(3) Japan

1. VDF Tokyo special workshop

Location: GRIPS, Tokyo
Time: 9:30-11:30am, May 30, 2005

Presenters:

Mr. Le Van Duoc (Director, Department of Planning, MOI)
Dr. Cao Xuan Thanh (Deputy Director, Department of Planning, MOI)

Participants:
Kenichi Ohno (GRIPS/VDF), Yoshiaki Ueda (Univ. of Marketing & Distribution Sciences), Nozomu Kawabata (Tohoku Univ.), Tadashi Kikuchi (Keio Univ.), Yuji Sasaoka (GRIPS), Shuji Isone (Japan Carbon Finance), Fan Xiaoju (Waseda Univ.) Nguyen Thi Xuan Thuy (GRIPS/MOI), Azko Hayashida (GRIPS)

Distributed:

- "Workshop on Vietnam's Industrial Strategy, Planning and Policy Formulation by MOI Officials at GRIPS" (handout)
- MOI of Vietnam, "Vietnam Industry towards the year 2020" (powerpoint)

Highlights:
Mr. Duoc explained the general purpose of this mission and what he wanted to learn from Japan. Using slides, Dr. Thanh presented the achievements and structural transformation of Vietnam's industrial sector. The strategic vision, goal and implementation direction toward 2020 were also explained. Free discussion followed.

One participant asked about specific leading industries of Vietnam. MOI explained that there were three groups of industries: (i) industries that are already competitive and can lead the economy in the next five years or so (garment, footwear, food processing, etc); (ii) basic

industries (power, oil, industrial materials, etc); and (iii) leading industries (electronics, electrical, etc).

Another participant raised the issue of the recent power shortages in Northern Vietnam. If this situation continued, it would send a very negative signal to potential investors. MOI explained that power generation required huge investment and the government was trying to diversify financial sources for its development. According to the power sector roadmap, the public sector would be responsible for transmission only and other functions would be privatized in the future.

Ohno raised four issues on numerical targeting. First, what should be the scope of numerical targets (detailed targets for each sector and product, or only overall growth and exports)? Second, what should be done when targets were missed? According to Ohno, missed targets should be studied for future policy improvements rather than be met by any means. There should also be a layered structure of targets from a few key macro targets to industry-specific indicators and product-specific forecasts, each of which should be treated differently. Third, there seemed to be some classification problems (for example, crude oil or mining should not be included in the "industrial sector"). Fourth, would Vietnam really need the five-year plan after 2010?

The MOI side asked whether the number of numerical targets should depend on the stage of development. MOI also noted that, in the past, targets were treated as legal orders to SOEs but Vietnam was now moving towards softer recommendation. The five-year plan was also shifting towards orientation rather than strict targets. It was also argued that, for some material industries like steel and power, numerical demand forecasts and supply targets were still useful. One participant noted that capitalist states used only macroeconomic (fiscal and monetary) policies to influence industries indirectly. Others emphasized the difference between top-down targets and bottom-up targets, and the possibility of other targets like productivity.

The progress of SOE reform was also discussed. Vietnam was currently testing to convert some "decree 90" corporations into joint stock companies. If this proved successful, more "decree 90" corporations and even "decree 91" corporations might be equitized in

the future. MOI was also trying to transform EVN, PetroVN and Vinatex into "groups" (tap doan) of companies.

Other issues included (i) how much environmental concern was incorporated in industrial strategy; (ii) how to cope with international price fluctuation; and (iii) comparison with Chinese SOE reform.

After the workshop, the MOI delegation met GRIPS President Toru Yoshimura.

2. Technical Cooperation Bureau of METI

Location: Ministry of Economy, Trade and Industry, Tokyo
Time: 16:30-18:00, May 30, 2005

METI participants:

Mr. Hisanori Nei (Director, Technical Cooperation Division)
Mr. Tetsuo Ito (Assistant Director, TCD)
Mr. Toshihiro Kodama (RIETI Senior Fellow)
Mr. Mitsuhiro Yokota (Director for ASEAN Affairs)

Mission members: Duoc, Thanh, Ohno, Thuy

Received:

- TCD/METI, "Japan's Technical Cooperation Towards ASEAN, May 2005" (slide printout).
- Toshihiro Kodama, "Role of Government (Industrial Policy)" , excerpts from JCIP, Made in Japan, MIT Press, 1997.
- "Recent Developments under AMEICC", handout, March 2005.

Highlights:

Mr. Nei first explained about trade and FDI linkage within East Asia and METI's economic cooperation in the region. Mr. Yokota briefly explained about the AEM-METI Economic and Industrial Cooperation Committee (AMEICC).

According to Mr. Nei, after the negative impact of the Asian crisis was overcome, economic ties between Japan and East Asian developing countries strengthened. Japanese firms were again shifting production bases to East Asia, including some high-tech processes. Remaining concerns included legal frameworks, protection of intellectual

properties, customs procedure, FDI policy, human resource development, environment, waste management, and so on. Liberalization, facilitation and the sustainability of economic growth were three main concerns. METI's current policy orientation consisted of economic partnership agreements (EPAs, more commonly known as FTAs) and institutional improvements. The Japan-Vietnam Joint Initiative was one of such efforts.

The MOI team wished to see the 1998 trade flow data in the handout updated to a more recent year. It also wanted to know which products would be featured in the (current) second FDI wave from Japan to Vietnam.

Mr. Kodama discussed Japan's high growth era based on his paper. During the postwar period, Japan's main focus shifted as follows: (i) reconstruction (1945-52); (ii) regaining balance-of-payments autonomy (1952-60); (iii) shifting to an open system (1960-70); (iv) adjustment to the oil crises (1970s-early 80s); (v) international cooperation (late 1980s-); and (vi) revitalizing the Japanese economy (1990s-). He emphasized that, during the high growth era, the government used policy loans and tax measures to build infrastructure and assist the downsizing of declining industries. According to him, the view that Japan targeted specific industries was wrong. Policies such as tax incentives for R&D and machinery investment were general and available to all industries. Although selective interventions were attempted around 1960, they were rejected by the parliament or the business community. The visions presented by the government were not mandatory but only indicative. They helped to share future visions between the government and businesses.

The MOI mission remarked that building the government-business relationship was important, but reality was that all industries lobbied for government funds or tax cuts, which posed a headache for policy makers. Mr. Kodama noted that Japan did not offer favorable treatment to specific industries; any enterprise which satisfied certain criteria, in any industry, could receive support. More discussion on sector-specificity of industrial support ensued.

3. Waseda University (Prof. Tran Van Tho)

Location: Prof. Tho's office, Waseda University, Tokyo
Time: 10:30-12:00, May 31, 2005

Waseda participant: Prof. Tran Van Tho (School of Social Sciences)

Mission members: Duoc, Thanh, Thuy.

Received:

- "Phuong huong chien luoc cua Cong nghiep Viet Nam" ("strategical direction for Vietnam's industry", Prof. Tho's article released in The Saigon Times magazine on April 28, 2005, in Vietnamese).
- "Kien nghi khan cap voi CP ve: chien luoc, chinh sach can thiet de phat trien nganh dien, dien tu gia dung truoc thach thuc AFTA" (Urgent proposal to the Vietnamese Government on the strategy and policy to develop consumer electric and electronics industry under the challenges from AFTA), Prof. Tho's Letter to Mr. Tran Xuan Gia, Chairman of PM Board of Researchers, and Mr Hoang Trung Hai, MOI Minister, on May 25, 2005, in Vietnamese).

Highlights:
Prof. Tho discussed his activities as a member of the Prime Minister's Research Board in Vietnam since 1993. He stressed on the development of supporting industries as a potential break-through industry for Vietnam in the context of globalization.

Prof. Tho explained his two recent papers listed above and a plan to publish a book on Vietnam's economic and industrial development. He expressed concern over import tariff policy on the parts and finished products of consumer electronics.

MOI officials appreciated Prof. Tho's academic achievement and stressed that such studies were very useful for formulating strategies, master plans and other policy documents for the sake of Vietnam's industrial development up to the year 2020. More studies were encouraged and closer cooperation with MOI was recommended. It

was agreed that Prof. Tho should make a presentation on Vietnam's industrial development strategy at MOI some time this summer.

4. Japan Bank for International Cooperation (JBIC)

Location: JBIC Head Office, Tokyo
Time: 14:30-16:30, May 31, 2005

JBIC participants:

Mr.Yasunori Onishi (Dep. Director General, Develop. Assist. Dept. 2)
Mr. Takanori Satake (Senior Economist, JBIC Institute)
Mr. Shinji Kaburagi (Advisor, Corporate Finance Dept.)
Mr. Yoshifumi Omura (Dep. Director, Div.2, Develop. Assist. Dept. 2)

Mission members: Duoc, Thanh, Ohno, Thuy

Received:

- Takanori Satake, "Results of Survey of Overseas Business Operations by Japanese Manufacturing Companies: Vietnam and other Asian countries" (handout prepared for this mission).
- JBIC Institute, "Survey Report on Overseas Business Operations by Japanese Manufacturing Companies", Summary, Nov. 2004.
- JBIC, "Development of Vietnam Industry Sector" (handout prepared for this mission).
- Shinji Kaburagi, "Essence to make the best of the comparable competitiveness of the Vietnamese industry" (handout).

Highlights:

The JBIC side made three presentations on (i) the JBIC survey on Japanese manufacturers with particular attention to Vietnam (data received-see above); (ii) JBIC's approach to assisting Vietnam's industrial sector; and (iii) possibility of the ceramics industry.

Dr. Thanh asked if JBIC's manufacturers' survey differentiated north and south Vietnam since this distinction would be useful for policy makers. He also wanted to know if more investors were willing to come to Vietnam after mentioned weaknesses were corrected. JBIC responded that it was difficult to ask detailed questions for each

country since the questionnaire contained many questions and countries, and respondents were in company headquarters. Dr. Thanh also questioned why China, India and Vietnam were grouped together, and the answer was that these were countries that Japanese businesses were particularly interested as new FDI destinations.

JBIC noted that, unlike China and Thailand, Vietnam and India attracted much attention but reported few concrete investment plans. This was probably due to a time element, since it would take some time for investors to gather information and make plans for new host countries.

JBIC's assistance strategy for Vietnam was also discussed. Since SOEs were inefficient and the private sector was still small, it was considered essential that Vietnam absorb a large amount of FDI for industrialization. But not many investors come to Vietnam due to the lack of supporting industries and intellectual property right protection. Local firms should participate in the production network of FDI firms for achieving efficiency and competitiveness. Master plans for key industries, the Japan-Vietnam Joint Initiative, and JBIC's aid portfolio were also discussed.

Mr. Kaburagi emphasized the importance of understanding the taste of foreign customers and marketing to foreign customers' needs. Using the actual samples of ceramic bowls from Danang, he demonstrated that Vietnam had high potential in this industry if proper business orientation was in place.

Ohno noted that the proper use of numerical targets and the choice of leading industries were key issues in Vietnam. While numerical targets might not be suitable for highly developed economies, a country in transition might find them useful, if proper care was exercised. The scope and role of such targets and how to choose leading industries were the crucial question.

5. Honda Motor Co., Ltd.

Location: Honda Headquarters in Aoyama, Tokyo
Time: 10:00-12:00, June 1, 2005

Honda participants:

Mr.Koji Nakazono (General Manager, Overseas Operation Office no.2 - Asia & Oceania)
Mr. Hiroshi Nakagawa (Dep. Gen. Manager, Gov't & Industrial Affairs Office)
Mr. Shigeki Hayashi (Assistant Manager, Asean Motorcycle Dept, OOO no.2)
Mr. Cyril Aguadera (Coordinator, Asean Motorcycle Dept, OOO no.2), from Philippines
Mr. Issarapap Uchotananan (Coordinator, Asean Automobile Dept, OOO no.2), from Thailand
Mr. Junji Hida (Assistant Manager, Asean Motorcycle Dept., OOO no.2)
Asimo (Honda robot)

Mission members: Duoc, Thanh, Ohno, Hoang, Thuy

Received:

- Presentation hardcopy (no title) by Asean Motorcycle Division, Honda.
- Honda Corporate Profile.
- Honda Annual Report 2004.

Highlights:

The mission was greeted by large Japanese and Vietnamese flags and Asimo, Honda's human-type robot. A corporate video was shown, and Mr. Aquadera presented Honda's automobile and motorbike strategies using slides.

Mr. Nakazono welcomed the mission and thanked Vietnam for granting Honda a license to start automobile production (dated March 2005). Mr. Nakazono said that Honda very much hoped to contribute to Vietnam's industrialization and asked for further assistance of the Vietnamese government. He hoped to exchange information and continue talks with the government. He also noted that Honda was the only company that sponsored a large-scale TV campaign for traffic safety in Vietnam.

As to the motorbike, Honda noted that the recent removal of quota restriction on imported parts was very good news. This eliminated the

largest obstacle for expanding production. With rising output, Honda's localization has already reached over 80%, and exports to the Philippines and Laos began.

Other topics such as Honda's future business plans in Vietnam and other countries, as well as remaining issues, were extensively and concretely discussed (not recorded here).

6. Japan External Trade Organization (JETRO)

Location: JETRO Headquarters, Tokyo
Time: 10:00-12:00, June 1, 2005

JETRO participants:

Mr.Ryo Ikebe (Chief Dep. Director, Trade and Economic Cooperation Div.)
Mr. Koji Ida (Assistant Director, Asia & Oceania, Overseas Research Dept.)
Mr. Satoshi Kitashima (Asian Cooperation Div., TECD)
Ms. Dao Uyen Phuong (Asian Cooperation Div., TECD)

Mission members: Duoc, Thanh, Ohno, Hoang, Thuy, Mori

- Koji Ida, "Vietnam's Investment-Related Environment for Japanese Companies".
- Overseas Research Department, JETRO, "Japanese-Affiliated Manufacturers in Asia: ASEAN and India (Survey 2004)", March 2005.

Highlights:
Mr. Ida first presented the evaluation of FDI destinations (including Vietnam) based on the JBIC survey (see the meeting record with JBIC above). Discussion followed.

MOI wondered why the average size of FDI coming to Vietnam was becoming smaller. As to the changeable policy environment, MOI said that the government did not wish to change policies frequently but this was inevitable when external environment changed. MOI was searching for appropriate industries to support (footwear, garment, electronics, food processing, etc), and they hoped to receive global market forecasts for key industries. However, JETRO did not have such

forecasts. Ohno noted that evaluating the potentiality of industries from global forecasts was difficult since Vietnam's performance would not be in parallel with global market expansion.

Mr. Ikebe felt that by now Vietnam already had a fairly good FDI environment. He thought that Vietnam's growth in the last ten years was very impressive and its economy was full of dynamism. He was certain that export processing would expand in the future. Mr. Ikebe also said that enterprises in Vietnam should procure parts not only domestically but also from China and ASEAN for building regional business networks.

Mr. Kitashima remarked that Vietnam's supporting industries remained very weak and could not compete globally unless they improved technology and quality control. Measures to improve supporting industries were discussed, including the vendor company database and reverse trade fairs by JETRO. Ms. Phuong is in charge of such fairs and another fair will be held in Hanoi later this year.

7. Research Institute of Economy, Trade and Industry (RIETI)

Location: METI Annex, Tokyo
Time: 9:30-11:00, June 2, 2005

RIETI participant: Mr.Susumu Sanbonmatsu (senior researcher)

Mission members: Duoc, Thanh, Ohno, Hoang, Mori

Received:

- A memo on the "Study plan on the global management and innovation of Japanese enterprises" (Japanese).
- Susumu Sanbonmatsu, "Innovation and organizational and management reform: the case of the electrical industries", RIETI Discussion Paper Series 05-J-003 (March 2005, Japanese).

Highlights:
Mr. Sanbonmatsu presented the general framework of his research. Each MNC follows its own strategy while responding to changes in business environment. Business style is defined by markets, product line, and value chain positioning. To realize the chosen business style,

each MNC determines management style, design organization and operational processes, and exercise organizational capabilities.

For dynamic competitiveness, two global chains-global innovation chain and global supply chain-are particularly important. To introduce new products continuously, MNCs must always plan and invest ahead for each market. With Japanese MNCs, business architecture for initial product development is often integral but later expansion is based on modularization. Basic platforms may remain the same but additions are made to serve markets in different countries. For efficient production, MNCs must allocate different productive functions to various countries properly for inventory reduction, labor cost reduction, quality, and speed. Leadership and corporate culture (internal common value) are particularly important. If an MNC has strong lead rship and corporate culture for progressive innovation, it can rearrange management resources, redesign organizational structure and power, and alter the resource allocation principle.

MOI wanted to know what Vietnamese firms should do to participate in these chains. Mr. Sanbonmatsu replied that strategies depended on whether products were for export or domestic supply. Clustering is particularly important, and policies for supporting industries and HRD can promote its formation. When and how Vietnamese firms can enter the global value chain depends on each sector. For automobiles, there is already an extensive global production network spanned by MNCs and the question is how to participate in it. For electronics, acquiring proper skills and technology is key. For software, human resources are crucial. In all cases, an efficient electronic communication network was necessary to join the global chain.

8. Automobile Division of METI

Location: METI, Tokyo
Time: 14:00-15:30, June 2, 2005

METI participants:

Mr. Makoto Watanabe (Director for Automobile Policy Planning)
Mr. Junichi Iwasaki (Assistant Director, Automobile Division)
Ms. Atsuko Yoshida (Technical Cooperation Division)

Mr. Tetsuo Ito (Assistant Director, Technical Cooperation Division)

Mission members: Duoc, Thanh, Ohno, Hoang, Mori

Received:

- METI profile brochure, 2004.
- Makoto Watanabe, "Current Status and Challenges of the Japanese Automobile Industry Policy", prepared for this mission.
- JAMA, The Motor Industry of Japan 2005 (bilingual J & E).
- METI, Guide to the Research and Statistics Department, 2004.

Highlights:

Japan's automobile policy in the past and at present was explained. For METI, "surrounding policies" on air pollution, fuel efficiency and traffic safety were historically very important. For these, METI set standards under close consultation with producers. The deliberation council played a crucial role in private-public cooperation in the 1960s. For air pollution, the emission control law was enacted in 1973 which was tightened subsequently. Fuel efficiency was achieved by benchmarking the most efficient producer (top-runner system). Diesel regulation and clean fuel requirements were promoted with tax benefits. More recently, the intelligent transport system and the electronic toll collection (ETC) system have been promoted. Generally, under increasing globalization, the role of METI has included (i) trade negotiations and indicating clear trade liberalization schedules; (ii) coping with energy and environmental issues; and (iii) improving business environment in the Asian region. The government has had no major role in business strategy or promotion of the car industry since private enterprises decide them.

The mission asked whether policies were made by METI or other ministries. METI responded that it all depended on the issue. METI was responsible for technology, safety standards and trade negotiations. Traffic, environment and other issues were handled by other ministries. Inter-ministerial cooperation has been good. Drafted laws were sent to the Cabinet and then to the Parliament for approval and implementation.

Japan has had a long history of promoting supporting industries. The law for rationalizing parts industry and the SME Agency provided

many supporting measures. METI advised that upgrading skills of workers and enterprises was crucial for Vietnam.

The mission asked about controlling traffic congestion. METI replied that the number of cars was only a minor issue. For proper traffic policy, the development strategy for roads and railways is crucial. Infrastructure, traffic control system, urban planning and education are all needed. Japan never restricted the registration of motor vehicles since the freedom of business enterprise was so basic to Japanese policy making. Jakarta, Bangkok and Singapore restrict traffic entering urban centers, but not the total number of cars. According to METI, congestion is a traffic control problem, not a problem of the car industry.

The mission also inquired about channels with the private sector. Drafted laws are always discussed at an official open committee and also receive public opinion for at least one month. For FTA negotiations, METI communicates with the industry via telephone, email and informal meetings to summarize Japan's position before going to the negotiation table. For data collection, there is a law that requires monthly submission of basic data by enterprises. Such data come automatically but with delay. The Japan Automobile Manufacturers Association (JAMA) reports basic data much faster. JAMA also plays a key role in linking government and businesses. If METI needs specific or sensitive data, the reason must be explained. If there is a good reason, businesses will cooperate. Otherwise, they don't. METI usually works with JAMA but sometimes approaches individual companies directly. The mission noted that, in Vietnam, MOI did not contact individual enterprises for policy purposes.

9. Information & Communications Electronics Division of METI

Location: METI, Tokyo
Time: 15:30-17:00, June 2, 2005

METI participants:

Mr. Kazuo Yokota (Deputy Director for International Cooperaton, Information Policy Division)

Mr. Toshihiko Tamura (Deputy Director, Information & Communications Electronics Division)
Ms. Atsuko Yoshida (Technical Cooperation Division)
Mr. Tetsuo Ito (Assistant Director, Technical Cooperation Division)

Mission members: Duoc, Thanh, Ohno, Hoang, Mori

Received:

- METI memo, "On information policy: past policy trends and future direction", Nov. 2004 (Japanese).
- T. Kodama, H. Ueda, and T. Sunada, "Agenda for Industrial Policy in East Asian Countries", RIETI studies in international trade and industry no.16, 1994.

Highlights:

The history of Japan's electronics industry promotion was explained. A shift from heavy industry to the electronics industry was promoted, and locally produced computers were encouraged in the 1960s-80s. Coping with IT innovation, and trade talks on intellectual property rights and semi-conductors were main issues in the late 80s to early 90s. From the late 90s to 2000, e-business was promoted as internet became popular. At present, the e-Japan strategy is METI's main concern. This strategy was explained in detail.

The e-Japan strategy, formulated in 2001, aimed to make Japan a frontline IT nation by 2005. The government created the IT Strategy Headquarters, IT Basic Law, and IT Strategy. It also supported the building of IT infrastructure. One of the targets, creating fast internet (broadband) environment, was already achieved by 2003 in terms of speed and price. For this reason, the policy focus has shifted to the user-side issues including provision of contents, platform, and information services.

METI's policy is conducted in continuous circles: the process of evaluation, goal-setting and implementation is repeated to revise the strategy. The typical policy cycle for electronics lasts 1 to 3 years depending on the targeted product or service. Immediate targets and longer-term goals are distinguished, but the important thing is that policy cycles ensure quick and flexible response to changing situations

and achievements. Goals, periods and criteria are constantly revised. Numerical targets are sometimes used (for health services, for example) but not very often.

The deliberation council on industrial structure concluded in its report in April 2005 that Japan was strong in hardware but weak in IT services. Moreover, it was pointed out that all Japanese manufacturers produced similar IT products leading to excess competition and reduced prices and profits. By contrast, foreign companies such as IBM, Intel and Samsung concentrate on core businesses and generate large profits. For METI, it is difficult to tell Japanese companies to produce what and what not. But if private companies collectively express desire to avoid overlapping in product lines, the government can support their effort. This can be done through publishing official reports, monitoring R&D, and deregulating the industry upon businesses' equest.

Japan's promotion measures are basically the same as in other countries. METI uses tax reduction for introducing IT systems, tax incentive for IT investment, subsidies for developing LSI circuits, and subsidies for IT training of SMEs. Some of the IT training programs are subsidized by prefectures (local governments). METI also supports individuals who get IT licenses and qualifications.

10. Manufacturing Management Research Center (MMRC)

Location: MMRC Project Office, Tokyo
Time: 10:30-12:15, June 3, 2005

MMRC participants:

Prof. Takahiro Fujimoto (executive director)
Mr. Ge Dongsheng (researcher)
Mr. Hai (Tokyo University)

Mission members: Duoc, Thanh, Ohno, Hoang, Mori

Received:

- MMRC profile (English and Japanese)
- Takahiro Fujimoto, "A Twenty-first-Century Strategy for

Japanese Manufacturing", Japan Echo, Feb. 2004 (English).

- Takahiro Fujimoto, The Monozukuri (manufacturing) Philosophy of Japan, Nihon Keizai Shimbunsha, 2004 (Japanese).
- Takahiro Fujimoto, Architecture-based Analysis of Chinese Manufacturing Industries, RIETI/Toyo Keizai Shimposha, 2005 (Japanese).

Highlights:

MMRC is the office of the 21st Century Center of Excellence (COE) Project managed by the University of Tokyo and headed by Prof. Takahiro Fujimoto, the leading authority on business architecture theory[34].

The purpose of this project is to document the integration-based Japanese manufacturing system in detail. Integral business architecture is the source of strength of Japanese MNCs. Prof. Fujimoto's hypothesis is that proper matching of product type and firms' organizational capability generates competitiveness. Organizational capability is country-specific. Japanese and Chinese business styles are different, and trade between the two countries is therefore basically complementary. This can be regarded as a new theory of comparative advantage based on business architecture.

The actual operation of integration-based manufacturing is often unrecorded. This COE project attempts to put it into words. For this purpose, sixteen Japanese MNCs including Toyota, Canon, Honda, Matsushita, Sony, etc. form a consortium and monthly meet at this office. Prof. Fujimoto gave some examples of architecture-based analyses including (i) criticism of full-set mentality; (ii) Toyota teaching a good company to become even better; (iii) Toyota-Dell comparison; and (iv) invalidity of current industrial classification.

[34] VDF is part of another 21st Century COE Project managed by GRIPS and headed by Prof. Kenichi Ohno. This meeting exchanged information and views of two COE projects.

Ohno raised four issues related to business architecture dynamics in developing countries. First, whether modularity-based local firms can survive WTO and FTAs or they will be eliminated (example: Vietnam's motorbike industry)? Second, Prof. Otsuka and Prof. Sonobe of GRIPS identified a common 3-stage pattern of industrialization in developing countries: (i) rise of an initiator; (ii) expansion of copy production with low quality and low price; and (iii) emergence of an innovator to raise quality and competitiveness. The key question is whether transition from (ii) to (iii) requires FDI or it can be done locally. Third, architectural evolution is private sector-driven in Japan, but it may require policy intervention in developing countries. Fourth, can Japan's integral businesses be combined effectively with production in ASEAN (including Vietnam)?

Prof. Fujimoto (as well as Profs. Otsuka and Sonobe) argued that ODA should be used to help developing countries climb the three stages noted above. However, Ohno cautioned that it was very difficult to distinguish unproductive copycats from innovative imitators. If ODA is used to help unproductive copycats, it will fail. Prof. Fujimoto agreed that this distinction was important. He added that the quality of initiators and innovators was also critical. He thought that US-China (modular) and Japan-ASEAN (integral) were potentially suitable production partners. If Thailand and Vietnam acquire additional capability required for integration-based manufacturing, they will become Japan's good manufacturing partners. For this, key elements are transfer of design and engineering capability from Japan to ASEAN, promoting manufacturing-related HRD with ODA, and accumulation of firm-specific knowledge by reducing job hopping.

Prof. Fujimoto is particularly interested in the motorbike industry and visits China and India often. He also came to Vietnam and visited Thang Long Industrial Park. Toyota is inviting Prof. Fujimoto to lecture in Vietnam (end 2005?). Ohno asked him to contact VDF before coming to Vietnam to arrange additional activities. Prof. Fujimoto's COE project will continue until 2007. He hopes to find another funding after that.