Chinese Motorcycle Penetration into Vietnam and the Existing Motorcycle Makers: A Study of Honda Company

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Abstract

This study explores the impacts of Chinese motorcycle emergence on local environment in Vietnam and existing motorcycle makers, particularly Honda. Grounded upon the framework of diamond of competitive advantage, the study finds that Chinese penetration in Vietnam has created more opportunities Honda can utilize in the long run than threats Honda had to overpass in the short run. Selective environment disadvantages played an important role in making pressures on Honda to engage in more sophisticated activities performed in the local country. The attempt to integrate the changes emerged from external environment with internal resources through consolidating relationship with local consumers and local suppliers can enable the firms to sustain competitive advantage over the value system.

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1. Introduction

In international competition, co-evolution between internal and external factors often determines the development process of the firm in particular market. The purpose of this study is to explore Honda expansion in Vietnam under unexpected emergence of Chinese motorcycle into the country. The penetration has been followed by considerable changes in local environment, and then has affected much on Honda Vietnam business activities.

Motorcycle industry in Vietnam was less developed until 1990s when it started developing under the new stage of international competitive environment. The emergence and development of Chinese motorcycle industry has characterized global motorcycles industry into two business architectures, *close-integral* model which is considered as classical Japanese architecture, and *open-modular* model which is newly established as a result from Chinese motorcycle industry (Ulrich, 1995; Fujimoto *et al.*, 2001; Ge, 2004; Hoang, 2005). As a developing country sharing the same border with China, Vietnam motorcycle industry has been influenced by both dichotomizations. This feature makes Honda Vietnam's development different from other subsidiaries in the region as well as Honda in the past.

The existing study is to address some questions: What were impacts of Chinese phenomenon on Honda Vietnam Company? – described the emergence of Chinese motorcycles into Vietnamese market and the effects on Honda Vietnam business; How has Honda Vietnam responded to changes in the local environment? – focused on Honda's activities towards the changes in environment by making new step and respective strategy to cope with existing challenges.

2. Background

Subsidiary development deals with the evolution of foreign subsidiaries after they established, or after initial foreign direct investment has occurred (Birkinshaw & Hood, 1998b). The basic idea is that over time the subsidiary accumulates valuable capabilities in the host country, which lead to an enhanced status, and thus an extension of the scope of its activities.

There have been three major streams explaining driving forces to subsidiary development in the host country. The first one is headquarter-driven process where decisions are made by headquarter managers regarding the allocation of activities to the subsidiaries. Two theoretical perspectives shed the light on this stream are the product life cycle (Vernon, 1966) and the internationalization process (Johanson & Vahlne, 1977).

The second one is grounded on network conceptualization of the multinational corporation (MNC) in that subsidiary is part of a network which has strong impact on its all elements and it is considered as loosely couple entity. Subsidiary development decisions are made at subsidiary level through subsidiary initiatives (Birkinshaw, 1997). Theoretical perspective sheds light on this stream is the network model (Ghoshal & Bartlett, 1990).

The third one is organizational theory where scholars view organizational action as constrained by the environment in which it occurs. The nature of the local environment, as defined by customers, competitors, suppliers, and government bodies thus has an important influence on the activities undertaken by the subsidiary (Porter, 1990). MNC researchers have adapted this perspective by proposing that each subsidiary operates in its own unique task environment, which constrains or determines the activities of that subsidiary (Ghoshal & Nohria, 1989; Rosenzweig & Singh, 1991).

This paper builds upon the local environment determinant perspective of subsidiary development. Although the static relationship between the subsidiary and its local

environment has been studied (Ghoshal & Nohria, 1989; Rosenzweig & Nohria, 1995), and there have been empirical researches on subsidiary expansion (Birkinshaw, 1998; Chang & Rosenzweig, 1998), there has little consideration of the dynamic question, say, the relationship between local environment changes and subsidiary's capability development. So far studies on local environment-driven subsidiary evolution is still rather limited (Birkinshaw & Hood, 1998a).

The existing paper borrows the model "diamond of competitive advantage", proposed by Porter (1990). According to this model, subsidiary development is driven by the dynamism of the local business environment determinants, including consumers, suppliers, competitors and production factors, as well as by the subsidiary ability to access resources from MNC. Implicitly, the subsidiary itself also develops, in that it becomes capable of adopting and applying increasingly sophisticated levels of the MNC's technology.

The original diamond framework itself emphasizes on the role of home nation's favorable determinants on a firm's competitive advantages that helps the nation's firm gain and sustain high position in international market. However, there has little attention on how a global firm can achieve successes in particular market, specifically in particular host country. By considering Honda development in Vietnam this paper is expected to fill up this issue. Rather than using the diamond to explain how home country's determinants map firms' position, this paper uses the framework to see how host country's determinants contribute to a particular firm's competitive advantages and what the firm does to respond and take that advantages when it tries to expand operation in the host country.

3. Method and data

For the nature of previous research questions, case study method is preferred (Yin, 1994). Started by *what* and *how* question form, this study will be more descriptive and exploratory case research in nature. Honda Vietnam with motorcycle business is the main unit of analysis.

Recently the motorcycle industry in Vietnam has been developing with rapid growth. The industry development has been followed by interesting events such as considerable changes in the market, an evolution of business architecture, and complicated government policies. Among foreign motorcycle companies established in Vietnam, Honda seemed to be prominent in development process. Although it set up operation later than others, the company has been growing rapidly with confident steps.

In order to collect data, we have conducted three field trips to Vietnam, the first in August 2004, the second in April 2005, and the last in September 2005. Interviews with Honda and other assemblers were made. We also visited related government bodies to receive their view points about the industry development in general. The facts and evidences were presented and discussed at the workshop of Vietnam Development Forum in front of individuals and organizations involved. Overall information of motorcycle industry in

Vietnam was gathered from Ministry of Industry, Ministry of Trade, and Ministry of Public Security.

4. A case study of Honda Vietnam

Honda Vietnam Co. Ltd. is a join-venture of Honda Motor (Japan), Vietnam Engine and Agriculture Machinery Corporation – VEAM (Vietnam) and Asia Honda Motor (Thailand), established in 1996, located at Phuc Thang Commune, Me Linh District, Vinh Phuc Province. Construction was finished with capacity of 450,000 bikes (2 shifts) per year

in 1997 and it started to produce Super Dream model. Future model was added in 1999 and HVN introduced Wave Alpha in late 2001. The number of employees is over 2,000. At early stage of development, Honda started direct investment in Vietnam as final assembly. The company aimed at final assembling, sales and marketing. The plant performed low-tech activities such as pressing, welding, plastic molding, painting, engine assembly, frame assembly, quality control, and packing ¹. Almost all parts were imported from its parents (Japan Honda) or sister subsidiaries (in Thailand and Indonesia). The assembly line layout was a replica of motorcycle assembly in Thailand. HVN invited some suppliers to invest and supply parts inside the country to help saving cost and complying with local government requirement. First two models were Super Dream and Future which were based on Dream II model produced in Thailand. These two models were competitive in order to compete in the new market. Parts were imported and assembled in Vietnam, so the quality was ensured. The company could avoid bad image. One Honda local manager described this as follows:

"One the one hand, we started Super Dream because for a long time Dream II have been popular with Vietnamese consumers when this model was imported to our country from Thailand. They love it and we all know this fact. On the other hand, Honda wanted to expand manufacturing in the region as well. Vietnam is, of course, an attractive market. We use a lot of motorcycles"

It showed that Honda attempted to exploit current capabilities transferred from the parents and other subsidiaries in the region through applying replicated process technology and introducing similar motorcycle models. In general, competition was based on preference of using motorcycle by local people and low labor cost. Honda Vietnam had little clearly intended plan in advance. Neither new product was planned nor were attempts to upgrade process technology made. However, the basic of competitive advantage had changed since Chinese motorcycle penetration into the domestic market.

4.1. The changes in industrial structure

Geographically, Vietnam is close to China. By 1999 domestic motorcycle industry was still less developed while motorcycle industry in China was at mature², which had effects

on Vietnamese market as a result³. Chinese motorcycles were mainly imported to Vietnam in 2000 by more than 50 domestic companies who were established within just two years 2000- 2001 and made products under complete-knock-down (CKD) method.

Prior to 1997, Honda kept its record of first position in motorcycle market with complete-build-up (CBU) products. As Honda Vietnam established and served domestic market with Super Dream and Future model, total Honda motorcycles still took biggest market share of average of 60% for three year, 1997-1999 (Figure 1).

Although production volume by Honda Vietnam increased slightly in period 1999-2000, it was outweighed by growth rate of Chinese motorcycle, from less than 1 thousand units in 1999 to 1.5 million units in 2001. Market shares of all FDI companies fell down. Honda Vietnam's share dropped from 20% to 8%, total Honda products decreased remarkably as well, from 68% to 12% within the years, whereas number of Chinese motorcycle increased remarkably and domestic companies dominated the market with market share made up 75%.

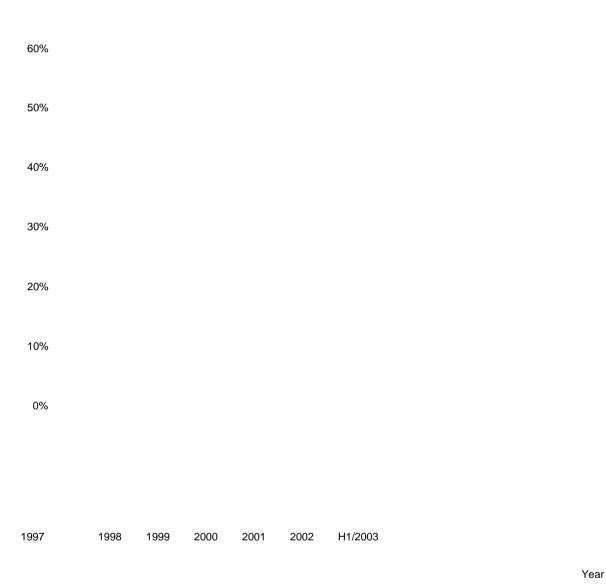
The main reason for the domination was that the prices of Chinese motorcycle were quite low, as compared with other existing models in market places. They were about only

- ¹ Honda Vietnam Report Period 1996-2002.
- ² Chinese motorcycle industry started from 1980. It experienced high growth rate in mid 1990s. Production volume reached 12 million units in 2000 (Source: World Motorcycle Facts and Figures 2001)
- ³ Some reasons for Chinese motorcycle exporting: stagnation of domestic demand; high production capacity and

overstock; efforts to sell out copied models in comply with requirement to enter WTO.

one third or one half of other companies' products. Consequentially, there was a fast reduction in price of all types of motorcycle companies. The average price index droped sharply by almost half from the year 1999 to 2001. Basic of competitive advantage shifted to cost-based competition. Firms competed on capability to tap largely potential demands of lower-income population.

Figure 1: Market share by motorcycle companies



Source: Ministry of Trade, Ministry of Public Security

The emergence has segmented the market into two parts, low price segment and high price segment. The low price segment (less than \$1000) which did not exist before 1999 has expanded rapidly since then from 63,000 units to 1.2 million units in 1999 and 2000, respectively. The number of new products felt into this segment was limited to Chinese products, following by some products of Taiwanese firms.

In the demand side, the presence of Chinese motorcycles has revealed the real demand for Honda products in Vietnam. The demand for using motorcycle was quite high among Vietnamese people, who were low-income consumers. In fact, local consumers accepted using Chinese motorcycles even though they recognized many defects. Beside the reason of low price, one other important reason was that those motorcycles were mainly copies of Honda products which have been popular and attractive to Vietnamese people. One HVN's manager shared his opinion about this as follows:

"In our country, after buying a Chinese motorcycle, he is willing to pay about only 2 USD to replace old label with new imitation label of Honda products, looking like he is riding a Honda motorcycle. You can see easily the availability of repair services where people can modify their Chinese motorbikes to be like Japanese ones... Obviously, preference toward Honda products was reflected in huge consumption of Chinese motorcycles by local customers"

The threats were not only about market share and market position but also on fundamental asset, say, Honda brand name and its reputation. Numerous domestic companies directly competed with Honda Vietnam in terms of products which were specific to Honda's assets. Their products were characterized as open-module architecture and were copies of Honda traditional brand names, such as Dream and Wave model. Visited 4 motorcycle shops who sold Chinese motorcycles in Hanoi, it was recognized that more than 90% models were copies of Honda models. One shop keeper explained his business as follows:

"Of course, consumers prefer models which are copies of Honda than other types. Those products benefit us. That is why we import and sell them"

One other impact of Chinese emergence in Vietnam was on supplier side as it created agglomeration effects on supporting industry. There was a wave of suppliers following Chinese motorcycle penetration into the domestic industry. At early time of establishment, each motorcycle maker relied much on its own small number of suppliers, such as keiretsu members of Japanese makers. However, by 2001 there were more than 550 component suppliers in the motorcycle industry. Two main groups were FDI suppliers and Vietnamese suppliers. The former could supply engine parts for domestic motorcycle makers and transmission related parts for both FDI and domestic ones. The later developed rapidly after the blooming of Chinese motorcycle. They had lower technological skill and production capability. Parts made by this group were considered as low prices and standardized.

The recognition consumer demand and development of supporting industry played important role for Honda Vietnam to have new orientation of development in this country. Honda Vietnam could not benefit right away from those chances but they may be platform for further commitment in the local country. In order to respond to environment changes Honda exerted improve its relationship with local suppliers through the network and satisfy local consumers better in order to compete successfully with existing competitors.

Domestic competitor played as an impetus factor which initiated the interaction among determinants in the diamond. When other factors have become more advanced and sophisticated, the relationship between them was interdependent. Product development that could link appropriate available resources became a crucial imperative for Honda Vietnam. As Honda, at the outset, perceived the competition on price, the company gave priority to cost reduction from design process to fit the purpose of making reasonable price motorcycle. Developed from the original model, Wave in Thailand, the new model must keep maximum important common parts, reduce less necessary parts, and maximize using low-price parts.

Under the supports from Honda parent, Honda Thailand and all efforts to bring lower-price model to domestic consumers, first thousand Wave Alpha of HVN were introduced in December 2001 with price of 700 USD for each. For this reasonable price and reputation of Honda brand name, sale volume of Wave Alpha increased rapidly from 322,000 to 380,000 units in 2002 and 2003 respectively, and reached up 436,000 units in 2004 (Figure 2).

Thousand units

Figure 2: Production volume of Honda by products

450

400

350

300

Super Dream Future Wave Alpha

250
200
150
150

100
50
0
1997 1998 1999 2000 2001 2002 2003 2004
Year

Source: Compiled by the author from interview

Wave Alpha, a new product which had not ever appeared in Honda managers' mind, has been well known by Vietnamese people not only in terms of nice price but also of good quality. It becomes strategic product of Honda development in Vietnam and fully mobilized Honda's resources in the region. Honda has been increasing commitment, deploying and developing resources in the local country as well. Only with those actions could Honda Vietnam consolidate its presence and sustain competitive advantage in this emerging market.

The two main ways Honda Vietnam has been following were to develop supplier network and transfer technology. While the later helped HVN to be able to produce core components in house, actively serve consumers for Honda products, the former encouraged HVN to outsource non-core parts, and then cut production cost.

Developing supplier network: Cutting cost was an imperative for Honda Vietnam to compete in the changing base of competition in Vietnam. Although Chinese motorcycle penetration has brought about local suppliers who could supply low price components, Honda Vietnam considered it carefully to keep the competence and did not want to jeopardize its handsome reputation for quality. Honda has attempted to change the structure of supplier network together with supporting local suppliers to develop manufacturing capability.

Figure 3: Supplier system of Honda Vietnam

Source: Compiled by the author

In early stage of development, suppliers to Honda Vietnam were limited in Keiretsu members in Thailand and Japanese (first-tier suppliers), and some FDI companies in Vietnam (Figure 3). From 2002 Honda Vietnam has increased its first-tier suppliers to some in China. All components purchased in China were through Honda Sundiro Motorcycle Co. Ltd. Second and third-tier suppliers have been also expanded to local suppliers. A noteworthy feature was that almost changes were happened mainly in none-core parts such as lamp, mirror, stay, and some functional parts. Although for core-parts HVN still procured from

Keiretsu members, among number of new suppliers increased from 28 to 45 by April 2005, all were not Keiretsu members.⁴

Transferring technology: Technology transfer is a critical way to localize production in Vietnam so as to satisfy consumer demand. Competitor rivalry had effects to push HVN to innovate and improve existing operation. The manager stressed that:

"Localization of engine is really important; we can not survive without investment in localizing the engine in Vietnam"

Technology to manufacture some difficult parts that require high-tech standards has been transferred to Honda Vietnam. The most notable point was that the technology of diecasting and machining some parts of motorcycle engine, such as crank case, cover crank

case, cylinder, head cylinder, and electrodeposits paint line has been applying. All were considered as the evidences of technology transfer from 1999 to 2002. Moreover, following engine localization program, from 2004 Honda has invested and transferred technology to manufacture cam shaft which is considered as the heart in a motorcycle the engine. One engineer described this as follows:

"Cam shaft is the very part to decide the operation of such heart since it controls the time to close and open valve and coordinates the movement of piston with the time preciseness of one of thousands of a second"

4.3. Honda continuous commitments in the local country

Honda Vietnam's performance was much better after introduction of Wave Alpha model. Production volume of Honda Vietnam increased sharply from 170,000 units to 565,000 units in 2001 and 2004, respectively. The market share recovered to 19% in 2002 and up 35% in 2004. About 90,000 Wave Alpha motorcycles were exported within two years 2004-2005. The company also sold more than 434,500 components to regional coutries. Participating in higher value activities was also seen in HVN's investment in R&D. The company has established a branch of South East Asia R & D Center in Vietnam. The body helps in designing and drawing, supporting the implementation of localization program, reducing time and energy for such implimentation.

Good business in recent years has encouraged Honda Vietnam to move ahead. It will invest about USD 60 million in producing cars within the next five years. The factory has a designed capacity of 15,000 units per year but it will produce 10,000 units in the first phase in the middle of the year 2006. With its continuous investment, Honda Vietnam is showing its confidence about this new phase of its history of doing business in Vietnam. Mr. Satoshi Toshida, the Asia-Oceania chief operating officer and managing director stated about Honda pland at a conference in Hanoi:

"Following Honda Vietnam's development of its motorcycle business, which saw total sales of about 500,000 units in 2004, Honda is now ready to make a long-term commitment to the development of Vietnam's automobile industry"

5. Discussion and concluding remarks

Environments do not change on any regular or orderly basic and they seldom undergo continuous dramatic change notwithstanding. Firms can not anticipate all the changes precisely. Whether a change brings the firm advantage or disadvantage depends upon

how the firm can deal with the change. Basically, those firms who recognize the influential change,

⁴ In his research, Hoang (2005) compares the supplier system the two countries and finds that the relationship between Honda and Keiretsu members in Vietnam is less tight couple than in Thailand.

actively build capabilities and drive its strategy to fit the new environment are likely to succeed in intensively competitive environment.

The motorcycle industry in Vietnam has experienced a significant development stage with many changes. It was a result of interaction between domestic firms, who make Chinese motorcycles, and Japanese ones, especially Honda. Chinese motorcycle penetration has made the change in basic competitive advantage. Competition on price became prominent and fierce. Honda was competed directly and had to face the problem of derivative reputation which was utilized by domestic companies through their copied models.

The emergence, however, has also created chances for Honda. Real domestic demand for low-price motorcycles, especially for Honda products, was recognized. Moreover, there was an improvement of local suppliers who were available to manufacture motorcycle parts. Nevertheless, those things were still simple and general. It required Honda to develop internal resources to take advantages from external environment changes in order to respond to existing threats.

The analysis of Honda responses shows that a distinctive competence is obtained from co-evolution between external and internal resources rather one itself. Opportunities might be treated as supplemented assets which may need other specific resources to realize them to be usable, and eventually to upgrade firm capability. Yet, continuous improvement, finding discontinuity, reconciling resources and developing capability are necessary for firms.

Wave Alpha in Vietnam was an ever low-price model of Honda. Honda's strategy focusing on cost competition with such model became crucial to respond to local environment changes. In fact, Honda had little deliberated plan for specific business in Vietnam. It developed local operation by incrementally increasing commitment to local market, starting as assemblers and then adding more value activities. As Wave Alpha model was developed, Honda took advantages of environment changes in new suppliers and potential consumers without big difficulties.

Our case study also supports and is consistent with the theory of the "diamond" (Porter, 1990). Close and interdependent relationship between determinants in the diamond plays important role in creating pressures on firms to innovate and upgrade activities in the host country. Advanced interaction between intense domestic competition, demanding consumers and competitive suppliers has encouraged Honda to develop new products, increase technology transfer, and consolidate buyer-supplier relationship in Vietnam. Honda has made considerable commitments to this country and moved to more sophisticated activities as a full motorcycle maker. It becomes not only an important

subsidiary in Honda network but also contributes much to the development of motorcycle industry as well as to Vietnamese economy so far.

From all above analysis, some concluding remarks can be obtained. First, emergence of Chinese motorcycles in Vietnam has brought a big challenge to Honda in early stage. However, more important, it has created favorable conditions from consumer demand and supplier side on which Honda has upgraded its manufacturing capability and become stronger in the local country, ensuring Honda competitive advantage in the long run.

Second, Honda has restructured its organization to quickly respond to external changes in local environment through supplier network and product architecture in order to utilize resources mobilization in the region. Together with incremental commitment, flexibility allowed local specific product strategy to be formed; eventually the threats were neutralized in the short run.

Third, Honda has made attempts to integrate new chances created from external environment into internal resources through better relationship with local consumers, close cooperation with local suppliers. As such, Honda could consolidate sustainability of the value system.

References

- Birkinshaw, J. M. (1997) "Entrepreneurship in multinational corporations: The characteristics of subsidiary initiatives" *Strategic Management Journal* **18**(3), 207-229.
- Birkinshaw, J. M. (1998) "Foreign-owned subsidiary and regional development: The case of Sweden" in *Multinational Corporate Evolution and Subsidiary Development* by J. M. Birkinshaw and N. Hood, Eds., Macmillan: London, 268-295.
- Birkinshaw, J. M., and N. Hood (1998a) "Multinational subsidiary evolution: Capability and charter change in foreign-owned subsidiary companies" *Academy of Management Review* **23**(4), 773-795.
- Birkinshaw, J. M., and N. Hood (1998b) *Multinational Corporate Evolution and Subsidiary Development*, Macmillan: London.
- Chang, S.-J., and F. M. Rosenzweig (1998) "Functional and line of business evolution process in MNC subsidiaries: Sony in the USA, 1972-1995" in *Multinational Corporate Evolution and Subsidiary Development* by J. M. Birkinshaw & N. Hood, Eds., Macmillan: London, 299-332.
- Fujimoto, T., A. Takeishi, and Y. Aoshima (2001) *Business architecture: The strategic design of products, organizations and process*, Yuhikaku: Tokyo.
- Ge, D. S., and T. Fujimoto (2004) "Quasi-open product architecture and technological lock-in: an exploratory study on the Chinese motorcycle industry" *Annals of Business Administrative Science* **3**(2), 15-24.

- Ghoshal, S., and C. A. Bartlett (1990) "The Multinational Corporation as an Interorganizational Network" *Academy of Management Review* **15**(4), 603-625.
- Ghoshal, S., and N. Nohria (1989) "Internal Differentiation within Multinational- Corporations" *Strategic Management Journal* **10**(4), 323-337.
- Hoang, P. T. (2005) "Competition and Evolution of Business Architecture: The case of the Vietnamese motorcycle industry" in *Improving Industrial Policy Formulation* by K. Ohno and N. V. Thuong, Eds., Publishing House of Political Theory: Hanoi, 235-266.
- Johanson, J., and J. E. Vahlne (1977) "The Internationalization Process of the Firm: A Model of Knowledge Development and Increasing Foreign Market Commitments" *Journal of International Business Studies* **8**(1), 23-32.
- Pascale, R. T. (1996) "The Honda effect" *California Management Review* **38**(4), 80-91. Porter, M. E. (1990) *The competitive advantage of nations*, Free Press: New York.
 - Quinn, J. B. (2003) "Honda Motor Company 1994" in *The strategy process:* concepts, contexts, cases by H. Mintzberg et al., Eds., Pearson Education: Harlow, 200-216.
 - Rosenzweig, P. M., and N. Nohria (1994) "Influences on human resource management practices in multinational corporations" *Journal of International Business Studies* **25**(2), 229-252.
 - Rosenzweig, P. M., and J. V. Singh (1991) "Organizational environments and the multinational enterprise" *Academy of Management Review* **16**(2), 340-361.
 - Stalk, G., P. Evan, and L. E. Shulman (1992) "Competing on capabilities: the new rules of corporate strategy" *Harvard Business School Review* **70**(2), 57-69.
 - Ueda, H. (2003) "Vietnamese motorcycle industry" in *Vietnam's Industrialization in the Age of Globalization* by K. Ohno & N. V. Thuong, Eds., JICA-NEU joint project: Hanoi, 251-268.
 - Ulrich, K. (1995) "The role of product architecture in the manufacturing firm" *Research Policies* **24**(3), 419-440.
- Vernon, R. (1966) "International investments and international trade in the product cycle"

 Quarterly Journal of Economics 80(2), 190-207.
- Yin, R. K. (1994) Case study research: design and methods, Sage: Thousand Oaks.