be unrealistic to expect the companies of different nations to employ the same strategies at the same time. Therefore, longitudinal research designs would allow a thorough evaluation of the effect of corporate strategy on performance.

A third possibility for future studies is to examine the impact of strategy on corporate performance by industry types. Although insignificant in this study, other studies suggest that different industries exhibit distinct characteristics in Korea, Japan, and the United States. These characteristics can explain possible differences in corporate performance.

This study highlights the importance of corporate strategy for understanding financial performance. The nine regression performance equations are statistically significant (p < .05). Moreover, the results show that the efficacy of different strategy dimensions varies across countries. While the findings for particular dimensions are not consistent with theory-based predictions, they

only highlight the need for more theory building in this area and for large scale empirical studies to gain a better appreciation of the full ramifications of corporate strategy for company performance. We hope that this paper and its results encourage other researchers to test its findings or provide alternative frameworks that will enrich the field.

References

[1] Barney, J. "The resource-based model of the firm: Origins, implications, and prospects," *Journal of Management*, 1991, 17(1), 97-98.

[2] Chandler, A. *Scale and scope*. Cambridge, MA: Harvard University Press, 1990.

[3] Chowdhury, A. "M & A mania: Tokyo Raiders turn to new Europe," *Asian Finance*, 1990, 16(5), 18-19.

[4] De Castro, J.O. & Chrisman, J.J. "Order of market entry, competitive strategy, and financial performance," *Journal of Business Research*, 1995, 33(2), 165-177.

[5] Dollar, D. & Sokoloff, K. "Patterns of productivity growth in South Korean manufacturing industries, 1963-1979", *Journal* of Development Economics, 1990, 33(2), 309-327.

[6] Grant, R.M. *Contemporary strategy analysis*. New York, NY: Basil Blackwell, 1991.

[7] Hax, A.C. & Majluf, N.S. *The strategy concepts & process*. Englewood Cliffs, NJ: Prentice-Hall, 1991.

[8] Hodock, C.L. "Strategies behind the winners and losers," *Journal of Business Strategy*, 1990, 11(5), 4-7.

[9] Hoskisson, R.E., Hitt, M. & Hill, C.W. "Managerial risk taking in diversified firms: An evolutionary perspective," *Organizational Science*, 1991, 2(2), 296-315.

[10] Jain, S.C. International marketing management. Boston, MA: PWS-Kent Publishing, 1990.

[11] Katz, J.P., Zarzeski, M.T., & Hall, H.J. "The impact of strategy, industry, and culture on forecasting the performance of global competitors: A strategic perspective," *Journal of Business Strategies*, 2000, 17(2), 119-143.

[12] Lee, J. & Blevins, D.E. "Profitability and sales growth in industrialized versus newly industrialized countries," *Management International Review*, 1990, 30(1), 87-100.

[13] Lehn, K. & Makhija, A.K. "EVA & MVA: As performance measures and signals for strategic change," *Strategy & Leadership*, 1996, 24(3), 34-38.

[14] Levine, D.I. "Participation, productivity, and the firm's environment," *California Management Review*, 1990, 32(4), 86-100.

[15] Lieberman, M.B., Lau, L.J. & Williams, M.D. "Firm-level productivity and management influence: A comparison of U.S. and Japanese automobile producers," *Management Science*, 1990, 36(10), 1193-1215.

[16] McGahan, A. M. "Competition, strategy, and business performance," *California Management Review*, 1999, 41(3), 74-101.

[17] Miller, R. "Profiting in the Pacific rim," *Target Marketing*, 1990, 13(3), 26-28.

[18] Mintzberg, H. "The design school: Reconsidering the basic premises of strategic management," *Strategic Management Journal*, 1990, 11, 171-196.

[19] Oster, S. M. *Modern competitive analysis*. New York, NY: Oxford University Press, 1990.

[20] Pelham, A.M., "Influence of environment, strategy, and market orientation on performance in small manufacturing firms," *Journal of Business Research*, 1999, 45(1), 33-46.

[21] Porter, M.E. *The competitive advantage of nations*. New York, NY: Free Press, 1990.

[22] Remolona, E.M. "Understanding international differences in leverage trends," *Federal Reserve Bank of New York Quarterly Review*, 1990, 15(1), 31-42.

[23] Schmenner, R.W. & Rho, B.H. "An international comparison of factory productivity," *International Journal of Operations & Production Management*, 1990, 10(4), 16-31.

[24] Stimpert, J.L. & Duhaime, I.M. "Seeing the big picture: The influence of industry, diversification, and business strategy on performance," *Academy of Management Journal*, 1997, 40 (3), 560-583.

[25] Umezawa, M. "Japan's advertising boom-globalization holds the key to the future," *Tokyo Business Today*, 1990, 58(8), 22-23.

[26] Zahra, S.A. & Garvis, D.M. "International corporate entrepreneurship and firm performance: The moderating effect of international environmental hostility," *Journal of Business Venturing*, 2000, 15(5/6), 469-492.