

1

Competitive Strategy in the Six ASEAN Countries: Summary Findings from Individual Papers

DAISUKE HIRATSUKA

The Institute of Developing Economies, JETRO of Japan and research institutes of the six ASEAN countries have conducted a joint study program to promote common recognition of the importance of enhancing competitiveness and upgrading industries, especially in the context of regional trade liberalization. The six ASEAN institutes taking part are: the Centre for Strategic and International Studies of Indonesia, the Malaysian Institute of Economic Research, the Philippine Institute for Development Studies, the Singapore Institute of International Affairs, the Thailand Development Research Institute and the Central Institute for Economic Management of Vietnam. This paper summarizes our joint study of the industrial upgrading strategy and reconsiders the implications of the regional trade cooperation for industrial upgrading in the ASEAN countries.

I. Changes of Economic Environment Surrounding ASEAN

The economic environment of the ASEAN countries, including positive factors as well as negative ones, has changed dramatically in the last decade in ways that have revolutionized business styles within East Asia.

Change 1: The Remarkable Rise of China and Increasing Competition

China has accelerated its open door policy since 1992, and as a cheap labor export production base has attracted foreign direct investment (FDI), in this

regard overtaking ASEAN in East Asia. China has developed remarkably in recent years, especially since the Asian currency crisis of 1997. Rates of economic growth have fallen in the ASEAN economies, while China has maintained high growth rates. More importantly, China, with a population of about 1.3 billion, opened its markets to a greater extent by entering the World Trade Organization (WTO). This has encouraged foreign firms to expand their business bases in China, not only for export purposes but also for access to the Chinese domestic market. Even Japanese firms, which were conservative about investing in China, are expanding their business activities there. The entry of China with cheap labor and a huge and growing market will gradually pull away the bulk of FDI flowing to the ASEAN region. As a result, competition in East Asia is increasing. ASEAN is concerned about intensified competition from China in export markets,¹ and competition in the domestic market has also emerged as a serious threat to ASEAN.²

This poses a serious challenge to the ASEAN countries, which are still relatively weak in indigenous technological capability, as FDI will in all probability remain an important channel for gaining access to foreign technological know-how for the foreseeable future. The existing industrial technological development strategies in ASEAN, strategies that are based on FDI, are necessary and useful, but might not be sufficient to enable ASEAN to compete with other economies in East Asia³.

Change 2: The Shortening of the Products Cycle and the Rapid Development of Information Technology

Information technology is becoming an important element shaping the contours of the global economy. The rapid development of information technology has shortened the product cycle, and has changed the comparative competitive advantages of trading partners in East Asia⁴. The shortened product cycle has promoted an international division of labor especially in information and technology-related products including parts; meanwhile the advanced economies are specializing in research and development (R&D) and in key materials and parts, and the developing economies such as the ASEAN countries and China are engaging in main production including final testing. Much FDI has been attracted to the developing economies of the region. This has brought a dramatic change in their competitiveness during the last decade,⁵ and has led to the formation of a regional production network through which East Asia is emerging as a major production region for information and technology-

related products.

Change 3: Optimum Procurement and Development of Production Networks

Increasing competition in East Asia has changed the procurement activity of firms operating in the region, streamlining their ties with traditional suppliers and disseminating optimum procurement practices. For example, traditionally, when Japanese firms operating at foreign sites have been unable to procure items from foreign suppliers, they have imported goods from Japan. However, at present, they try to procure parts and materials at the lowest prices within the region except for the key ones which are still supplied from Japan. In other words, an international division of labor in East Asia has caused traditional bilateral relationships to develop into more complicated, multilateral trade relationships, in which parts and materials are transferred across the board within the region. Moreover, increasing competition has promoted sourcing from indigenous suppliers, a development which has hardly ever been seen before in ASEAN countries. The dissemination of optimum procurement has promoted competition in East Asia as a feedback effect.

Change 4: Reallocation of Production Sites in ASEAN-wide Production

Step by step, the original six ASEAN members have reduced their tariffs on goods within the region and will reduce them to less than 5 percent by 2003. As AFTA takes shape, each ASEAN market will become more competitive than ever.⁶ Multinational corporations (MNCs) are reallocating their production sites, which were dispersed within the ASEAN region, to achieve greater centralization,⁷ a development that is leading to ASEAN-wide production.

Three kinds of reallocation of production are occurring within the ASEAN countries. (1) The first one is intra-industry specialization, that is, resource sharing, industrial complementation and industrial cooperation. A typical case is the automobile industry under the ASEAN Industrial Cooperation Scheme (AICO). (2) The second type of reallocation is intra-firm exchange of final products. This is also possible in the AICO scheme. Many automobile makers specialize in specific types and trade them in knockdown form within affiliate companies in the ASEAN region.⁸ (3) The third type is merger of management of several

plants among different firms in one country.

II. Issues regarding ASEAN's Industries

Arising from the changes of environment that have been already mentioned, the following issues pose a challenge to the ASEAN countries:

Issue 1: Losing Advantage of Abundant Unskilled Labor

The ASEAN countries are losing advantage in factor endowment as regards abundant unskilled labor. Up to now, the ASEAN countries sustained economic growth by using cheap labor for export production. Due to their rapid industrialization, however, the wages of unskilled labor have increased, and the ASEAN countries have lost competitiveness in labor-intensive products. Moreover, this trend has been accelerated by the rise of China, where cheap labor is more abundant than in ASEAN. Daily necessities and miscellaneous goods provide a good example of ASEAN's decreased competitiveness with respect to China. But, Vietnam still has comparative advantage in cheap labor in industries such as garments and footwear manufacture, and in some other labor-intensive industries including ones based on agriculture.⁹ As wage rates rise, labor intensive industries become uncompetitive, driving firms to invest in more advanced production processes, using labor with a higher level of skills in order to survive in the new environment.¹⁰

Issue 2: ASEAN and China Compete Against Each Other¹¹

During the last decade, the ASEAN Five (Indonesia, Malaysia, the Philippines, Singapore and Thailand) have increased their competitive strength in the following industries: home electrical appliances, office and communication apparatus, personal computers and peripheral devices. The same countries are also competitive in the parts industry, including electronics parts, and home electrical appliance parts. Not only are the ASEAN countries competing against each other, but they are also competing against China. The ASEAN countries have to establish complementary trade relationships with each other and also with China. Each ASEAN country needs to upgrade its industry according to its own comparative advantage, establishing complementary trade relationships

with the other ASEAN countries and with China. It is becoming possible, during the process of ASEAN market integration, for each ASEAN country to succeed in manufacturing on an ASEAN-wide or an Asia-wide basis.

Issue 3: Transformation from a Mass Production-Based Economy to a Knowledge-Based Economy

As they lose their comparative advantage of abundant unskilled labor, the industrializing ASEAN economies will need to create a new factor endowment, and will need to transform their economies, from mass production-based ones relying on unskilled or semiskilled labor, to knowledge-based ones. Knowledge-based economic activities comprise R &D, product and service design, high value-added processing and marketing for the domestic, regional and global market places.¹² Knowledge-based economic activities require human and intellectual capital with a mass of creativity and innovation potential.

Issue 4: Strong Protection of Specific Industries

Strong protection of specific industries causes distortion in the market, and that impairs the ability of firms to respond to the changing environment. The Indonesia government promoted upstream industries such as steel, petrochemicals, heavy machinery, ships, under strong protection. This brought about a rise in input prices and delayed the development of supporting industries.¹³ Malaysia meanwhile promoted a capital goods sector, in the expectation of creating greater linkages with the rest of the economy. The overall performance of heavy industry projects, however, was less than satisfactory as they had to contend with serious gluts in world markets as well as stiff international competition. All these projects required strong protection, with apparently little likelihood of viability otherwise.¹⁴

Like Indonesia and Malaysia, Vietnam has been taking a “picking the winner” approach towards developing targeted sectors that are considered to be important for the whole economy. Between 2000 and 2010, investment in upstream industries will be increased to develop supporting industries, which provide inputs for other industries, and to reduce the cost of importation. Firms in Vietnam can survive without the need to improve their technological capacity.¹⁵

A policy for promoting the development of supporting industries could

start by reducing the protection of the upstream industries and abolishing local content requirements.¹⁶ The most important component of the policy is the development of non-discriminatory supporting policies designed to benefit all industries. Examples of such policies include maintenance of macroeconomic stability, infrastructure development, maintenance of legal certainty, improvements to the regulatory capacity, reduction of bureaucratic red-tape and corruption, and the development of human resources, so as to reduce cost and uncertainty.¹⁷

Issue 5: Low Indigenous Levels of Technology and Skills

Within ASEAN, indigenous technological levels remain low. In all ASEAN countries, the capability of technology transfer from foreign firms to indigenous firms is limited. While there are a few Thai firms with design and reverse engineering capability, most large scale firms are in the stage of acquiring and assimilating technological capability, and the small and medium enterprises (SMEs) have only the capability to operate the technology. Most Thai firms do not invest in technological development.¹⁸ Most Philippines firms are not aware of the importance of technology and how to improve their technological level.¹⁹ In Singapore, upgrading has been hampered by lack of skills, absence of a local technology base and lack of other capabilities that are present in developed economies.²⁰ Because of the narrowness of their knowledge, indigenous firms cannot develop core technologies and climb up the technological ladder.

(1) Weak linkages between foreign and indigenous firms

The inability of indigenous firms to develop technology is firstly attributable to the weakness of their links with foreign firms. For instance, in Indonesia, transfer of technology from foreign firms to indigenous firms has been only moderate.²¹ Malaysia's unremarkable indigenous technology development over the years suggests that foreign technology transfer has not been broad-based and widespread.²² In the Philippines, large enterprises have only limited linkages with the rest of the country, a state of affairs that has prevented efficiency gains from successful international competition from spreading to domestically oriented firms.²³ Most of the firms with relatively upgraded technology are foreign firms. But, this technological upgrading is not sustainable, because some firms have simply acquired new technologies from abroad and do not have their own independent strategy or long-term policy for technological creation, while other firms are using technologies that are

two or three generations behind the currently updated technologies.²⁴

(2) Lack of a policy framework

Secondly, the absence of a policy framework makes it difficult to nurture indigenous technology and skills. Most indigenous firms are not aware of the importance of technology and most do not know where to find it. This reflects the lack of specific policy instruments to engineer positive spill-overs from the MNCs, as well as the absence of a policy framework for nurturing the technology and skills of indigenous firms,²⁵ and entrepreneurship and technopreneurship.²⁶ In Vietnam, support and service systems for science and technology are still underdeveloped. The system for obtaining information on science and technology is not convenient for firms to use, and administration procedures for getting patents, licenses and appraisals on technologies are still relatively complicated and costly.²⁷

(3) Small domestic markets are targeted

Thirdly, and perhaps more important still, most indigenous firms have targeted domestic markets that are too small for scale merits to function and too limited to require firms to use global standard technology. It follows that most indigenous firms use backward technology. Meanwhile MNCs have not ventured to use indigenous suppliers even when such suppliers have been modernized.

Issue 6: Regulatory and Bureaucratic Red-Tape

Regulatory and bureaucratic red-tape causes high costs and increased uncertainty. Thai enterprises must observe the rules and submit to the red-tape processes of governmental agencies and customs processes²⁸ and to start new operations requires the submission of various documents to the related authorities. Not only foreign firms but also indigenous ones suffer from bureaucratic red tape and high tariffs. For example, factories operating in the economic processing zone in Thailand have to clear customs when they contract out to subcontractors in the country and when they bring materials back into the zone again after processing in out of the zone for outsourcing. This causes high costs and delays business for firms operating in the zone, and is an obstacle to the development of supporting industries in the country. Another example is cross-border transportation: because overland transportation services between Thailand and Malaysia have not been mutually agreed, containers on the trucks cannot cross the border without changing vehicles. This not only causes a rise in

transportation costs, but also slows down the speed of business.

In Vietnam, red tape, lack of transparency, and poor performance and inconsistency of public administration have all burdened firms and investors. Red tape is a costly imposition on firms especially with regard to administrative matters such as licensing, customs, taxation, land clearance, and appraisal and approval of technology transfer contracts and high-tech projects. Corruption is still widespread. These problems lead to high transaction costs when doing business in Vietnam. Policy implementation is carried out very slowly and inconsistently, and this sometimes makes investors confused. Inconsistency in policy implementation in Vietnam has added more uncertainty to doing business there. This is mainly due to lack of vision and to the absence of a long-term comprehensive strategy for managing industrial development.²⁹

III. Human Resource Development Strategy in ASEAN

Each ASEAN country needs to change its industrial policy, from the traditional type, which provides subsidies and protection to specific sectors, to types encouraging more market competition of a kind that strengthens the formation of capacity for human resource development, and for technological and skill development.

Industrial upgrading and the formation of knowledge-based economies require a large and highly-qualified human resource, in particular engineers and scientists. In order to meet the human resource demand, ASEAN countries need to build broad and deep human resources. ASEAN governments are cooperating in the implementation of high quality education programs, some examples of which are as follows.

The Singapore government is restructuring its education sector so as to accommodate a shift toward a knowledge-based economy. In line with its goal to become a knowledge-based economy, Singapore is building up an education hub in the rapidly growing Asia-Pacific region. This will provide Singapore with its own talent pool to engage in research and work in new knowledge-driven companies. The Singapore government hopes to increase the number of foreign students studying in the country. Many of them will be provided with scholarships and will be sent to work for various Singapore-based organizations, after their formal education is finished.³⁰

Malaysia has launched many education programs to meet the demand for human capital in a knowledge-based economy. The government aims

to achieve a 60 to 40 ratio of science engineering course students to arts students from the present ratio of 40 to 60. The teaching of science and mathematics in English was introduced in schools and universities in 2003. The government has converted all secondary vocational schools to secondary technical schools. A consortium of 11 public universities has provided a distance learning course for students, and technical and business courses have been set up. Meanwhile several advanced skill training courses have been introduced. At the Japan-Malaysian Institute, German-Malaysian Institute, British-Malaysian Institute, and Malaysia-France Institute specialized courses are offered in mechanics, industrial engineering technology, avionics engineering and multimedia development. Besides these formal types of education, employers in all economic sectors can apply to the Human Resource Development Fund, which provides financial assistance for apprenticeship training and computer purchases, enabling firms to retain and upgrade the skills of their workers. To increase the number of educated employees, the government has awarded Multimedia Super Corridor status to companies to employ foreign knowledge workers.³¹

Most workers in Thailand have completed only elementary school education. In addition, entrepreneurs themselves also lack modern management insights. As a result, Thailand will find it difficult to shift to a knowledge-based economy. The 9th Five Year National Economic and Social Development Plan, which started in 2002, includes a human resource development strategy for increasing the number of those who have completed secondary school and who have graduated in science fields. Subsidies will be given for tuition fees and food, and plant that promotes science study will be exempted from tax. By initiating teacher training projects, Thailand plans to develop and promote basic knowledge at all levels of education, and especially in elementary, secondary and vocational education. Meanwhile teachers will be trained in the special techniques necessary for teaching entrepreneurs to improve their knowledge and skills. Training will be provided in fields necessary for business operations, and connections will be established between educational institutions and the business sector, with the aim of facilitating, for example, teaching in educational institutions by industrial specialist volunteers.³²

Indonesia has an education policy for improving the quality of primary school and secondary education by reforming the examination system, curriculum, textbook, teachers and the management and administration of education. Tertiary education institutions such as universities have been

given autonomy in the administration of education activities. But, Indonesia has a budgetary constraint in supporting much-needed vocational schools.³³

The Philippines government has been remiss in failing to align its education system toward a globally and technologically-competitive economy. Schools in the Philippines do not provide the requisite technical skills and knowledge. Recognizing the importance of education, policymakers have implemented in the school year 2002–2003 a new curriculum called the Basic Curriculum, which aims to raise the quality of school graduates. Tertiary education will supply the higher-level skills needed for competitiveness while middle-level skills will be acquired during the technical and vocational education and training for which the Technical Skills Development Authority is responsible.³⁴

In its 2001–2010 strategy on education and training development, Vietnam will give priority to improving the quality of education and training in human resources among managers, entrepreneurs and skilled workers. The Vietnamese government plans to revise the school curriculum and will introduce textbooks that combine theory with reality, and knowledge with experiment. Teaching capacity and education methodology will be improved, and education management will be reformed so as to provide more autonomy. Schools and universities will develop in directions conducive to promoting collaboration between Vietnamese schools and foreign partners in providing education and training. Education will be standardized, diversified, modernized and systematized so as to meet social needs. The government also is studying the possibility of establishing an indicator system needed for training, which will help to provide education services to meet the practical needs of the economy.³⁵

IV. Indigenous Technological and Skill Development Strategy in ASEAN

Formal education has been emphasized as regards the development and subsidization of human capital by governments. However, it is commonly stated by ASEAN's research institutes that formal education is not enough, and a broad policy framework is necessary for indigenous firms to develop their technological and skill levels, as these firms are not aware of technology and where to obtain it. Indeed, the ASEAN governments have not provided enough programs and facilities to nurture indigenous

technology and skill development.

In Singapore, the issues of enterprise, innovation and risk-taking were not encouraged and nurtured in the past because the government was the single all-embracing institution in planning and implementation of policy. Without changing the overall basic structure, it is not possible to initiate a developed industrial structure that is both self-sustaining and vibrant.³⁶ It is imperative that Malaysia systematically changes its science and technology policy towards persuading MNCs to foster technopreneurship, which is of paramount importance for indigenous technology development.³⁷ Thailand has not established a skill and technological learning system to enable it to compete with new technologies. Skill formation and technological capability development obviously depend not only on economic incentives but also on policy environments.³⁸ Improvement of education is not sufficient in the formation of skills for production activities.³⁹ Industrial upgrading processes need supporting institutions, that is, the production process requires not only marketed inputs but also the input of non-marketable public goods such as educated labor, physical infrastructure, general R&D, and law and order.⁴⁰

Singapore, Malaysia and Thailand have definite action plans for developing knowledge-based economies, but the Philippines and Indonesia do not have feasible forward-looking plans because of budget constraints. Vietnam has an industrial policy for the period 2001 to 2010 aimed at targeted industries, but has no overall policy framework for the improvement of indigenous technological and skill levels.

To create vibrant enterprise and technology-conscious SMEs and government-linked companies, the Singapore government has established a relevant task-force and committees to pioneer and implement the important factors necessary for the realization of economic and industrial restructuring consistent with and relevant to a knowledge-based economy. One of these is the Technopreneurship 21 Ministerial Committee, set up in 1999, which aims to develop a pro-enterprise environment, a conducive physical infrastructure, a venture investment infrastructure and education.⁴¹

Malaysia has launched an industrial master plan, IMP2 (1996–2005), which focuses on raising competitiveness. IMP2 contains a program to promote and nurture local SMEs to become reliable and competitive manufacturers and suppliers to leading industries. This objective will be achieved by way of fiscal incentives, business matching and programs supporting technological development, skill upgrading, export and market development as well as by provision of SME industrial sites. A large

number of SMEs have participated in the program. Malaysia also has industrial technology plans that provide R&D grants, tax incentives for R&D, loan and venture capital programs, and a venture capital fund. Meanwhile science parks function as modern prototype production centers, as well as quality and control laboratories.⁴²

In the Ninth Five Year Plan started in 2002, Thailand intends to implement an action plan for the ascent of technological ladders, that is, the government will allocate budgetary expenditure to stimulate enterprises that at present are unaware of their own potential and to help enterprises that realize the necessity of developing themselves but are uninformed concerning the technology they need, and where to find it. The government has also established a Skill Development Fund to promote training courses in cooperation with the private sector and the educational institutes, and will subsidize firms that invest for technological development. A product testing center for SMEs will also be promoted. At the same time the government will aim to improve entrepreneurial skills, and will provide long-term credit for the purchase of new technological machinery.⁴³

In the Philippines, support facilities such as testing centers, either government-run or government subsidized, are either lacking or non-existent. The same can be said of standardization institutions and support industries such as packaging and so forth. The innovation system only reaches out to a handful of firms, usually the large ones. Government and private sector linkages are very weak, thus, commercialization of developed technologies has not been well promoted. The government agency in charge of innovation and research and the various science and technology related agencies have formulated various science and technology plans. These would enhance technological capability if implemented. However most of these plans and policies have largely remained on paper.⁴⁴

Indonesia failed to develop comprehensive plans for strengthening its technology base, partly due to financial constraints in the aftermath of the 1997–98 Asian crisis. The focus of the policy agenda in Indonesia is currently on macroeconomic stability and economic recovery from the crisis.⁴⁵

V. Implications of Regional Cooperation for Industrial Upgrading and Technological and Skill Development

A most important aspect is that indigenous firms in the ASEAN countries

have targeted small domestic markets where high technology has not been essential. Indigenous technological and skill levels have come to lag behind global standards. However, if ASEAN indigenous firms succeed in manufacturing on an ASEAN-wide or an Asia-wide basis, they might find it possible to climb up the technological ladder, as has been done by Japanese and Korean firms by way of specialization. Actually, in global scale manufacturing, Japanese SMEs specialized in the making of specific products and worked for large enterprises which produced goods for both domestic and export purposes. ASEAN-wide or Asia-wide manufacturing will attract FDI in more advanced fields to ASEAN and will eventually lead to the development of both foreign and indigenous firms, with strengthening linkages between the two types. For realization of manufacturing on an ASEAN-wide or an East Asia-wide basis, the ASEAN countries need to abandon competitive trade relationships and instead establish complementary trade relationships with each other, by allocating resources appropriate to the factor endowment of each country and also by creating new factor endowments so as to find comparative advantage.

Lastly, in what ways will Japan's ongoing industrial and corporate structure reforms affect the reallocation of overseas production in East Asia once the single ASEAN market is completed and the ASEAN-Japan Comprehensive Economic Partnership is realized?

Certainly, because of the ageing of the Japanese population, labor supply will fall. Thus, Japanese firms will concentrate on more advanced products and will require more overseas production bases, although automation and labor saving measures will be introduced. Japanese firms need abundant highly-skilled labor for overseas production. ASEAN is the best overseas site for advanced products, because Japanese firms have operated there for a long time and in doing so have accumulated intangible assets: production and management know-how, as well as the employment of many technicians accustomed to the Japanese way of doing things. By and large, local executives are responsible for procuring materials and for custom procedures. Japanese firms manufacture capital or technology-intensive products in ASEAN. For example, four Japanese companies are the world's only makers of high-tech 2.5 inch hard disk drives (HDDs). They produce these products only in the Philippines and Thailand because they have operated in those countries for a long period. Most of the parts for 2.5 inch HDDs are produced in Thailand, Malaysia and Singapore. Some processes are subcontracted to indigenous firms.

Each ASEAN country needs to provide highly skilled labor, and a

high-quality infrastructure. The latter must include transportation together with physical facilities such as quality control testing laboratories and modern prototype production centers. Supporting industries must be established and speedy public administration introduced especially as regards custom clearance. The ASEAN production bases have to work organically like a single market, responding to speedy conduct of business. In this regard, ASEAN-wide manufacturing should be possible by a combination of individual country efforts, ASEAN-wide cooperation programs, and assistance from Japan.

Notes

- 1 See Punyasavatsut and Poapongskorn (2003) and Feridhanunsetyawan and Aswicahyono (2003).
- 2 See Punyasavatsut and Poapongskorn (2003).
- 3 See Ariff (2003).
- 4 See Lim (2003).
- 5 See Hiratsuka (2003).
- 6 See Punyasavatsut and Poapongskorn (2003).
- 7 See Ariff (2003).
- 8 As of February 2003, 101 projects of the first and second types were approved as AICO projects.
- 9 See Dinh, Dang and Vo (2003).
- 10 See Feridhanunsetyawan and Aswicahyono (2003).
- 11 See Hiratsuka (2003).
- 12 See Ariff (2003).
- 13 See Feridhanunsetyawan and Aswicahyono (2003).
- 14 See Ariff (2003).
- 15 See Dinh, Dang and Vo (2003).
- 16 See Feridhanunsetyawan and Aswicahyono (2003).
- 17 See Feridhanunsetyawan and Aswicahyono (2003).
- 18 See Punyasavatsut and Poapongskorn (2003).
- 19 See Lamberte et al (2003).
- 20 See Lim (2003).
- 21 See Feridhanunsetyawan and Aswicahyono (2003).
- 22 See Ariff (2003).
- 23 See Lamberte et al (2003).
- 24 See Dinh, Dang and Vo (2003).
- 25 See Punyasavatsut and Poapongskorn (2003) and Feridhanunsetyawan and Aswicahyono (2003).
- 26 See Lim (2003).
- 27 See Dinh, Dang and Vo (2003).

- 28 See Punyasavatsut and Poapongskorn (2003).
- 29 See Dinh, Dang and Vo (2003).
- 30 See Lim (2003).
- 31 See Ariff (2003).
- 32 See Punyasavatsut and Poapongskorn (2003).
- 33 See Feridhanunsetyawan and AswicaHyono (2003).
- 34 See Lamberte et al (2003).
- 35 See Dinh, Dang and Vo (2003).
- 36 See Lim (2003).
- 37 See Ariff (2003).
- 38 See Punyasavatsut and Poapongskorn (2003).
- 39 See Lamberte et al (2003).
- 40 See Feridhanunsetyawan and AswicaHyono (2003).
- 41 See Lim (2003).
- 42 See Ariff (2003).
- 43 See Punyasavatsut and Poapongskorn (2003).
- 44 See Lamberte et al (2003).
- 45 Memo from Feridhanunsetyawan.

References

- Ariff, Mohamed. 2003. "ASEAN Strategy for Upgrading Industry and Improving Industrial Competitiveness: The Case of Malaysia." Paper presented at the Second ASEAN-Japan Research Institute Meeting, July 22, JETRO, Tokyo.
- Dinh Van An, Dang Thi Thu Hoai and Vo Tri Thanh. 2003. "A Competitive Strategy Report for Industrial Upgrading in Vietnam." Paper presented at the Second ASEAN-Japan Research Institute Meeting, July 22, JETRO, Tokyo.
- Feridhanunsetyawan, Tubagus and Haryo AswicaHyono. 2003. "Indonesia's Strategy for Industrial Upgrading." Paper presented at the Second ASEAN-Japan Research Institute Meeting, July 22, JETRO, Tokyo.
- Hiratsuka, Daisuke. 2003. "Competitiveness of ASEAN, China and Japan." Paper presented at the Second ASEAN-Japan Research Institute Meeting, July 22, JETRO, Tokyo.
- Lamberte, Mario B., Caesar B. Cororaton, Aniceto C. Orbeta and Myrna S. Austria. 2003. "Philippine's Strategy for Upgrading Industry." Paper presented at the Second ASEAN-Japan Research Institute Meeting, July, JETRO, Tokyo.
- Lim, Hank. 2003. "Singapore's Strategy for Industrial Upgrading." Paper presented at the Second ASEAN-Japan Research Institute Meeting, July 22, JETRO, Tokyo.
- Punyasavatsut, Chaiyuth and Nipon Poapongskorn. 2003. "Thailand's Strategy for Industrial Upgrading." Paper presented at the Second ASEAN-Japan Research Institute Meeting, July 22, JETRO, Tokyo.