MOI-VDF Joint Mission to Japan

June 2005

The Ministry of Industry (MOI) of Vietnam and the Vietnam Development Forum (VDF) jointly organized a one-week mission to Japan in order to gather information and exchange views on the methodology of industrial policy formulation in Vietnam. More concretely, the objectives of the mission included the following:

- To understand the methodology of Japan's industrial policy formulation at present and in the past.
- To study information channels among government, business associations and private enterprises at present and in the past.
- To receive experts' advice on how to formulate industrial strategies and master plans in Vietnam.
- To collect international industrial data needed to analyze leading industries in Vietnam.

This paper contains the mission's main findings and the minutes of meetings drafted by VDF. All responsibility for the content rests with VDF.

Mission location: Tokyo, Japan

Mission period: May 30 to June 3, 2005

Mission members:

MOI:

Mr. Le Van Duoc (Director, Department of Planning)

Mr. Cao Xuan Thanh (Deputy Director, Department of Planning)

Joining from Japan:

Prof. Kenichi Ohno (VDF co-leader/GRIPS)

Ms. Nguyen Thi Xuan Thuy (GRIPS/MOI)

Mr. Pham Truong Hoang (Yokohama National University)

Mr. Junichi Mori (Fletcher School, Tufts University)

MOI members took part in all meetings. The other members participated in some of the meetings. Azko Hayashida and Atsuko Danjo of GRIPS supported the mission.

Part I

Main Findings

Japan is a very important trade, investment and aid partner for Vietnam as well as the leading nation in East Asia's dynamic manufacturing network. The mission fully recognized, even before departure, that Japan's past and current experiences could not be applied directly to Vietnam because of different development stages and socio-economic circumstances. In this sense, Thailand was a much closer example for Vietnam than Japan¹. However, the mission believed that valuable lessons could still be had from Japan if proper modifications were made. We believe that the mission succeeded greatly in obtaining important insights.

METI's role

The Ministry of International Trade and Industry (MITI) is considered to have contributed to Japan's rapid industrialization in the postwar period although the exact extent and scope of this contribution is still debated. Most economists agree that, while private dynamism was central, MITI also played an important assisting role. On the other hand, the view that the Japanese economy was orchestrated by a strong government telling businesses what to do, a view sometimes expressed by foreign observers, is not supported. As the Japanese economy achieved high industrialization and maturity, the role of MITI also diversified into environment, energy saving, safety standards, trade negotiation, intellectual property rights, regional cooperation and so forth. The overall influence of MITI on Japanese industries also declined as large private firms became competitive and globalized. In 2001, the government reorganized MITI into the Ministry of Economy, Trade and Industry (METI).

Even in the high growth period (from the late 1950s to the early 1970s), MITI's role was to coordinate and support private activities rather than dictating them. For declining industries, MITI intervened more strongly in order to downsize and restructure them. MITI also supported R&D in next-generation technology, but not always with success. However, in the case of Japan's highly competitive industries such as consumer electronics, cameras, watches, automobiles and motorcycles, MITI's role was small. Private firms were the driving force of these industries. MITI sometimes tried to reorganize their industrial structure but such efforts often failed to materialize or were rejected by the private sector (e.g., automobile). We must have a balanced view of the role of MITI/METI in the history of Japanese industrialization. It should be neither overestimated nor underestimated.

In automobile and IT (the two METI divisions we met), the role of the government was relatively modest. In the case of automobile, METI has had no major role in deciding output, investment, product design or global strategy of Japanese MNCs. This has been

¹ Our joint mission to Thailand was conducted from Feb. 28 to Mar. 4, 2005. Its findings are recorded in "MOI-VDF Joint Mission On Industrial Policy Formulation of Thailand" available on the VDF web and also reported by Kenichi Ohno at the VDF Symposium on Industrial Strategy Formulation on Mar. 24, 2005 in Hanoi.

true not only today but in the past as well. METI's concern has been various issues related to the industry including air pollution, fuel efficiency, trade negotiation and improving business environment in the East Asian region (sometimes using ODA). These are the areas that cannot be handled by individual companies due to externality or diplomacy. Although Japan had serious air and noise pollution and congestion due to heavy automotive traffic in the past, it never imposed any numerical restriction on automobile registration. METI stated clearly that such restriction would violate the basic principle of free enterprise. It said that road safety and congestion was a traffic control problem of the government, not a problem of industrial production by private companies.

In the case of IT, the METI's role was somewhat greater than in the case of automobile in creating a vision and setting and revising targets. This reflects the fact that IT is a fast evolving industry requiring huge investment and constant adjustments in law and regulation in comparison with automobile which is a relatively mature industry. But it should also be noted that METI's policy touches only part of Japan's entire IT industry which accounts for over 8% of GDP². METI's current policy in this area is the *e-Japan Strategy* initiated in 2001. This strategy aimed to make Japan a top IT nation by 2005, namely this year. However, the target for IT infrastructure (fastest and lowest-cost broadband access in the world), which was one of the four original targets³, was already achieved in 2003. Subsequently, the main concern shifted to the active use of IT by the general population. While METI is relatively more influential in IT than automobile, the government still remains a follower of industrial trends and opinion rather than an enforcer of a strategy in a top-down manner. METI continually listens to the views of the industry and experts in formulating and revising e-Japan Strategy, as we will see below.

Clearly, the government's supplementary role in industrialization reflects the very strong dynamism and competitiveness of Japanese manufacturing enterprises. MITI had to carefully listen to and work with the private sector and implemented policies that were really desired by the industry. In rare cases where MITI tried to intervene in the strategy and organization of private enterprises against their will, policy was not effective.

Channels with the private sector

To play a role appreciated by businesses, MITI needed effective communication channels with them. In fact, MITI's strong and multi-faceted linkages with the private sector in the past were a favorite research topic of foreign scholars such as Chalmers Johnson, Daniel Okimoto, World Bank and Ed Campos. At present, METI still maintains many communication channels inherited from the MITI days although the private sector is now relatively more independent from METI compared with the past.

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² Japan's IT industry is divided into (i) contents and platform (cable TV, mobile phone service, broadcasting, etc); (ii) hardware (computers, mobile phones, audio-visual equipment, consumer electronics, etc); and (iii) information service (system maintenance, software production and sales, information processing, etc). The value of these segments amounted to 19 trillion yen, 9 trillion yen and 14 trillion yen respectively in 2003 with the total of 42 trillion yen (there may be some double-counting if purchasers are not final users). Japan's GDP in 2003 was 502 trillion yen.

³ The other three original targets were e-business, e-government and human resource development (IT training)—see Table 1 below.

Deliberation councils still play an important role in linking government, industry and experts and in generating consensus and solving problems among them. Special committees and study groups also play a similar role. Whatever the name, the mechanism for listening to the industry's needs and opinions before making a policy is well established in Japan. These councils, committees and study groups meet as frequently as necessary and produce reports to identify new issues and map out future directions.

In addition to councils, committees and study groups set up by the government, industrial associations such as the Japan Automobile Manufacturers Association (JAMA) and the Japan Electronics and Information Technology Industries Association (JEITA) provide permanent bridges between the government and businesses. METI usually works with industrial associations to gather information and formulate policies. METI also contacts individual companies by telephone, email and informal meetings as needed. Before going to an FTA negotiation, for example, METI approaches businesses through an industrial association and individual contacts to determine Japan's position. In the case of introducing a new law, the draft is routinely discussed in an official open committee attended by concerned businesses and experts. It also receives public comments for at least one month.

Japanese enterprises are required by law to report basic data such as production, sales and exports to the government every month. However, data collected by industrial associations are usually faster than official data. When METI needs special or sensitive data from enterprises, it must explain the reason. Enterprises cooperate only when they agree with the purpose of such data collection.

Quick implementation and flexible revision

METI's industrial strategy is frequently reviewed and adjusted. In the case of the IT industry, strategies are revised every one to three years depending on the targeted product or service. Let us take a look at the *e-Japan Strategy* mentioned above as an example.

Table 1 shows the evolution of this strategy from Jan. 2001 (establishment) to Sep. 2004. Within this 45-month period, key targets were revised annually and new goals were introduced constantly. Two new bodies were created to revise the strategy. In light of early achievement of the initial targets, the completely revised *e-Japan Strategy II* was formulated in July 2003. Although IT is an area in which speed is essential, it still must be admitted that METI's policy formulation and execution is extremely fast and flexible. Moreover, decided actions are immediately put into practice without delay. This is in sharp contrast to Vietnam where the process of drafting and approving industrial strategies and master plans normally takes years, and implementation is often delayed while operational rules and regulations are being prepared. In the fast-changing IT industry, five-year or ten-year targets are not meaningful since it is hard to predict the industry's direction beyond immediate future.

Table 1. Evolution of Japan's IT Policy in Recent Years

	Activity	Outcome
e-Japan Strategy (Jan.2001-)		
Jan.2001	IT Basic Law & IT Strategy Headquaters established	
Mar.2001	" <u>e-Japan Key Targets</u> " decided: (1) infrastructure, (2) e-business, (3)e-government, (4) HRD; to become top IT nation by 2005	Infrastructure target achieved by 2003
Jun.2002	"e-Japan Key Targets 2002": (1) fast internet 30 million households, (2) very fast internet 10 million households, (3) 98% electronic application & reporting to government by end FY2003	Achieved by 2003
Sep.2002	Special Study Council established to map out new strategy	
e-Japan Strategy II (Jul.2003-)		
Aug.2003	"e-Japan Key Targets 2003": Increasing IT use in (i) seven leading areas: health care, food, life, SME, finance, learning, job, public service; (ii) five cross-cutting areas: next-generation infrastructure, security, R&D, HRD, international strategy	
Dec.2003	Evaluation Special Study Council established	
Feb.2004	e-Japan Strategy II Acceleration Package decided: Asia & global strategy, security contents, deregulation evaluation, e-government	
Mar.2004	ESSC's first report	
Jun.2004	"e-Japan Key Targets 2004": reflecting Acceleration Package above; numerical targets introduced for improving life quality and enhancing firms' competitiveness; to remain top IT nation after 2006	
Sep.2004	ESSC's second report	

Source: METI Commerce and Information Policy Bureau.

The VDF-MOI mission has found in both Thailand and Japan that effective industrial policy formulation requires constructive and continuous contacts with businesses and mechanisms to frequently review and flexibly adjust the policy in implementation. Without these, policy becomes too slow and out of synch with the true requirements of the industry.

Numerical targets

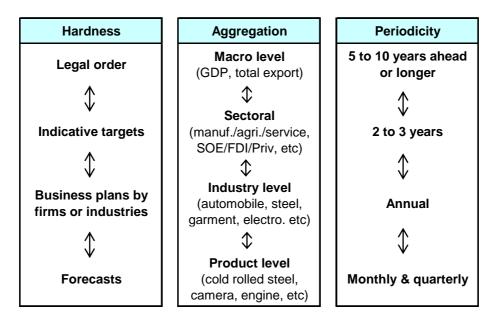
One of the questions raised by the VDF-MOI joint research is how Vietnam should use numerical targets in industrial strategy formulation in the future. It is clear that the method of setting rigid numerical targets for a large number of industries and products and requiring them to be met by any means is no longer appropriate in an economy under market-orientation and international integration. But this does not mean that all numerical

targets must be abolished. Thailand uses numerical targets for the total output and exports of automobiles and motorcycles, and Japan currently uses numerical targets for the household use of broadband internet and the promotion of e-government. Which numerical targets are appropriate and which are irrelevant and even harmful?

In reality, Vietnam's policy making is shifting gradually away from rigid targets to softer guidelines and recommendations. However, quantitative mentality is deeply entrenched from the days of economic planning and difficult to overcome immediately.

For the rethinking of numerical targets, it is useful to consider their different dimensions. Table 2 shows the hardness of targets, the level of aggregation and the periodicity of revision as three key dimensions of real-sector numerical targets. This framework allows us to selectively adopt such targets rather than accepting or denying them in totality.

Table 2. Three Dimensions of Numerical Real-sector Targets



Under economic planning, hard numerical targets bound all levels of aggregation from macro to product level, with five-year plans and annual budgets as key planning cycles. Under market-orientation and international integration, however, legally binding targets are no longer feasible or desirable. Numerical targets should be much less in number and of the other three types (indicative targets, business plans or forecasts).

Long- and medium-term targets on GDP growth, overall export performance or industrial structure may still be adopted, but they should be indicative without legal obligation. At the sectoral and industry levels, the appropriate choice of targets depends on the nature of each sector or industry. For material industries supplying mainly domestic markets such as steel, cement and power, numerical targets based on realistic demand forecast scenarios are still useful. But private enterprises, not the public sector, should gradually become the major supplier, and policy should shift from direct intervention like price and

investment control to indirect coordination of the industry's interest such as drafting reports and master plans and strengthening SI, marketing, procurement, HRD, etc.

For processing- or assembly-type export-oriented industries like electronics hardware, garment, footwear and food processing, collective numerical targets are less meaningful and should be indicative at best. The effort of individual producers and global market competition should determine quantitative performance, and the main goal of enterprise managers should be enhancing innovation, competitiveness and strategic positioning rather than achieving predetermined numerical targets. Furthermore, for dynamically evolving industries like IT and electronics where new products and markets emerge constantly, quantitative forecasts beyond a few years are largely meaningless.

Vietnam in global and regional competition

Japanese MNCs are striving to expand their businesses in highly dynamic and competitive global markets. Whether they invest in Vietnam is not a bilateral consideration between Vietnam and Japan but a move to take a strategic position in the context of global innovation, production and marketing. While improving Vietnam's business conditions is important, this effort must always be made in full understanding of Vietnam's position in the global and regional business environment. Even if Vietnam improves its investment climate, that will not necessarily accelerate FDI inflows if the speed of improvement is slower than in other host countries or if improvements are made in the areas that do not interest foreign businesses.

The perspective of evaluating Vietnam in the context of global and regional business strategy was clearly seen in the following three meetings.

First, JBIC reported the results of the annual survey of Japanese manufacturing MNCs to the mission. According the latest surveys in 2003 and 2004, Vietnam was the fourth most popular FDI destination for Japanese MNCs after China, Thailand and USA. But unlike with China, Thailand and USA, Japanese MNCs had few concrete plans to invest in Vietnam although general interest was high. This was partly because Vietnam was a relatively new host country and it would take some time for Japanese companies to gather information and draft business plans. Japanese MNCs lauded low-cost labor, market potential and human resources as three attractive points about Vietnam, while the weaknesses in the legal system and insufficient infrastructure were the main drawbacks in comparison to other FDI destinations.

Second, Mr. Sanbonmatsu of the Research Institute of Economy, Trade and Industry (RIETI) discussed the strategic dynamics of Japanese MNCs. In his research, key strategic ingredients are markets, product line and value chain positioning. To introduce new products for each major market continuously, MNCs must always plan and invest ahead (*global innovation chain*). Moreover, for high-quality, low-cost and speedy production, MNCs must allocate different functions and processes to various countries properly (*global supply chain*). In all this, management leadership and corporate culture play very important roles. The essential point here is that MNCs come to Vietnam if that

improves their performance in global innovation chain or global supply chain. The government must know what Vietnam can offer to attract them when it launches an FDI marketing campaign.

Third, Honda explained its business situations and strategy to expand Asian production⁴. Recently Honda received a license to produce cars in Vietnam, for which the company was grateful. Honda hopes to build good relations with MOI in particular and with the Vietnamese government in general to realize Vietnam's potential with rising income and highly skilled labor. For motorcycles, India, China, Thailand, Indonesia, Philippines and Vietnam are the key production sites of Honda. For cars, China and Thailand are particularly important in East Asia. When the car production starts in Vietnam, Honda plans to assign Vietnam to produce certain parts for global export. Honda already exports automatic transmission from Indonesia to Asia, EU and US, and its plant in the Philippines also exports manual transmission to global markets.

Partnership based on business architecture

The mission also exchanged views with Prof. Takahiro Fujimoto of Tokyo University at his project office. He is the leading Japanese authority in business architecture theory and his current research documents the *integration*-based manufacturing system which constitutes the source of Japan's competitiveness⁵. For this purpose, sixteen Japanese MNCs such as Canon, Honda, Matsushita, Sony and Toyota cooperate with this project.

According to Prof. Fujimoto's theory, comparative advantage is created when the organizational capability of an enterprise or a country is matched properly with its product (whether *integral* or *modular*). Production partners should also be selected appropriately from the viewpoint of business architecture. Japan is an industrial country with integral capability while the US is an industrial country with modular capability. The US and China are appropriate production partners since they are both modular. Japan and ASEAN countries are also potentially good partners *if* ASEAN improves integration-based manufacturing capability. On the contrary, if ASEAN pursues modularity-based production (copy production with low quality and low price under excess competition), it will lose out against China.

Vietnam must shift from modularity-based businesses to integration-based business in order to avoid direct confrontation with China and to build a more productive relationship with Japan. Prof. Fujimoto emphasized that Vietnam should learn the skills suitable for integration-based manufacturing. The government and donors (including Japan) should also support this effort in the private sector. More specifically, local capability in product design and engineering must be raised in a way directly linked to production processes.

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⁴ Our discussion contained many concrete actions that Honda planned to undertake in the near future whose details cannot be reported here.

⁵ Business architecture is divided into two main types: *integral* (creating original parts for each product) and *modular* (combining common parts available in the market). Competitive Japanese firms often exhibit integral architecture while Chinese firms usually have modular architecture. However, not all Japanese firms are competitive or integration-based. According to Prof. Fujimoto, about half of them are globally oriented and only 10-20% have integration-based manufacturing.

Human resource development for the purpose of high-quality manufacturing is particularly important. In fact, these are exactly the things that Japanese firms are trying to do and what the Japanese government has been doing with its technical assistance programs in ASEAN. However, Prof. Fujimoto's theory puts these ongoing efforts in a new theoretical perspective⁶.

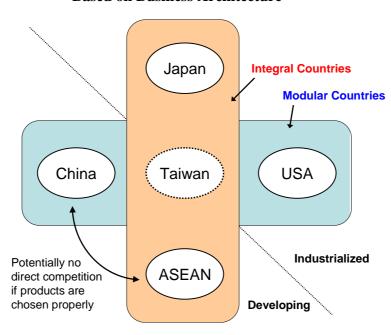


Figure 1. Comparative Advantage and Potential Partnership Based on Business Architecture

Source: Compiled from the mission's discussion with Prof. Takahiro Fujimoto. Note: Taiwan's position in architectural orientation is flexible but ambiguous.

The mission raised three questions related to this view. First, can modularity-based local firms (such as Vietnam's local motorcycle assemblers) survive WTO and FTAs and become the basis of further development or will they be eliminated? Second, in light of the finding that industries in developing countries go through three stages: (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 competitiveness⁷, does the transition from quantity to quality (from (ii) to (iii)) require FDI or can it be done locally? Third, architectural evolution is private sector-driven in Japan, but it may require policy intervention in developing countries.

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⁶ Kenichi Ohno argued that Vietnam should break through the "glass ceiling" of industrialization by not only agglomerating assembly and parts industries (quantitative expansion) but also enhancing technical absorption (qualitative improvement) in the future. Prof. Fujimoto's advice is basically the same as this but phrased in a more analytical language. See chap.1, K. Ohno and N. V. Thuong eds, *Improving Industrial*

Policy Formulation, VDF book published by the Publishing House of Political Theory, 2005.

Tetsushi Sonobe and Keijiro Otsuka, Roots and Strategies of Industrial Development: Lessons from the East Asian Experience, Chisen Shokan, 2004 (in Japanese).

Whether the government and ODA can play useful roles in speeding up this process was also discussed. While policy support is theoretically desirable, actual policies based on insufficient information tend to assist wrong producers (too weak or politically connected producers) leading to a waste of money. Unproductive copycats who will disappear soon and innovate imitators who will contribute to industrialization must be distinguished before assisting local producers. But such a distinction may not always be possible.

These arguments are relatively new and currently evolving in the Japanese academic circle, and answers to the questions raised above cannot be given immediately. But they may provide useful insights to Vietnam's industrialization in the near future when these ideas are better organized and expressed.

Part II

Meeting Records

1. VDF Tokyo special workshop

Location: GRIPS (meeting room 3A), 7-22-1 Roppongi, Minato-ku, Tokyo

Time: 9:30-11:30am, May 30, 2005

Presenters:

Mr. Le Van Duoc (Director, Department of Planning, MOI)

Mr. Cao Xuan Thanh (Deputy Director, Department of Planning, MOI)

Participants:

Kenichi Ohno (GRIPS/VDF), Yoshiaki Ueda (Univ. of Marketing & Dist. 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, Mr. 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 shortage in Northern Vietnam. If this situation continues, it will 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. According to the power sector roadmap, the public sector will be responsible for transmission only and other functions will 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 are 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 pyramidal 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 seem to be some classification problems (for example, crude oil or mining should not be included in the "industrial sector"). Fourth, does Vietnam really need the five-year plan after 2010?

MOI raised a question as to whether the number of numerical targets depended on the stage of development. MOI also noted that, in the past, targets were treated as legal orders to SOEs but Vietnam is now moving towards softer recommendation. The five-year plan is 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 are still useful. One participant noted that capitalist states use only macroeconomic policies (fiscal and monetary) 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 is currently testing to convert some "decree 90" corporations into joint stock companies. If this proves successful, more "decree 90" corporations and even "decree 91" corporations may be equitized in the future. MOI is also trying to transform EVN, PetroVN and Vinatex into "groups" (tap doan) of companies.

Other issues included (i) how much environmental concern is 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. METI Technical Cooperation Bureau

Location: Ministry of Economy, Trade and Industry, Main Building, 1-3-1 Kasumigaseki, Chiyoda-ku, 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, the economic ties between Japan and East Asian developing countries have been strengthened. Japanese firms are again shifting production bases to East Asia, including some high-tech processes. Remaining concerns include legal frameworks, IPR protection, customs procedure, FDI policy, HRD, environment, waste management, etc. Liberalization, facilitation and the sustainability of economic growth are three main concerns. METI's current policy orientation consists of EPAs (FTAs) and institutional improvements. The Japan-Vietnam Joint Initiative is 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 is 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 the sharing of future vision between the government and businesses.

The MOI mission remarked that building the government-business relationship is important but the reality is that all industries lobby for government funds or tax cuts, which is a headache for policy makers. Mr. Kodama noted that Japan did not target 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: 1-6-1 Nishiwaseda, Shinjuku-ku, Tokyo; Building 14, Room 1022

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 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 Vietnam's Prime Minister's Board of Researchers since 1993. He stressed on the development of supporting industry as a potential break-through industry for Vietnam in the context of globalization.

Prof. Tho talked about his two latest 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 and the case of Matsushita Home Appliances Vietnam.

MOI officials appreciated Prof. Tho's academic achievement and stressed that such studies were very useful for formulating strategy, master plan and other policy making 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 tentatively agreed that Prof. Tho should make a presentation on Vietnam's industrial development strategy some time this summer at MOI.

4. Japan Bank for International Cooperation (JBIC)

Location: JBIC Head Office, 1-4-1 Otemachi, Chiyoda-ku, Tokyo, 3rd floor

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. Takehiro Yasui (Dep. Director, Div. 2, Develop. Assist. Dept. 2)

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

Mr. 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 if its 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 in Japan. Mr. Thanh also questioned why China, India and Vietnam were grouped together, and the answer was that these were the countries that Japanese businesses were interested as new FDI destinations.

JBIC noted that, unlike China and Thailand, Vietnam and India attracted much attention but reported few concrete investment plans. Besides the necessity to improve investment climate, time element would be another factor, 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 SI and IPR protection. Local firms should participate in the production network of FDI firms for 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 may not be suitable for highly developed economies, a country in transition may use them usefully. However, the scope and role of such targets and how to choose leading industries were the crucial question. JBIC commented that although it is difficult to choose specific leading industries in Vietnam, labor intensive and export-oriented industries are to be prioritized for further successful development.

5. Honda Motor Co., Ltd.

Location: 2-1-1 Minami Aoyama, Minato-ku, 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. Aguadera presented Honda's automobile and motorbike strategies using powerpoint.

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 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 elsewhere as well as remaining issues are extensively and concretely discussed (not reported here).

6. Japan External Trade Organization (JETRO)

Location: Ark Mori Building 7th floor, 1-12-32 Akasaka, Minato-ku, 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

Received:

- 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 (incl. 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 these fairs and another fair will be held in Hanoi later this year.

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

Location: METI Annex, 11th floor, 1-3-1 Kasumigaseki, Chiyoda-ku, 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. MNCs follow their own strategy while responding to changes in business environment. Business style is defined by markets, product line and value chain positioning. To realise the chosen business style, MNCs determine 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 individual markets. For efficient production, MNCs must allocate different production functions to various countries properly for inventory reduction, lower labor cost, quality, and speed. Leadership and corporate culture (internal common value) are particularly important. If an MNC has strong leadership 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 could 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 SI and HRD can support its formation. When and how Vietnamese firms can enter the global value chain depends on each sector. For automobile, there is already an extensive 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. At any rate, an efficient electronic communication network was necessary to join the global chain.

8. METI Automobile Division

Location: METI, 16th floor, 1-3-1 Kasumigaseki, Chiyoda-ku, 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 have been promoted with tax benefits. More recently, the intelligent transport system and the electronic toll collection (ETC) system are promoted. Generally, under increasing globalization, the role of METI has included (i) trade negotiation and indication of a clear trade liberalization schedule; (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 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 as well as 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. 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 (in Vietnam, MOI does not contact individual enterprises for policy purposes).

9. METI Information & Communications Electronics Division

Location: METI, 16th floor, 1-3-1 Kasumigaseki, Chiyoda-ku, Tokyo

Time: 15:30-17:00, June 2, 2005

METI participants:

Mr. Kazuo Yokota (Deputy Director for International Cooperation, 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 to electronics industry was promoted and locally produced computers were encouraged in the 1960s-80s. Coping with IT innovation and trade talks on IPR 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, METI is pursuing the e-Japan strategy together with other government bodies. 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 has moved to the user-side issues including provision of contents, platform and information services.

Japan's IT 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 (in promoting the use of electronic medical sheet, for example) but not for all.

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 lower price and profit. By contrast, IBM, Intel and Samsung concentrate on their 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 reduce overlapping, the government can support their effort. This can be done through publishing official reports, monitoring R&D, and deregulating the industry upon businesses' request.

Japan's promotion measures are basically the same as those in other countries. METI uses tax reduction for introducing IT systems, tax incentive for IT investment, subsidies for developing next generation semiconductor production technology, and subsidies for the training of IT users at SMEs. Some of the IT training is subsidized by prefectures (local governments). METI also supports the certification system of individual IT engineers.

10. Manufacturing Management Research Center (MMRC)

Location: 3-34-3 Hongo, Bunkyo-ku, 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 (E & J)

- 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 COE Project conducted by the University of Tokyo and headed by Prof. Takahiro Fujimoto, the leading authority on business architecture theory⁸.

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 complimentary. This is a new theory of comparative advantage based on product architecture.

The actual operation of integration-based manufacturing is often unrecorded. This project attempts to put it into words. For this purpose, sixteen Japanese MNCs including Canon, Honda, Matsushita, Sony, Toyota, 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.

Ohno raised four issues related to developing countries. First, whether modularity-based local firms can survive WTO and FTAs or will they be eliminated (Vietnam's motorcycle industry is cited)? Second, Prof. Otsuka and Prof. Sonobe of GRIPS identified the 3-stage

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⁸ VDF is part of another 21st Century COE Project conducted by GRIPS and headed by Kenichi Ohno. This meeting exchanged information and views of two COE projects.

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 and 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/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 accumulating firm-specific knowledge through low labor turnover.

Prof. Fujimoto is particularly interested in the motorcycle 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.

11. Development Bank of Japan (DBJ)

Location: Koko Building 5th floor, 1-9-3 Otemachi, Chiyoda-ku, Tokyo

Time: 14:00-16:00, June 3, 2005

DBJ participants:

Mr. Masahisa Koyama (Director Gen., International & Cooperation Dept, DBJ)

Mr. Hirohiko Sekiya (Senior Executive, Japan Economic Research Institute)

Mr. Kojiro Sakurai (Senior Economist, RICF, DBJ)

Mr. Takashi Sasano (Senior Economist, RICF, DBJ)

Mission members:

Duoc, Thanh, Hoang, Mori

Received:

- M. Koyama, "Japanese industrial policy and DBJ loans in the postwar period."
- H. Sekiya, "Industrial policy and policy-based finance in Japan."
- K. Sakurai, "Theoretical explanation of industrial policies in postwar Japan."
- T. Sasano, "Industrial cluster policy."

Highlights:

DBJ participants delivered their presentations in the order of received materials above. Most of the information was on the past experiences of Japan but some materials were about more recent periods.

Mr. Koyama's "Japanese industrial policy and DBJ loans in the postwar period" made clear that Japan did have some period (1958-1962) of numerical targeting for development. More specifically, annual targets included: (i) export growth of 10.5%; (ii) increase in gross capital formation of 4%; (iii) increase in value-added of 10.5% for heavy and chemical industry and 5.3% for light industry; (iv) increase in private consumption of 5.5%.

Mr. Sekiya's "industrial policy and policy-based finance in Japan" introduced IT promotion loans as an example of an industrial policy which Japan successfully implemented. In addition, two interesting issues were also presented: the practices of industrial policy in its formulation and implementation process, and the key factors for successful implementation of industrial policy under financial and SOE reforms.

In the "theoretical explanation of industrial policies in postwar Japan," Mr. Sakurai explained that the method of income elasticity of demand was used to identify infant industries that should be supported by the Japanese Government in the postwar period. It was interesting to know that the Japanese Government did come up with a reason (though not accepted by all) to support some industries but not others in certain periods. In addition, *Shingikai* (deliberation council), a committee set up by a relevant ministry, provided means to exchange information between government and the private sector.

Mr. Sasano's "industrial cluster policy" showed that Japan was now actively incorporating the industrial cluster approach into industrial policy. Two recent industrial cluster policies in Japan (2001 and 2002) were presented. The interesting point for the mission's research was that the ideas of industrial clusters (approach, domain and implementation) were also widely used in the Malaysian Industrial MP II (1986-2005) more than ten years ago. This point should be studied properly during the proposed MOI-VDF mission to Malaysia later this year.

Due to the time constraint, the DBJ participants and mission members did not have enough time for discussion. Both sides agreed to keep contact and further discussion via email was recommended.