

Chunwei Lu

Southern Taiwan University of Science and Technology, Dept. of Applied Japanese

ABSTRACT

This research explored the collaborative relationships between foreign direct investments by Japanese manufacturers in Vietnam and domestic suppliers; how the investors manage domestic factories is also discussed. The theories of multinational enterprises, strategic alliances, and supply chain models are linked into a single structure, and a specialist questionnaire is utilized to establish a complete evaluation framework for foreign direct investments by Japanese manufacturers in Vietnam in order to examine the effect of the relationships and domestic management.

The research has examined domestic employees' management. According to this empirical analysis, foreign direct investments by Japanese manufacturers in Vietnam plays an important place on domestic management; however, at present, implementing domestic management is difficult, especially on human resource management. The main factor is that training domestic employees, especially managers, takes time, and it is hard to integrate Japanese and Vietnamese cultures within just a few years. Moreover, firms strive to collaborate with domestic suppliers in order to gain sources of competitive advantage, but the services and technologies of domestic suppliers must be improved.

Keywords: The Japanese manufacturers, domestic management, collaboration, strategic alliance, Vietnam

INTRODUCTION

2015 is the 42nd anniversary of diplomatic ties between Japan and -Vietnam diplomatic ties. Japanese firms have contributed to Vietnam's rapid and sustainable socio-economic development. Vietnam has a population of 86 million, and the average of laborers is 27 years-old. Over the course of two decades, Vietnam has emerged as an important regional producer of oil and natural gas in Southeast Asia and Vietnam is one of the fastest growing Asian economies with a consistent growth rate of 7% from 2003 to 2006. The Vietnamese government has been attracting foreign investments through incentive policies, and has boosted exploration activities, allowed greater foreign company involvement in the oil and natural gas sectors. Vietnam has shown promising signs of improvement of economic and political.

Most Japanese manufacturers invest in China, Thailand, and India. Wages in China have risen 300% in the last 15 years, and now. Vietnamese factory workers make 55% less than their counterparts in China. As a result, lower cost Vietnam is poised to become the new manufacturing center of Asia. According to Porter's value chain (1985), primary activities from inbound logistics to services and support activities from infrastructure, human resource to technology are the values that exceed the cost of activities. Nevertheless, despite being rather a new sector in Vietnam, logistics and the infrastructures have proved their importance in the country's socio-economic developments. These developments of their potential services are facing many big challenges.

In Vietnam, logistics developments help to ensure both time and quality for firms' activities and their services. Nevertheless, the Vietnamese logistics industry is coping with several difficulties, including weak transport infrastructure, weak electric power, water problems, a large volume of inventory, complicated administrative procedures and high investment fees for services. In a developed economy, companies often use logistics for transport and distribution; however, Vietnamese businesses have a habit of self-controlling the supply chain system. Therefore, they do not gain strong results from their operations. These are a big barrier for the development of the logistics sector in Vietnam.

*Address for correspondence:

wini882003@yahoo.com.tw

Given the circumstance of a developing economy, how Japanese manufacturers in Vietnam apply domestic resources and infuse them into a firm's core value is discussed in this study. Many studies have been conducted on domestic management and collaborating strategy separately; however, interviews with top managers reveals that there are connections between these two academic fields. The framework combines these two areas, and the results can perhaps be used as a guide by governments and foreign direct investments by Japanese manufacturers in Vietnam to review.

LITERATURE REVIEW

In the context of globalization, multinational enterprises possess some forms of firm-specific advantage such as a product, a production process, technology, reputation or other intangible assets to invest in other countries directly, which allows firms to exploit foreign markets (Dunning, 1993). Structure is changed in a globalised world, economic activities are becoming more and more global (Amin, Thrift, 1994). Each part of the production process, from the product's initial formation, research and development, to its eventual mass-production take place in that part of the world where it is most profitable. Therefore, production might move to countries with lower labor costs or the affected firms have to close down their activities (Schelte, 1999). Foreign direct investment is the response to a particular type of market failure. The basic idea, to which we return in more detail below, is that incomplete contracts and missing markets give rise to the possibility of opportunistic behavior in arms-length exchange and so to the preference arises to replace external contracts by direct ownership and internal hierarchies (Rugman, 1996). Foreign investors transfer knowledge with respect to new specific techniques and for systemic knowledge embracing new procedures requiring integrative learning and coordination (Meyer, 2003).

Literature Review by Japanese

In order to bring costs down, Japanese manufacturers invest overseas. Some domestic products are sold to domestic markets, and some of them are exported to Japan or other countries. Nowadays, the level of domestic management of Japanese manufacturers is lower than American and European manufacturers. Moreover, financial management and some materials' purchasing are controlled by mother companies in Japan. Training domestic employees, especially managers and developing their specialties are important lessons for Japanese manufacturers (Zhuyan, 2001). While people talk about domestic management, materials, markets, capital, and domestic resources are discussed. However, before operating a business domestically, investors must rely on natives who know how to communicate with domestic firms and understand domestic circumstances (Arahata Kousaku, 2007). Japanese management cannot be transferred to local management wholly. (Shiho Nakamura, 2003). Haraguchi Toshimichi (2008) found that, while foreign direct investments by Japanese manufacturers in Southeast Asia thinks about domestic management, the ratio of natives is higher than the ratios of market expands, material purchasing, and products' developing. Most of Japanese manufacturers do not hire natives as managers, the main factor is language; therefore, firms hire natives who studied in Japan is suggested (Mitsuhiro Seki, 2008).

Typology of Alliance (1995)

Economics is the core of a strategic alliance. Economic and social rationales may both replace each other and interact. While people talk about cooperation, competition must also be discussed. The primary driver of strategic alliances is the emergence of intense global competition, a staple of major corporations, which has rendered simple but time-tested strategies less effective. Firms must constantly innovate to forge ahead of equally innovative rivals throughout the world. They must develop new capabilities often simultaneously in a number of areas. These areas range from technology development to the manufacturing processes and from plant economics to marketing and distribution. This must be done quickly. By relating cooperation and conflict, Yoshino and Rangan (1995) developed a Typology of Alliance.

Table2.1. Typology of All	iance by Yoshino and Rangan
---------------------------	-----------------------------

		Extent of Organized Interaction		
		Low	High	
Potential Conflict	High	Pre-competitive Alliances	Competitive Alliances	
Fotential Connet	Low	Pro-competitive Alliances	Noncompetitive Alliances	

Sources: Yoshino and Rangan (1995)

By relating two concepts, four types of alliances were created. A pre-competitive alliance typically brings together firms from different, unrelated industries while pro-competitive alliances are formed by firms at different levels in the vertical value chain to enhance the competitiveness of the chain. Noncompetitive alliances are typically intra-industry alliances among non-competing firms. For example, firm caterings for different segments of the market, while competitive alliances where the partners are catering for the same customers.

Beamon's Supply Chain-resources Type (1998)

A supply chain can be defined as an integrated process consisting of a number of various business entities, **Including:** suppliers, manufacturers, distributors and retailers. They work together in an effort to acquire raw materials, convert them into specified finished products and finally deliver these finished products to retailers. He provided a focused review of the literature in a multi-stage supply chain modeling and defined a research agenda for future research in this area.

According to Beamon, there are three supply chain modeling issues:

- 1) Product Postponement: This is the practice of delaying one or more operations to a later point in a supply chain, thus delaying the point of product differentiation.
- 2) Global vs. Single-Nation Supply Chain Modeling: Global supply chains are supply chains that operate in multiple nations.
- 3) Demand Distortion and Variance Amplification: This is a phenomenon in which "orders to the supplier have larger variance than sales to the buyer." Variance amplification occurs when the distortion of the demand "propagates upstream in amplified form." As a result, a number of strategies have been developed to counteract the effects of demand distortion and variance amplification.

McIvor, Ronan & McHugh's Collaborative Relationships (2000)

In a partnership, both customer and supplier commit to continuous improvement and shared benefits. To maximize benefits, complementary activities and behaviors must be exhibited by both partnering organizations. Problems may occur in the areas of joint buyer-supplier cost reduction, supplier integration into the new product-development process, logistics management and core business strategies. Moreover, cultural changes in both organizations must accompany successful collaborative relationships.

Defining Domestic Management and Collaboration

Due to the internationalization and concentration of business, economic executives no longer have a strong connection with their place of production. Production locations can transfer or collapse for various reasons, amongst them changing cost factors or competition (Amin & Thrift, 1994). According to Chandler (1990), from the 1950s to the 1970s, we witnessed a dramatic growth in multinational companies that, by means of the multi-divisional form (M-form) of organization, internalized as many activities as possible. This, on the other side, led to bureaucracy and inflexibility and from the late 1970s onwards, the companies responded by starting to externalize activities and-invest the other developing countries, strategic alliances being one of the most popular means of response (Faulkner, 1995). This popularity has made it necessary to redefine the role of not only governments to encompass alliances and policies but also industries to re-think as a competitive mode of organization rather than as collusion (Dunning, 1997).

Buckley and Chapman (1993) agreed that a proper strategy must be defined for a given time. Even assuming that the partners have near complete information and thus are able to prepare a detailed plan for the strategic alliance between partnerships, it should be stressed that the partners of a strategic alliance do not need to have common goals. They may have different goals. What is important is that the goals are known and that it is agreed that the different goals can be fulfilled within one and the same collaborative strategy (Joan Vuust, 1999).

According to most definitions, domestic management and collaboration is defined as firms applying domestic sources: including human resources, natural resources, and material resources, etc., and combining with firms' core value to do vertical and horizontal collaboration with domestic firms.

MODEL CONSTRUCTION

According to literature review and interviews with top Japanese managers who work in Vietnam, this research discovered that the crucial decision factors influencing the collaboration strategies between the undertakers of foreign direct investments of Japanese manufacturers in Vietnam and domestic suppliers were:

- 1) pressures to obtain proper materials from domestic suppliers
- 2) pressures related to cultural differences and communication problems with domestic suppliers
- 3) pressures for logistic supports and services from domestic suppliers

"Environmental uncertainties," both external and internal including transportation infrastructure, electric power and water problems are combined into a variable that represents both the resources of firms and the collaborative performances that both of the parties cannot control.

The evaluation framework for this study is as Figure 3.1.



Figure 3.1. Evaluation Framework

Economic globalization has forced, and is still forcing, multinational enterprises to develop new global manufacturing. The resources of multinational enterprises are limited and distinct; firms have to apply domestic resources and phase out firms' core values and experiences in order to get to the purpose of going global: reduce costs, have closer access to materials, bringing cost down, etc. The hypotheses are as follows:

H1: The correlation between "background information of objects" and "collaborative performances" is significant.

H2: The coefficient between "level of hiring native employees" and "collaborative performances" is significant.

H3: There is a negative correlation between "resources of firms" and "environmental uncertainties.

H4: There is a positive correlation between "resources of firms" and "collaborative performances."

ESTIMATION RESULTS

In regarding the evidence-based part and performance measures, companies' background information is examined. A total of 194 foreign direct investments by Japanese manufacturers in Vietnam were chosen from the data of the 2008 Data Bank Series (published by Toyo Keizai Inc). 78 effective returns were received in August 2013.

Descriptive Statistics

The software-SPSS 12.00 was used for analysis. The Cronbach's Alpha (reliability analysis) of collaborative performances result is 0.822; Cronbach's Alpha of environmental uncertainties is 0.833. According to Cuieford (1965), an Alpha between 0.7~1.00 indicates high reliability.

 Table4.1. Background Information of Firms

Background Information of objects	Percentage	
Established Years : overseas factories		
Jan. 1991 ~ Dec. 1995	19.40%	
Jan. 1996 ~ Dec. 2000	33.80%	
Jan. 2001 until now	46.90%	

Only high percentage items are listed	
Capitals: (Japan Yen)	
100 million ~ 500 million	38.50%
The motivation of investing Vietnam:	
Lower cost labor	23.24%
Globalization (from inbound operations to marketing and	33.30%
services)	
The purpose of investing Vietnam:	
Cost down	21.24%
Service customers (geographical features)	13.51%
Operation models:	
Japanese management	35.93%
Japanese and Vietnamese managements	42.20%
The current problems of operation in Vietnam:	
The procedures of local administrations are complex	12.71%
Difficult to get proper materials from domestic suppliers	11.68%
The parts that firms must enhance in the near future	
Conduct performance appraisal system (human resources)	10.27%
Personnel training	16.56%

Resources: this study

From Table 4.1, 46.90% of firms were established factories in Vietnam after Jan. 2001, personnel training takes time.

Table4.2. Domestic Management

The level of domestic management	Percentage	
• The domestic management ratio (only chose 1)		
R&D	5.20%	
Production	17.30%	
Marketing	10.50%	
Hiring native employees (especially managers)	65.60%	
Others	1.40%	
• The reason of difficult to implement 100% native		
employees: (only show the top one)		
The ability is not enough	32.80%	
• Does your company take domestic management as an	3.88	(average)
important place?		
 Native employees can join important meeting 	3.17	(average)

Resources: this study

Firms take an important place for domestic management; however, they think that employees' abilities are not enough; and this is one of the reasons of why employees join important meetings rarely.

ANOVA

H1: The correlation between "background information of objects" and "collaborative performances" is significant.

 Table4.3. Correlation Analysis for H1

Variables	Average Value	t-value	p-value
Pressures to obtain proper materials from domestic suppliers	3.87	0.830	0.443
Pressures related to cultural differences and communication problems with domestic suppliers	3.77	9.600	0.000*
Pressures for logistic supports and services from domestic suppliers	3.01	1.082	0.331

*means p<0.05

Firms for whom the motivation for investing Vietnam is globalization: from inbound operations to marketing and services, pay much more attention to communicating with domestic suppliers. H1 is partially significant.

Liner Regression

H2: The coefficient between "level of hiring native employees" and "collaborative performances" is significant.

Table4.4. Liner Regression for H2

	Un-standardized Coefficients		Standardize		Sig.	
Variables	Beta	Std. Error	Coefficient	t	(P)	VIF
			S			
(Constant)	3.990	0.385		13.82	0.000	
• The advantage of hiring natives to				2	*	
president is rising morale of native	-0.113	0.043	-0.257			1.12
employees				-2.433	0.036	9
• The disadvantage of hiring					*	
natives to managers is small-group						
mentality (quit the job at the same	-0.147	0.042	-0.388			1.0.1
time, etc.)	0.100	0.040	0.001	-2.783	0.010	1.34
• The abilities of natives are not	0.183	0.043	0.381	2 221	0.010	6
high enough	0 100	0.021	0.202	3.231	*	1.00
• Japanese management is suitable	0.122	0.031	0.202	1 000	0.002	1.82
for vietnam (especially on numan				1.822	0.003	Z
resources)						1.01
					0.042	1.71
					*	U
Adj-R ² =0.677 F=13.442 P=0.002* D-W=2.106						

**means p*<0.05

The Durbin-Watson (D-W) statistic is a test statistic used to detect the presence of autocorrelation in the residuals from a regression analysis. And the value always lies between 0 and 4. From Table 4.4, the D-W statistic result is 2.106 and successive error terms were, on average, much different in value from one another. In regressions, this can imply an underestimation of the level of statistical significance. The Adj- R^2 is 0.677, which means the percent of variance is 66.70% \circ The equation for calculating collaborative performance is 3.990 - 0.1113 (The advantage of hiring natives to president is rising morale of native employees) - 0.147(The disadvantage of hiring natives to managers is small-group mentality (quit the job at the same time, etc.) + 0.183(The abilities of natives are not high enough) + 0.122 Japanese management is suitable for Vietnam (especially with respect to human resources).

H3: There is a negative correlation between "resources of firms" and "environmental uncertainties.

H4: There is a positive correlation between "resources of firms" and "collaborative performances."

 Table4.4. Correlation Analysis for H3 and H4

Resources of firms (average 2.89)	Pearson	Significant (p-value)	Average
environmental (including external and internal) uncertainties (reduce)	0.723	0.000*	3.98
collaborative performances (increase)	0.892	0.000*	4.12
Item-to-total corrections	0.882	0.000*	

* means p<0.05

From Table 4.4, when firms have more resources: including a high level of domestic management, environmental uncertainties could be reduced significantly, with the result that the collaborative performances between firms and domestic suppliers could be increased.

CONCLUSION

Multinational enterprises usually need to cooperate with the other firms in order to get economic scale, reduce costs, or grow their market share. As a result of forming domestic management and collaboration between foreign direct investments by Japanese manufacturers in Vietnam and domestic suppliers, the conclusions are as follows:

1. Firms for whom the motivation for investing Vietnam is globalization (from inbound operations to marketing and services pay much more attention on communication with domestic suppliers.

- 2. For firms that have more resources (including a high level of domestic management, especially with respect to hiring native employees), the influence of environmental uncertainties could be reduced, with the result that the collaborative performances of the firms and domestic suppliers could be increased.
- 3. While investors get more support and service from domestic suppliers, it could be a competitive advantage for investors to operate using domestic management.

Foreign direct investments by the Japanese manufacturers in Vietnam occupies an important place with respect to domestic management and collaboration with domestic suppliers; however, training native employees is one of the crucial tasks for firms; knowledge, technologies and quality control of domestic suppliers also need to be enhanced. The dependence on human relations could enable investors to coordinate under conditions of uncertainty or complexity; dispatching native managers to Japan to learn Japanese management practices and technologies might provide a method for global integration.

THE LIMITATIONS AND FUTURE STUDY OF THIS RESEARCH

This research focuses on foreign direct investments by Japanese manufacturers in Vietnam. The market circumstances, customers' locations, domestic suppliers' opinions, and how technology transfer to Vietnam are not concerned; therefore, it is suggested that someone who is interested in this field could undertake an investigation into these matters and in the future make a comparison.

REFERENCES

- [1] Bamford, James D. (2003). Mastering Alliance Strategy, Jossey-Bass, CA.
- [2] Barney, J. B. (1991). Firm Resource and Sustained Competitive Advantage, Journal of Management, 1991, Vol. 17, pp. 99-120.
- [3] Beamon BM. (1998). Supply chain design and analysis: Models and Methods, International Journal of Production Economics Vol. 55, 281-294.
- [4] Buckley, P.J. and M. Chapman, (1993) "Bounded Rationality in the International Strategic Alliance," Paper presented at the EIBA conference.
- [5] Buckley, P.J. and M. Casson (1996). An Economic Model of International Joint Venture Strategy, Journal of International Business Studies, vol. 27, no. 5.
- [6] Chandler, A.D. (1990). Scale and Scope: The Dynamics of Industrial Capitalism, Harvard University, Cambridge, Mass.
- [7] Cuieford, J.P. (1965). Fundamental Statistics in Psychology and Education 4th ed., McGraw Hill, N.Y.
- [8] "Data Bank Series for Research & Analysis" June 19, 2008, Toyo Keizai, Inc.David R. Hardoon and John Shawe-Taylor. (2003). Kcca for different level precision in content-based image retrieval. In Submitted to Third International Workshop on Content-Based Multimedia Indexing, IRISA, Rennes, France.
- [9] Davis, T. (1993). Effective supply chain management. Sloan Management Review, 34, 35-46.
- [10] Dunning, J.H. (1997). The Changing Nature of Firms and Governments in a Knowledge-Based Globalizing Economy, Carnegie Bosch Institute, England.
- [11] Faulkner, D. (1995). International Strategic Alliance. Co-operating to Compete, McGraw-Hill Book Company, London.
- [12] Gilpin, M.E. (1987). Spatial structure and population vulnerability. Viable populations for conservation, Cambridge University Press, Cambridge, U.K. 125-139.
- [13] Grant, R.M. (1991). The Resources-Based Theory of Competitive Advantage: Implications for Strategy Formulation, California Management Review, Spring, 114-135.
- [14] Joan Vuust. (1999). Towards an International Economy of Strategic Alliances, Kopicentralen, Aalborg Universitet.
- [15] John Tomlinson (1999). Globalization and Culture, The University of Chicago Press.
- [16] J. Dunning & Feng ZHANG (2007). Meeting of Experts on FDI, Technology and Competitiveness. U.S.A conference.

- [17] Kale, P., and Singh, H. (2007). Building Firm /capabilities Through Learning: The Role of the Alliance Learning Process in Alliance Capability and Firm-Level Alliance Success, Strategic Management Journal, 28:981-1000.
- [18] Ley, C. (2001). Market-Driven Politics. Neo-liberal democracy and the public interest. London, Verso Books p280.
- [19] Lilian Forzani (2007). Principal Components for Regression: a conditional point of view. chapter1.
- [20] Magnus Borga. (1998). Learning Multidimensional Signal Processing. PhD thesis, Linkping Studies in Science and Technology.
- [21] Maloni, M.J. & Benton, W.C. (1997). Supply Chain Partnerships: Opportunities for Operations Research, European Journal of Operational Research, Vol. 101, 3, 419-429.
- [22] Meyer, K.E. (2003). Foreign Direct Investment in Emerging Markets, WP 15, Centre for New and Emerging Markets, LBS, London.
- [23] McIvor, Ronan and Marie McHugh. (2000). Partnership Sourcing: An Organization Change Management Perspective, The Journal of Supply Chain Management, 36, 12-20.
- [24] Ming-hung Shu, Wei-ju Hung, Bi-min Hsu, Thanh-lam Nguyen, Chunwei Lu, Forecasting with Fourier Residual Modified ARIMA Model- An Empirical Case of Inbound Toursim Demand in New Zealand, WSEAS Transactions on Mathematics, 2014. Feb. Vol. 13, pp. 12-21.
- [25] Porter, M. E. & Fuller, R. (1986). Competition Global Industries, Harvard Business Press, Boston.
- [26] Porter, M. E., How Competitive Force Shape Strategy, Harvard Business Review, March/April 1979.
- [27] Porter, M. E., (1985) "Competitive Advantage," The Free Press, New York, Ch.1, pp11-15.
- [28] Porter, M. E., & Fuller, R., (1086) "Competition Global Industries," Harvard Business Press, Boston.
- [29] Porter, M. E., "Towards a Dynamic Theory of Strategy," Strategic Management Journal, 1991, Vol. 12, pp. 95-117.
- [30] Prahalad C.K. & Doz Y. (1987). The multinational mission, New York: Free Press.
- [31] Richard J. Elkus Jr. (2008). Winner Take All: How Competitiveness Shapes the Fate of Nations, A Member of Perseus Books Group, NY.
- [32] Rugman, Alan M. (1996). The Theory of Multinational Enterprise, Cheltenham: Elgar.
- [33] Scott, Allen; Storper, Michael. (2003). Regions, Globalisation, Development. In: Regional Studies, Vol. 3, 6&7, pp. 579-593.
- [34] Vokura, R.J. (1998). The journey toward agility, Industrial Management Data System, vol. 98, 4, 165-171.
- [35] Yoshino and Rangan, Michael Y. and U. Srinivasa (1995). Strategic Alliance-An Entrepreneurial Approach to Globalization, First Edition, Boston.
- [36] "Data Bank Series for Research & Analysis" June 19, 2008, Toyo Keizai, Inc.
- [37] http://www.jbic.or.jp/index.html.

AUTHOR'S BIOGRAPHY



Chunwei Lu Ph.D., is graduated from the International University of Kagoshima (IUK), Japan, PhD. program in economics, in 2011. She was a teacher assistant in IUK. Her search interests are competitiveness, competitive advantages, strategic alliance, collaboration, supply chain. She worked as an overseas manager in Shiuanban Industrial Co., Ltd (electronics-related industry) from 2000 to 2008. She became a member of Japan Society for Applied Management Institute, Kyusyu Keizaigakkai (Institute), and Japan Academy of Enterprise and Business Administration in 2008. And she became a member of WSEAS in 2010. Now, she

is an assistant professor of Southern Taiwan University of Science and Technology, Dept. of Applied Japanese.