Chapter 2
The Motorcycle Industry: The Global Context and the Vietnamese Case

Abstract In order to understand the evolution of the Vietnamese motorcycle industry, it is essential to grasp the contrasting features of the Japanese and Chinese motorcycle industries. Japanese lead firms developed long-term and exclusive ties with a small number of fixed suppliers in order to develop lead firm proprietary models and manufacture them to high quality standards, while Chinese lead firms made extensive use of market forces in managing their linkages with a large number of suppliers to achieve price-based competitiveness in producing copies or slightly modified versions of popular Japanese models. Vietnam was the first place outside of China where the two groups of lead firms fought for supremacy. The rapid transformation and development of the Vietnamese motorcycle industry has been driven primarily by the competition between Japanese motorcycle manufacturers, which sought to replicate the conventional Japanese sourcing practices, and local Vietnamese assemblers, which essentially followed the Chinese way of exploiting market forces for producing low-priced copies of Japanese models.

Keywords Motorcycle industry · Lead firm-supplier relationship · Japan · China · Vietnam

The introductory chapter elaborated on two features of the Vietnamese motorcycle industry which make it an illuminating case for analysing the trajectories and mechanisms of supplier learning. The first is the rapid development that the industry has undergone in the period of a decade. The second is the coexistence of two groups of motorcycle manufacturers or assemblers—or simply *lead firms*, to use the terminology of the conceptual framework adopted in this book to be developed in Chap. 4—that developed contrasting patterns of coordination in their relationships with suppliers.

Indeed, the development of the Vietnamese motorcycle industry is best understood in the context of the competition between two groups of lead firms cultivating contrasting types of linkages with their suppliers. However, before going into the detailed discussion of the Vietnamese case, a brief overview of the structural transformation of the global motorcycle industry is essential because it provides an important context to the evolution of the Vietnamese motorcycle

M. Fujita, *Exploiting Linkages for Building Technological Capabilities*, SpringerBriefs in Economics, DOI: 10.1007/978-4-431-54770-9_2,

industry. This chapter therefore starts by discussing the global context of the industry. An overview of the Vietnamese case will follow.

2.1 The Global Context

In the global motorcycle industry, Japanese motorcycle manufacturers have maintained leading positions since the 1960s (Fujita 2013a). To start with, motorcycles have integral product architecture. Because such products are characterised by complex mapping from functional elements to physical components and tightly coupled interfaces among interacting physical components, they call for fine-tuning between the whole product and its component parts if overall product performance is to be maximised (Ulrich 1995; Baldwin and Clark 2000). Since Honda launched the highly acclaimed Super Cub in 1958, which eventually became a dominant design (Abernathy and Utterback 1978; Abernathy and Clark 1985; Teece 1986) in this industry, motorcycle manufacturers have adopted proprietary product designs carrying components customised to particular models.[1] Honda, as well as three other Japanese motorcycle manufacturers that successfully followed suit, namely, Yamaha, Suzuki and Kawasaki, emerged as global industry leaders by producing high-quality models that carried lead firm proprietary designs.

To ensure a stable supply of large quantities of high-quality components customised to their specific models, the Japanese lead firms developed long-term and exclusive ties with a small number of fixed suppliers.[2] Using the terminology of the global value chain (GVC) approach, these lead firms developed *captive* chains with suppliers, in which suppliers were subject to centralised control and extensive intervention from their lead firms (Gereffi et al. 2005). By entering into transactions with Japanese lead firms, suppliers could expect large orders in the long run. They were also were offered various forms of assistance by the lead firms so that they could attain the lead firm requirements. However, suppliers were virtually locked into relationships with particular lead firms and were under pressure to reach their goals and specifications, often by ceding autonomy (Fujita 2013a).

[1] Not a single Super Cub component was used in common with Honda's other models (Otahara and Sugiyama 2005).

[2] A substantial body of research on the Japanese car and electronics industries has revealed how the distinctive model of intra- and inter-firm organisation contributed to the sustainment of superior product development and manufacturing performance (Smitka 1991; Clark and Fujimoto 1990, 1991; Nishiguchi 1994; Dyer 1996; Fujimoto 1999). Moreover, as Japanese firms expanded abroad via FDI, the model was transferred and adapted to different country contexts (Cusumano and Takeishi 1991; Sako 1992; Helper and Sako 1995; Ernst 2002). The organisational model was also adopted independently in both developed and developing countries by local producers seeking to improve the productivity of their operations (Kaplinsky 1995; Posthuma 1995a, b; Harriss 1995; Humphrey et al. 1998).

However, the dominance of the Japanese motorcycle manufacturers came to be challenged by the end of the 1990s. The challenge came from China, whose motorcycle production surpassed that of Japan in 1993 to emerge as the world's largest motorcycle producer. Unlike the case of Japan discussed above, the huge Chinese market was dominated by copies or slightly modified imitations of popular Japanese models that were produced by local manufacturers and sold at approximately 30–70 % of the price of the originals (Ohara 2005: 69). In a market where consumers prioritised prices over product quality and intellectual property rights are weakly protected, roughly a dozen of popular models developed by Japanese motorcycle manufacturers, which had been introduced into a number of Chinese state-owned motorcycle manufacturers under technological licensing agreements in the 1980s, were widely shared and replicated by Chinese manufacturers by the 1990s (Ohara 2001; Ge and Fujimoto 2004).

The sharing of several popular models across numerous players within this industry, which this book refers to as *de facto standardisation* of Japanese models, had an enormous impact on the relationship between lead firms and suppliers. De facto standardisation enabled a large number of lead firms and suppliers to enter into the assembly of motorcycles and the manufacture of components, respectively, and engage in arm's-length transactions of standardised components without being locked into particular relationships. The extensive use of market forces, with frequent switching of partners in terms of prices, enabled Chinese motorcycle manufacturers to achieve remarkable levels of price-based competitiveness and to thrive in the huge domestic market as well as other emerging markets.[3]

It needs to be emphasised, however, that de facto standardisation of the sort that prevailed in China failed to ensure full compatibility of components. For products with integral product architecture, full compatibility of components could only be guaranteed insofar as they were manufactured precisely in accordance with the original drawings of the Japanese base models (Fujita 2013a). However, this has not been the case in China, where repeated duplicative imitation of a given dominant model adopting different measuring methods and varying degrees of precision often gave rise to components that were not compatible with each other (Ge and Fujimoto 2004, 2005). Non-compatibility problems were typically addressed in an ad hoc manner by making ex post adjustments (ibid). Even such adjustments did not render components strictly compatible but was sufficient to make them *assemblable*. This means that Chinese firms compromised on product quality for the sake of reducing the need for explicit inter-firm coordination.

[3] China's exports of motorcycles started to expand since the late 1990s. China's top ten motorcycle export destinations from 1998 to 2008 were Nigeria, the United States, Vietnam, Indonesia, Argentina, Japan, Turkey, Mexico, Germany and Brazil (the author's calculation based on Global Trade Information Services, Inc. 2012).

2.2 The Vietnamese Motorcycle Industry

The rivalry between the Japanese and Chinese motorcycle manufacturers outlined in the previous sub-section is the key to understanding the evolution of the Vietnamese motorcycle industry. On the one hand, three major Japanese motorcycle manufacturers established production bases in Vietnam in the late 1990s. Following their conventional practices, they launched sophisticated products and sought to manufacture them to high quality standards by developing their exclusive supplier networks. Value chains developed by these manufacturers, referred to as *Japanese chains*, were characterised by captive model of industrial organisation.

On the other hand, in the early 2000s, Vietnamese lead firms started the assembly of component kits imported from China, which were largely low-priced, low-quality products imitating popular Japanese models. Similar to the Chinese case discussed above, the value chains developed by these assemblers, referred to as *Vietnamese–Chinese chains*, are best categorised as market chains. In excess of 50 Vietnamese assemblers initially assembled imported Chinese components. However, as the Vietnamese government strengthened import controls and local content rules, these assemblers gradually expanded local sourcing by engaging in on-the-spot transactions with a moderately large number of Vietnamese, Taiwanese, Korean or Chinese suppliers based in Vietnam. Because the components are standardised to the extent that they imitated popular Japanese models[4] and the product quality requirements were low, transactions involved little need for explicit coordination between lead firms and suppliers, with frequent changing of of partners on the basis of price.

Focusing on the repeated rounds of competition between the Japanese and Vietnamese lead firms, the development of the industry can be divided into three stages (Table 2.1).[5]

In Stage I (mid-1990s to the end of the decade), three Japanese and one Taiwanese motorcycle manufacturer engaged in domestic production of motorcycles. Following the Vietnamese government's decision to launch an import substitution policy to promote the domestic production of motorcycles, Honda, Yamaha, Suzuki and Taiwan's Sanyang established local factories (Table 2.2). As their sophisticated products were priced substantially higher than what ordinary Vietnamese consumers could afford, motorcycle sales as a whole stagnated, but Japanese–brand motorcycles still accounted for the bulk of the market (Fig. 2.1). This small, protected market hardly attracted any scholarly attention at this stage.

[4] According to the author's survey of motorcycle retailers in Hanoi and Ho Chi Minh City in August–September 2002, the bulk of the models produced by Vietnamese assemblers imitated Honda's two popular models: *Dream* and *Wave*.

[5] The discussion on the stages of development is based on the existing literature on this industry, including Fujita (2005, 2006, 2007, 2008, 2011, 2012, 2013b); Intarakumnerd and Fujita (2008, 2009); Pham and Shusa (2006); Pham (2007); Nguyen (2006, 2007); and the Motorbike Joint Working Group (2007).

Table 2.1 Stages of Vietnamese motorcycle industrial development

Stage	Market (annual sales)	Government policy	Foreign motorcycle manufacturers	Local assemblers
Stage I: Start-up phase (late 1990s)	Less than 500,000	Import substitution; encouraging FDI in domestic production	Foreign motorcycle manufacturers set up domestic production	(Did not exist at this stage)
Stage II: The China shock & its repercussions (2000–2004)	2000–2001: Over 2 million; 2002–2004: reduced to 1.5 million	From 2002 onwards: Strengthened enforcement of import controls and local content rules; restrictions on motorcycle registration and expansion of production capacity by foreign manufacturers	2000–2001: Lost market shares; 2002 onwards: Honda Vietnam launched a low- priced model, the Wave Alpha, and recovered market share	More than 50 assemblers emerged
Stage III: FDI-led development (2005–2008)	Over 2.5 million	Local content rules and restrictions on motorcycle registration and investments in production capacity expansion were abolished.	Fully recovered market share; increased FDI in component manufacturing	Consolidated into a smaller number of large assemblers

Source The author, based on Fujita (2011, 2012, 2013b)

Table 2.2 Major foreign motorcycle firms in Vietnam

Name of the manufacturer	Year of license	Ownership structure (Nationality and percentage of ownership in parenthesis)
Vietnam Manufacture and Export Processing Co., Ltd. (VMEP)	1992	Chinfon Group[a] (Taiwan, 100 %)
GMN Automobile & Motorcycle Parts Manufacture Joint Venture Co., Ltd.[b]	1995	Chaikomol Business (Thailand, 30 %), SKB (Thailand, 10 %), New Chip Xeng (Laos, 30 %), General Export Import Co. (Vietnam, 30 %)
Vietnam Suzuki Corp.	1995	Suzuki Corp. (Japan, 35 %), Sojitz (Japan, 35 %), Vikyno: Southern Agricultural Machinery Corp. (Vietnam, 30 %)
Honda Vietnam Co., Ltd. (HVN)	1996	Honda Motor Co., Ltd. (42 %), Asian Honda Motors (Thailand, 28 %), Vietnam Engine & Agricultural Machinery Corp. (VEAM) (Vietnam, 30 %)
Yamaha Vietnam Co., Ltd. (YVN)	1998	Yamaha Motors (Japan, 46 %), Hong Leong Industries (Malaysia, 24 %), Vietnam Forestry Corporation (Vietnam, 30 %)
Lifan Motorcycle Manufacturing Joint Venture Co.	2002	Chonqing Lifan (China) 70 %, Vietnam Import–Export Technology Development Co. (Vietnam, 30 %)

Note

[a] Chinfon Group owns Sanyang Industry Co., Ltd., a motorcycle manufacturer known for SYM brand motorcycles

[b] GMN stopped operating in 2004

Source Fujita (2006:329); prepared on the basis of interviews by the author; a survey commissioned to the Vietnam Institute of Economics, Vietnam Academy of Social Science in 2004

Stage II (2000–2004) was a period characterised by a major external shock and its repercussions. It was during this period that the Vietnamese motorcycle industry attracted wide interest from businesses, researchers, and policymakers in Vietnam and abroad. In the early 2000s, massive volumes of low-priced imitations of Japanese-brand motorcycles were imported from China—a phenomenon often dubbed the "China shock" (Fujita 2007). Since the Vietnamese government had prohibited the import of assembled vehicles, Chinese imports arrived in the form of knockdown component kits that were assembled by more than 50 local firms. With prices as low as a third to a quarter of foreign-brand models, these imitations quickly penetrated the medium- and low-income consumer markets that had hitherto been unexploited by foreign manufacturers. The market expanded four-fold in the late 1990s, and local assemblers of Chinese motorcycles commanded roughly 80 % of these extended sales (Fig. 2.1).

The China shock provoked a series of reactions from incumbent producers and policymakers. As Vietnam became a symbol of an expanded Chinese threat that had already become apparent in China, Japanese companies initiated company-wide efforts to regain market shares. This culminated in the launching of a new, low-priced model by Honda Vietnam (HVN) in 2002. The new model, named Wave Alpha and priced at approximately one-third of the company's previous models, quickly gained

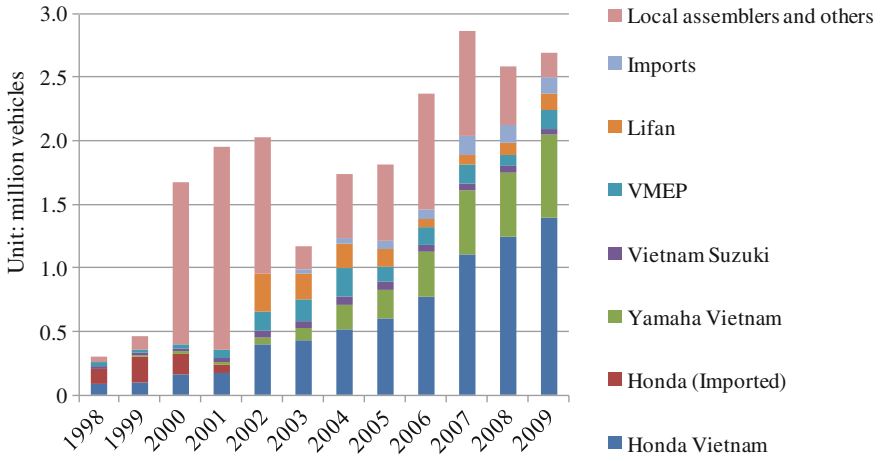

Fig. 2.1 Motorcycle sales in Vietnam by manufacturers. Notes: Data on "Honda (Imported)" was available from the Motorbike Joint Working Group (2007) up to 2005 but the figures were zero from 2002 onwards. *Source* Fujita (2013b), based on the Motorbike Joint Working Group (2007), Industrial Research Institute (2011) and General Statistical Office (various years)

popularity as the low-quality of Chinese motorcycles had by now become apparent to Vietnamese consumers (The Motorbike Joint Working Group 2007).

The Vietnamese government responded by enacting a series of policy changes to restore order and promote the sound development of the industry. However, the uncoordinated, sudden, and often arbitrary ways in which policy changes were enacted—frequently running contrary to previously announced plans and/or discriminating against foreign motorcycle manufacturers (Fujita 2011)—created serious side effects.

First, restrictions on the importation and registration of motorcycles were introduced. In September 2002, the Vietnamese government suddenly announced that imports of motorcycle components for the year should be limited to 1.5 million units (Cohen 2002). This was followed by restrictions on motorcycle registration[6] and limits on investments for expansion of production capacity by foreign motorcycle manufacturers from 2003.[7] Whilst these measures were intended to prevent the uncontrolled proliferation of motorcycles on Vietnam's streets, the consequence was stagnation of the overall market growth, with annual sales of motorcycles declining from over 2 million in 2002 to 1.17 million in 2003 (Fig. 2.1).

[6] Circular 02/2003/TT-BCA by the Ministry of Public Security dated 13 January 2003 limited motorcycle registration to one vehicle per person. Decision 98/2003/QD-UB by the Hanoi People's Committee dated 14 August 2003 prohibited new motorcycle registration in four central districts of Hanoi.

[7] Prime Minister's Decision 147/2002/QD-TTg dated 25 October 2002.

Second, in an attempt to encourage the development of local assemblers into fully fledged motorcycle manufacturers, the government stepped up the enforcement of local content rules, which hitherto had been circumvented by local assemblers,[8] and instituted standards for motorcycle manufacturers, with the requirement that a minimum of 20 % of local content had to be achieved by in-house manufacturing of key components.[9]

Notably, some of the aforementioned policies were implemented in ways that explicitly favoured local assemblers. When the government suddenly introduced quantitative restrictions on component imports in September 2002, local assemblers received a favourable allocation of import quotas, whilst insufficient quota allocation to HVN and Yamaha Vietnam (YVN) drove these companies to temporarily suspend their production.[10] From 2003 onwards, as noted above, the government restricted foreign motorcycle manufacturers from investing in the expansion of production capacity beyond the original proposals authorised by the Vietnamese authorities upon the issuance of FDI licences. This brought about serious damage to foreign motorcycle manufacturers because the rapid expansion of the market in the 2000s had not been envisaged in the 1990s when the investment decisions were made. HVN, in particular, suffered because this policy hampered the company's ambitions to use the Wave Alpha to regain lost market shares.

A new phase of industrial development (Stage III; 2005–2008) began as the end of the policy turbulence brought about rapid, FDI-driven growth. Diminishing academic interest in the industry notwithstanding, this was in fact the time in which the most dynamic development occurred (Fujita 2011). In 2005, the Vietnamese government abandoned restrictions on motorcycle registration[11] together with the policy that had prevented foreign motorcycle manufacturers from investing in additional production capacity.[12] As a result, domestic motorcycle sales climbed to 2.8 million units in 2007, far exceeding figures during the China shock (Fig. 2.1).

Japanese firms chose to satisfy the growing market in Vietnam via FDI for local production, following their conventional approach to the localisation of production

[8] The local content rules were originally announced at the end of 1998 for implementation from the beginning of 1999 (Decision of the Ministry of Finance 1994/1998/QD-TTg dated 25 December 1998). Their full implementation was delayed until the beginning of 2001 due to opposition from local assemblers (Ishida 2001).

[9] Prime Minister's Decision No.38/2002/QD-TTg dated 14 March 2002.

[10] Of the total of 1.5 million motorcycle component imports permitted for the whole year, local assemblers were allocated 900,000 units whilst foreign motorcycle manufacturers only received 600,000 (*Viet Nam News* 4 November 2002; Cohen 2002).

[11] Circular No. 17/2005/TT-BCA of the Ministry of Public Security dated 21 November 2005 rescinded legislation limiting motorcycle registration to one vehicle per person and only in the locality for which each held household registration.

[12] Official document No. 1854/VPCP-HTQT issued by the Government Office on 11 April 2005.

in countries with a large demand for their products.[13] Accordingly, they actively invested in expansion of production capacity, capturing an increasing share of this fast-growing market. In the meantime, local assemblers lost their market share but still held roughly one-third of the total sales as of 2006 (Fig. 2.1). They survived primarily by catering to low-income consumers in the rural areas where Japanese-brand models still had not penetrated.

2.3 Conclusion

This chapter has set out the context for the empirical analysis of the Vietnamese motorcycle industry. The key to understanding the evolution of this industry was the rivalry between Japanese and Chinese motorcycle manufacturers exhibiting contrasting types of competitiveness by developing very different types of value chains. Indeed, the rapid transformation and development of the industry has been driven primarily by the competition between Japanese motorcycle manufacturers, which sought to replicate the conventional Japanese sourcing practices, and local Vietnamese assemblers, which essentially followed the Chinese style of producing copies or slightly modified versions of popular Japanese models.

References

Abernathy WJ, Clark KB (1985) Innovation: mapping the winds of creative destruction. Res Policy 14:3–22

Abernathy WJ, Utterback JM (1978) Patterns of industrial innovation. Technol Rev 80(7):40–47

Baldwin CY, Clark KB (2000) Design rules: the power of modularity. The MIT Press, Cambridge

Clark KB, Fujimoto T (1990) The power of product integrity. Harvard Bus Rev 68(6):107–118

Clark KB, Fujimoto T (1991) Product development performance: strategy, organization, and management in the world auto industry. Harvard Business School Press, Boston

Cohen M (2002) Biker wars. Far Eastern Econ Rev, November 7: 46

Cusumano MA, Takeishi A (1991) Supplier relations and management: a survey of Japanese, Japanese-transplant, and U.S. auto plants. Strateg Manag J 12(8):563–588

Dyer JH (1996) Specialized supplier networks as a source of competitive advantage: evidence from the auto industry. Strateg Manag J 17:271–291

Ernst D (2002) Evolutionary aspects: the Asian production networks of Japanese electronics firms. In: Borrus M, Ernst D, Haggard S (eds) International production networks in Asia: rivalry or riches?. Routledge, London, pp 80–109

Fujimoto T (1999) Evolution of a manufacturing system at Toyota. Oxford University Press, Oxford

Fujita M (2005) Betonamu no nirinsha sangyo (Vietnam's motorcycle industry). In: Sato Y, Ohara M (eds) Ajia no nirinsha sangyo: kiso joho to kigyo ichiran (Asia's motorcycle

[13] From its early years, "to explore the world market, to produce where the demand is" has been at the core of Honda's mission (http://www.honda.co.jp/50years-history/009.html, accessed 2 October 2011).

industry: basic information and company directory). Institute of Developing Economies, Chiba, pp 113–129 (in Japanese)
Fujita M (2006) Betonamu no nirinsha sangyo: shinko shijo ni okeru jiba kigyo no sannyu to sangyo hatten (Vietnam's motorcycle industry: the entry of local enterprises into a newly-emerging market and industrial development). In: Sato Y, Ohara M (eds) Ajia no nirinsha sangyo: jiba kigyo no bokko to sangyo hatten dainamizumu (Asia's motorcycle industry: the rise of local companies and the dynamism of industrial development). Institute of Developing Economies, Chiba, pp 323–365 (in Japanese)
Fujita M (2007) Local firms in latecomer developing countries amidst China's rise: the case of Vietnam's motorcycle industry. Discussion Paper No. 97. Institute of Developing Economies, Chiba
Fujita M (2008) Betonamu nirinsha sangyo no hatten to kozo henka: jiba kigyo wo meguru kankyo no henka wo chushin ni (The development and structural changes in the Vietnamese motorcycle industry: focusing on the changing environment surrounding local firms). In: Sakata S (ed) Henyo suru Betonamu keizai to keizai shutai (Changing economy and economic entities in Vietnam). Institute of Developing Economies, Chiba, pp 119–145 (in Japanese)
Fujita M (2011) Value chain dynamics and local suppliers' capability building: an analysis of the Vietnamese motorcycle industry. In: Kawakami M, Sturgeon TJ (eds) The dynamics of local learning in global value chains: experiences from east Asia. Palgrave Macmillan, Basingstoke, pp 68–99
Fujita M (2012) How sectoral systems of production promote capability building: insights from the Vietnamese motorcycle industry. Asian J Technol Innov 20(S1):111–131
Fujita M (2013a) Exploring the sources of China's challenge to Japan: models of industrial organisation in the motorcycle industry. Discussion Paper No.419. Institute of Developing Economies, Chiba
Fujita M (2013b) The Japanese and Chinese models of industrial organisation: competing for supremacy in the Vietnamese motorcycle industry Discussion Paper No. 420. Institute of Developing Economies, Chiba
Ge D, Fujimoto T (2004) Quasi-open product architecture and technological lock-in: an exploratory study on the Chinese motorcycle industry. Ann Bus Adm Sci 3(2):15–24
Ge D, Fujimoto T (2005) Giji opun akitekucha to gijutsuteki rokku-in: Chugoku otobai sangyo no jirei kara (Quasi-open architecture and technological lock-in: the case of Chinese motorcycle industry). In: Fujimoto T, Shintaku J (eds) Chugoku seizogyo no akitekucha bunseki (Architecture-based analysis of Chinese manufacturing industries). Toyo Keizai Inc., pp 81–115 (in Japanese)
General Statistics Office (various years) Statistical yearbook. Statistical Publishing House, Ha Noi
Gereffi G, Humphrey J, Sturgeon T (2005) The governance of global value chains. Rev Int Political Econ 12(1):78–104
Global Trade Information Services, Inc. (2012) World trade atlas internet version 4.7e. Global Trade Information Services, Inc., Columbus
Harriss J (1995) "Japanization": context and culture in the Indonesian automotive industry. World Dev 23(1):117–128
Helper SR, Sako M (1995) Supplier relations in Japan and the United States: are they converging? Sloan Manag Rev 36(3):77–84
Humphrey J, Kaplinsky R, Saraph PV (1998) Corporate restructuring: Crompton Greaves and the challenge of globalisation. Response Books, New Delhi
Industrial Research Institute (2011) Ajia nirinsha sangyo 2011 Betonamu hen (Asia's motorcycle industry 2011: Vietnam). Industrial Research Institute Co., Ltd., Tokyo (in Japanese)
Intarakumnerd P, Fujita M (2008) Coping with a giant: challenges and opportunities for Thai and Vietnamese motorcycle industry from China. Sci Technol Soc 13(4):35–60
Intarakumnerd P, Fujita M (2009) China's threat and opportunities for the Thai and Vietnamese motorcycle industries: a sectoral innovation system analysis. In: Malerba F, Mani S (eds)

Sectoral systems of innovation and production in developing countries. Edward Elgar, Cheltenham and Northampton, pp 207–231
Ishida A (2001) Betonamu no baiku sangyo: kokusanka no shido (Vietnam's motorcycle industry: the start of localisation). Ajiken world trends 74, November: 30–33
Kaplinsky R (1995) Techniques and system: the spread of Japanese management techniques to developing countries. World Dev 23(1):57–71
Nguyen DT (2006) Building external manufacturing capability in emerging markets: Honda's knowledge transfer and the role of local suppliers' responsiveness. J Asia-Pacific Bus 7(4):77–95
Nguyen DT (2007) Chinese motorcycle penetration into Vietnam and the existing motorcycle makers: a case study of Honda company. Econ Bull 1(4):1–9
Nishiguchi T (1994) Strategic industrial sourcing: the Japanese advantage. Oxford University Press, New York
Ohara M (2001) Chugoku otobai sangyo no sapuraiya shistemu; risuku kanri to noryoku kojo sokushin mekanizumu kara mita nicchu hikaku (The supplier system of the Chinese motorcycle industry: a comparative study with the Japanese system in view of the mechanisms of risk management and capability upgrading). Ajia Keizai XLII-4:2–38 (in Japanese)
Ohara M (2005) Chugoku no nirinsha sangyo: kyodai ro-endo shijo wo motarashita jiba kigyo chushin no hatten (China's motorcycle industry: development centred on local firms resulting in huge low-end market). In: Sato Y, Ohara M (eds) Ajia no nirinsha sangyo: kiso joho to kigyo ichiran (Asia's motorcycle industry: basic information and company directory). Institute of Developing Economies, Chiba pp 61–77 (in Japanese)
Otahara J, Sugiyama Y (2005) Akitekucha-ron kara mita sangyo seicho to keiei senryaku: opunka to kakoikomi no dainamikusu (Industrial growth and business strategy seen from the architectural theory: the dynamics of opening and enclosure). In: Fujimoto T, Shintaku J (eds) Chugoku seizogyo no akitekucha bunseki (Architecture-based analysis of Chinese manufacturing industries). Toyo Keizai Inc., Tokyo, pp 117–147 (in Japanese)
Pham TH (2007) Effects of supply systems on firms' capabilities building in new emerging economies: the case of Vietnam's motorcycle industry. Unpublished PhD thesis, Graduate School of Environment and Information Sciences, Yokohama National University
Pham TH, Yoshikazu S (2006) Supplier-assembler network structure and capability improvement of suppliers in newly emerging Vietnam's motorcycle industry. Asian J Technol Innov 348 14(2):143–165
Posthuma AC (1995a) Japanese techniques in Africa? human resources and industrial restructuring in Zimbabwe. World Dev 23(1):103–116
Posthuma AC (1995b) Japanese production techniques in Brazilian auto component firms: a best practice model or basis for adaptation? In: Elger T, Smith C (eds) Global Japanization? the transnational transformation of the labour process. Routledge, London, pp 348–377
Sako M (1992) Prices, quality and trust: inter-firm relations in Britain & Japan. Cambridge University Press, Cambridge
Smitka MJ (1991) Competitive ties: subcontracting in the Japanese automotive industry. Columbia University Press, New York
Teece DJ (1986) Profiting from technological innovation: implications for integration, collaboration, licensing and public policy. Res Policy 15:285–305
The Motorbike Joint Working Group (2007) For sound development of the motorcycle industry in Vietnam. The Publishing House of Social Labour, Hanoi
Ulrich K (1995) The role of product architecture in the manufacturing firm. Res Policy 24:419–441