2006

Strategic Orientation and Export Performance of Firms

Jooh Lee
Rowan University

Berin Gurner
Rowan University

Berhe Habte-Giorgis

2006

Strategic Orientation and Export Performance of Firms(IMDA, Guner & Lee & Habte)

Jooh Lee, *Rowan University*
Berin Gurner, *Rowan University*
Berhe Habte-Giorgis

Gurer
Lee
Habte-Giorgis

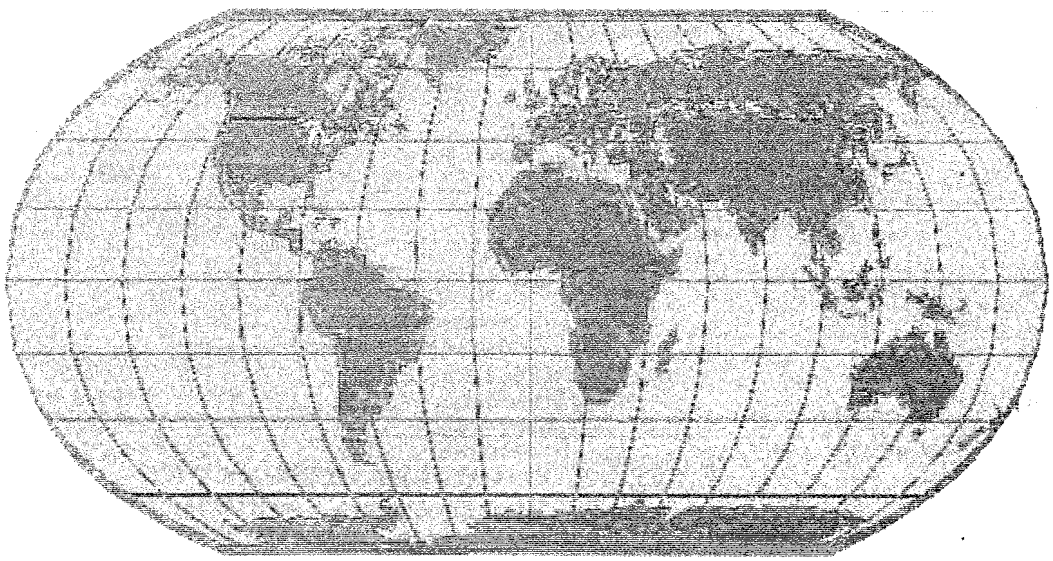
International Management
Development Association
Pennsylvania, USA

SARAJEVO GRADUATE
SCHOOL OF BUSINESS

INTERNATIONAL MANAGEMENT DEVELOPMENT RESEARCH YEARBOOK

TECHNOLOGY, STRUCTURE, ENVIRONMENT, AND STRATEGY INTERFACES IN A CHANGING GLOBAL BUSINESS ARENA

Edited by:
Erdener Kaynak, Ph.D.;D.Sc.
Pennsylvania State University at Harrisburg
Talha D. Harcar, Ph.D.
Pennsylvania State University at Beaver



ADVANCES IN GLOBAL MANAGEMENT DEVELOPMENT

VOLUME XV 2006

Strategic Orientation and Export Performance of Firms: A Study of American, Japanese and German Companies in the Manufacturing Sector

Berrin Guner, Rowan University, USA
Jooh Lee, Rowan University, USA
Berhe Habte-Giorgis, Rowan University, USA

The purpose of this paper is to examine the linkage between strategic variables and the export performance of firms in the US, Germany and Japan. R&D Intensity, Capital Intensity, Average Collection Period, Debt Leverage, and Labor Productivity are used as a measure of strategic variables. R&D intensity and Labor Productivity are found to have a strong and positive association with export performance in all three countries. Capital intensity and average collection period also have significant relationship with export performance in the US and Japan respectively.

Introduction

Growing liberalization, integration and competition in world economies since the post-war period have been responsible for the increasing engagement of firms in exporting activities. In fact, exporting is a crucial business activity for nations' economic health, as it significantly contributes to employment, trade balance, economic growth, and higher standard of living (Czinkota and Ronkainen, 1998). Exporting is also an integral part of sustaining the firm's competitive advantage in the turbulent market, because of improvement in financial position, increased capacity utilization, higher technological standards, and attainment of a desired performance (Jain, 1991; Leonidou and Katsikeas, 1996; Zhao and Zou, 2002). Consequently, attention to the significance of exporting has drawn considerable interest in recent times from economic policy makers in government as well as academic researchers.

In light of these benefits, it is necessary to understand what strategic factors lead to better performance in exporting firms. Notwithstanding the large volume of studies on export performance, the determinants of export performance remain highly fragmented (Zou and Stan, 1998). There is a plethora of research on the correlates of export performance that are internal and external to the firm (Calantone, et al., 2006). However, strategic v within an export performance framework have n unified. Business-level of strategy is concerned p with utilizing the firm's distinctive competencies in gain a competitive advantage in its industry and Although export activity is influenced by organi characteristics (Koh, 1990; Nolle, 1991), an investig the relationships between organizations' strategic (e.g., R&D, firm size, and capital intensity, etc.), an performance is very scarce. Furthermore, most stud been conducted in a single country context. The paper, therefore, differs from previous studies fronts; 1) it studies possible associations between variables and the export performance of firms, and comparative study of exporting firms in three economies; the US, Germany and Japan. Such stu important step because multi-country studies are a the export marketing literature. As such, little is about cross-national differences in the export perf of firms.

Strategic Variables, Export Performance and Hypotheses

The primary objective of the paper is to em verify the relative importance of strategic variable export performance of American, Japanese and firms. Strategic management and industrial organ economics literatures provide ample evidence relationships between strategy and performan Geringer et al., 2000; Porter, 1990). Such stud emphasized the relative importance of different factors (e.g., diversification, R&D intensity, firm s capital intensity, etc.) in determining firm performa present paper is an application of these studies t performance. As outlined below, it focuses on fi elements of business strategy based on their import the availability of secondary data.

R&D Intensity:

The term "R&D" intensity refers to a company's expenditure in new technology development (Kamien and Schwatz, 1982). Literature suggests that firms that invest a large portion of their sales in R&D tend to experience more growth than those that do not (Morbey and Reithner, 1990). Several studies empirically have investigated the relationship between R&D investment and performance (Franko, 1989; Hoskisson and Turk, 1990). Evidence indicates that irrespective of industry and size, company growth increases along with R&D increases. In a study of the PIMS database, Holak, Parry, and Song (1991), for example, found significant differences in performance among firms based on their R&D expenditures. Such evidence exists in the export performance literature that suggests a positive relationship between the export performance of firms and R&D intensity (see, for example, Zhao and Zou, 2002). It appears that R&D investment usually enables firms to maintain international competitive leadership through product development, operational efficiency, and cost reduction (Balakrishnan and Fox, 1993; Hannay and Steele, 1986; Ito and Pucik, 1993; Link and Tassey, 1987; Zhao and Zou, 2002). Hence, we expect that R&D intensity will positively affect the performance of exporting firms. Thus;

H1: R&D intensity is positively associated with the export performance of firms.

Capital Intensity:

Capital intensity refers to the amount of assets required per dollar of sales that is the ratio of total assets to total sales. It is argued that companies are required to make capital investments to remain competitive and to maintain their company's growth (Balakrishnan and Fox, 1993; McKie, 1970; Sosin and Fairchild, 1987). Ohmae (1990) contends that investment in automation, robotics, quality control has vastly increased productivity in the past decade and caused a major shift from labor to capital. He points out that auto industry, electronics, chemicals, and textile industries experience more productivity, performance, and competitiveness thanks, in part, to capital intensive production. Such method leads to improved production processes resulting in cost effectiveness and consequently, better company performance (Lee and Blevins, 1990).

We expect a positive association between capital intensity and export performance as well. The rationale for this expectation stems from the literature suggesting that capital investment pays off over time (Ravenscraft, 1983; Ohmae, 1990; Yamawasaki, 1989). The application of resources toward capital assets usually represents the technological sophistication of the operations of the firm which enables it to achieve better quality and lower costs. In an international marketing context, these operational advantages are a must for a company to gain access to a foreign market and sustain its competitive position (See for example, Czinkota and Ronkainen, 1998). Therefore, in light of past studies, we offer the following hypothesis;

H2: Capital intensity is positively associated with the export performance of firms.

Labor Productivity:

Labor productivity is essential to healthy operations. It indicates how effectively firms can combine inputs to produce output and is a major determinant of cost and competitiveness (Pilat, 1998). Lee, Zahra, and Wongtada (1995) argue that effective management of manufacturing process is needed for productivity improvements. This may involve reforms in human resource management; training, job satisfaction, communication, and work reform. Labor productivity is also very essential for exporting firms that rely on capacity to fill foreign orders. Further, labor productivity puts exporting firms on the same front with foreign competitors that enjoy high level of productivity. Therefore;

H3: Labor productivity is positively associated with the export performance of firms.

Collection Period:

Collection period (or credit activity) represents the ability of a firm to collect its account receivables effectively (Lee, Zahra and Wongtada, 1995). It is defined as the ratio of accounts receivable to total sales. The ability of a firm to collect its accounts on time and its effective management is crucial to maintain its cash position. Shorter collection period reduces reliance on leverage for financing corporate activities. This is particularly important for exporting firms because timely collection provides relief of additional administrative burden of collection and reduces risk of doing business internationally. As a result, firms will be able to manage their finance more effectively and to have available cash to expand. Based on this argument, we hypothesize that;

H4: Collection period is negatively associated with the export performance of firms.

Debt Leverage:

Debt leverage may be one of the major strategic variables in business level strategy, particularly with respect to export performance. However, the assessment of the firm's debt leverage in terms of sound capital budgeting is likely to be much more complex empirically than theoretically. Generally speaking, using more debt raises the riskiness of the firm's earnings stream through the foreign market, but more debt generally means a higher expected rate of return (Brigham, 1982).

Although the cross-national nature of this study precludes claims of cause and effect, the results of the past literatures demonstrate that the foreign business activity by export emphasized by top management may influence the systematic risk of a firm either directly or by modifying the effects of financial context (Beard and Dess, 1981; Markides, 1995). The results of the past studies also suggest that a firm's business activity by export strategy may convey information to investors about its future market riskiness over and above that provided by the firm's specific financial and market condition. Investors may be wary of the market risk of conglomerates but were willing to reduce their assessment of market risk if a specific/competitive firm showed high profitability, low debt, and high capital intensity, conditions that implied high entry barriers for its businesses. However, it can also be argued that to the extent the cost of a firm's capital is less than the returns earned by the firm, debt can have a positive impact on profitability. It is widely known that debt leverage is much higher in Pacific Rim countries, especially Japan compared to other countries like U.S. and Germany.

Beard and Dess (1981) found that average leverage measured inversely by the ratio of equity to total assets has the theoretically correct negative sign and is statistically significant. Thus, relatively large amounts of leverage tend to raise industry profits rates, implying more debt leverage leads to greater risks. Consequently, it is more desirable to introduce leverage into the general model to explain profitability since leverage is correlated with other key elements of market structure. Aside from the general studies in the market strategy (Beard and Dess, 1981; Grant and Jammine, 1989; Markides, 1995) which focused on financial risk as measured by the debt leverage has yielded a negative association between this kind of risk and firm profitability, other studies (Fisher and Hall, 1969; Hall and Weiss, 1967) found a positive relationship between this kind of business risk and profitability. The discipline imposed by the debt burden forces management to invest wisely and thus be more efficient in some fashion. The same argument can be made for export performance, since successful exporting activities are a risky and lengthy process (Cavusgil and Naor, 1987) which involves a long term approach to profitability. Thus, export performance is expected to increase with greater risk.

H5: Debt leverage is positively associated with the export performance of firms.

Empirical Design and Methodology

Sample and Data Collection

The proposed hypotheses were tested through a three-nation study in the manufacturing sector. The US, Germany and Japan were selected due to their economic wealth and their export power. According to CIA World Factbook, Germany ranks first, the US second, and Japan fourth in the total value of exports in the world.

The initial samples for the present study included the top 500 publicly listed manufacturing companies in the U.S., Japan and Germany over a three-year period (2002-2004). In order to increase generalizability and reliability the samples of U.S., Japan and German firms were matched on the basis of industry type. Due to the sample selection criteria and data availability, the final sample for the present study included a total of 988 firms, consisting of 320 U.S firms, 358 Japanese firms and 310 German firms in manufacturing sector. All firm data were collected primarily from *Compact-D Worldscope* data base. The samples for each country (U.S., Japan and Germany) were analyzed separately to avoid any problems associated with translating currencies using volatile exchange rates. The selected data are arithmetic averages for the most recent three year period.

Description and Measurement of Variables

Explanatory Variables: R&D intensity is measured as the ratio of R&D expenditures to total sales revenue. Similarly capital intensity is assessed as the ratio fixed assets to total sales revenue. Collection period is the ratio of account receivable to total sales. Debt leverage is defined as the ratio of total debt to shareholders' equity. Finally, labor productivity is measured as the natural log value of sales volume per employee. These measures of the constructs had been widely used in the literature.

Dependent Variable: Numerous studies demonstrated that export performance is a multidimensional construct (Diamantopoulos, 1999; Katsikeas, Leonidou, and Morgan 2000). There is an agreement that export performance measures should include both objective and subjective dimensions and should assess short-term as well as long term success. Secondary data use allowed us to concentrate only on a single measure of export performance. The ratio of exports to total sales, hence, is employed as a measure of the construct.

Covariates: Firm size is one of the most frequently studied factors in export performance studies. Though there is no consensus about the nature of its effects, there are certainly a large number of empirical studies that establish a significant relationship between firm size and export performance (Zhao and Zou, 2002). Hence, it is treated as a control variable in the present study. Firm size is measured by the natural log value of total number of employees because the total number of employees are most likely to be employed as a proxy measure of firm size in most empirical studies relating to exporting rather than total assets or sales revenues.

In addition, several studies (see, for example, Cavusgil and Zou, 1994; Chakbarti, 1991) indicate that technology intensiveness is an important correlate of firm strategy. Hence, the technological intensity of the industry is used a

control variable and dummy coded as 1 for high tech and 0 for low tech sectors.

Empirical Model and Statistical Methods

Descriptive characteristics of the variables are presented in Table 1 for each country. Correlation coefficients are calculated to assess whether multicollinearity exists. Such problem did not exist since the coefficients were less than 0.90 (Hair, Anderson, Tatham, and Black, 1998).

To investigate the relationships between the economic activities and performance, an ordinary least squares (OLS) multiple regression was employed. This method is appropriate for this study because this study is primarily designed to explore the relative significance of independent variables on the performance measures. To test the proposed hypotheses, separate regression analyses for the US, Japan and Germany were used. This statistical procedure is suggested for multi-country studies (Douglas and Craig, 1999).

Table 1

Descriptive Statistics: US, Japanese, and German Manufacturing Firms

	US Firms		Japanese firms		German firms	
	Mean	Std.Dev	Mean	Std.Dev	Mean	Std.Dev
Firm Size: Ln($Sales)	15.472	1.207	14.155	1.291	13.628	1.574
Capital Intensity	1.430	0.851	1.182	0.449	0.848	0.356
Debt Leverage	117.474	249.091	131.604	676.998	72.862	623.213
A/C Collection Period	38.4	39.2	41.5	48.5	26.7	33.4
Labor Productivity	349.550	367.941	394.707	370.061	308.267	353.956
Dummy (High vs. Low)	0.592	0.493	0.704	0.457	0.538	0.500
N	320		358		310	

Note: Firm Size is the natural log value of US dollar based sales revenue, Capital Intensity is the ratio of total assets to total sales revenue, Debt Leverage is the ratio of total debt to common shareholders' equity, A/C Collection Period is account receivable collection period (days); Labor Productivity is the US dollar value of total sales to number of employees.

Results

Results of the regression analysis are presented in Table 2. Overall, the regression models for all countries are statistically significant at the $p<0.001$ level. Findings for the US suggest that R&D intensity ($p<0.001$), capital intensity ($p<0.05$) and labor productivity ($p<0.05$) are positively and strongly associated with the export performance of firms. The results for Japan indicate that R&D intensity ($p<0.01$), and labor productivity ($p<0.001$) are significantly and positively; and collection period ($p<0.001$) significantly and negatively associated with export performance. For Germany, results indicate that R&D ($p<0.01$) and labor productivity ($p<0.001$) are strongly and positively associated with the export performance of firms. These findings suggest that R&D intensity and labor productivity are a significant predictor of a firm's export performance in all three countries.

Conclusion

This study was an attempt to empirically explore the impact of strategic variables on export performance of firms in the U.S., Japan, and Germany. Out of the five variables examined, two showed significant impact for all the countries, one did not have any impact in any of the countries, and two had impact in two countries only.

R&D Intensity, and Labor Productivity, or hypotheses 1, 2 respectively are the variables with statistically significant impact. These findings conform to the literature and conventional understanding that spending on R & D leads to new product development and the enhancement of

competitiveness of a company's products (Ito and Pucik, 1993). The competitive strategy of the U.S. relies on leading the world on producing cutting-edge products on a continuous basis. When other countries start imitating the product or start producing improved products, then it is time to move to new products again. The results of this study hint that all the three countries in the study are now pursuing this strategy. The implication for the U.S. is that it either has to increase the degree of innovation or shorten the cycle to have a distinct advantage over competitors and to continue using this strategy.

Table 2

Results of OLS Regression Analysis for Export Performance

Variables	US Firms			Japanese Firms			German Firms		
(Constant)	61.206	(10.320)	***	53.986	(21.873)	*	8.043	(30.860)	
Firm Size: Ln (Sales)	2.086	(0.752)	**	3.597	(0.625)	***	5.110	(1.146)	***
R&D Intensity	1.025	(0.241)	***	0.332	(0.133)	**	0.893	(0.393)	**
Capital Intensity	5.466	(2.146)	*	1.166	(1.733)		0.023	(6.045)	
Debt Leverage	-0.004	(0.005)		0.000	(0.001)		0.009	(0.007)	
A/C Collection Period	0.021	(0.043)		-0.081	(0.022)	***	0.083	(0.067)	
Labor Productivity	18.480	(8.303)	*	9.497	(2.005)	***	8.605	(2.059)	***
Dummy (High vs. Low)	0.196	(0.053)	**	0.007	(0.001)	***	0.002	(0.003)	
Adjusted R2	0.374			0.299			0.209		
F-Ratio	5.346	***		6.324	***		4.894	***	

Note: Cell entries are regression coefficients and Standard errors are in parentheses

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Labor Productivity may be associated with cost and eventual competitiveness of products in the market. The significant association of productivity with export performance indicates that this variable is crucial for entry and survival in foreign markets. Again, as with the case of R&D Intensity, when competitors achieve the same level of productivity, labor productivity may cease to be a competitive advantage.

Debt Leverage does not have significant impact in all the three countries which means, this variable does not significantly influence export performance in the companies studied in all three countries. One possible explanation is that Debt Leverage may be uniform in exporting and non-exporting companies. Due to the competitive nature of the manufacturing industry in all three major economies, risk taking behavior is expected which may not always transla into profits. Also, it is known that long-term view investment does not maximize profits immediately b helps firms to gain market shares and build custom relationships. Our data frame did not allow us to see t impact of long-term risk taking behavior on expo performance. The literature can benefit immensely from research that studies the nations' risk taking behavior a its impact on the long term export performance of firms.

Capital Intensity has impact only in the U.S. T reason for this finding may be that capital intensity, in t more competitive US market, provides some measure protection from rivals which may create an advantage f firms in their international operations. Also, one wou expect Labor Productivity and Capital Intensity to go han

-hand, because high labor productivity is partially the outcome of heavy investment in technology and improved processes. However, the results of this study proves that this is not necessarily so. While Labor Productivity is significantly associated with export performance, Capital Intensity is not.

Collection Period is significant only in Japanese firms. Table 2 indicates that collection period is longest for Japan which may lead to lower export performance. Traditionally, Japanese firms operate based on credit-based sales which may explain long collection period. A detailed examination of the culture and practice of debt collection in Japan compared to the other countries can be an appropriate topic for further study in the future.

Notwithstanding some of the measurement problems (particularly in Export performance) and the data deficiencies, which should temper our confidence in the results, the empirical findings indicate considerable similarity in the relationship between business market strategy and export oriented activity in the three developed economic countries with different market environment. The following suggestions for future study seem appropriate as an outgrowth of this investigation. Especially, the selection of manufacturing industry even in three different country groups may leave open some questions to the generalizabilty of the study's results with respect the export policy. Because different type of industry sectors (for example, non-manufacturing firms) may have different impacts on export activity (or performance), any further attempt to generalize the business strategy – export performance relationships must clearly distinguish between the manufacturing and the non-manufacturing. As a consequence, it would be more desirable that future studies should be done with more comparable number of firms in both type of industry.

A final note of this study concerns limited, but growing, interest of a comparative study of the relationship between firm strategy and export performance across countries with different business environments. As the model and data are improved, the findings of this study can be retested and extended. Future research regarding this research paradigm across national boundaries should consider this aspect particularly with respect to export strategy. In fact, this study has just opened the door to additional research efforts that serve to generalize the relationship between firm strategy and export activity across counties. Perhaps follow-up studies should explore the comprehensive firm strategy-export performance relations across countries by generating broad type of industry sectors (i.e., manufacturing vs. non-manufacturing) in addition to technology distinction (i.e., high-tech vs. low-tech) as well as a proper export performance measures to investigate the questions of particular interest.

References

Balakrishnan, Srinivasan and Isaac Fox (1993). Asset Specificity, Firm Heterogeneity and Capital Structure. Strategic Management Journal, 14, 3-16.

Beard, Donald W. and Dess, Gregory G. (1981). Corporate level Strategy, Business level strategy, and Firm performance." Academy of Management Journal, Vol.24, No.4,pp.663-638.

Brigham, Eugine F. 1982. Financial Management: Theory and Practice. The Dryden Press(2nd Edition).

Buzell, Robert D. and B. T. Gale (1987). The PIMS Principles. New York,NY: Free Press.

Calantone, Roger, J., et al., (2006). The Influence of Internal and External Firm Factors on International Product Adaptation Strategy and Export Performance: A Three Country Comparison, Journal of Business Research, 59(2): 176-185.

Cavusgil, Tamer and Shaoming Zou (1994). Marketing Strategy-Performance Relationship: An Investigation of the Empirical Link in Export Market Ventures, Journal of Marketing, 58 (January), 1-21.

_____ and Jacob Naor. 1987. Firm and Management Characteristics as Discriminators of Export Marketing Activity. Journal of Business Research 15: 221-235.

Chakbarti, Alok K. (1991). Industry Characteristics Influencing the Technical Output: A Case of Small and Medium Size Firms in the US, Strategic Management Journal, 21(2), 139-152.

Czinkota, Michael R. and Ilkka A. Ronkainen (1998). International Marketing. Fort Worth, TX: Dryden Press.

Diamantopoulos, A. (1999). ViewPoint-Export Performance Measurement: Reflective vs Formative Indicators. International Marketing Review 16(6):444-457.

Douglas, S. and S. Craig (1999). International Marketing Research: Concepts and Methods, 2nd ed. John Wiley and Sons.

Fisher, N. and Hall, G. R. (1969). Risk and Corporate Rate of Return. Quarterly Journal of Economics , Vol.83, No.1, pp.79-92

Hair, Joseph, Rolph Anderson, Ronald Tatham, and William Black (1998). Multivariate Data Analysis, 5th ed. Prentice Hall.

Hall, Marshall and Weiss, Leonard (1967). Firm Size and Profitability. The Review of Economics and Statistics Vol.69,No.3,pp.319-331.

Hannay, N. B. and Lowell Steele (1986). Technology and Trade: A Study of US Competitiveness in Seven Industries. Research Management, 29(1), 14-22.

Holak, Susan L., Mark E. Parry and X. Michael Song (1991). The Relationship of R&D/Sales to Firm Performance: An Investigation of Marketing Constituencies. Journal of Product Innovation Management, 6(4), 267-282.

Geringer, J. M., Tallman, S. & Olsen, D.M. (2000). Product and International Diversification Among Japanese Multinational Firms. Strategic Management Journal, 21, 51-80.

Grant, Robert M. and Jammine, Azar P. (1988). Performance Differences Between the Wrigley/Rumelt Strategic Categories. Strategic Management Journal, 9: 333-346.

Ito, Kiyohiko and Vladimir Pucik (1993). R&D Spending, Domestic Competition and Export Performance of Japanese Manufacturing Firms. Strategic Management Journal, 14, 61-75.

Jain, Subhash (1993). International Marketing Management. CA: Wadsworth Publishing Company.

Kamien, Morton and Nancy Schwartz (1982). Market Structure and Innovation. Cambridge: Cambridge University Press.

Katsikeas, Constantine, Leonidas C. Leonidou and Neil A. Morgan (2000). Firm-level Export Performance Assessment: Review, Evaluation and Development. Journal of the Academy of Marketing Science, 28(4): 493-511.

Koh, A. (1990). Relationships among Organizational Characteristic, marketing Strategy and Export Performance. International Marketing Review, 8 (3), 46-60

Leonidou, Leonidas and Constantine S. Katsikeas (1996) The Export Development Process: An Integrative Review of Empirical Models. Journal of International Business Studies, 27(3), 517-551.

Lee, Jooh and David E. Blevis (1990). Profitability and Sales Growth in Industrialized Versus Newly Industrializing Countries. Management International Review, 30(1), 87-100.

Lee, Jooh, Shaker A. Zahra and Nittaya Wongtada (1995). A Comparative Study of Leading American, Japanese, and Korean Corporate Strategy and Financial Performance. Journal of Asia-Pacific Business, 1(1), 65-95.

Link, Albert and Gregory Tassey (1987). Strategies for Technology Based Competition. Lexington, MA: Lexington Books.

Markides, Constantinos C. (1995). A Diversification, Restructuring and Economic Performance. Strategic Management Journal, Vol. 16, 101-118 (1995)

McKie, James (1970). Market Structure and Function: Performance versus Behavior. In Industrial Organization and Economic Development, J. W. Markham and G. F. Papanek, eds. Boston, MA: Houghton Mifflin Co., 3-25.

Morbey, Graham and Robert Reithner (1990). How R&D Affects Sales Growth, Productivity, and Profitability. Journal of Engineering and Technology Management, (May-June), 11-14.

Nolle, D.E. (1991). An Empirical Analysis of Market Structure and Import and Export Performance for US Manufacturing Industries. Quarterly Review of Economics & Finance, 31 (4), 59-78.

Ohmae, Kenichi (1990). Becoming a Triad Power: The New Global Corporation. In International Marketing Strategy, Hans Thorelli and Tamer Cavusgil, eds. Oxford: Pergamon Press.

Porter, Michael (1990). Competitive Advantages of Nations. New York: Free Press.

Ravenscraft, D. J. (1983). Structure-Profit Relationships Between Business and Industry Level. The Review of Economics and Statistics, 65(1): 214-224.

Sosin, Kim and Loretta Fairchild (1987). Capital Intensity and Export Propensity in Some Latin American Countries. Oxford Bulletin of Economics and Statistics, 49(2), 191-208.

Yamawasaki, H. (1989). A Comparative Analysis of Inter-temporal Behavior of Profits: Japan and the United States. Journal of Industrial Economics, 37(4), 389-409.

Zou, Shaoming and Simona Stan (1998). The Determinants of Export Performance: A Review of the Empirical Literature Between 1987 and 1997. Proceedings, American Marketing Association, *Winter Educators' Conference.*

Zhao, Hongxin and Shaoming Zou (2002). The Impact of Industry Concentration and Firm Location on Export Propensity and Intensity: An Empirical Analysis of Chinese Manufacturing Firms. Journal of International Marketing, 10(1): 52-71.