

# THE JAPANESE JOURNAL OF ADMINISTRATIVE SCIENCE

June, 1998 (Vol. 12, No. 2)

Edited by

THE JAPANESE ASSOCIATION OF ADMINISTRATIVE SCIENCE

President : Mitsuru Wakabayashi, Nagoya University

Editor : Naotaka Watanabe, Keio University

Associate Editors :

Toshihiro Kanai, Kobe University

Yasuaki Kido, Sanno University

Haruo Takagi, Keio University

Mitsuru Wakabayashi, Nagoya University

---

## CONTENTS

### ARTICLE

- The Impact of Firm Size on Export Performance and Attitudes:  
An Empirical Study on Thailand Exporters ..... 79  
Paiboon Archarunroj and Yasuo Hoshino
- Reference Groups, Achievement and Motivators of R&D Workers: A Comparative  
Study among Researchers, Engineers, and Technical Staff in the Paint Industry ..... 89  
Hideo Misaki
- The influence of subordinate readiness on leadership effectiveness: A test of  
Situational Leadership theory considered hierarchical level of organization ..... 103  
Fumitoshi HAYASHI and Toshihiro MATSUBARA
- Two dimensions of utilization of women employees in companies:  
Different tendencies among the tertiary industries ..... 113  
Yukiko SENDA
- Research on organizational citizenship behaviors and those determinants:  
A case of Japanese employees. .... 125  
Ken'ichiro TANAKA, Yoichiro HAYASHI, and Ken-ichi OHBUCHI
- Book Review  
*Management and Psychology in the Flat Organization*,  
Eri YOKOTA, Keio University Press, 1998 ..... 145  
Yasuaki KIDO (Reviewer)
- Manuals for writing, Submitting, Reviewing and Publishing  
JJAS Publishing Committee ..... 149

---

THE JAPANESE ASSOCIATION OF ADMINISTRATIVE SCIENCE

Department of Business Administration, Aichi-Gakuin University, 12 Araiike, Iwasaki,  
Nisshin 470-0131, Aichi, Japan (Phone: +81-5617-3-1111 (Ex.380) ; Fax: +81-5617-4-2420)

E-mail: [matsu@dpc.aichi-gakuin.ac.jp](mailto:matsu@dpc.aichi-gakuin.ac.jp)

Home Page: <http://www.aichi-gakuin.ac.jp/~matsu/JAAS/>

## The Impact of Firm Size on Export Performance and Attitudes: An Empirical Study on Thailand Exporters\*

Paiboon Archarungroj and Yasuo Hoshino  
(University of Tsukuba)

The proposition that firm size is positively associated with certain aspects of export behavior is often taken for granted. However, results from past literature do not definitively support this proposition. The research presented here attempts to re-clarify these conflicting findings in the export marketing literature by empirically examining the impact of firm size on two aspects of export behavior, one relating to export performance and the other concerning company's attitudes toward export. This study is based on responses to questionnaires by 86 managers of Thai exporting firms. The results indicate that exporting firms of different sizes did, to a certain degree, differ significantly in many of the export performance and attitudes variables being studied; but larger exporting firms did not necessarily perform better than smaller exporting firms, nor did they have more positive attitudes toward export.

### Introduction

Among researchers, there is little dispute that exports are an essential element of healthy economic growth. Most governments of developing countries as well as developed countries are keenly interested in increasing their exports as a means of promoting their economic growth. It is not surprising, therefore, that the belief in exports as an engine of growth is particularly strong in Thailand, which has experienced rapid export growth in recent years. However, the proposition that firm size is positively associated with export behavior is often taken for granted. Many believe that larger firms are more actively involved in export business than are smaller firms. This has often led government sector officials in Thailand to assume that larger firms perform better in international markets. They also assume that larger firms have more positive attitudes toward

exporting which means larger companies are more aggressively involving in export business. Thus, officials generally focus attention on finding ways to improve the export activities of smaller firms. Various export incentive packages have been developed, aimed at encouraging smaller firms to engage more actively in international business. Based on a review of the literature, however, it is difficult to draw the conclusion that firm size has a positive impact on export behavior. We are not aware of any studies presenting convincing evidence on this proposition. In addition, despite intensive study and controversy regarding the subject, little research on this topic has been conducted in developing countries like Thailand. The research presented here is, therefore, an attempt to investigate the impact of firm size on the exporters' behavior as specific to the case of exporters in Thailand.

### Summary of Past Literature

The export behavior of firms relates to the supply side of international trade. It concerns with how firms behave with respect to exports. Most empirical studies have identified multiple consideration relating to export behavior of firms.

---

\* The authors would like to thank Professor Henrich R. Greve of University of Tsukuba, Ms. Christy Khojasteh of University of Missouri-Columbia and the editor for editing this paper. The authors, however, are responsible for any remaining errors.

Among those mostly studied export behavior variables are performance-related like export intensity and export profitability; motivation-related like reasons for exporting; and attitude-related like the management's views toward export markets. Bilkey [1978] attempted to integrate the vast variables of export behavior into topics to which they apply such as export initiation, motivation for exporting and perceived obstacles to exporting, etc. The relationship between firm size and export behavior is one of the most widely analyzed subjects in the export marketing literature [Bonaccorsi, 1992; Calof, 1994, Bilkey, 1978]. Firm size is thought to be a useful and manageable approximation of firm resources, which are held to affect export behavior. Furthermore, firm size provides a simple criterion for segmenting firms into groups showing a similar export behavior and, possibly, similar problems encountered. Thus, many researchers have included firm size as a dependent variable in their empirical studies. Despite the supposed importance of size and the intensive research on the topic, little consensus exists about whether size has a strong relationship with export behavior. Some studies found a positive relationship between size and export behavior [Cavusgil and Nevin, 1981; Samiee and Walters, 1990; Christensen, Rocha and Gertner, 1987], while others discovered the negative or mixed results [Ali and Swiercz, 1991; Bonaccorsi, 1992; Bilkey and Tesar, 1977; Karafakioglu, 1986]. Thus, it is difficult to draw definitive conclusions concerning the significance of firm size as a variable affecting export behavior.

Nevertheless, because of the generally accepted nature of these size-based theories, many studies have attempted to link the size of the firm with various export behavior aspects such as the firms' level of export intensity [Samiee and Walters, 1990; Bonaccorsi, 1992], number and nature of countries exported to [Calof, 1994; Samiee and Walters, 1990], export growth [Dominguez and Sequeira, 1993], export profitability [Samiee and Walters, 1990], export experience [Calof, 1994], propensity to export [Bonaccorsi, 1992; Calof,

1994] and export attitudes [Roy and Simpson, 1981; Abdel-Malek, 1978; Calof, 1994; Cavusgil, Bilkey and Tesar, 1979; Cavusgil and Nevin, 1981; Samiee and Walters, 1990; Ali and Swiercz, 1991; Czinkota and Johnston, 1983].

In part, inconsistencies in export study results may be due to the use of different measurements for size. In some studies, number of employees was used as the measurement of size [Bilkey and Tesar 1977; Bonaccorsi 1992; Cavusgil and Naor 1987; Holzmuller and Kasper 1991], while for others the sales level of the firm was used [Christensen, Rocha and Gertner 1987; Cavusgil, Bilkey and Tesar 1979]. Cavusgil [1984] found that when firm size was measured by number of employees, there was no relationship with export behavior except for very small firms, but found a significant relationship when size was measured by annual sales. Yet others found contradictory results even when the annual sales were used as a proxy for size [Burton and Schlegelmilch 1987].

## Data and Methodology

### Research Objectives

This study empirically investigates the impact of firm size (small, medium, and large) on export performance and attitudes. It examines how firms in Thailand of varying sizes differed in terms of the export performance and attitudes. The variables used for export performance included export intensity, export earnings ratio, export growth, expected export growth, export experience, and export market coverage. Views of CEOs on export profit, risk, and cost as compared to domestic market were used to measure export attitudes.

### Research Instrument

A mail questionnaire survey was employed to obtain information on export-related behavior of exporting firms in Thailand. The questionnaire was composed of 3 main sections. The first part provided a basic profile of the firm. It collected information on firm's name, year of establishment, foreign ownership, sales volume, and number of employees. The second part of the questionnaire gathered information on the firm's types of

## The Impact of Firm Size on Export Performance and Attitudes:

export, export experience, export market coverage, major export markets, export intensity, export earnings-ratio, and actual and expected export growth. The third part of the questionnaire asked the CEOs' views on export profit, risk, and cost as compared to domestic markets.

### Survey Design

#### *Sample Frame*

Many studies of size and exporting have used only small and medium-sized firms in their sample frame [Cavusgil and Nevin 1981; Kaynak and Kothari 1984; Cavusgil, Bilkey and Tesar 1979; Cavusgil and Naor 1987; Holzmuller and Kasper 1991], while other studies used a broad range of firms of all sizes [Bilkey and Tesar 1977; Calof 1994; Burton and Schlegelmilch 1987; Bonaccorsi 1992]. The sample in this study included manufacturing firms of all size classes. They were then categorized into three broad groups (small, medium, and large) based on the number of employees and sales volume. Since the number of employees and sales volume were the criterion used in several previous studies, it also facilitates direct comparison of results with this study.

#### *Data Collection*

The list of Thailand's exporters was obtained from Thailand's Exporters Selected List 1995-1996 (Department of Export Promotion, Ministry of Commerce of Thailand). Thailand's Exporters Selected List 1995-1996 is an extensive directory of approximately 2000 exporters in Thailand. A supplementary list of exporters was obtained from the Thailand Export Monitor 1994-1995 (Alpha Research Co. Ltd.), which is a handbook of export statistics and a directory of Thai exporters.

The research was conducted from June to August, 1995. A total sample of 500 firms that export manufacturing products was randomly selected from the exporter lists, and a mail survey questionnaire was sent to each of these firms, addressed to the chief executive officer in charge of exporting or international operations. The choice of this respondent group was based on the belief

that people in these positions are most knowledgeable of the exporting process and overall exporting performance. In responding to the questionnaire, the managers were asked to provide facts about their company, export related attributes and their attitudes on export markets.

Total mailing to 500 firms yielded responses from 112 firms. Eleven letters were returned as undeliverable. Excluding 11 undeliverable letters, the mailing yielded a response rate of 22.9%. Of 112 firms responding, eight were excluded because they were non-exporters. Eighteen more were eliminated because the questionnaire had many missing values. This resulted in a final sample of 86 firms used for analysis in the study, representing the usable rate of 17.6% out of 489 delivered letters. The low response rate (22.9%) may be due to the fact that Thai exporters in general (especially the smaller companies) are reluctant in disclosing their companies' data because they want to avoid tax. Chi-Square Goodness of Fit test indicates that the industrial distribution and the sample size categories are equally distributed at  $\alpha=0.01$ .

#### *Composition of the Sample*

The sample consisted of only exporting firms of manufacturing products in Thailand with the following industrial distribution: automotive parts and accessories, rubber and chemical products, electronics, machinery and equipment, toys and games, construction material, and miscellaneous. The industry membership distribution of the sample is shown in the Table 1.

Table 1 Industrial Distribution of the Sample

Industry	Frequency	Percent
Automotive Parts and Accessories	14	16.3
Rubber and Chemical Products	14	16.3
Electronic Products	12	14.0
Machinery and Equipment	11	12.8
Toys and Games	13	15.1
Construction material	6	7.0
Miscellaneous	16	18.6
Total	86	100

## Description of the Variables

### *Firm Size*

As with many earlier studies on size and export behavior, company size information was classified using interval-based categories. In this study, both sales volume and number of employees were used simultaneously as size variables. Firms were grouped into three size categories. Using sales, small firms had annual sales of less than 100 million Baht, medium-sized firms had sales between 100 million and 500 million Baht, and large firms had sales in excess of 500 million Baht. Using number of employees, small firms had less than 100 employees, medium-sized firms had 100 to 500 employees, and large firms had more than 500 employees. For purposes of analysis, small firms were represented by "1", medium-sized firms by "2", and large firms by "3".

### *Export Performance*

Self-reported export performances were used. The performance variables included the export intensity (exports as a percentage of total sales), export earnings-ratio (percentage of earnings derived from exports), export growth (whether the firms' exports had increased in the previous 12 months), expected export growth (CEO's forecast of export growth in the next 12 months), export experience (number of years the firm has been in the export business), and export market coverage (number of countries the firm is exporting to).

Export intensity and export earnings ratio were sub-divided into six groups, "1" having export sales intensity or export earnings ratio of less than 5%, "2" having export intensity or export earnings ratio of 5% to 10%, "3" having export intensity or export earnings ratio of 11% to 20%, "4" having export intensity or export earnings ratio of 21% to 50%, "5" having export intensity or export earnings ratio of 51% to 80%, and "6" having export intensity or export earnings ratio of greater than 80%.

Export growth and expected export growth had three values. "1" meant export volume had decreased in the past 12 months or was expected to decrease in the next 12 months, "2" meant the

export volume remained the same in the past 12 months or was expected to remain the same in the next 12 months, and "3" meant export volume had increased in the past 12 months or was expected to increase in the next 12 months.

Export experience was reported by the actual number of years the firm has been in the export business, and export market coverage was the self-reported number of foreign countries the firm is currently exporting to.

### *Export Attitudes*

The export attitudes were measured by CEOs' views on profit, risk, and cost involved in marketing the firm's products internationally as compared to marketing the same products domestically in Thailand.

The participating companies were asked to provide their views on export profit, risk and cost as compared to domestic market. The values ranged from "1" to "5", representing considerably less than domestic, less than domestic, equal to domestic, greater than domestic, and considerably greater than domestic, respectively.

## Analytical Techniques

The SPSS statistics software was used to analyze the impact of firm size on the export performance and attitudes. Both one-way analysis of variance (ANOVA) and Kruskal-Wallis H tests were conducted to assess whether the export performance and attitudes differed significantly among exporting firms of different sizes. The non-parametric Kruskal-Wallis test was conducted on the same variables since the normal distribution of the sample could not be assumed. These multiple statistical tests were employed to ensure that the results were reproducible, and were not the result of an inherent mathematical bias of one statistical technique.

Due to the categorical nature of the size information, the non-parametric Spearman correlation was used to assess the correlation relationship between firm size and all of the export behavior variables under study. In all analysis, missing values were excluded on an analysis-by-analysis

## The Impact of Firm Size on Export Performance and Attitudes:

basis.

### Discussion

#### Firm Size and Export Performance

The export performance variables employed include export intensity, export earnings ratio, actual and expected export growth, export experience, and export market coverage. The results are presented in Table 2.

#### *Export Intensity*

There was no significant difference in export intensity among firms of different sizes when the number of employees was used as the size variable. The ANOVA, Kruskal-Wallis and Spearman Correlation tests all indicated no significant difference at  $p < .05$  among firms of different number of employees with regard to export intensity. This may indicate that number of employees is not a good indicator of firm size in explaining export intensity.

On the other hand, export intensity of the firms differed significantly among firms of different

sizes when sales volume was used as the measurement for size. In contrary to common beliefs, however, sales volume was found to be inversely correlated with export intensity. Smaller exporting firms generally exported a higher proportion of their sales than did larger exporting firms. This was evidenced by the negative and significant Spearman correlation ( $r = -.3977$ ,  $p < .01$ ). This finding contradicted the other export research which found no relationship between size and export intensity [Bonaccorsi 1992].

#### *Export Earnings Ratio*

As with the results of the relationship between firm size and export intensity mentioned above, smaller exporting firms differed significantly from larger exporting firms in terms of export earnings ratio only when sales volume was used as the measurement of firm size. Again, firm size was inversely correlated with export earnings ratio as reflected in the negative and significant Spearman correlation ( $r = -.4289$ ,  $p < .01$ ). It can therefore be concluded that the larger the

Table 2 The Impact of Firm Size on Export Performance

	Employees (N=86)						Sales (N=80)					
	Mean			F	H	r	Mean			F	H	r
	Small (N=27)	Medium (N=30)	Large (N=29)				Small (N=31)	Medium (N=31)	Large (N=18)			
1. Export Intensity <sup>1</sup>	4.4231 (1.4744)	4.1333 (1.5916)	3.7931 (1.8201)	1.0178	1.6251	-.1390	4.7667 (1.4547)	4.2903 (1.5957)	2.8333 (1.5811)	9.1102**	14.157**	-.3977**
2. Export Earnings-Ratio <sup>2</sup>	3.8261 (1.4664)	3.3846 (1.5512)	3.2500 (1.7769)	.8564	1.7834	-.1451	4.1786 (1.3892)	3.6154 (1.5252)	2.3333 (1.6088)	8.4371**	14.3801**	-.4289**
3. Export Growth <sup>1</sup>	2.2000 (.8660)	2.3000 (.7944)	2.5517 (.7831)	1.3734	3.2742	.1893	2.2759 (.8408)	2.4839 (.7244)	2.4444 (.8556)	.5471	1.0901	.1082
4. Expected Export Growth <sup>2</sup>	2.5000 (.7400)	2.5714 (.6341)	2.7037 (.6688)	.5799	1.9236	.1488	2.5926 (.6939)	2.6667 (.6202)	2.5556 (.7048)	.1651	.3165	-.0168
5. Export Experience (Actual Years)	7.3846 (3.6340)	9.5000 (5.1532)	12.3448 (6.9348)	5.7139**	8.3292*	.3185**	6.8065 (3.6253)	11.6897 (6.3025)	12.0000 (6.0585)	8.3292**	16.3591**	.4291**
6. Export Market Coverage (No. of Countries)	7.8400 (5.6912)	12.6786 (8.9486)	16.0000 (12.7895)	4.7162*	8.0535*	.2950**	8.9667 (8.2231)	16.9000 (11.6807)	11.0588 (8.7569)	5.1301**	11.9892**	.1976

F = ANOVA F-ratio; H = Kruskal-Wallis H Test; r = Spearman Correlation Coefficient

Standard Deviation in parenthesis.

\* Significant at  $p < .05$

\*\* Significant at  $p < .01$

1 For mean export intensity and export earnings ratio, "1" = less than 5%, "2" = 5-10%, "3" = 11-20%, "4" = 21-50%, "5" = 51-80% and "6" = more than 80%.

2 For mean export growth and expected export growth, "1" represents export volume had decreased in the past 12 months or is expected to decrease in the next 12 months, "2" represents the export volume remained the same in the past 12 months or is expected to remain the same in the next 12 months, and "3" represents export volume had increased in the past 12 months or is expected to increase in the next 12 months.

exporting firm in term of sales volume, the lower the proportion of profit earned from export markets.

### ***Actual and Expected Export Growth***

Regardless of the measurement of size used, the relationship between firm size and both the export growth and expected export growth was not important. The differences in the export growth variables among different firm sizes were not significant at  $p < .05$  for the two statistical tests conducted. Though most of the firms had reported that they performed well in terms of export growth and had an optimistic view towards future export growth, there was no significant difference among firms of different sizes with regards to the above mentioned factors.

### ***Export Experience***

As Calof [1994] found, the export experience (number of years in the export businesses) was found to be positively associated with the size of the firm. This is supported by the significant ANOVA and Kruskal-Wallis test at  $p < .01$ , and the positive and significant Spearman Correlation coefficients regardless of the measurement of size used. In other words, larger exporting firms in general tended to be in export business longer than did smaller exporting firms. Specifically, using number of employees as the size variable, small-sized firms in the survey had on average 7.4 years of export experience, compared with 9.5 and 12.3 years respectively for the medium and large-sized firms (Spearman's  $r = .3185$ ,  $p < .01$ ). Similar results were obtained when sales was used as the size variable. In this case, the average years of experience were 6.8, 11.7 and 12.0 years respectively for small, medium and large-sized firms (Spearman's  $r = .4291$ ,  $p < .01$ ) as shown in Table 2.

### ***Export Market Coverage***

Export market coverage differed significantly among firms of different sizes as confirmed by the significant ANOVA and Kruskal-Wallis test, both when number of employees and sales volume

were used as the measurement of size. This is similar to the findings by Calof [1994].

There was no definitive correlation between firm size and the export market coverage. When number of employees was used as the size measurement, the Spearman correlation indicated a positive, though weak, and significant coefficient ( $r = .2950$ ,  $p < .01$ ). The average number of countries exported to were 7.8, 12.7 and 16.0 years respectively for small, medium and large-sized exporting firms as measured by number of employees. When sales was used as the size variable, however, there was no correlation between firm sizes and export market coverage. In this case, the medium-sized exporting firms on average exported to more countries than did small and large exporting firms. Specifically, medium-sized firms exported to approximately 16.9 countries as compared to 9.0 countries for small-sized exporting firms and 11.1 countries for large exporting firms as measured by sales.

### ***Firm Size and Export Attitudes***

The CEO's views on the cost, profit, and risk in export marketing vis-a-vis domestic marketing were used to measure exporters' attitudes on export business. The results are presented in Table 3.

As with the previous findings on the impact of firm size on export performance, the results of the relationship between firm size and export attitudes suggest a limited role for number of employees as a size measurement in explaining export attitudes. As can be seen from Table 3, when number of employees was used to measure firm sizes, the results of the tests were not significant at  $p < .05$  with respect to the management attitudes regarding export profit, risk and cost. That is, there was no difference in export profit, risk and cost views among the CEOs of the exporting firms of different sizes as measured by number of employees.

In contrast, when sales volume was used to measure firm size, both the ANOVA and Kruskal-Wallis analysis indicated a significant statistical difference regarding export profit and

The Impact of Firm Size on Export Performance and Attitudes:

Table 3 The Impact of Firm Size on Export Attitudes

	Employees (N=86)						Sales (N=80)					
	Mean*			F	H	r	Mean*			F	H	r
	Small (N=27)	Medium (N=30)	Large (N=29)				Small (N=31)	Medium (N=31)	Large (N=18)			
7. View on Export Profit	2.5926 (.9711)	2.5172 (1.1838)	2.2759 (1.2789)	.5812	2.1068	-.1570	2.7097 (1.2164)	2.6000 (1.1326)	1.7778 (.8782)	4.3726*	8.6998*	-.2802*
8. View on Export Risk	2.8889 (1.2506)	3.2857 (1.4105)	3.2759 (1.3335)	.7905	1.4822	.1162	2.6667 (1.2954)	3.3333 (1.2685)	3.6111 (1.3346)	3.5340*	6.8605*	.2938 <sup>~</sup>
9. View on Export Cost	2.9630 (1.0913)	2.6786 (1.2488)	3.0000 (1.2817)	.5916	1.2265	.0152	2.9032 (1.1359)	2.8966 (1.2055)	2.6667 (1.2367)	.2684	.7194	-.0732

F = ANOVA F-ratio; H = Kruskal-Wallis H Test; r = Spearman Correlation Coefficient

Standard Deviation in parenthesis.

\* Significant at  $p < .05$ .

<sup>~</sup> Significant at  $p < .01$ .

a For mean export attitudes, the values ranged from "1" to "5", representing considerably less than domestic, less than domestic, equal to domestic, greater than domestic, and considerably greater than domestic, respectively.

export risk views among the exporting CEOs of different sales volume. It is interesting to note, however, that these results contradict the commonly held belief that smaller-sized firms view exporting unfavorably. The results suggested that the CEO's attitudes related to export profit and risk were less positive in larger exporting firms than in smaller exporting firms. In general, smaller exporting firms perceived export profit to be higher and export risk to be lower than did larger exporting firms. The Spearman correlation also supports this as can be seen from the negative and significant coefficient ( $r = -.2802, p < .05$ ) for views on export profit and positive and significant coefficient ( $r = .2938, p < .01$ ) for view on export risk as shown in Table 3.

The analysis indicated no significant difference with regards to the view on export cost among firms of different sizes both when number of employees and sales volume were used as the size variables. CEOs of smaller exporting firms viewed export cost similarly to CEOs of larger exporting firms.

### Conclusion

The main purpose of this study was to investigate the relationship between firm size and the export performance and attitudes in Thailand. Though the findings were not conclusive for all variables, there is no question that size has some

impact on many export performance and attitude variables. Smaller exporting firms in Thailand were more deeply involved in foreign trade and had more positive attitudes towards the export market than did larger exporting firms, contradicting the widely held belief that larger firms are more positively involved in international business. Export is not limited to large firms, small firms can export successfully. Patibandla [1995] similarly argues that "small firms that could reach a critical threshold size and production efficiency and make use of possible information externalities might be able to break into export markets and export at higher intensity."; while Kumar and Siddharthan [1994] reasons that "very large enterprises enjoying an oligopolistic hold over the protected domestic market are generally less inclined to export than other firms".

The sales variable has frequently been used as proxy measure for resources. Thus, traditional beliefs that smaller firms do not export because of resource constraints is not supported by these findings. While smaller exporting firms certainly possess fewer resources than larger exporting firms, they performed better and had more positive attitudes toward export business than did larger exporting firms in general. The positive attitudes of the smaller exporting firms towards exporting may help to explain why smaller exporting firms are more engaged in export business



than larger exporting firms. The export attitudes of the management of larger exporting firms, however, need to be improved.

In summary, with respect to export performance, when number of employees was used as the size variable, firm size only mattered for export experience and export market coverage. When using sales volume as the size variable, firms of different sales volume differed significantly in terms of export intensity, export earnings ratio, export experience and export market coverage. The results also suggest that smaller exporting firms in terms of sales volume exported more and earned more from export business than did larger exporting firms.

There were no significant statistical differences in the views on export profit, risk and cost among firms of different sizes when number of employees was used as the measurement for firm size. But when sales volume was used as the size variable, smaller exporting firms view exporting more positively than the larger exporting firms with regards to export profit and risk. These results indicate that firm size may have some negative impact on export attitudes. Similar results were found by Abdel-Malek [1978], who showed that managers within small firms are not less export-oriented than managers in large ones.

The results of this study suggest a limited role for number of employees as a size measurement in explaining export behavior in Thailand, a finding similar to that of Cavusgil [1984]. Sales seemed to be a better approximation of size in terms of export behavior. The results of this study may partly be caused by the industrial effects of the sample firms, since the firms studied came from various industries (though all were manufacturing firms) of which some are more labor intensive than others.

This study has limitations inherent to any case study. The findings should be interpreted in light of several limitations. First, general conclusions have been drawn on the basis of a survey of a limited number of companies. These companies may not be representatives of all exporters in Thailand, but we believe that the results generally

reflected the direction of Thai exporters with regards to export performance and attitudes. A great deal of care was taken in the preparation of the questionnaires, selection of companies for survey, and analysis of responses in an effort to enhance the validity of the study on the impact of firm size on exporters' behavior in Thailand.

Second, it should be noted that the validity of this study is limited by the time dimension. Bonaccorsi [1992] argued that "company size and export performance may be the results of different processes with different time paths, so that statistical correlation at any point in time should not be assumed to be a proof of a causal linkage." The export attitudes and even the firm size itself may change towards time. A study of a longitudinal nature may help to overcome the problem.

Third, the research concentrated on a limited number of export behavior. Other meaningful export determinants could be considered, or an in-depth interview method with Thai exporters might be used.

Finally, as mentioned earlier, some industries may be more labor-intensive than others. In this case, a better relationship between the number of employees and export behavior might have been found if the industrial effects are controlled. Research aimed specifically at studying the effects of different size measures could be conducted to determine the differences in the effect of employees and sales as the measurement of size.

## References

- Abdel-Malek, Talaat., Export Marketing Orientation in Small Firms, *American Journal of Small Business*, Vol. 3, No. 1, 1978, pp. 25-34.
- Ali, Abbas/Paul M. Swiercz., Firm Size and Export Behavior: Lessons from the Midwest, *Journal of Small Business Management*, April, 1991, pp. 71-78.
- Alpha Research Co. Ltd. *Thailand Export Monitor* 1994-1995.
- Bilkey, Warren J., An Attempted Integration of the Literature on the Export Behavior of

The Impact of Firm Size on Export Performance and Attitudes:

- Firms, *Journal of International Business Studies*, Spring-Summer 9, 1978, pp. 33-46.
- Bilkey, Warren J./George Tesar., Export Behavior of Smaller-Sized Wisconsin Manufacturing Firms, *Journal of International Business Studies*, Vol. 8, No.1, 1977, pp. 93-98.
- Bonaccorsi, Andrea., On the Relationship between Firm Size and Export Intensity, *Journal of International Business Studies*, 23(4), 1992, pp.605-636.
- Burton, F. N./Bodo B. Schlegelmilch., Profile analyses of non-exporters versus exporters grouped by export involvement, *Management International Review*, 27, 1987, pp. 38-49.
- Calof, Jonathan L., The Relationship between Firm Size and Export Behavior Revisited, *Journal of International Business Studies*, Second Quarter, 1994, pp. 367-387.
- Cavusgil, S. Tamer., Differences Among Exporting Firms Based on their Degree of Internationalization, *Journal of Business Research*, 12, 1984, pp. 195-208.
- Cavusgil, S. Tamer/Warren J. Bilkey/George Tesar., A Note on the Export Behavior of Firms: Export Profiles, *Journal of International Business Studies*, Spring / Summer, 1979, pp. 91-97.
- Cavusgil, S. Tamer/Jacob Naor., Firm and management characteristics as discriminators for export behavior, *Journal of Business Research*, 15 (3), 1987, pp. 221-35.
- Cavusgil, S. Tamer / John R. Nevin., Internal Determinants of Export Marketing Behavior: An Empirical Investigation, *Journal of Marketing Research*, Vol. 23 (February), 1981, pp. 114-119.
- Christensen, Carl H./Angela da Rocha/Rosanne G. Gertner., An empirical investigation of the factors influencing export success of Brazilian firms, *Journal of International Business Studies*, Fall, 1987, pp. 61-78.
- Czinkota, Michael.R. / Wesley, J. Johnston., Exporting: Does Sales Volume Make a Difference? *Journal of International Business Studies*, 14/11, Spring/Summer, 1983, pp. 147-153.
- Department of Export Promotion, Ministry of Commerce, Thailand. *Thailand's Exporters Selected List 1995-96*, Fifth Edition,
- Dominguez, Luis V./Carlos G. Sequeira., Determinants of LCD Exporters' Performance: A Cross-National Study, *Journal of International Business Studies*, First Quarter, 1993, pp. 19-40.
- Holzmuller, Hartmut H./Helmut Kasper., On a theory of export performance, *Management International review*, 31, 1991, pp. 45-70.
- Karafakioglu, Mehmet., Export Activities of Turkish Exporters, *International Marketing Review*, Winter, 1986, pp. 33-43.
- Kaynak, Erdener/Vinay Kothari., Export behavior of small and medium sized manufacturers, *Management International Review*, 24, 1984, pp. 61-69.
- Kumar, Nagesh/Siddharthan, N.S., Technology, Firm Size and Export Behaviour in Developing Countries: The Case of Indian enterprises, *The Journal of Development Studies*, Vol. 31, No. 2, 1994, pp. 289-309
- Patibandla, M., Firm Size and Export Behaviour: An Indian Case Study, *The Journal of Development Studies*, Vol. 31, No. 6, 1995, pp. 868-882
- Roy, Delwin A./Claude L. Simpson., Export Attitudes of Business Executives in the Smaller Manufacturing Firm, *Journal of Small Business Management*, April, 1981, pp. 16-22.
- Samiee, Saeed/Peter. G.P. Walters., Influence of Firm Size on Export Planning and Performance, *Journal of Business Research*, Vol. 20, 1990, pp. 235-248.

(平成10年9月20日受稿, 平成10年10月15日受理)

Appendix- List of Companies<sup>1</sup>


---

ABCO International Co., Ltd.	Thai-Asia Commercial Co., Ltd.
Apex Toy Co., Ltd.	Thai-Hua Intertrade Co., Ltd.
Aruna Co., Ltd.	Thairung Union Car Co., Ltd. (Public)
Bangkok Metropolis Motor Co., Ltd.	Union Art Industries Co., Ltd.
Bangkok Writing Instruments Co., Ltd.	Union Plastic Co., Ltd. (Public)
D.H.A. Siamwalla Ltd.	Union Toys Marketing Co., Ltd.
Ekarat Engineering Co., Ltd. (Public)	Wongwaiwit Gift House Co., Ltd.
Golden File Co., Ltd.	
J.J. Gifts & Toys Co., Ltd.	
Ly-Long Brush (Thai) Co., Ltd.	
MP. Marketing Co., Ltd.	
Marine Accessories Co., Ltd.	
Medigloves Ltd.	
Minami and Verbena Industry Co., Ltd.	
NBS. Maronix Rubber Co., Ltd.	
Plan Toys Co., Ltd.	
Pressure Container Industry Co., Ltd.	
Royal King Infant Products Co., Ltd.	
S.I.P Siam Inter Pacific Co., Ltd.	
Sammitr Motors Manufacturing Co., Ltd.	
Santa Craft Co., Ltd.	
Schunk United Carbon Co., Ltd.	
Siamphomprathan Co., Ltd.	
T. Krungthai Industries Co., Ltd.	
Teamtronics Co., Ltd.	
Thai Crayon Co., Ltd.	
Thai I.K.I. Industries Co., Ltd.	
Thai Mitsuwa Co., Ltd.	

---

<sup>1</sup> The list included only thirty-nine out of eighty-six participating firms who gave permission to reveal their firms' names.

## 研究開発従事者の準拠集団, 業績, モチベーション

—ペイント業界における研究職, 技術職, 技術サービス職の比較—

神戸商科大学 三崎 秀央

Reference Groups, Achievement and Motivators of R&D Workers: A  
Comparative Study among Researchers, Engineers, and Technical  
Staff in the Paint Industry

Hideo Misaki  
(Kobe University of Commerce)

This research proposes three research questions and analyzes responses from a questionnaire survey of 137 researchers, 402 engineers and 195 technical staff members. The first set of question items is to determine if there are different motivators working among the three groups surveyed. The purpose of the second question items is to reveal if there is an evidence of a positive relationship between one's reference group and achievement. The last question investigates the relationship between one's reference group and motivator factors.

The research findings are the following: (1) despite of similar motivators for each job category there are some critical differences existing among the three groups, (2) there is a positive relationship between being cosmopolitan and local, and the individual level of achievement, (3) each reference group demonstrates critical differences in their relations to motivators. The overall facts reveal that the different job category of workers need different approaches to HRM practices.

### はじめに

激しい競争が繰り広げられている今日の企業環境のもとでは、競争力のある技術・商品を開発することが強く求められおり、いかに創造的な研究開発を行うかは重要な経営課題の一つである。このような経営課題に対して、Takeuchi and Nonaka (1986) や Clark and Fujimoto (1991), Iansiti (1997) などは自動車やコピー機、コンピュータなどの組立型産業の新製品開発プロセスに焦点を当て、めざましい研究成果をあげている。これに対し、研究開発従事者の管理という問題は経営学研究の中では比較的歴史が浅く、その蓄積も十分には進んでいない。

一般に、研究開発従事者などに代表されるプロフェッショナルは独自の規範を持っており、管理が困難であるといわれている。組織へのロイヤリティ<sup>1)</sup>の低い研究開発従事者は、組織目的への貢献をあまり考慮せずに、専門家社会における評価を重視した行動をとることがある。その一方で、組織内のことにしか興味を示さないような視野の狭い研究開発従事者は、先端知識・先端技術に疎くなり、その業績も総じて低いこともわかっている (Pelz and Andrews, 1966; Rotondi, Jr., 1975)。

また、一口に研究開発従事者といっても、研究開発プロセス内での役割は多岐にわたり、研究職、技術職、技術サービス職といった役割分化もみられる。このような役割分化は、単に部門による分類だけではなく、同一部門内においてもみられる。

人的資源管理を効果的に行うためには、その管理対象を深く知る必要がある。そこで本稿では、管理対象である研究開発従事者を管理する手がかりを探ることに目的を置く。具体的には、ペイント業界の14社で行われた質問紙による調査をもとに分析を行い、次の3つの課題を明らかにすることである。第1の課題は、研究職、技術職、技術サービス職のそれぞれにおいて、準拠集団 (ロイヤリティの対象) と業績との関係を明らかにすることである。第2に、それぞれの職種において、モチベーションにどのような差異があるのかを確認することである。第3に、それぞれの職種において、どの集団にロイヤリティを感じるかによって、モチベーションをはじめとする個人特性にどのような差異があるのかを確認することである。

本稿ではペイント業界で勤務する研究開発従事者を研究対象としているが、ペイント産業に焦点をあげて理由には以下の2つがある。第1に、ペイント産業はプロセ

# リーダーシップ効果に及ぼす部下のレディネスの影響について

— 組織の階層水準を考慮した Situational Leadership 理論の検討 —

愛知工業大学 林 文 俊・愛知学院大学 松 原 敏 浩

The influence of subordinate readiness on leadership effectiveness: A test of Situational Leadership theory considered hierarchical level of organization

Fumitoshi HAYASHI and Toshihiro MATSUBARA  
 (Aichi Institute of Technology) (Aichi Gakuin University)

The purpose of this article is to examine Hersey and Blanchard's situational leadership theory. This theory is widely known and used, but has limited, mixed empirical validation. This study examines the underlying assumptions regarding the theory's prescriptions that subordinate readiness moderates the relationships of leadership behaviors with indicators of subordinate morale. This study also considered subordinate hierarchical level of organization. Questionnaire survey was conducted using 72 pairs of workers at a local public entity. Results of this analysis support these assumptions when leadership scales of participation and deligation are used. But the results do not support these assumptions when PM leadership scale is used. Findings are discussed in terms of future research and theory development.

## I 問題と目的

Hersey & Blanchard (1969, 1977, 1993) により提唱されたSL理論 (Situational Leadership Theory) は、代表的なリーダーシップ理論の1つとして権威あるテキスト (例えば, Bass, 1990; Yukl, 1998) などにも紹介され、日本でもよく知られているが (白樫, 1980; 林, 1984), その妥当性については現在まで十分な検証がなされていない。この理論は、アカデミックな研究者よりも組織開発のコンサルタントやリーダーシップ訓練の実践家などにおいて、高い評価を与えられている。また、Blake & Mouton (1964) の提唱するマネジリアル・グリッド理論とSL理論を巡る論争も、記憶に新しい (Blake & Mouton, 1982; Hersey & Blanchard, 1982)。

SL理論では、周知のごとく、リーダーシップ・スタイルを課題達成的行動 (task behavior) と人間関係の行動 (relationship behavior) の2次元の組み合わせによってとらえ (S1, S2, S3, S4), 状況変数として部下のレディネス (成熟度) を問題とする。そして、部下のレディネスに適合したリーダーシップ・スタイルとして、図1に示すようなベル型の曲線を仮定している。なお、このモデルでは、部下のレディネスの水準に合わせた最適なリーダーシップ・スタイルとして、S1からS4にそ

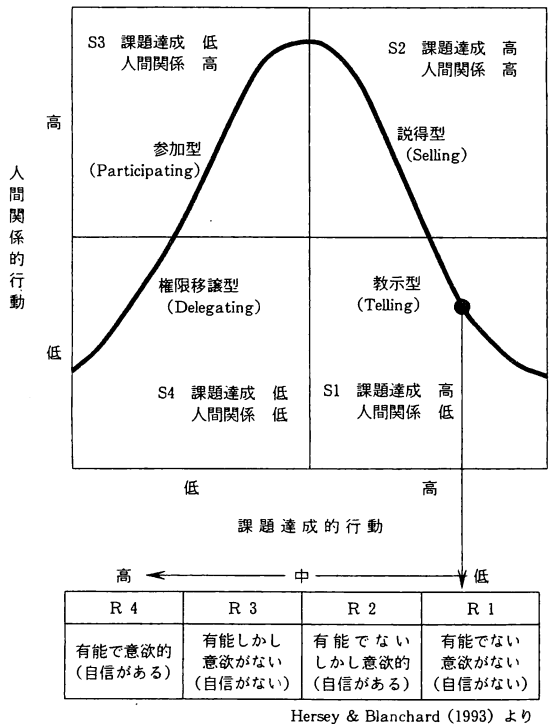


図1 SL理論の予測する最適なリーダーシップ・スタイル

## 女性従業員活用をとらえる二つの次元

— 第三次産業における多様性を事例として —

国立社会保障・人口問題研究所 仙田幸子

Two dimensions of utilization of women employees in companies:  
Different tendencies among the tertiary industries

Yukiko SENDA

(National Institute of Population and Social Security Research)

This study examines the dimensionality of utilization of women employed at the tertiary industries in Japan to determine how female work force is utilized in the companies. The researcher analyzed data compiled in "Kaishashikihou Joshigakusei-shushokuban '98" and found two dimensions of utilization of female employees: 1) "the proportion of female managers and the proportion of women taking maternity leave", and 2) "the average tenure of female employees and the proportion of the married."

Using the two axes derived from the data analysis, the tendencies of utilization of female employees among five industries were compared. The service industry scores high in both dimensions. The retail trade has a high score in the first dimension, but is low in the second. Conversely, the general trade (sogo-shosha) as well as the financing and insurance are positioned low in the first dimension and higher in the second with the general trade more so in each of these dimensions. Other wholesale trade scores low in both dimensions. This research suggests a need for reforming a plan to maximize the female labor participation with consideration to each dimension for utilization of female employees.

### 1. 問題

戦後日本において女性の雇用労働力化は進展したというイメージがあるが、量的側面と質的側面の2つに分けてとらえると、進展した部分とそうでない部分があることが分かる。ここでは量的側面を雇用労働力率や女性雇用労働者の平均勤続年数でとらえ、質的な側面は、女性管理職割合と家庭との両立（結婚、出産後の就業継続）という面からとらえることとする。

日本において、女性の雇用労働力率は戦後ほぼ一貫して上昇しており、1997年には女性が雇用者の39.4%を占めている（総務庁統計局「労働力調査年報 平成9年 1997」）。女性雇用労働者の平均勤続年数も一貫して上昇傾向にあり、1996年には8.2年である（労働省「賃金構造基本調査」）。女性の平均勤続年数はこの10年間で1.1年延びており、男性雇用労働者の勤続年数の上昇（同期間に0.7年）より大きい。このように、女性の雇用労働力化は量的な面では進展している。

一方、管理職に占める女性の割合は未だにごく低く、1997年でもわずか5.1%に過ぎない（労働省「平成9年度賃金構造基本調査」）。また、近年、女性の就業率のいわ

ゆる「M字型カーブ」において、ボトムが20歳代から30-34歳と後ろに動くといった、ボトムの底上げがみられるなどの変化がみられるが、これは主に晩婚化によって、30代前半に未婚で就業継続している女性が増加していることによるものであるといわれる（今田, 1996）。結婚で離職する女性の割合は近年減少する傾向にあるが、末子が3歳未満の女性の雇用労働力率はこの10年横ばいである。1997年で、末子が3歳未満で雇用労働者である女性は、21.3%に過ぎない（総務庁統計局「労働力調査特別調査報告 平成9年2月」）。仕事と家庭の両立という点では、離職のタイミングが「結婚」から「出産」へと後ろにずれつつあるものの、「結婚」、「出産」というライフイベントが女性の離職に大きな関連を有していることにはかわりがないということである。つまり、女性雇用労働力化は量的側面では進展しているが、質的な側面ではあまり明確な進展がないといえる。

このように、女性の雇用労働力化に質的な面での進展はあまり見られない。そこで、どうしたら女性の質的な側面での活用を推進することができるのかについて、これまでも多くの研究が行われてきた。しかし、従来の研究では、女性従業員活用の現状の違いをふまえて、女

## 組織シチズンシップ行動とその規定要因についての研究\*

浜松大学 田中 堅一郎・東北大学 林 洋一郎

東北大学 大 淵 憲 一

Research on organizational citizenship behaviors and those determinants:  
A case of Japanese employees.

Ken'ichiro TANAKA, (University of Hamamatsu),  
Yoichiro HAYASHI, and Ken-ichi OHBUCHI (Tohoku University)

In this study, we examined the factors which determine organizational citizenship behavior (OCB), voluntary and extra-role behaviors by employees within organizations. Japanese employees (N=187) completed questions about OCB, justice in organizations, leadership styles of their superiors, job satisfaction, organizational commitment, and organizational support. Multiple regression analyses revealed that: a) the higher procedural justice was evaluated, the more Japanese employees were likely to display OCB, b) the effect of distributive justice on OCB was weaker than procedural justice and interactive justice, c) as higher-level Japanese employees had more job satisfaction or organizational commitment, they were more likely to display OCB. In addition, Japanese employees who evaluated organizational support more highly were more likely to display OCB. Covariance structure analysis indicated that the evaluations of interactive justice and supportive leadership by superiors indirectly enhanced OCB. Based on the results of analyses, we discussed OCB in Japanese corporations.

### I. 序 論

#### 1. 組織シチズンシップ行動 (OCB) の概念

集団や組織の成員は、自分の所属する集団や組織の方針に服従するばかりか、ある時には自ら進んでそれらに対して是認行動をとる場合がある。本研究では、そうした組織への自発的行動の一つである組織シチズンシップ行動 (organizational citizenship behavior; 以下、OCB) について検討される<sup>1)</sup>。OCBは、Organらの定義によれば次のようになる。

「従業員が行う任意の行動のうち、彼らにとって正式

\* 本研究は、平成9年度浜松大学総合研究所・特別研究助成の支援を受けた。

1) 「組織市民行動」という呼び方もあるが (例: 西田, 1997), ここでは組織シチズンシップ行動 (OCB) で統一する。なお、OCBの類似概念として、向社会的組織行動 (prosocial organizational behavior; Brief & Motowidlo, 1986), 組織的自発性 (organizational spontaneity; George & Brief, 1992) がある。

な職務の必要条件ではない行動で、それによって組織の効果的機能を促進するもの (Organ, 1988)」

「組織に貢献する様々な個人的行動のうちで、強制的に任されたものではなく、正式な給与体系によって保証されるものでもないもの (Organ & Konovsky, 1989)」

さらに Podsakoff, MacKenzie, & Hui (1993) は、Smith, Organ, & Near (1983) や Organ (1988) による OCB の定義を修正して以下のように再定義した。

OCBとは、職場・組織における行動のうちで (a) 従業員が (OCBを) 示したことに對してははっきりと褒賞されるわけではなく、示さなかったことに對して罰せられることもない、(b) 従業員の職務内容規定には含まれない、そして (c) 従業員が彼らの仕事の一つとして行うように訓練されていないもの。

#### 2. 問題意識

さて、OCBはアメリカで生まれた概念であるが、日本においては「奉職」という言葉に代表されるように、自分の所属する集団や組織に対する自発的行動は、暗黙