Reforming Key Economic Institutions in Indonesia: Lessons from Korea's Development Experiences

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Knowledge Sharing Project

Reforming Key Economic Institutions in Indonesia: Lessons from Korea's Development Experiences

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Preface

Today, it is widely recognized that the development gap between the developing and developed countries has been fundamentally attributable to the knowledge gap between them. With high acknowledgement of its importance in economic and social development, international society has put forth great effort to narrow the knowledge gap. As a country that made a successful transition to a developed country after the ruins of war and benefited greatly from international society, Korea owes it to the world to share its own developmental experiences with developing countries.

The Korean Ministry of Finance and Economy (MOFE) launched its annual program called Knowledge Sharing Project (KSP) to reduce the gap and assist the development of partnership countries in 2004. Indonesia was chosen as one of the target countries along with Turkey in the second year, 2005-2006. The main job of the project was to give specific policy recommendations for selected current concerns of the Indonesian government - ① Effective Early Warning System, ② Roadmap for Bond Market Development, ③ Effective Training Programs, ④ Export Promotion Institutions, and ⑤ SME Development Strategy.

I would like to express my gratitude to Dr. Soogil Young, President of the National Strategy Institute, and all the project consultants – Dr. Francis Chang Seok Oh, Mr. Chong Tae Park, Dr. Ilho Yoo, Dr. DoHoon Kim, and Dr. Jai Min Lee – for all their hard work. My sincere thanks go to Dr. Soogil Young, the project manager and editor, whose efforts made this project successful. I would also like to thank all the officials of the Ministry of Finance, Ministry of Trade, and P.T. Bank Ekspor Indonesia for their active participation, warm hospitality and friendship. My special thanks go to Minister Sri Mulyani Indrawati for the strong support she has shown for the MOF projects. Likewise, the invaluable advice contributed by Chairman Nyum Jin, former Deputy Prime Minister of the Ministry of Finance and Economy, and all other members of the Steering Committee is greatly appreciated. Last but not least, the members of the International Development Exchange Program have been a great support throughout the project.

It is hoped that this project will make contributions to Indonesian economic development and serve as an opportunity to promote mutual cooperation between Korea and Indonesia. The policy recommendations in this report are based on Korean experiences and are solely the opinions and recommendations of the authors.

Jung Taik Hyun
President
KDI School of Public Policy and Management

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Introduction

The Korean Ministry of Finance and Economy (MOFE) undertakes the Knowledge-Sharing Projects for selected developing countries each year in order to assist the target countries in advancing their economic development by sharing Korea's own policy experiences through policy consultancy. These Projects are administered by the KDI School of Public Policy and Management.

MOFE and the KDI School launched the KSP for Indonesia in May 2005, and appointed Dr. Soogil Young, President of the National Strategy Institute in Seoul and a former Korean Ambassador to the OECD, as the Project Manager. The Korean team of consultants have performed policy consultancy on five specific policy objectives:

- First, developing the Indonesian early warning system (*Consultant: Francis Chang Seok Oh, Korea Center for International Finance*);
- Second, developing the roadmap for the Indonesian bond market (*Consultant: Chong Tae Park, MainStream & Company, Ltd.*);
- Third, improving the education and training programs for the Ministry of Finance officials (*Consultant: Ilho Yoo, KDI School of Public Policy and Management*);
- Fourth, strengthening the effectiveness of trade and FDI promotion (*Consultant: DoHoon Kim, Korea Institute for Industrial Economics and Trade*);
- Fifth, strengthening the support system for small and medium enterprises to support export-oriented industry (*Consultant: Jai Min Lee, The Export-Import Bank of Korea*).

The first three were undertaken at the request of the Ministry of Finance (MOF), the fourth one at the request of the Ministry of Trade (MOT), and the last one at the request of *P.T. Bank Ekspor Indonesia (Persero) [BEI,* the Indonesian Bank Exim].

During the last six months, the Korean KSP Team organized the Pilot Study (October 2005) and the Preliminary Review Workshop (December 2005) in Jakarta, the Final Review Workshop (February & May 2006) immediately followed by the On-Site Workshops in Seoul, and the High-Level Policy Dialogue Seminar and the Public Dissemination Seminar (March 2006) in Jakarta. The exact dates for those workshops differed from project to project[1]. The Korean consultant on the bond market project, in particular, has made six additional trips to Jakarta for the project.

On each project, the Korean consultants worked closely with the relevant Indonesian officials as a single working group. Progress has been rapid with the three projects. As a result, in collaboration with the Indonesian MOF, the Korean MOFE and the KDI School held the High-level Policy Dialogue Seminar at the Borobudur Hotel in Jakarta on March 28 in order to present the KSP Team's findings and recommendations to the senior MOF officials on those three projects. On March 29, the following day, the three institutions held a Public Dissemination Seminar on the roadmap for the Indonesian bond market development, in particular. Public brainstorming, especially, among the relevant institutions and the market participants, was considered to be an input of critical importance to successful development of the bond market in Indonesia.

The Public Dissemination Seminar was attended by several hundred people from the local community of officials, businessmen, and experts, with Mr. Si-Hyung Lee, Director-General of Economic Cooperation, of the Korean Ministry of Finance and Economy, giving the opening remarks, Dr. Soogil Young, Project Manager, presenting a summary report on the findings from all three projects, and Dr. Sri Mulyani Indrawati, Indonesian Minister of Finance, delivering a keynote speech on the recommendations emerging from the bond market development project. This Seminar was followed by a press conference organized by BAPEPAM, Indonesia Capital Market Supervisory Agency, in which the authority announced its "Bond Market Development Plan for Indonesia," which stemmed from its joint work with the Korean consultants on the subject matter.

The present report consists of the final reports, which have been subsequently completed on those five component projects. The key findings from those projects are highlighted in the remainder of the present introductory chapter.

1 _ The dates for the Pilot Study and Preliminary Review Workshop were Oct. 18-21, 2005 and Dec. 19-21, 2005. The dates for the Final Review Workshop and On-Site Workshop were Feb. 20-24, 2006 and May 9-11, 2006. The respective dates for the High-Level Policy Dialogue Seminar and Public Dissemination Seminar were March 28-29, 2006.

Developing the Early Warning System

Problems with the current Indonesian EWS within MOF include the following:

- Human resources making up the surveillance unit are vastly insufficient;
- The surveillance unit is a subdivision within MOF, 4 ladders down from the Minister, revealing a low priority assigned to sovereign risk surveillance;
- There is little provision for the surveillance unit's contacts with the market; and,
- There is too much importance attached to quantitative EWS, and lack of recognition that the main part of EWS should be a qualitative EWS, consisting of a network of experts.

Main *recommendations* are for the Indonesian government to:

- Consider an independent National Surveillance Unit (NSU);
- Create a direct simultaneous reporting line to all relevant players in the public sector, constituting "hot lines" that bypass bureaucratic ladders;
- Create a system of dialogue with the market;
- Create the qualitative EWS system first as the main component;
- Allow the NSU to develop other derivative functions like a Swiss Knife, such as a sovereign IR tool and a financial information hub.

On the whole, the Indonesian government is recommended to benchmark the Korean Center for International Finance (KCIF) for its own independent National Surveillance Unit.

Developing the Bond Market

Three key underlying issues of the Indonesian bond market have been identified:

- There is insufficient real-time disclosure of transaction records, affecting effective market monitoring by regulators. Accordingly, the level of transactional transparency is low, and there is no system to provide official bond price information, so it is difficult to secure fair valuation for the bond portfolio of financial institutions.

- There is a great need to improve the market microstructure to enhance the price formation process and overall market harmonization and competition mechanism. One example is the tax structure, which is different across industries and has affected participation. Another is that the level of access to the transaction infrastructure such as the depository system is not uniform across the industry. There are multiple depository systems for corporate and government bonds, making it difficult to achieve overall Straight-Through Processing

(STP) in the capital market. *All these factors have hampered further market development towards greater efficiency.*

- The lack of a proper and credible information collection and dissemination system makes it difficult for the bond market supervisory authorities to perform an efficient market monitoring and controlling function. There is a great need to improve the regulatory guidelines for the marking to market process that will ensure greater ability to supervise the risk and capital management adequacy of financial institutions (banks, mutual funds, pension funds, insurance funds, etc). On the whole, *market supervision needs to be improved.*

Key short term *<u>recommendations</u>* are for the Indonesian authorities to:

- Develop a fair valuation system for bonds and construct a system for concentrated collection and management of the bond related data, with the long-term goal of developing an integrated bond market information system;

- Strengthen the government bond market, with the long-term goal of expanding and improving the bond trading infrastructure; and,

- Develop a systematic structure of cooperation and coordination among all related authorities, with the long-term goal of developing a single integrated supervisory authority.

The authorities are also advised to create *a single execution body* to promote those recommended tasks and coordinate the support from related organizations of the government.

Improving the Education and Training Programs for MOF

<u>Perspective</u>

Reforming the education and training programs (E&T) for officials cannot be undertaken effectively unless these programs are considered to be part of the public sector human resource management. The E&T reform should thus be undertaken as part of the public sector reform.

Accordingly, the E&T reform should involve many parties such as: FETA, BPPK, and *instansi pengguna diklat* (the users) of MOF, *Biro Kepegawaian*, State Administration Institution (LAN), State Personnel Agency (BKN), and the Ministry of State Apparatus Supervision (Menpan).

Recommendations

The E&T reform agenda may be divided into three categories according to the level of the government involved---national, MOF, and FETA.

National-level Agenda

- Develop and implement a performance-based human resource management system, considering the Balanced Score Card approach to fair performance evaluation, in particular.
- With the progress of individual performance evaluation as part of the public sector reform, also add the consulting service for career development.
- Outsource E&T to private institutions like universities as much as possible over time, if the E&T programs are available in those providers.

MOF-level Agenda

- Develop a performance-based human resource management system.
- Harmonize OJT with the regular E&T.
- Relate supervisors' performance with the results of their staff's E&T.
- For the higher ranking officials, allow them to develop their own E&T (for themselves) making use of vouchers, outsourcing, etc.
- Allow officials with good performance to take sabbatical leave for education and training.

FETA-level Agenda

- Develop programs which are interesting to the trainees by better reflecting their needs in the programs.
    >>For example, allow trainees to use vouchers or the individual learning account (as in the U.S.).
    >>Make more use of e-learning.

- Enhance the expertise of the teaching staff:
    >>Incorporate their teaching evaluation in their performance measurement;
    >>Improve the salary and promotional opportunities for the teaching staff;
    >>Exchange teaching staff with other E&T organizations such as universities and other private institutions.

- Relate E&T directly with the performance and the actual duty of the individual officials.
- Create a research center in FETA to host research by trainers and trainees on training

resources and to create a pool of trainers and experts for the development of these resources.

Promoting Trade and FDI in Manufacturing

Perspective

Major export promotion activities led by the Korean government from the 1960s to the 1990s.

- 1960s(Labor Intensive Industries): monthly export promotion meeting chaired by the President, "Export Day"
- 1970s(Heavy and Chemical Industries): established various industrial complexes, policy loans, "General Trading Company System" acting as a direct window for exporting and matchmaker between overseas buyers and domestic SMEs
- 1980s: rationalization(enhance private sector's initiatives by reducing government interference), trade liberalization policies, market-oriented policies
- 1990s: export insurance services to exporting firms (Korea Export Insurance Corporation established), various promotional measures to upgrade the quality of export products (i.e. R&D assistance, assistance to world-class goods), promotion of FDI

The Korean government established KOTRA and KITA to better assist the SMEs and their export promotion. KOTRA is a public corporation with the mission of promoting exports by providing trading firms with various trade-facilitating services, while KITA is a private organization that provides trade information to its members and educates international trade specialists. In parallel, NAFED and BKPM are the two major export promotion organizations. NAFED is a trade promotion organization but it has structural constraints as a government agency that only hires government officials. BKPM aims to coordinate all matters relating to foreign direct investment in Indonesia, but like NAFED, it has its limits.

Recommendations

- Change institutional status of NAFED and BKPM into public corporations
- Establish an "objective" evaluation on the performance of these institutions
- Consider reshuffling NAFED into a functionally structured organization
- Consider the option of merging NAFED and BKPM to create a synergy
- Consider sending a study team to Korea to benchmark KOTRA and KITA

Small and Medium Enterprises Development Strategy to Support Export-Oriented Industry

Perspective

Although Korea's support system for small and medium enterprises (SME) consists of various elements, in its recommendations, this report focuses on how to improve the effectiveness of Indonesia's BEI as the main institution that provides Indonesian SMEs with financing services for their export-related activities by reflecting on the successful experiences of Korea's own EXIM Bank, the Korean counterpart to BEI. Three specific recommendations for the reform and strengthening of BEI are presented.

Recommendations

First, BEI may be legally reformed to acquire the full status as an export credit agency, with access to unlimited and unconditional guarantee of the central bank.

Second, BEI should develop a rather intensive network of branches over the Indonesian archipelago to be available to assist a major portion of Indonesian SMEs. Branches should be opened in Palembang, Balikpapan/Samarinda, Makassa and Semarang areas, at the very least.

Third, BEI should consider adopting Special Credit Loans, Export Factoring and Forfeiting as specific financial instruments with which to support exporting SMEs.

Chapter 1

Developing an Effective Early Warning System for Financial Crises

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Summary

Francis Chang Seok Oh
KCIF

■ *Problems Identified in Indonesian EWS Development*

i) Insufficient Human Resources.

- Three staff members in the NSU plus one local consultant hired by ADB

ii) Low priority is assigned to sovereign risk surveillance.

- The Head of Surveillance is 4 levels below a DG, and even further below the Minister. Risk signals cannot be transmitted to the high or highest decision-maker fast enough.

iii) There is little contact with the market.

- The market is the place where NSU can get fresh information most quickly.
- Only phone calls to the market people can provide such information quickly.
- In addition, NSU needs to watch changes in the market psychology and the underlying causes.
- The MOF NSU practices only a minimum market contact.

iv) There is too much importance assigned to quantitative modeling.

- NSU is developing four quantitative models.
- Bank Indonesia operates three such models.
- What is missing is the manpower/organization which operates the model, analyzes the outcome, filters out false signals, and produces reports.
- Much more important is the qualitative analysis.

■ *Recommendations*

i) Consider an independent NSU.

- There is an abundance of potential NSU staff in the private sector, but the salary gap and lack of other incentives in the government keep them out.
- As a legal private entity, an independent NSU like KCIF can resolve the staffing problem.
- The output from NSU can be shared by MOF, BI, and related private associations.
- This would also allow direct and instantaneous reporting to the relevant high

authorities.

ii) NSU's reporting lines should be allowed to operate as "hot lines" which can bypass the bureaucratic hierarchical structure.

iii) Create a dialoguing system with the market.

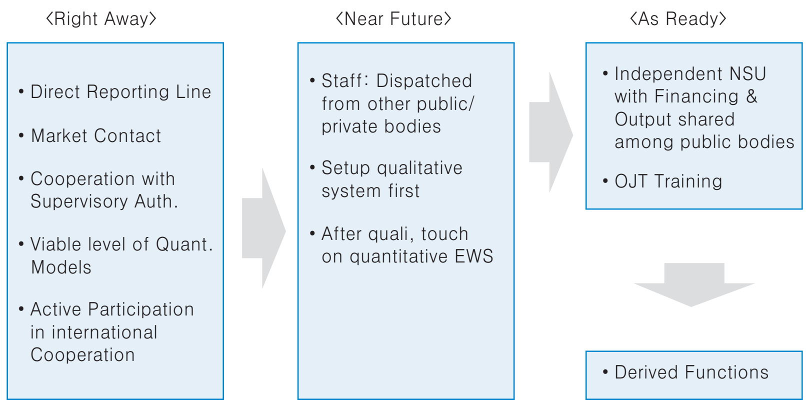
iv) Build and operate the mechanism for qualitative analysis first.

- At KCIF, out of 40 staff, 30 are engaged in this analysis: market intelligence team, research & analysis team, market monitoring team and others engaged in various monitoring activities.
- Quantitative models are intentionally designed to be sensitive to crisis symptoms, and are doomed to issue false signals. Qualitative examination is necessary to balance this sensitivity, and it is also necessary to monitor what models do not look at.

v) Consider other derivative functions of an independent NSU.

- Like a Swiss army knife, KCIF plays many other roles - a sovereign IR tool, a global financial information hub, etc.

■ *Recommended EWS Roadmap for Indonesia*



Chapter 1

Developing an Effective Early Warning System for Financial Crises

1. Background

This report is the final report for the project at the benefit of Indonesian Ministry of Finance (MOF), titled ‘*Developing an Effective Early Warning System for Financial Crises*’. The project is a part of the *Knowledge Sharing Project (KSP)* for the Indonesian public sectors, under the initiative of the *Ministry of Finance and Economy (MOFE)* of Korea. The project has been implemented from November 1, 2005 thru March 31, 2006 under the supervision of the *KDI School of Public Policy and Management* and subsequently *Dr. Soogil Young, President of the National Strategy Institute*.

■ *Project Participants*

Though not comprehensive, the list of main participants in the project is as follows:

<u>Project Consultant</u>: Dr. Francis Chang Seok Oh, Chief Strategist, Head of the EWS Team, *Korea Center for International Finance (KCIF)*, Seoul, Korea

<u>Project Advisors</u>:

Mr. Chong Tae Park, CEO & President, *Mainstream & Company, Ltd.,* Seoul, Korea

Mr. Doheon Lee, Vice-President, *Mainstream & Company, Ltd.*, Seoul, Korea

<u>Indonesian Project Officers</u>

On the qualitative EWS: Mr. Noeroso L. Wahyudi, Senior Researcher, Agency for Research on Economics, Finance and International Cooperation, *Ministry of Finance*, Indonesia

On the quantitative modeling: Mr. Syaifullah, Chief Economist, Surveillance Unit, Center for International Cooperation, Agency for Research on Economics, Finance and International Cooperation, *Ministry of Finance*, Indonesia

■ Project Processes

October 19~22: Project Consultant (PC) visited Jakarta for the Pilot Study.

November 1~11, 2005: PC sent Project Officers(POs) two versions of written questionnaires - one for quantitative EWS, and the other for qualitative EWS for fact-finding purpose.

November 11~December 18, 2005: Each PO distributed the questionnaire to appropriate people and collected their responses to be sent back to PC by December 18.

- Based on the responses, PC prepared follow-up questions to be raised during the Preliminary Review Workshop at Jakarta during December 19~20, 2005.

December 19~20, 2005: Preliminary Review Workshop was held in Jakarta, Indonesia, with the following format:

- Session 1: Introduction to Korea's EWS operation
  - ○ Presenter : Dr. Francis Chang Seok Oh
  - ○ Discussant : Mr. Noeroso L. Wahyudi, Senior Researcher, Agency; Mr. Syaifullah, Chief Economist, Surveillance Unit
- Session 2: The current status of Indonesia's EWS development
  - ○ Presenter : Mr. Maurin Sitorus, Director, Center for International Cooperation, MOF; Mr. Syaifullah; Mr. Senator Nur Bahagia, Institute of Technology at Bandung (ITB).
  - ○ Discussant : Dr. Francis Chang Seok Oh; Dr. Muhammad Handry Imasyah, Consultant of OREI, ADB

December 20~21, 2005: As a final step in fact finding, PC had meetings, in Jakarta, with those who are in charge of each EWS component - qualitative and quantitative. The four meetings with the following were arranged by POs.

- ○ Mr. Senator Nur Bahagia, Institute of Technology at Bandung (ITB) and two of his staff in charge of Artificial Neural Network EWS development
- ○ Dr. Muhammad Handry Imasyah, Consultant of OREI, ADB
- ○ Mr. Noeroso and Mr. Syaifullah, Ministry of Finance
- ○ Ms. Wahyu Dewati, Senior Economist, Bank Indonesia and two of her colleagues in charge of monetary risk monitoring (meeting held at Bank Indonesia)

February 20~24, 2006: The Final Review Workshop & On-Site Training was held in Seoul, Korea. The Final Review Workshop was offered in the form of an international conference with the title, "A Knowledge-Sharing Conference on East Asia's Recent Early Warning System Experiences." The conference was co-organized with the Korea Center for International Finance, KDI School of Public Policy and Management, Indonesian Ministry of Finance, and National Strategy Institute, sponsored by the Korean Ministry of Finance and Economy. The program for the conference is found in Appendix I. The Training Workshop was offered back-to-back to the conference in the KCIF office, where the Indonesian officials had a chance to take a look at the actual operation of the Korean EWS function in person, and to have a question-and-answer session with KCIF staff.

March 28~29, 2006: High-Level Policy Dialogue Seminar and Public Dissemination Seminar was held in Jakarta, Indonesia, where the major recommendations were delivered to the high officials in Indonesian MOF and Bank Indonesia.

2. Development of Early Warning System in Peer Countries

A. Early Warning System in Korea

■ *Concept of the Early Warning System*

An early warning system (EWS) is a system that captures symptoms of a negative event enough in advance. Each EWS takes different methodology and usage depending on the characteristic of the event to forecast on. For example, the Business Leading Indicator, one of the popular tools used in macroeconomic policy making, can be considered as an EWS to capture symptoms of business cycle downturn - a negative event to the economy.

The EWS in this report is the 'currency crisis' EWS which focuses only on the occurrence of currency crisis for a sovereign country. It is due to resource efficiency that a sovereign country wants to operate an EWS at the expense of public budget. Even one successful prevention of the currency crisis sufficiently compensates the public resource allocated to the EWS operation.

■ *Background for Korean EWS development*

There are two aspects for an economy to liberalize itself vis-à-vis global economy. One is to liberalize original transaction, and the other is to liberalize foreign currency settlement. In any country whose currency does not hold the status of international means of settlement, the restriction on foreign currency settlement effectively functions in the same way as that of original transaction.

The Korean economy began to open its goods market to the global economy as early as the late 1960's along with nationwide implementation of an export-oriented growth policy. Service transaction was liberalized in the early 1980's. However, one can say that both markets were effectively liberalized in 1992, when regulations on foreign exchange settlement regarding current transaction moved to a negative list system[1] from positive[2].

Capital account transactions were virtually open at the end of 1997, which was an inevitable choice with such a deep shortage of foreign exchange reserves. However, in a regulatory

1 _ With a negative list system, only the transactions listed by the authority are not allowed while all the others are allowed in principle. Vice versa for a positive list system.
2 _ Korea joined IMF article 8 in 1988, and acquired OECD membership in 1996.

context, it was in 1999 that Korea accepted a negative list system in capital account transactions as well as its settlement. If we focus on foreign direct investment only, Korea adopted a negative list system as early as 1974 for inbound FDI and 1978 for outbound FDI.

Table 1-1 ●● When Korea Entered into Negative List System

	Original Transaction	FX Settlement
Current Account Transaction	Goods : Late 1960's	1992
	Services : Early 1980's	1992
Capital Account Transaction	Almost open in 1997 & Negative List System in 1999	Inbound FDI : 1974 Ootbound FDI : 1978 Others : 1999

Currently, there remain six capital account transactions in Korean authority's negative list, shown in Table 1-2. These will be fully liberalized by 2011 under the government's *Long Term Foreign Exchange Market Promotion Plan* (Promotion Plan), particularly in the context of public initiative toward being the *North East Asian Financial Hub*. Recently, the government announced its intention to accomplish its 2011 target earlier than stated in the *Promotion Plan*.

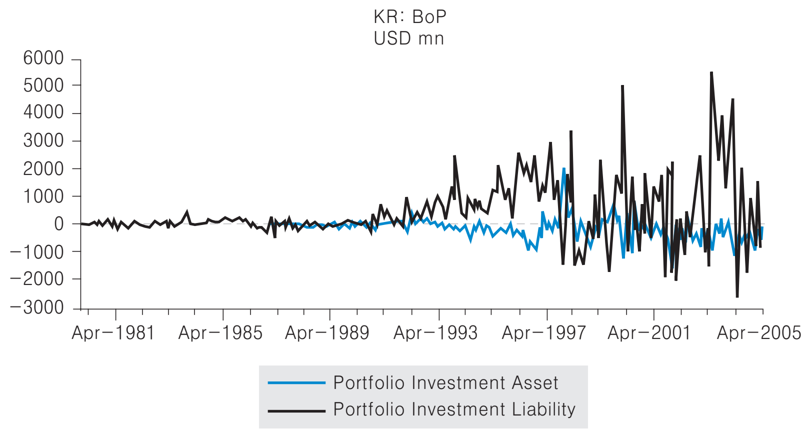
Table 1-2 ●● Remaining Capital Account Transactions in Negative List

Capital Account Negative List as of 1999	2000	Currently
① Corporation's offshore deposit and lending to nonresident		Long-term FX Mkt Promotion Plan: Targeting Full Liberalization by Y2011
② Nonresident's onshore deposit (including trust account) with maturity 〈 1 year	Deleted	
③ Individual's borrowing/lending from/to nonresidents, offshore deposit, offshore real estate investment	Deleted (except R.E.)	
④ Derivative transaction not through authorized FX dealers/brokers		
⑤ Resident's collateral offering for nonresidents		
⑥ Direct transaction of external payment vehicle between residents		
⑦ Resident's short-term borrowing from nonresidents and offshore short-term paper issuance		
⑧ Nonresident's issuance of KRW denominated paper with maturity 〈 1 year		
⑨ Transfer payment between resident and nonresidnet	Deleted	

As an inevitable consequence of liberalization, volatility in cross-border transactions has increased in secular trend as seen in Figure 1-1. Such surge in capital flow volatility necessitated nationwide monitoring tools. As a result, the Korean government armed itself with the following monitoring tools.

① Korea Center for International Finance (KCIF) with Currency Crisis EWS (since April 1999)
② On-line FX Flow Monitoring System (since April 1999)
③ Korea Financial Intelligence Unit (KFIU, since November 2001)[3]
④ FX Position Soundness Surveillance, internally by Financial Supervisory Services

Figure 1-1 ●● Volatility in Capital Movement in Liberalization Trend



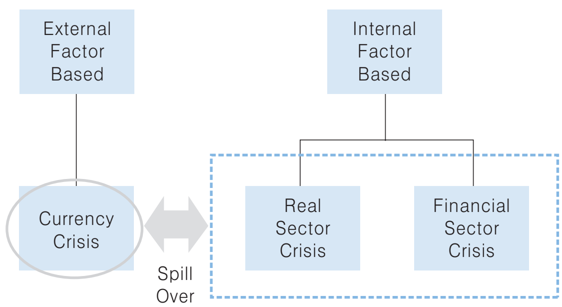
■ *Overview of Early Warning System in Korea*

As the interrelationship between economic sectors gets deeper in the process of economic development and globalization, so does the interrelation between sector risks. For instance, currency crisis does not necessarily come from unbalanced external factors but from internal factors also. As a result, a sovereign country needs to monitor all the important sectors in it more systematically than before.

3 _ Specializes in cross border ‘black money activity’, including money laundering.

At the beginning of 2004, the President of Korea launched the initiative to develop a nationwide early warning system, which covers all the major sectors that deserve systematic monitoring on the government level. Currently, Korea has developed a meta-system of early warning systems covering seven major sectors: Currency Crisis EWS (KCIF's system), Financial Industry Crisis EWS, Financial Market Crisis EWS, Energy Crisis EWS, Commodity Crisis EWS, Real Estate EWS, and Labor Market EWS.

Figure 1-2 ●● Risk Interrelations among Major Sectors in the Economy

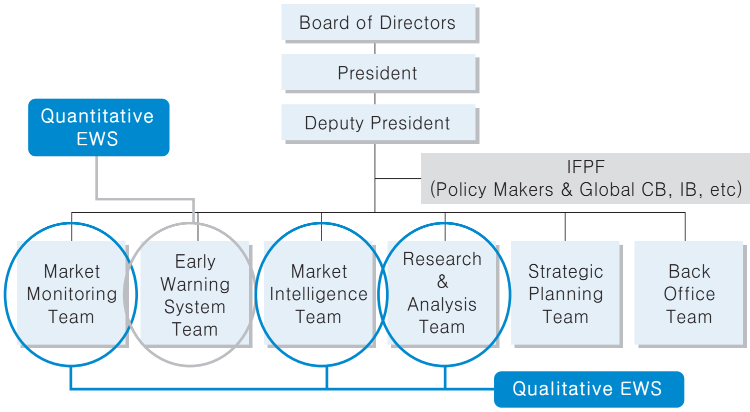


Currency Crisis EWS (FXEWS) was the first developed out of the seven as KCIF was established on April 1, 1999 under the auspice of the Government of Korea and the Bank of Korea. Operation of FXEWS, the primary mandate of KCIF, is decomposed into two parts: quantitative and qualitative. KCIF has four teams in direct operation on FXEWS; three of which are involved in qualitative and one mainly in quantitative as seen in Table 1-3 and Figure 1-3.

Table 1-3 ●● Roles of Each Team in Qualitative EWS

Team	Major Function
Market Intelligence Team	Monitors FX, Fixed Income, Equity, Derivatives, Commodity Mkt
Research & Analysis Team	Monitors Regional Economies including China, Japan, EU, US, EM's
Market Monitoring Team	Monitors new agenda/events in real time, around the clock (1st sensor of risk event)
Part of EWS Team	Monitors Korea-related agenda, changes in global players' view, Contact point with rating agencies, Coordinate IFPF

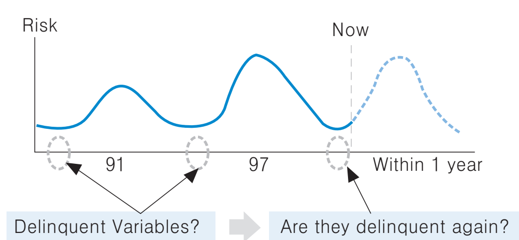
Figure 1-3 ●● Organizational Structure of KCIF



__Quantitative EWS__

Quantitative EWS is internally called FCI[4] Model. This model follows the methodology suggested by Goldstein, Kaminsky and Reinhart (1998)[5] - i.e. signaling approach. The concept of FCI model is straightforward. Criminals are prone to be delinquent again compared to other citizens. Such economic variables that have shown extraordinary behavior before past crises are more probable to show similar behavior when a new crisis is nearing. Hence, if we identify those variables that have shown extraordinary behavior before crises, the average of those variables can be used as an early warning indicator. (Refer to Figure 1-4)

Figure 1-4 ●● Concept of FCI



4 _ Fundamental Based Crisis Index.
5 _ Kamisky, Graciela, Saul Lizondo, and Carmen M. Reinhart, "Leading Indicators of Currency Crises," IMF, IMF Staff Papers, Vol. 45, No. 1 (March 1998)

FCI is calculated on a monthly schedule. In every monthly report, all the recent behaviors of a composite indicator, four sector indicators and all the individual variables are described. The composite indicator is a weighted average of all the individual variables, for which past forecasting performance is used as weight. Four sector indicators are designed to efficiently pin down the problematic sector when the composite indicator issues a warning signal. Each sector is identified by a combination of two measures: ‘internal’ or ‘external’ as well as ‘real’ or financial. It follows that FCI has four sectors: namely internal/real, internal/financial, external/real, and external/financial.

The level of the composite indicator matches one of the five warning zones, from *normal to emergency*, scaled by the extent of risk. Each zone corresponds to special policy actions listed in Table 1-4.

Table 1-4 ●● Policy Actions Responding to FCI Levels

FCI Level	Policy Action
Normal	-
Caution	• Tighter monitoring on domestic/global market, and Cross border short term capital flow • Increase quantity & quality of information shared inside and outside of government for the risk factors identified
Warning	• Strengthen monitoring function on illegal FX transaction • Higher requirement on FX liquidity soundness of financial institutions • Prepare policy action plans on risk factors identified • Active sovereign IR
Quasi-emergency	• Prepare contingency plans on short term FX liquidity shortage • Activate pan-government daily checking system and crisis managment entity • Double check SAFEGUARD trigger conditions
Emergency	• Activate SAFEGUARD following predetermined trigger conditions

A few caveats should be given in understanding FCI’s meaning and usage. First, FCI indicator implies the probability of another crisis within the coming 12 months, not tomorrow or next month. Second, FCI captures primarily *currency crisis*. The other forms of crises are captured generally in the contagion phase. Third, FCI is designed to be sensitive at the expense of false signaling; it is doomed to emit false signals as well as true signals. Hence, careful examination is required before policy action is initiated in response to the signal.

Qualitative EWS

Qualitative EWS is all the monitoring activities being done by the internal teams listed in Table 1-3. Each staff in those teams is mostly a specialist in his/her area, not necessarily a Ph.D. with academic exposure only. The foreign exchange market is monitored by an ex-dealer who has good hands-on experience in commercial banks with global presence, for instance. He has a close connection with current market dealers so that he can always feel at home in making a direct phone call to them.

Major outcomes of qualitative EWS are issue reports in various forms as follows:

i) Quick Report : *International Finance Daily, Special Monitoring Report* (for special occasions such as the Iraq War or North Korean nuclear situation); distributed to the public in general

ii) General Report : *General Monitoring Report, Analysis Report*; distributed to the public in general

iii) Premium Report : *Memo Restricted, CEO Information*; distributed to rather restricted groups, such as the Presidential Office, Government, FSC, BOK, and members & sponsors

iv) VIP Report : *Memo Confidential, Special Report*; distributed only to narrowly classified VIPs

Derived Functions of KCIF

KCIF is also evolving into a sovereign IR tool, as well as an information hub with global financial information being gathered into it. Particularly, KCIF functions as:

- Public chatting channel with rating agencies (Moody’s, S&P, etc.) with formality exacerbated, especially regarding sovereign ratings
- Government’s informal IR channel to global investors
- One of the favorite traveler’s centers for foreign visitors with financial backgrounds
- All other public bodies’ first resort for request information with regard to global financial matters

As the interrelationship between economic sectors get deeper in the process of economic development and globalization, so does the interrelation between sector risks. For instance, currency crisis does not necessarily come from unbalanced external factors but from internal factors also. As a result, a sovereign country needs to monitor all the important sectors more systematically than before.

B. Early Warning System in Thailand[6]

■ *Background for Thailand EWS Development*

The Asian economic crisis in 1997 took a heavy toll on the prosperity, stability and social well-being of many countries of this region. Most nations are suffering from widespread business bankruptcy, abnormally high unemployment levels, and an acceleration of poverty incidence.

Governments and international organization have collaborated to contain the impacts and revive the ailing economies. A number of measures have been introduced and implemented to rescue the afflicted economies. Immediate measures alleviated hardships of the newly unemployed and emerging poor through an increase in government spending. Short-term measures emphasize stimulating economic recovery and assuring sustainability as well as stability of economic growth by means of reforms in leading economic sectors. Long-term measures aim at strengthening international competitiveness and restructuring the economies for entry into the "New Economy."

An achievement of moderate economic growth in the ailing economies points to an early sign of economic recovery. As evidence pertaining to the attempts to solve the economic problems has been mounting over recent years, new findings are being disclosed. They not only reveal puzzles unanswered in the past but also open up a debate over which directions of economic development are suitable for the Asian Nations.

Assessments of the economic downturn and its impacts can pave the way for redesigning appropriate mechanisms, cushioning against similar economic crisis in the future. Lessons learned lead to a consideration of how existing macroeconomic policies, laws, governance, bureaucracy systems, social safety net programs and social capital accumulation are capable of alleviating the impact and preventing future shocks. Though the crisis severity has subsided to some extent, an earnest rethinking of effective approaches to understand these issues is only just beginning.

In the years since the appearance of the Asian Crisis, governments have been struggling to establish an appropriate mix of fiscal and monetary policies that will assist economies in the recovery and bounce back to their long-term growth paths.

6 _ This section is an edited version of the contribution of Mr. Taweesakdi Manakul, Director, Fiscal Policy Office, Ministry of Finance, Thailand, to the Knowledge-Sharing Conference on East Asia's Recent Early Warning System Experiences held in Seoul, Korea on February 21, 2006. The author delivers special appreciation to Mr. Taweesakdi.

Restructuring debts of private and public corporations and improving the performance of the financial section are examples of measures that so far have improved governance in both the financial and real sectors. Nonetheless, the progress of these reforms has been sluggish due to the weakening of the world economy.

■ *Early Warning System in ASEAN Countries*

After the Asian crisis in mid 1997, the ASEAN Finance Ministers Meeting (AFMM 2 December 1997, Kuala Lumpur), Malaysia agreed that ASEAN Countries should have a Regional Surveillance Mechanism to be a channel for exchanging information as well as consultation relating to economics and finance within and outside the region to prevent and avoid the future economic and financial crisis. The Asian Development Bank (ADB) and ASEAN Secretariat jointly consider the framework in setting up the Regional Surveillance Mechanism.

With this concept, the Economic Surveillance Mechanism has been established to monitor and assess the economic condition under the Asian Surveillance Process for which the Asian Development Bank is the agency that provides technical assistance while the ASEAN Secretariat undertakes the coordination role.

The Nation Surveillance Unit was set up in the ASEAN Member Countries to act as the core agency in economic monitoring and exchanging views on regional economic policy as well as development of the Early Warning System.

Later, the Economic Surveillance covered the ASEAN Member plus 3 (China, Japan and Korea) and focused on the use of the Early Warning System (EWS) as the tool for Macro Economic and Financial System sensibility analysis and the forecasting of future crises.

■ *Role of the Fiscal Policy Office*

The Fiscal Policy Office (FPO) serves as the ASEAN Surveillance Process (ASP) on behalf of the Ministry of Finance. The FPO has set up the National Surveillance Unit to serve as a focal point in collating and analyzing data as well as coordinating with other relevant agencies in Thailand including Finance and Macroeconomic Surveillance Unit (FMSU) at ASEAN Secretariat and ASEAN Member National Surveillance Unit.

The FPO has to present the macroeconomic information to the ASEAN Secretariat twice a year.

■ *Overview of Early Warning System in Thailand*

The analysis and study of economic conditions by analyzing the fundamental economic factors would be useful and beneficial, but it has some limitation in the timeliness for the dissemination of the information or the ability to forecast the trend of future economic crisis. Therefore, in order to increase the efficiency and effectiveness in analyzing economic conditions, the FPO has developed the Economic Early Warning System simulation model to analyze the deviation, fragility and crisis possibility.

FPO-Early Warning System is a signal extraction model, which has been used in a lot of research related to economic early warning system. The system consists of the following components:

i) Definition of Crisis (Currency or Balance of Payment Crisis) in this context is defined as a period of extreme movement in exchange rates and international reserves.
ii) Explanatory Variables : could be divided into 6 groups - current account, capital account, real sector, fiscal sector, domestic financial sector and global sector. These represent the leading crisis indicators by technical analysis of the movement of these variables pre crisis.
iii) Crisis Composite Index
iv) Crisis Possibility Calculation

Recently, the FPO has run the simulation model and the result from the simulation was stress tested by taking into account the negative impact of oil price, interest rate rise and a combination of both occurring at the same time.

The result of the stress test shows that from April 2005 to December 2005 the macroeconomics of ASEAN+3 are stable at the satisfactory level. The crisis possibility is low, while oil prices and interest rates in the world market have increased, except for some member countries in a certain period. It shows that if oil price and interest rate increases to a high level, they could have an impact on economic stability of these countries.

The FPO believes that signal extraction is a useful tool to construct an Early Warning System. It is useful at the macro level in identifying the vulnerability of the over-all economic system, and at the micro level in identifying the vulnerability of each respective sector by looking at the components of the composite index.

In addition, the early warning system for the micro level could also be a useful tool for monitoring and assessing the particular sector condition and trend. Thailand has given strong focus to setting up an early warning system for the financial sector, in particular, the financial institution system. The Bank of Thailand, as a main banking supervisory agency, is in the process of developing the system. Thailand also fully complies and employs the international prudential standard.

Furthermore, during the past 2 years, the Ministry of Finance and Bank of Thailand have launched the *Financial Sector Master Plan* (Plan) with aim of reorganizing the financial institution system, due to the fact that there were several types of deposit taking financial institutions in Thailand, by reducing types of financial institution. In doing so, the plan allows certain types of financial institutions to apply for upgrade to the Bank level, such as Finance Companies, and stand-alone BIBF. After the completion of the reorganization, financial institution in Thailand will compete on a level playfield.

The Plan also aims at promoting and enhancing effectiveness and efficiency of financial institutions by reducing the rules and regulations that obstruct the efficiency of financial institutions.

The financial services accessibility of all levels of people in all areas is also one of the important objectives of the Plan.

C. Early Warning System in China[7]

■ *Background*

With globalization and China's further opening, cross-border capital flows between China and the rest of the world are becoming greater than ever before. After China's accession into WTO in October 2001, accelerated trade and economic growth has greatly increased international payment transactions. This trend has had great impact on China's economic and financial situations. It also imposes new challenges for the monitoring and early warning of capital flow vulnerabilities, and prevention of systemic financial risks. Therefore, it becomes an urgent task to establish a capital flow vulnerability analysis and early warning system in China.

To improve China's monitoring of cross-border capital flows, prevent external shocks caused by short-term speculative capital flows, and maintain financial stability, the *State*

7 _ This section is an edited version of the contribution of Dr. Liu Guangxi, Director General, State Administration of Foreign Exchange (SAFE), China, to the Knowledge-Sharing Conference on East Asia's Recent Early Warning System Experiences held in Seoul, Korea on February 21, 2006. Even though he unavoidably failed to make presentation at the conference, the author delivers special appreciation to Dr. Liu. Another special appreciation goes to Ms. Min Zhao, Economist, World Bank Beijing Office, who made an excellent presentation on China's EWS at the Conference.

Administration of Foreign Exchange (SAFE) of China applied to the World Bank for the ASEM grant project named "*Building China's Capital Flow Vulnerability Analysis and Early Warning System*," which lasts from November 2003 to August 2006.

In recent years, many countries have taken measures to cope with capital flow vulnerability and have gained valuable experiences in monitoring capital flows and balance of payments situations. As well known, Korea set up a cross-border capital flow monitoring and early warning system after the 1997 Asian financial crisis, which could send out early warning signals of monetary crisis 12 months in advance. The Brazilian Central Bank has established a market expectation survey system to find market expectations for main economic indicators to be used as a reference for policy makers. Experiences in these countries show that strengthening the monitoring and early warning of capital flows and balance of payments situations is of vital importance to effectively and timely prevent financial crisis.

Learning from the experiences of other countries, the project working team in the SAFE has established a high frequency debt monitoring system and a market expectation survey system. These two systems, the first of their kind in this field, are China's important strategic moves to effectively monitor financial risks brought by financial integration and liberalization. SAFE's work has won the praise of both Chinese and international experts. The high frequency debt monitoring and early warning system is designed to collect and analyze debt data, while the market expectation survey system is used to forecast the development of macroeconomic conditions and the market's expectation for the main economic indicators. These two systems take into account both financial indicators and fundamental economic indicators, static analysis and dynamic analysis, and early warning and decision making, thereby helping to establish an all-around, systematic, dynamic and real time cross-border capital flow monitoring and early warning system and strengthen the ability to prevent financial and currency risks.

■ *Overview of China's Early Warning System*

Thanks to the efforts of SAFE's working team on the project, a series of significant achievements has been made in both research and system development. The team has completed a report on theoretical and empirical analysis of capital flow vulnerability, and successfully established the high frequency debt monitoring system and market expectation survey system.

<u>Conclusions of theoretical research</u>

With the help of experts from the World Bank, IMF, Bank for International Settlements, Korean KCIF, Brazilian Central Bank and other financial institutions, through organizing the research resources of State Administration of Foreign Exchange, Peking University, Fudan University, University of International Business and Economics, Beijing Technology and

Business University, Shanghai Institute of Foreign Trade, China Society of Economic Reforms, China Society for WTO Studies and other research institutions, the project working team carried out theoretical and empirical research on 10 sub-projects. The project working team has also organized a number of workshops and conferences, sent missions to South Korea, Brazil, UK, Turkey, and other countries to draw international experiences and implement a staff training program.

So far, there has been no commonly accepted definition of capital flow vulnerability. The SAFE holds the opinion that capital flow vulnerability refers to the vulnerability that an economic entity demonstrates when affected by capital flows. An economic entity, owing to some structural or systematic problems, or opening up too early to the outside world, may not be able to properly deal with large and rapid capital flows. Consequently, their economy may become vulnerable or even run into financial crisis. By studying international experiences in establishing capital flow monitoring and early warning systems, SAFE has come to the following conclusions:

i) An economy with liberalized capital and financial account should establish an effective capital flow monitoring and early warning system.
ii) Emphasis should be put on the monitoring of financial markets and short-term capital flows.
iii) Asset changes of non-residents should not be neglected.
iv) A unified electronic data network platform is needed.

In theory, a capital flow monitoring and early warning system should take into consideration all the items under capital and financial account of balance of payments, including direct investment, portfolio investment and other investment. However, due to time and resource limits, SAFE has taken a gradual and long-term approach in building a capital flow monitoring and early warning system in China, with emphasis on the most important items at the current stage.

<u>High frequency debt monitoring and early warning system</u>

Large-scale of borrowing was one of the major sources of vulnerability in many countries. China's external debt has been increasing and has become the most uncertain element on balance of payments. Although a debt statistical system has been set up in China, it cannot meet the requirements for capital flow monitoring and early warning under new circumstances. Therefore, SAFE modified the external debt statistical and monitoring system to establish a high frequency debt monitoring and early warning system.

The high frequency monitoring and early warning system is composed of four parts:

indicator analysis, subject analysis, comprehensive analysis and system maintenance. Indicator analysis reveals the interest rate spread (in percent over benchmark inter-bank market rates), maturity of credit lines (in days), and rollover ratio (ROR) for short-term credit lines. Subject analysis studies behavior of indicators across debtors and/or across creditors. Comprehensive analysis analyzes contractual amount, disbursement, outstanding amount, repayment of principal, repayment of interest, overdue payment by dimensions of debt type, debtor, creditor, guarantor, and currency, etc.

The high frequency debt monitoring and early warning system is the first of its kind in China. It is a breakthrough in terms of expanding coverage of statistics, enhancing data reporting frequency, improving data completeness, and enabling flexible analysis. The establishment of the high frequency debt monitoring and early warning system will help to establish a systemic, dynamic, and real time cross-border capital flow monitoring and early warning system. It will also serve to keep the balance of payments in equilibrium. In the long run, it will contribute to Renminbi capital account convertibility and financial stability.

Market expectation survey system

The market expectation survey system is an important part of the capital flow vulnerability monitoring and early warning system. By employing modern technology and scientific survey method, it analyzes the market's speculation on main economic indicators and provides reliable information for decision-making. It serves as a communication channel between policy makers and markets. By realizing dynamic data collection and feedback, this system helps to analyze the reasons behind changes in capital flows.

This project has made two major breakthroughs: First, SAFE completed the theoretical and empirical research of a number of sub-subjects and came up with the theory on capital flow vulnerability. Second, on the basis of the existing external debt monitoring system of the SAFE, the project working team successfully developed the high frequency debt monitoring system and the market expectation survey system. Both systems have passed the assessment of domestic and international experts.

Functioning of the systems

In order to facilitate the functioning of the high-frequency debt monitoring system, SAFE carried out training for Chinese banks' headquarters in Beijing, and the training for other banks, including foreign banks. The system started to operate in Chinese banks on November 1, 2005 and was put into use in all banks on December 1, 2005. Training for institutions using the market expectation survey system was completed by the end of September 2005 and the system's trial functions began in mid October.

To ensure the stable functioning of these two systems, the SAFE established a whole set of working systems:

i) *Daily maintenance mechanism* : The SAFE has established a detailed daily maintenance mechanism to maintain the system and provide technological support service.

ii) *Establishment of the analysis mechanism* : The SAFE will appoint working staff to carry out data analysis, taking into account data from high frequency debt monitoring and early warning system, market expectation survey system, and data from balance of payments and foreign exchange clearance.

iii) *Establishment of related regulations to ensure data quality* : By amending Statistical Declaration Methods for International Payments, Foreign Exchange Administration Regulations, and other related external debt statistical regulations, the SAFE will establish a legal base for data collection, reporting methods, reporting frequency, and reporting information.

Apart from establishing the working mechanism within itself, SAFE will also take other measures. One is to strengthen the coordination of information sharing with other departments. The other is to enhance the training of working staff so as to optimize the functions of the system.

Recent Development : Contingent liability Monitoring

Besides the high frequency debt monitoring and early warning system, the research on China's contingent external debt and the establishment of a corresponding monitoring system is an important follow-up step for the establishment of China's capital flow vulnerability analysis and early warning system. At present, China's contingent external debt mainly includes the following 5 parts:

i) External guarantee by domestic institutions. According to our estimation, the figure amounted to US $40.4 billion in 2004.

ii) Foreign-invested enterprises' un-distributed and un-remitted profits. By 2003, the profits and the dividends, which had not been remitted to foreign investors, amounted to $31.7 billion, accounting for 11.3% of accumulative total FDI.

iii) The "fixed return" project. This kind of fixed return projects, specified by the investment contract and remitting out certain ratio of capital annually, is similar to external debt.

iv) The expense apportions and transfer pricing between the parent companies and their subsidiaries in different countries. This kind of capital flow, which is hard to estimate and monitor, imposes a great challenge to balance of payments.

v) The debt of overseas Chinese-invested enterprises. These enterprises will ask for financial assistance from their domestic parent companies when they encounter difficulties.

For the above mentioned contingent external debt, the SAFE is only in charge of approving the guarantee of external financing by domestic institutions and the statistical and monitoring system has not been established. No statistical system is available for other items. Therefore, accurate data on contingent liability cannot be obtained.

■ *Next step toward a comprehensive capital flow monitoring and early warning system*

Cooperating with the World Bank, the SAFE held an international seminar on contingent external debt in December 2005. By taking the seminar as an opportunity, the SAFE will include indicators such as foreign-invested enterprises' un-remitted or un-distributed profits, loans to overseas enterprises, and external guarantees into the debt monitoring and early warning system. The SAFE will establish a contingent external debt statistical and monitoring system.

The first two decades of the 21st century will bring both challenges and opportunities. In general, the factors causing the surpluses in both current and capital accounts will still exist over a relatively long period of time. The SAFE will accelerate the reform of foreign exchange administration, cultivate a developed and mature financial market, establish the market mechanism and management mechanism for adjusting the balance of payments, and bring into full play the role of the market in distributing resources, so as to keep the equilibrium of balance of payments.

On the one hand, the SAFE will continue to strengthen the role of the market. On the other hand, more attention will be paid to the monitoring, early warning and analysis of cross-border capital flows. The establishment of the high frequency debt monitoring system and the market expectation survey system is only the first step in establishing the capital flow vulnerability analysis and early warning system. To further improve capital flow monitoring and early warning, the SAFE will continue to optimize the functions of the existing system and bring this system into full play. The SAFE will enhance the coordination with other agencies and strengthen staff training. Focused on monitoring of contingent external debt, domestic debt in Renminbi and other short-term capital flows, the SAFE will gradually improve our cross-border capital flow monitoring and the early warning system in the future.

D. Early Warning System in Other Asian Peers[8]

■ *Overview*

The Asian Development Bank has a major supporting role in establishing EWS in the Asian region. The role has been enacted in two aspects - quantitative and qualitative.

Quantitative Aspect

In an endeavor to develop a regional EWS model, which Korea and the ADB launched, the ADB produced a regional prototype of EWS software named Vulnerability Indicators and Early Warning Systems (VIEWS), as a follow-up process. So far, the VIEWS software has been installed in the financial ministries (mostly hosted by the NSUs) and central banks of 9 countries: namely, Cambodia, Korea, Lao PDR, Indonesia, Malaysia, Philippines, PRC, Thailand, and Viet Nam. It is also worthwhile to note that Brunei has expressed an interest in having the VIEWS installed and establishing a NSU as soon as it acquires ADB membership.

Qualitative Aspect

After the Crisis, member countries set up National Surveillance Units (NSU) to develop and diffuse EWS across the region. NSUs were established between 1999 and 2001 with ADB assistance in the finance ministries of Cambodia, Lao PDR, Indonesia, Philippines, Thailand, and Viet Nam, with a view to strengthen national economic and financial monitoring activities. The rest of this section is devoted to describing the qualitative aspect in detail.

■ *Establishment of the NSUs*

Of the six NSU currently established in ASEAN countries, two were created in 1999, two in 2000 and two in 2001. The Indonesian NSU underwent a major structural change in January 2005, when a new office was established, with increased staff and expanded scope and functions, while Lao PDR has talked about the possibility of undertaking a structural change soon.

Table 1-5 ●● Overview of ASEAN NSU

Country	Extablishment	Location	# of Staff
Cambodia	2001	Ministry of Finance	2
Indonesia	2000	Ministry of Finance	7
Lao PDR	2001	Central Bank	5
Philippines	2000	Ministry of Finance	3
Thailand	1999	Ministry of Finance	2
Viet Nam	1999	Ministry of Finance	3

8 _ This section is an edited version of the following material: Survey on National Surveillance Units (NSUs) — Preliminary Results, Office of Regional Economic Integration, Asian Development Bank, April 26, 2005. The author delivers special appreciation to ADB for offering the material.

Location

Five NSUs are located in the Ministry of Finance, while the NSU in Lao PDR is currently located in the Central Bank (Bank of the Lao PDR). These units assume different names in different countries, such as (i) Economic and Surveillance Office or Section; (ii) Sub-division for surveillance; or (iii) National Surveillance Bureau. In some cases there is no separate unit or office, but the typical functions of NSUs are assigned to existing offices such as the International Finance Policy Office in the Philippines, or the International Cooperation Department in Viet Nam.

Function

The main function of NSUs is to assist the country in economic and financial monitoring, in particular as part of the ASEAN Surveillance Process and the ASEAN+3 Finance Ministers Process. Typically, all six NSUs are requested to deliver at least two outputs with regularity: (i) Compilation of Surveillance Data Templates every three months; and (ii) Preparation of National Surveillance Reports every six months. Both outputs, Data Templates and Surveillance Reports, are forwarded to the ASEAN Secretariat, which uses them as inputs for preparing regional surveillance reports. The data templates were prepared by the ASEAN Secretariat with assistance from ADB and include mostly macro economic data on GDP, prices, trade, monetary and banking sectors, and the country's fiscal situation. Surveillance reports differ substantially from country to country in terms of information provided and the level of analytical content. The ASEAN Secretariat has provided on several occasions guidelines for the content of the Surveillance reports.

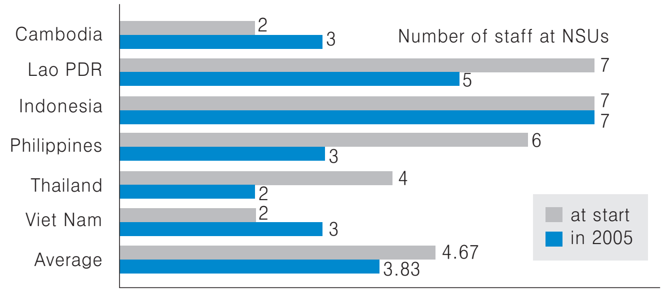
Only the Laotian NSU reported that its activities are limited to preparing data templates and surveillance reports. NSUs in the other five countries perform several other activities. The Cambodian NSU at the Ministry of Economy and Finance is also involved in the production of the monthly Government Price Index and the preparation of reports related to price movements and trends for internal circulation, as well as in providing inputs to the monthly Economic Statistic Bulletin and the Quarterly Economic Review Bulletin. The NSUs located in the Fiscal Policy Office of the Ministry of Finance of Thailand and in the International Finance Policy Office of the Department of Finance of the Philippines have also developed their original Early Warning System models, which they maintain and use to provide inputs for economic policy making. In particular, the Thai NSU prepares internal EWS reports submitted semi-annually to the MOF management. The new and enlarged Indonesian NSU reported to be willing to start soon developing its own EWS model soon as well. An activity which is conducted with particular care by the NSU in Viet Nam is coordination among national agencies for economic and financial surveillance.

Some of the NSUs also reported that from time to time they contribute to analytical work and economic research papers on their countries' economic and financial situations. All the above activities are generally meant to serve the country's economic and financial surveillance functions, which includes both a macro and a micro component and creates the basis for effective surveillance cooperation among ASEAN and the +3 countries.

■ *NSU Staff*

According to the questionnaire survey replies, staff located at NSUs declined from an average of 4.76 at the time of establishment to 3.83 in early April 2005. Notably, staff has declined in the Philippines, Lao PDR, Thailand, and has remained stable in Indonesia, while it has increased by one unit in Cambodia and Viet Nam. Three of the 28 initial staff employed in the six NSUs are still serving in their office; i.e. 19 of the 22 staff reportedly employed in the NSUs in early April joined after the time of the NSU establishment. All in all, more than 50 individuals have been directly involved with surveillance issues within the NSUs so far in the 6 ASEAN countries.

Figure 1-5 ●● Changes in Number of NSU Staff



It is, however, difficult to evaluate the performance and sustainability of NSUs' activities by merely observing the number of staff declared in the questionnaires, as activities vary from country to country and NSU staff is usually requested to perform multiple tasks in addition to the ones related to surveillance. In any case, 3-5 staff is perhaps a suitable number required for an effective functioning of these offices.

■ *Training of NSU Staff*

The average age of staff in the six NSUs is around 34. All NSU Heads have at least a

Masters degree and in one case even a Doctorate degree. They have been working an average 11 years with their Ministries (or central bank) and have an average of 6 years working experience with other organizations. All of them have attended the ADB training program on Regional Economic and Financial Monitoring, one of them a 7-week training program organized by the World Bank, and three of them a 2-week training program of the IMF. All in all, the ADB program on Regional Economic and Financial Monitoring has been attended by more than 80% of the staff currently employed with the NSUs, while only 37.5% attended other surveillance-related training programs of the IMF or the World Bank. One staff has also received training from the Ministry of Finance of Singapore. The training program provided by ADB is considered to be highly related to NSU activities by 46.7% of respondents and medium-related by the remaining 53.3%.

Several suggestions for improving the scope and coverage of training programs were provided by the six NSUs through the questionnaire survey. Following is a summary of proposals:

- In terms of the training program that OREI[9] has been offering since 2001 and currently provides at the ADB Headquarters on Regional Economic and Financial Monitoring, suggestions were made to (i) introduce an advanced component on EWS and its applications to the ASEAN+3 countries, involving more directly NSU staff; and to (ii) increase the number of trainees, especially from countries where an NSU has already been established;

- With regard to specific training needs for NSU staff, the following were identified: (i) economic analytical skills; (ii) English language; (iii) efficient writing of economic reports in English.

- Highlighted were intrinsic problems related to a relatively high staff turnover ratio and structural lack of staff availability in NSUs that make it difficult to plan and conduct proper training and ensure sustainability of activities performed by the NSUs. This may be due to the low attractiveness of government salaries vis-à-vis the private sector, or the slowness of the bureaucratic structure.

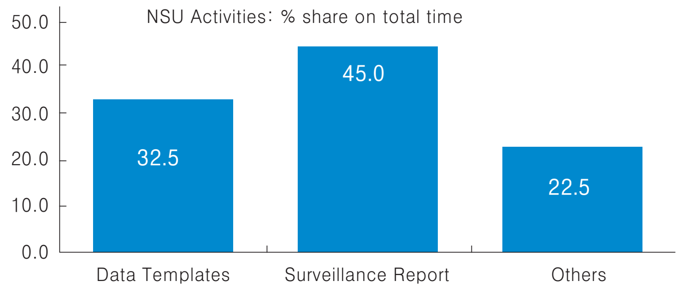
- Others suggested the importance of on-the-job training, due to the experimental component of the work and the lack of international best practice.

9 _ Office of Regional Economic Integration, ADB

■ *Activities*

The six NSUs spend on average 32.5% of their total staff time in compiling the data templates, 45% of the time in preparing the surveillance reports, and the remaining 22.5% for other activities.

Figure 1-6 ●● Job Sharing of NSU Staff



Data templates compilation occupies almost 18% of the time of individual staff in charge of this activity, while the preparation of surveillance reports occupies 19% of individual staff time, as these activities are usually conducted by more than one NSU staff.

Two of the six established NSUs, namely the ones in the Philippines and Thailand, have already started to develop and maintain their own Early Warning System models. In these two countries the average time devoted by NSU staff to compile data templates, prepare surveillance reports and work on the Early Warning System models is more or less the same, around 22.5%. The remaining 32.5% is devoted to other activities.

■ *Issues Related to Data, Report Preparation, and Coordination*

Several problems were identified with regard to the preparation of the surveillance data templates. Availability of data is the most important problem, followed by the timeliness in the release of data from the different agencies. Another relevant data problem is due to the frequency of data releases, in terms of matching the preparation of the data templates, while transparency and reliability of data are perceived as somehow less stringent problems.

The Indonesian NSU is the one that perceives data problems as more important than in other countries. Lao PDR is also facing several difficulties, especially with the frequency of data releases. Other countries expressed relatively fewer concerns on data problems.

In terms of problems related to the preparation of the Surveillance reports, the six NSUs indicated that their major concern is with the technical and analytical capacity of their staff. Availability of data to conduct an analysis of the ASEAN+3 region and capture the economic and financial interdependence with other countries is perceived as another problem affecting the preparation of the surveillance reports.

Problems were also identified with regard to the inter-agency coordination function that NSUs are supposed to conduct at the national level. While, this does not seem to be a major problem in many countries, it was suggested that as surveillance is a relatively new mandate for the Ministries of Finance, inter-agency responsibilities are still being threshed out and that overall more time should be devoted to enhance inter-agency coordination, especially in preparation of surveillance reports and EWS model results. Suggestions were made to initiate a series of discussions among national agencies, also with the assistance of OREI and the ASEAN Secretariat.

■ *Suggestions*

All six NSUs suggest that ADB should continue the assistance program, including support for equipment, statistical software, training and workshops, consultants, etc. It was also suggested that the new program gets NSUs together through, perhaps, a joint-workshop on a yearly basis, and that updated data template be stored on either ARIC or ASEAN Secretariat Websites for reference and future use.

Given the very sensitive nature of the issues related to surveillance, which involve the intrinsic risk of giving wrong signals to the markets and starting self-fulfilling crises, it was also suggested to use great precaution in using the EWS software to be distributed by OREI. While strict security measures should be applied when installing the software, it may be appropriate that NSUs' higher authorities be the main entities to make decisions on how to release empirical estimations to the public and the way to share results among relevant agencies.

Another relevant suggestion was made to establish an OREI Alumni Program with ADB taking the lead in setting up a secured electronic database, or a simple group email, where a rotating facilitator can put issues at hand for the discussion of the NSUs.

E. Early Warning System in Non-Asian Peers

Non-Asian peers, including New Zealand and Sweden, have no explicit public unit such as NSU that specializes in EWS operation. However, it is interesting that the EWS-like operation is taken charge of by the government debt management offices (DMOs). This makes sense in that the government is the last resort when a crisis comes.

It is noteworthy that the DMOs manage sovereign risk in terms of balance sheet rather than financial flow. For example, in the late 1980s, the New Zealand Debt Management Office (NZDMO) focused on foreign-currency debt net of foreign-exchange reserves in order to minimize the volatility of the public balance sheet in New Zealand dollar terms. Their major tools are mean-variance modeling. In the 1990's, NZDMO extended the approach to the government's reported balance sheet.

To be sure, the balance sheet approach is an important complement to the flow approach in the sense that it is difficult to identify the weakness of the economy only by looking into the flows. It is one of the areas that Asian countries need to dig into.

3. Current State of Indonesian EWS Development

Indonesian EWS is under development in two streams - one in the Ministry of Finance (MOF), and the other in Bank Indonesia (BI, the central bank). The Ministry of Finance and Bank Indonesia maintain the NSU and the FSSU (Financial Stability Surveillance Unit), respectively in house.

■ *EWS Development in the Ministry of Finance*

The Indonesian MOF is keenly interested in developing an operational early warning system against possible future currency crises. Thus it has already launched a project to develop an EWS model based on the artificial neural network framework (NNEWS), as well as non-parametric (IHEWS) and parametric framework (IPEWS). The modeling work has been outsourced to the Institute of Technology, Bandung (ITB).

In a separate development, the Asia Development Bank (ADB) has recently completed a "Regional EWS" model (REWS) for the Asian economies that is based on the non-parametric, or equivalently, the signaling approach. ADB has packed the model into a software, which can be operated on a personal computer. It is currently distributing it to member countries, including Indonesia and Korea. The Indonesian MOF, however, finds that the ADB's REWS does not perform very well for Indonesia because it does not incorporate the idiosyncrasies of the Indonesian economy. Moreover, REWS is a black box software, of which the source code is hidden to the users with the copyright remaining owned by the ADB. Inaccessibility to source code made it difficult to reflect national idiosyncrasies in the model, discouraging the MOF from employing REWS as Indonesia's official tool for EWS. Accordingly, the Ministry is motivated to develop three EWS models that reflect the idiosyncrasies of the Indonesian economy and offer accessible source code through outsourcing to ITB.

It is thus expected that the Indonesian government will soon have four different EWS models for its utilization, the REWS, the NNEWS, the INEWS, and the IPEWS with the architecture of REWS and the INEWS being closely similar.

In a discussion with the visiting Korean pilot study team on October 20, 2005, and in explaining this situation to the team, the Ministry showed a strong interest to learn from the Korean EWS that is being operated by the KCIF, and in particular, to develop another quantitative model for the Indonesian economy that would be similar to KCIF's own model for the Korean economy based on the signaling approach.

However, the KCIF's model carries almost the same architecture as INEWS, partly similar to IPEWS, which is already under development through outsourcing to ITB. It has been found unnecessary to develop another version of KCIF-styled quantitative model. The interview at Jakarta on December 19, 2005 with Dr. Senator Nor Bahagia, Professor, ITB, has only reinforced such a finding.

Operating multiple EWS models could increase the government's confidence in identifying a potential future crisis when the signals from a majority of the models commonly indicate a crisis. However, the government also runs the risk of getting confused when the signals contradict each other. It would also be costly to develop and run multiple models. If multiple EWS models are running, it is recommended that the government has a priority among models, choosing one main model and regarding the others as auxiliary.

Table 1-6 ●● Quantitative EWS in Indonesia

Body	Models	Developed by
NSU	Non-parametric	Institute of Technology at Bandung (ITB) *by Industrial Engineers
	Parametric	
	Artifical Neural Network	
	Non-parametric (VIEWS 1.0)	ADB
Bank Indonesia	Non-parametric	Internal Staffs
	Parametric	
	Markov Switching	

All the models that NSU develops take a single set of 17 macroeconomic indicators listed below:

- current account related (4): real exchange rate, export, import, terms of trade
- capital account related (4): foreign reserves, M2/foreign reserves, bank's foreign liability/foreign asset, external liability/foreign reserve
- financial sector related (5): M2 multiplier, domestic interest rate, lending rate, domestic credit/GDP, bank deposit
- real sector related (1): stock prices
- global economy related(3): world oil prices, U.S. interest rate, USD/JPY real exchange rate

If the above list were compared with Korean list of variables, it would produce an interesting result. However, it is regrettable that Korean list is a classified information mostly due to its potential impact on the currency market. Instead, two caveats for the Indonesian list are offered in the following:

First, real effective exchange rate is more recommendable than real exchange rate. The two do not create much discrepancy in countries as Mexico and Canada that highly depend on U.S. in international trade. However, for Asian countries who has high exposure to non-U.S. counterparts - for instance, Japan and China - real effective rate would work better as an indicator of trade competitiveness.

Second, bank's foreign liability/asset ratio should reflect derivative positions. More often than not, reported bank's balance sheet shows only cash positions in foreign exchange, with derivative positions only footnoted. When the ratio represent cash positions only, it might not carry its original implication - i.e., bank's vulnerability to international liquidity shock.

After a series of field studies in Jakarta, it has been identified that Indonesia has sufficient capacity in building up a quantitative early warning subsystem by itself, but confronts a problem in setting up a qualitative one.

The quantitative subsystem is a system of statistical software, consisting of the 'models' discussed above. The qualitative subsystem is composed of the whole organizational system in which staff who are mandated with the early warning operation undertake analyses and make judgments based on the output from the quantitative subsystem.

The National Surveillance Unit (NSU) is in charge of both subsystems. Organizationally the unit is a team composed of four experts, reporting to the Center of International Cooperation, a directorate in MOF. Even though the unit is additionally supported by an ADB consultant, a Ph.D. in Economics, four people are by all means short of appropriate manpower needed for viable EWS operation. In Korea, for instance, as many as forty people are working full time for the whole EWS operation. With the current manpower shortage, it is highly suspected that even the quantitative models are not satisfactorily handled by the NSU after ITB's delivery.

■ *EWS Development in Bank Indonesia*

In the qualitative aspect, BI established the *Financial System Stability Unit* (FSSU) for conducting the micro and macro level analysis required to detect systemic vulnerability.[10] The FSSU has around 30 people (master degrees in economics, banking and finance) and 4 Ph.Ds in economics and banking. FSSU intensified its research and surveillance, which is aimed to asses and monitor the trends and risks of the domestic financial system. It conducts qualitative EWS

10 _ This is in line with the IMF recommendation and Letter of Intent with the IMF.

on aggregate banking and stress testing on individual banks, while the *Directorate of Economic Research and Monetary Policy* conducts qualitative and quantitative EWS on macro indicators and currency. In case of emergency, the FSSU has a direct reporting line to the Governor of BI.

In the quantitative aspect, BI has internally developed the INEWS and IPEWS, which is now in operation. In addition, BI developed the Markov regime switching EWS model that generates probability of switching from tranquil to crisis condition and overcomes the sample dependent threshold problem. The result of the quantitative EWS is limited only to internal use of BI.

Differently from Korea, Indonesia does not yet have an independent financial supervisory authority, which is in charge of financial crisis EWS[11] in Korea. Only recently, Indonesia began talks on establishment of independent financial supervisory authority.

11 _ A currency crisis occurs when the major players in an economy fall into a shortage in international liquidity. On the other hand, financial crisis occurs when they fall short of local currency liquidity. The widely an economy integrate itself to global capital market, the more probably the two crises cause each other. This report, however, focuses only on currency crisis EWS, as financial crisis EWS stands outside of the terms of reference, and is worth a topic of another independent research project.

4. Lessons from Experiences

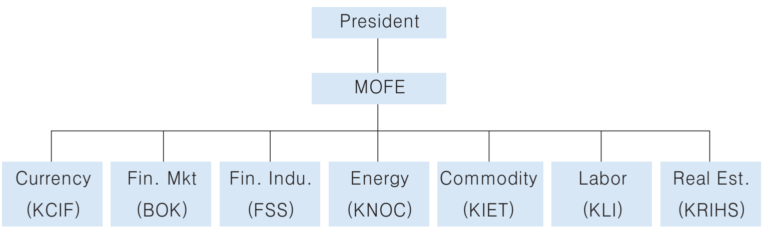
In the following, several lessons found in countries' experiences in the operation of EWS are listed.

■ *Growing necessity of EWS system in emerging market countries*

As an inevitable consequence of capital account liberalization in emerging countries, including Korea and Indonesia, volatility in cross-border financial transactions has been and will increased in secular trend. Such surge in capital flow volatility necessitated nationwide risk monitoring tools, represented by the early warning system (EWS). In addition, it has been many emerging market countries' experience that, once a crisis breaks out, it takes enormous nation-wide pain and endeavor to recover. Operation of an EWS cost is virtually nothing when compared to such recovery cost. With volatility growing in cross border capital flow, prevention becomes more and more economical than cure. The role of an EWS system in an economy is compared to that of a neural system in a human body: "Without a good neural system, one is destined to burn his/her hands off on a stove."

■ *It is good to have centralized national risk monitoring.* No two bodies should be responsible for the same area. As already seen, Korea has already centralized all seven EWS components under one umbrella, efficiently avoiding duplication.

Figure 1-7 ●● Korea's National EWS



■ *The body in charge of EWS should maintain close cooperation and communication with relevant monitoring bodies, including government, central bank, and financial supervisory authorities.* On top of monitoring an umbrella committee, it is recommended that manpower and surveillance information be shared among related bodies. Korea maintains, as the umbrella committee, the Economic Situation Examine Committee, presided over by the Deputy Prime Minister. Members of the committee include related ministers, the Governor of the Bank of Korea, and the head officials in the Presidential office. Meetings are held periodically and also when needed. Manpower is shared between bodies in Korea. MOFE, BOK, FSS staff are transferred and/or dispatched to the KCIF, and KCIF reports are shared by all the public bodies who show demand for them.

- *Quantitative and qualitative EWSs need to be equilibrated.* Quantitative EWS consists of single or multiple statistical models, including nonparametric, parametric or ANN model. Since any quantitative model is intentionally designed to be sensitive to crisis symptoms, qualitative examination (or qualitative EWS) is needed to balance the sensitivity of the model. A qualitative EWS is all the monitoring structure and activities composed and practiced by human experts. Such expertise is useful in checking the correctness of a risk signal as well as in monitoring whatever the model fails to look at.

- *Appropriate inventory of manpower is important in the operation of EWS*. Operation of quantitative models does not need heavy manpower. For instance, in Korea, only three KCIF staff are involved in the operation of quantitative EWS modeling, although the number is expected to grow as KCIF introduces new models to its menu. In another instance, an ADB survey in 2005 shows that, in the Philippines and Thailand, where NSUs operate their own models, the average time devoted by NSU staff to modeling is just 22.5%. However, it is noteworthy that these quantitative staff must be experts at hands-on level in econometrics as well as computer programming. For qualitative EWS, the manpower demand is far bigger than quantitative. While each qualitative staff is a specialist - not necessarily a Ph.D. - in his/her specific area, the number of area to be monitored is by no means small. As a reference the current workforce of the Korean KCIF is listed in the following.

- *Chief Economist*: Ph.D., Finance, Chicago Univ.
- *EWS Team*: 1 Head (Ph.D., Economics, expertise in econometrics & macroeconomics), 2 Model Operators (M.A., Economics, expertise in econometrics & macroeconomics), 2 Foreign View Monitors (B.A., in UK/US), 1 Dispatched from KEXIM, 1 Dispatched from BOK
- *Market Intelligence Team*: 1 Head, 2 FX specialists, 2 Fixed Income Specialists, 2 Equity Specialists, (all are ex-market players), 1 dispatched from BOK
- *Research & Analysis Team*: 1 Head (Ph.D., Economics) 1 EU Specialist (Ph.D., Economics), 1 Japan Specialist (Ph.D., earned in Japan), 1 China Specialist (Ph.D., earned in China), 1 BRICS (ex. China) Specialist (M.A.), 1 dispatched from FSS (Director General level)
- *Market Monitoring Team*: 1 Head (Ex-Director of NY & Tokyo Office, KEB)

- *New York Office*: 1 American Director, 1 Secretary

- *Multi-model approach should be economical*. It has been witnessed that many ASEAN countries endeavor to have multiple EWS models, spanning from signaling, parametric, ANN, structural VAR and Markov switching. However, it should be checked whether only the same, not various, aspects of the economy are looked at through different colored glasses. For example, usage of the same set of signaling input variables to parametric models does not tell much more. Also, before developing any new model, the development and maintenance costs have to be sufficiently cheap relative to its effectiveness.

- *International cooperation is needed in monitoring contagion effects*. Contagion effect, or vulnerability of one economy to the shock from another economy, can be fully monitored only by regional cooperation. For example, Korea's financial exposure to Indonesia is not comprehensive when measured only inside of Korea, and vice versa. The whole picture can be captured when data from both countries are collected and compared.

5. Recommendations

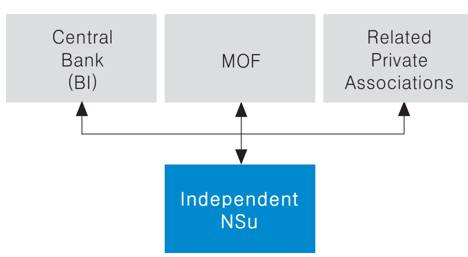
The current Indonesian situation in EWS development is carefully compared with the above lessons, which results in the following recommendations.

- *Consider establishing an independent NSU*. Indonesian Surveillance Unit (NSU) has only three staff including the unit head, plus one local consultant hired and provided by the ADB. Those four staff might be sufficient if NSU operates only on quantitative aspects of EWS and if they were all hands-on econometricians. However, those four staff are found to work additionally on the qualitative side, including data compilation and National Surveillance Report preparation. ADB is offering a regular training program - 'Training Program on Regional Economic and Financial Monitoring' - to ASEAN NSU staff, including Indonesia. The program has been attended by 80% of NSU staff. However, training alone does not give the full answer, mainly because of the following two problems.

  - First, high staff turnover, partly due to salary gap vis-à-vis the private sector, weakens the effectiveness of the training program. Actually, while the Indonesian private sector is abundant in potential NSU staff, salary gap and lack of other incentives prevents NSU from attracting them. The lack of incentives is partly due to salary ceiling regulation in the public administration law.
  - Second, OJT program, not lectures, is in greater demand, but such opportunities are rare.

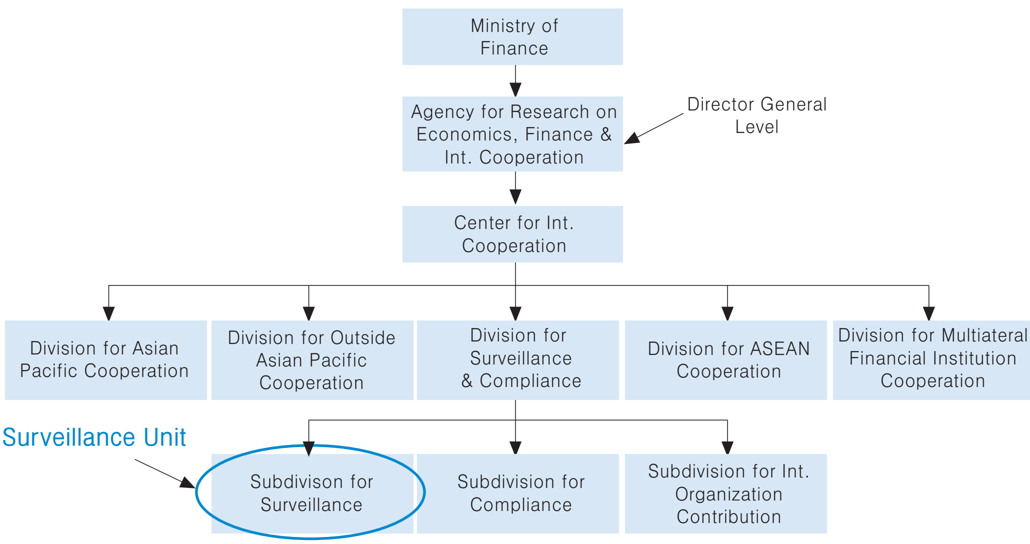
One way to resolve the staffing problem is to set up an independent NSU, whose funding and manpower could be shared among supporting bodies. A legally private entity is free from public administration law and is able to offer appropriate incentives. This is the way the KCIF operates.

Figure 1-8 ●● Concept of Independent NSU



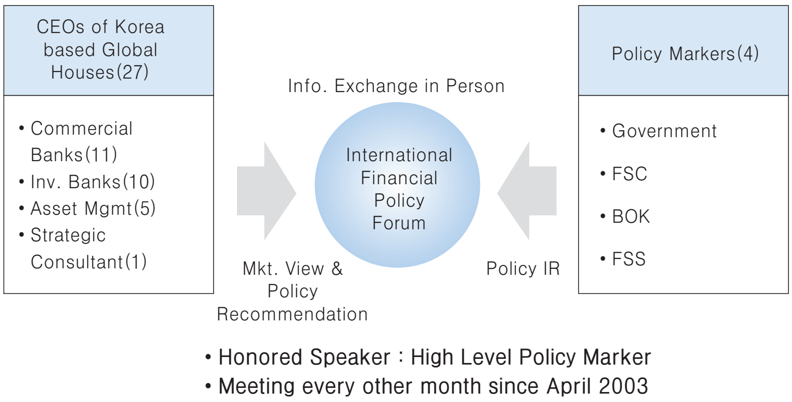
- *Consider direct reporting line*. Despite taking high risk, Indonesia put too low a priority on sovereign risk surveillance. NSU's reports reach the Minister only after three steps of interim clearance, which might take days. It means that risk signals can not be transmitted to policy makers within an appropriate time. In Korea, if considered important, KCIF reports are delivered to all the necessary parts of the public sector at once with minimum time spent. Indonesian NSU's reporting lines are recommended to be 'hot lines' which can bypass the bureaucratic ladder.

Figure 1-9 ●● Current Location of Indonesian NSU



- *Keep dialogue with the market.* It is found that Indonesian NSU is maintaining only minimum market contacts. The market is the place where NSU can get the quickest and freshest information, which is why many public risk watchers, including Bank Indonesia, Chinese SAFE, Korean KCIF, and other central banks keep close contact with the market players. Specifically, Korean KCIF operates the International Financial Policy Forum (IFPF), which KCIF coordinates the International Financial Policy Forum (IFPF), a closed discussion forum held every other month. IFPF membership is open only to the international financial or finance-relate institutions with presence in Korea, and major public decision makers - Government, Bank of Korea, and financial supervisory authorities. IFPF serves as one of the important information sources in relation with qualitative EWS.

Figure 1-10 ●● International Financial Policy Forum



At the end of 2005, Indonesia established a Financial Sector Stability Forum (so called FSSK), which consists of BI, MOF and Deposit Insurance Corporation. Part of the FSSK activities are to facilitate coordination and exchange of information among these authorities and to provide dialogue with market players. In addition, one of the main tasks of FSSK is to provide relevant information to assist the Coordinating Committee (Ministry of Finance, Governor of BI and Insurance Deposit Corp. Executive) in making decisions on failed banks.

The conversations in the FSSK meeting, however, are to be informal and kept classified vis-à-vis any third parties, including mass media. Otherwise, it runs the risk of frank opinions' not being delivered. Also, the relationships between high officials should descend down to the staffs, who probably need the network most badly in writing reports. High officials should be responsible for network maintenance at the staff level.

- *Put priority on the qualitative EWS*. Indonesia already seems abundant in models. NSU has almost finished its development of non-parametric, parametric and artificial neural network models with the help of the Institute of Technology at Bandung (ITB). ADB has provided VIEWS 1.0, flexible software with which the user can easily run a non-parametric model. In addition, Bank Indonesia internally developed a non-parametric, parametric and Markov switching model of EWS. What is needed in Indonesia is a qualitative EWS - i.e., manpower and organizations that operates the model, analyzes the outcome, filters out false signals and finally produces reports. Only after sufficient research power is secure for qualitative EWS, it is recommended that Indonesia develop further quantitative models which looks at new aspects of the sovereign risk.

■ *Consider derivative functions of the qualitative EWS as additional benefit*. Once well organized, NSU could also work as a Swiss army knife, which carries multiple derivative functions. For instance, Korean KCIF is evolving into a sovereign IR (investors relations) tool, as well as an information hub as global financial information accumulates.

■ *Other recommendations*

- Sovereign risk management manual, which Korea prepared in 2005.
- In developing a quantitative model, an economist is needed. It has been witnessed that Indonesian NSU EWS models are being constructed only by engineering people, running the risk of having technically correct but economically incorrect models.
- The apprentice system is one of the best ways in training hands-on staff.
- Critical statistics in risk monitoring can be frequently found in the financial supervisory authorities, not in the National Statistics Office.
- Keep on listening and watching what other countries do.
- Learn the experiences of other countries who went through currency crises. As currency crises come in many different forms, case study will help to enhance prediction power of NSU.

6. EWS Roadmap for Indonesia

All the above recommendations are sorted in a timeline framework, constructing the recommended EWS roadmap for Indonesia.

■ *Step 1 (Right Away)*

- Construct direct reporting lines
- Promote market contacts
- Activate cooperation with supervisory authorities
- Develop quantitative modes up to viable extent
- Actively participate in international cooperation processes

■ *Step 2 (Near Future)*

- Invite staff dispatched from other public and/or private bodies
- Set up qualitative EWS
- Only with operational qualitative EWS in place, touch on further quantitative EWS

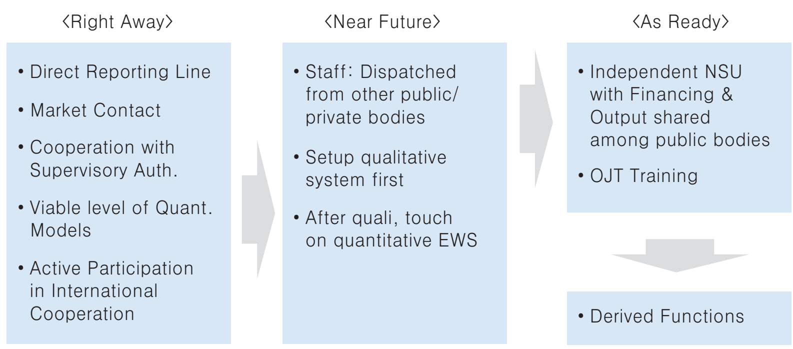
■ *Step 3 (As Ready)*

- Set up independent NSU with financing and output shared among public bodies
- Start OJT training when capability is even partially harnessed

■ *Step 4 (As Ready)*

- Develop derived function of the independent NSU

Figure 1-11 ●● Recommended EWS Roadmap for Indonesia



Appendix I

Program for A Knowledge-Sharing Conference on East Asia's Recent Early Warning System Experiences

Co-organized by

Korea Center for International Finance,
KDI School of Public Policy and Management &
Indonesian Ministry of Finance,
National Strategy Institute, Korea

Sponsored by

Korean Ministry of Finance and Economy

Time: February 21, 2006, 09:00-12:40
Venue: International Conference Hall, KFB Building, Seoul, Korea

Program

08:30-09:00 Registration
09:00-09:20 Opening Remarks
- Mr. Jin Byung-Hwa, President, KCIF
- Dr. Young Soogil, President, NSI Forum & Projects Manager

09:20-10:20 The State of the Early Warning System in the Post-Crisis Asia: Trends, Challenges and Policy Implications

Presentations:
- China's EWS and Experiences with it, by Ms. Min Zhao, Economist, World Bank Office in Beijing, PRC
- Thailand's EWS and Experiences with it, by Mr. Taweesakdi Manakul, Director, Specialized Financial Institution Division 3, Fiscal Policy Office, Ministry of Finance, Thailand
- Philippines's EWS and Experiences with It, by Ms. Gilda Victoria Mendoza, Director, International Finance Policy Office, Department of Finance, Philippines

10:20-10:30 *Coffee break*

10:30-11:10 Discussion

- Necessity for Regional Cooperation in Sovereign Risk Monitoring, Je-Yoon Shin, Deputy Director General, International Finance Bureau, Ministry of Finance and Economy, Korea
- Free discussion

11:10-12:30 Developing an Effective EWS for the Indonesian Economy

- Draft Recommendations, by Dr. Francis C.S. Oh, KCIF
- Discussion

  Dr. Maurin Sitorus, Director, Center for International Cooperation, MOF, Indonesia

  Mr. Syaifullah, Head, National Surveillance Unit, MOF, Indonesia

12:30-12:40 Concluding Remarks, by Dr. Young Soogil

Appendix II

Information Sources of the Korea Center for International Finance

■ Monitoring Source

- 20 IB & CB Reports including Merrill Lynch, Morgan Stanley, etc.
- Rating Agency DBs, including S&P, Moody's and Fitch
- Proprietary Info. Sources, including Bloomberg, Reuters, Dow Jones
- Research Institutions, including Oxford Analytica, World Market Research, IIF
- Specialized Periodicals, including FT, WSJ, Economist, Euromoney
- Major Think Tanks, including Heritage, Brookings

■ Global Network

- Global Scoped IB, CB, Mutual Fund, Pension Fund, Hedge Fund
- New York Office of the Korea Center for International Finance

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Chapter 2

The Roadmap for Bond Market Development in Indonesia

The Roadmap for Bond Market Development in Indonesia

Chong Tae Park
MainStream & Company, Ltd.

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Also, we would like to acknowledge Ms. Angela Yap of BondWeb Malaysia for her editorial assistance in facilitating this report.

Our thanks for their support in realizing the potential and vision of this initiative.

I. Introduction

The Indonesian Ministry of Finance expressed its interest in seeking technical assistance from Korea on municipal bonds issuance. The discussions on the subject that took place in Jakarta during October 18-19, 2005 between the visiting Korean Pilot Study team and the Indonesian Ministry of Finance, however, led to the agreement that the priority of the Ministry is to develop an overall roadmap for the development of the bond market for the Indonesian economy.

The discussions have also identified many diverse requirements from the Indonesian government's perspective such as:

1. Government Bond Market
   - Price Discovery Mechanism and Transparency Initiative
   - Retail Government Bond Development

2. Non-Government Bonds
   - Municipal Bonds
   - Derivative Market Development
   - Corporate Bonds (Credit and Fair Valuation)

3. Market Stability and Risk Disclosure
   - NAV Accounting for Financial Institutions including Mutual Funds
   - Risk Disclosure

Our team has re-categorized the Indonesian requirement into two perspectives:

- Development of the Government Bond Market as a pre-requisite and catalyst for development of other market segments
- Improvement in Market Efficiency in the 3 major pillars of Information Infrastructure, Intermediary Infrastructure and Regulatory Infrastructure

1.1 Project Objective

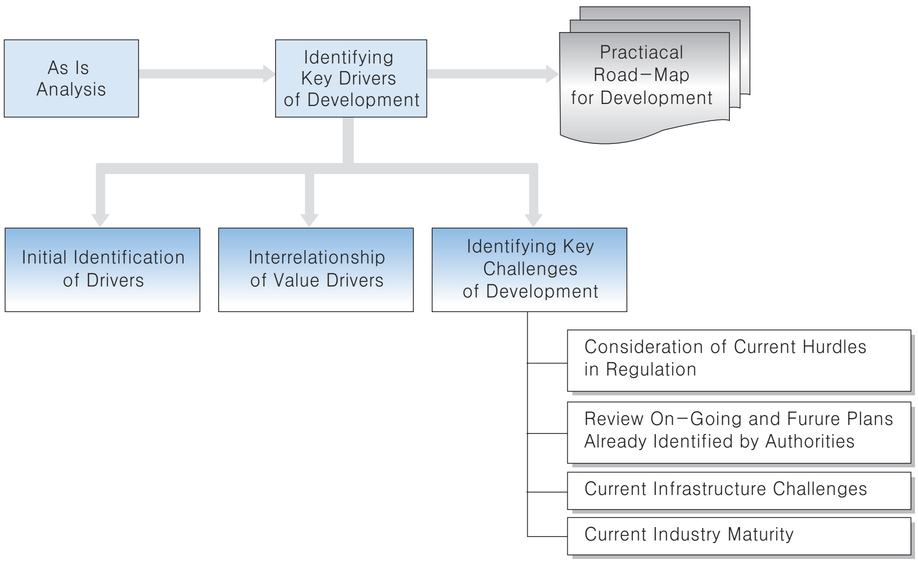
The present project will aim:

- To assist the Indonesian MOF in drawing a roadmap to develop bond markets in general, deriving and prioritizing key initiatives geared to this goal; and
- To provide technical practical guidance on the specific development identified in the

roadmap for market development.

Strategy

The research was conducted as a joint and interactive work by both the consultants and the Indonesian Project Officers hereafter defined as Project Team Members. The consultants undertook a full review of the Indonesian Bond Market from the 3 Pillars of Efficiency (Information, Trading and Regulatory) with specific focus on the Government Bond Market. The Project Team will provide information on the state of the Indonesian bond market, serving as local research partners performing the “as is” analysis and assisting the consultant in deriving the drivers of development which will eventually lead to the Road Map.



For the in-depth analysis of the market, the project team received tremendous support from BAPEPAM, Bank Indonesia, Debt Management Office, BAPEKKI, and Self Regulatory Organizations such as KSEI, KPEI and SSX. The Project Team undertook data analysis and interactive interviews with market participants, infrastructure providers and regulators.

2. As-Is Analysis of the Indonesian Bond Market

2.1 Government Bond Market - "As Is" Analysis of Product and Market

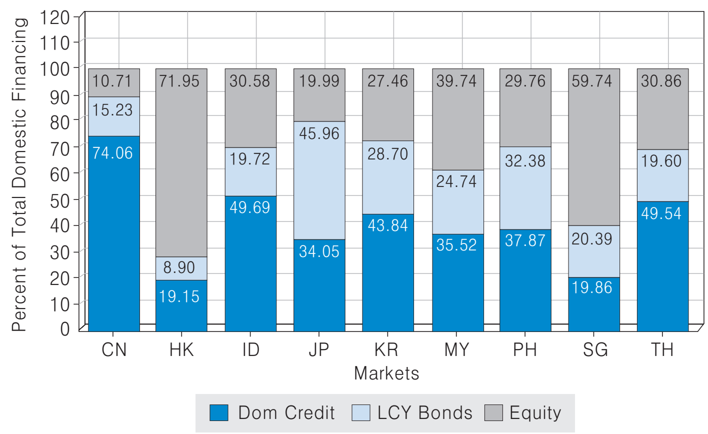
Since coming out of the Asian Financial Crisis in 1997, affected Asian economies began to reposition themselves in an increasingly globalized economy. Bond market development emerged as a key fundamental reform agenda to strategically improve the credit formation process which was previously extremely bank-centric. Prior to 1999, the Indonesian bond market, for both government and corporate actors, was almost non-existent as major credit formation was heavily dependent on the fragile banking sector. The crisis put tremendous pressure on the payment system, resulting in liquidity and credit stress on Indonesian institutions and led to massive flight by local and foreign investors due to quality.

Table 2-1 ●● Domestic Financing Profile Indonesia

	Percent of Total Domestic Financing			In USD billions			
Observation	Domestic Credit	Bonds	Equity	Domestic Credit	Bonds	Equity	Total
Dec-95	60.05	1.8	38.15	104.81	3.15	66.58	174.54
Dec-96	55.62	3.58	40.8	124.04	7.99	91	223.03
Dec-97	67.4	4.46	28.15	69.56	4.6	29.05	103.21
Dec-98	71.49	6.53	21.98	71.81	6.56	22.08	100.45
Dec-99	46.07	23.45	30.48	69.8	49.28	64.04	210.12
Dec-00	52.25	31.85	15.9	88.12	53.71	26.81	168.64
Dec-01	54.71	30.89	14.4	87.36	49.33	23	159.69
Dec-02	54.81	29.78	15.41	106.97	58.11	30.07	195.15
Dec-03	49.54	27.54	22.91	118.19	65.71	54.66	238.56
Dec-04	48.03	22.94	29.02	121.23	57.91	73.25	252.39
Sep-05	49.69	19.72	30.58	119.6	47.47	73.61	240.68

Source: ADB

Figure 2-1 ●● Indonesia Year 2005 in comparison to ASEAN+3 Majors



Source: ADB

Indonesia, with the exception of the People's Republic of China, has the highest dependency on domestic credit as a major source of financing in the local currency. This "traditional" lending practice of banking institutions for providing long term loans to corporations stifles positive growth[1] in the bond market.

The Indonesian Government began developing its market from 1999 as part of its post-crisis deficit financing program. Its initial issuance consisted of bonds which were privately placed to the respective banks for the purpose of banking recapitalization. Its issuance profile includes both tradable and non tradable issuances.

Table 2-2 ●● Indonesian Market Size of Tradable Bonds

	As a Percentage of GDP				In USD billions			
Period of Observation	Govt	Corp	Fin Inst	Total	Govt	Corp	Fin Inst	Total
Dec-95		0.8	0.6	1.4		1.8	1.4	3.2
Dec-96	1	1	1.2	3.2	2.5	2.5	3	8
Dec-97	0.4	0.9	0.7	1.9	0.9	2	1.7	4.6

1 _ Banks in Indonesia have been lending directly to Corporate Clients at lending periods extending 15 years and above which act as a direct competitor to the Corporate Bond Market

Dec-98	4.4	1.1	0.8	6.3	4.6	1.2	0.8	6.6
Dec-99	30.6	0.9	0.5	32	47	1.4	0.8	49.3
Dec-00	30.9	0.9	0.6	32.4	51.2	1.5	1	53.7
Dec-01	29.3	0.8	0.5	30.6	47.2	1.3	0.8	49.3
Dec-02	28.4	0.8	0.5	29.6	55.7	1.5	0.9	58.1
Dec-03	25.6	1.4	0.9	28	60.1	3.4	2.2	65.7
Dec-04	20.1	1.7	1	22.8	51.2	4.3	2.6	58.1
Dec-05	15.5	1.5	1	18	43.6	4.1	2.8	50.5

Source: ADB

Table 2-3 ●● Overall Issuance of Government Bonds

Government Debt Securities	Nominal	% of GDP
I. Government Domestic Bonds		
1. Fixed Rate[1]	IDR 189,164,022,000,000	7.14%
2. Variable Rate[1]	IDR 210,703,290,000,000	7.95%
Sub Total	IDR 399,867,312,000,000	15.08%
3. Bond to Bank Indonesia	IDR 220,898,830,294,530	8.33%
Sub Total	IDR 220,898,830,294,530	8.33%
Total Government Domestic Bonds	IDR 620,766,142,294,530	23.41%
II. Government International Bonds		
1. INDO-06[1][3]	USD 400,000,000	0.15%
2. INDO-14[1]	USD 1,000,000,000	0.38%
3. INDO-15[1]	USD 1,000,000,000	0.38%
4. INDO-16[1]	USD 900,000,000	0.34%
5. INDO-35[1]	USD 600,000,000	0.23%
Total Government International Bonds	USD 3,900,000,000	1.48%
Total Gov't Debt Securities	IDR 659,902,642,294,530	24.89%

Notes: 1) Tradable 2) Non-Tradable 3) Managed by Bank Indonesia
Assumptions: 1. Exchange Rate(IDR/USD)=10,035(Source: Bank Indonesia, Dec. 1, 2005)
2. GDP 2005=Rp 2,651.2 trillion

The Indonesian Government Bonds (IDR denominated) current issuance profile is at an early stage of benchmark securities building, whereby it can be observed from the Debt Distribution (refer to Figure 2-2).

- Multiple Series in Small Issue Size below IDR 6,000,000,000,000

- Sporadic Distribution of Floating Obligation vs. Fixed Rate Obligation
  - In extreme cases year 2009 - all obligation are Floating Rate, market participants currently do not trade Floating Rate Obligation due to lack of any hedging mechanism or products

- Sporadic Distribution of Maturity along month of Year

Figure 2-2 ●● Total Debt Distribution by Month and Year

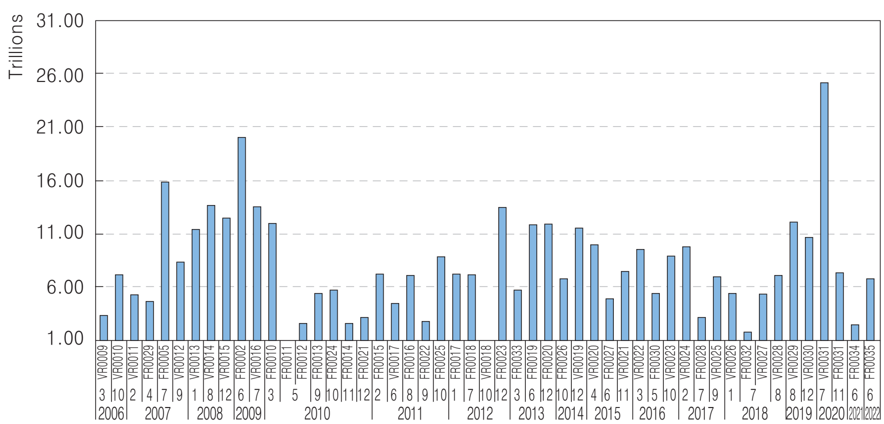


Table 2-4 ●● Government Bond Product Summary

Maturity	1 year to 15 years for IDR Issue
Coupon Structure	Fixed Rate and Variable Rate based on SBI (Bank of Indonesia Certificate) 3 months
Coupon Payment	Semi Annual and Quarterly (Floating Obligation)
Total Series	50
Settlement	DVP Model 1 Via Book Entry System with The Central Bank (Bank Indonesia) BI SSSS System
Listing	On The Surabaya Stock Exchange
Secondary Market	Over The Counter

2.2 Market Activity, Infrastructure and Participants in the Government Bond Market

The Republic of Indonesia as an issuer of Government Bonds appoints the Debt Management Office of MOF (DMO) to be its issuance coordinator and overall manager of its obligation.[2] The main goal of Government Debt Management activities is to reduce debt burden in the long run and to maintain the cost of government debt securities at the lowest level and at manageable risk. The significant debt reduction program continues to promise a steep change in Indonesia's credit worthiness in the medium term. The current strategy of Government Debt Securities Portfolio Management, as reported in its annual report, is as follows:

1. Reducing refinancing risk from 2007-2009;
2. Lengthening average maturity;
3. Balancing out maturity structure, in line with government budget and market absorption capacity;
4. Developing and enhancing the liquidity of the secondary market;
5. Reducing the stock of domestic debt by conducting buyback program in secondary market.

In order to ease the burden on the state budget, in 2002 the government introduced a government bond re-profiling program. Re-profiling was an exchange offer or debt switching program for bonds maturing in 2004-2009 to a new series of bonds with longer tenure (2010-2020). Under its operational objective of market promotion, DMO stated that it will be committed to work actively.

1. Price Transparency Initiative with Inter Dealer Market Association for government bonds knows as HIMDASUN (25 members consisting of 10 Private National Banks, 3 State-owned Banks, 7 Foreign Banks and 5 securities companies as of January 31, 2005). HIMDASUN was established in March 18, 2003 as an association whose main activity is the execution of the Government Bond Market Trading under BAPEPAM rule. It does not have any official market making obligations but acts on a voluntary basis to provide its

2 _ Source DMO Report.

bid and offer[3]. It also has been undertaking market development activities such as education, development of trading infrastructure and Multi-Lateral REPO Agreement.

2. To develop Repo Market;

3. To create benchmark issues, through issuing medium and long-term securities, as well short-dated securities in the future;

4. To widen the investor base by working closely with pension funds, mutual funds, and insurance companies to increase their appetite for investing in government bonds;

5. To enhance the efficiency and reliability of the existing clearing, settlement and registry system by implementing Bank Indonesia-Scriptless Securities Settlement System so-called BI-SSSS (DVP : Delivery versus Payment and RTGS : Real Time Gross Settlement);

6. To develop a transparent and efficient regulatory framework through establishing Government Regulation and Ministerial Decrees as operational regulation to support Government Debt Securities Law.

DMO is also embarking on a “Retail Bond Initiative” whereby the government plans to issue the “Obligasi Retail Indonesia (ORI)” as a new class of product to retail investors. These will be tradable Government Securities in smaller denominations and will utilize the distribution channel of banking institutions and securities firms as its selling agents. (At the time of writing, it is expected that the ORI will be issued by August 2006.)

The government also appointed Bank Indonesia (BI or Indonesia’s Central Bank) to act as the Auction and Administration Agent. BI currently operates the BI-SSSS (Bank of Indonesia Scriptless Securities Settlement System) which undertakes the depository activity (conduct administration of Government Securities, including registration, and as payment agent for interest (coupons) and redemption of Government Securities) of the Indonesian Government Bond Market, Primary Market Bidding and Real Time Gross Settlement Function of its payment system. BI also undertakes the selection of the “bidders[4]” who are qualified to

3 _ HIMDASUN Quotations are available on Bloomberg Terminals, but these are not dealing or execution prices. In order to promote price discovery mechanism, HIMDASUN members are required to submit their bid and offer price quotation on Bloomberg page (IDMA <go>). This price is recognized as the Official Closing Price for Government Securities under BAPEPAM Rule IV C 2.

4 _ Bidders are appointed by MOF comprising Banks, Securities Company and Money Market Brokers To qualify, Banks must hold a valid license from Bank Indonesia to operate as a Bank; comply with the

participate via competitive bidding[5] in the Primary Market Auction of Government Securities. BI also acts on behalf of MOF as an agent in the sale and purchase of Government Securities on the Secondary Market for the account of the government.

The depository system, BI-SSSS, undertakes the administration of Sovereign Debt Instruments which includes ownership registration of Sovereign Debt Instruments in a two-tier system consisting of the Central Registry operated by Bank Indonesia and Sub-Registries[6] appointed by Bank Indonesia. The Central Registry conducts the ownership registration of

Minimum Capital Adequacy Requirement (CAR) based on the Bank Indonesia Regulatory Provisions; and member of Bank Indonesia - Scripless Securities Settlement System (BI-SSSS). Rupiah and Forex Money Market Brokerage Companies must hold a valid license from Bank Indonesia to operate as a Rupiah and Forex Money Market Brokerage Company; have at least 2 (two) Money Market experts; active on the Money Market and/or in trading of Bank Indonesia Certificates (SBIs), as reflected in cumulative bidding activity in Primary Market Market auctions for 1 (one) month SBIs equal to a minimum of 1% (one percent) of total issues in the last 3 (three) months; and member of BI-SSSS. Securities Companies must hold a valid license issued by the Capital Market Supervisory Agency (BAPEPAM) to operate as Securities Company conducting business as Underwriter and/or Securities Dealer-Broker administering securities accounts of customers; possess at least 3 (three) years of experience in Capital Market transactions; and member of BI-SSSS. Banks and Securities Company - Submit Competitive Bidding (Price and Yield) for own account and Clients , Non Competitive Bidding is for client account only. Non Bidders may submit Competitive or Non Competitive Bidding (Volume Only). Non Bidders may include natural person, company, business partnership, association, or organized group. All Bids will be submitted via BI Automatic Bidding System (ABS).

5 _ Auction Methodology: The Auction is held on the basis of quantity targets, taking into account the discount rate or yield stated in the bids received. The method applied for determining winning bidders in Auctions shall be the Stop-Out Rate (SOR) system, namely the sale on the basis of the indicative target volume to be sold by the Government. The SOR is the highest discount rate or yield obtained in the Auction on the Primary Market in order to achieve the indicative target. The SOR shall be determined by the Minister of Finance of the Republic of Indonesia (DMO). The price of winning bids in the Auction shall be determined according to the multiple price method. Price and quantity for each winning bidder in the auction shall be determined as follows:

Multiple Price Method → Competitive Bidding: i. In the event that the discount rate or yield bids are lower than the SOR, Bidders shall receive all quantity bids placed for SDIs at the bidded discount rate or yield. ii. In the event that a discount rate or yield bid is equal to the SOR, Bidders may receive all or part of the quantity bids placed for SDIs calculated on a pro-rata basis at the bidded discount rate or yield.

Non-Competitive Bidding: i. Prices of SDIs for winning bidders in the SDI Auction shall be determined on the basis of the weighted average price of the outcome of Competitive Bidding. ii. The quantity of SDIs for winning bidders shall be determined as follows: (1) In the event that total bids are less than the maximum allocation for non-competitive bidding, Bidders shall receive all quantities for which they placed bids. (2) In the event that total bids are greater than the maximum allocation for non-competitive bidding, Bidders shall receive a portion of quantities for which they placed bids, calculated on a pro-rata basis.

In the event that the bids placed result in a discount rate or yield beyond the bounds of reasonability, the Minister of Finance of the Republic of Indonesia may adjust the realized quantity of the SDI Auction or cancel the holding of the SDI Auction in its entirety. (Source: Bank Indonesia)

6 _ Bank and custodian institution domiciled in the legal territory of Indonesia with valid license to conduct business as custodian, issued by the Capital Market Supervisory Agency, BAPEPAM. It must also possesses at least three (3) years experience in securities registration activities, and/or at least three (3) years

Sovereign Debt Instruments in the names of banks, sub-registries, and other parties approved by Bank Indonesia for holding a securities account at the Central Registry, while sub-registries conduct the ownership registration of sovereign debt instruments in the names of customers. The system operates the sub registry account on an "Omnibus Account Structure" whereby it only recognizes the sub-registries as the account holder.

Herein lies a **major fundamental issue** with regards to access to the Central Depository for Bidders or Non-Banking Institutions who are not sub-registries i.e. securities firms who do not have the custodian license from BAPEPAM, would have to undertake the management of their own account and their clients with a "Sub-Registry" who in actuality is a potential direct competitor in the Primary and Secondary Market. Observed from the information process and access perspective, it is a possibility that "front running" activity may happen due to the informational advantage of custodian institution especially if the "Chinese wall" breaks between the custodian business and the trading business, a hypothetical situation which the authorities have no capabilities of monitoring at this stage.[7]

2.2.1 Primary Market Process Flow

DMO in conjunction with BI will announce the auction schedule via the DMO site, BI Information systems and Information Vendors. Potential investors including bidders and non bidders will submit competitive and non-competitive bids into the Automatic Bidding System (ABS) operated by BI. ABS is a component of the BI-SSSS system, which will do the auto-allocation to the banks and sub-registry's account for successful bidders. Securities firms, who are naturally not a part of the payment system, will have a competitive disadvantage of fully funding their bidding prior to submission as the system operates on a Delivery Versus Payment

experience in custodianship of securities after obtaining a license to conduct business as custodian from BAPEPAM. Other key Criteria: 1. Has business network for registration extending overseas and/or for custodianship of securities extending overseas; 2. Has business network for domestic online registration of securities; 3. Has secure, accurate, and reliable system for registration of scriptless securities by means of book entry, capable of administering at least outright, repo, and pledging transactions; 4. Human Resources to undertake dedicated unit for handling of custodian activities with professional management and staff in registration and/or custodianship of securities; 5. A Bank operating a Sub-Registry is required to comply with the Capital Adequacy Ratio requirement, based on Bank Indonesia regulations; 6. A custodian institution operating a Sub-Registry is required have paid-up capital of no less than Rp 25,000,000,000 (twenty-five billion Rupiahs); 7. Nominal value of securities registered and/or held in custodianship at an average of no less than Rp 1,000,000,000,000 (one trillion Rupiahs) during the latest 6 (six) months. (Source: Bank Indonesia)

7 _ Current supervisory authority capability is hampered due to the lack of market information such as Post and Pre Trade Information and overlapping institutional and functional regulation in the OTC Bond Market.

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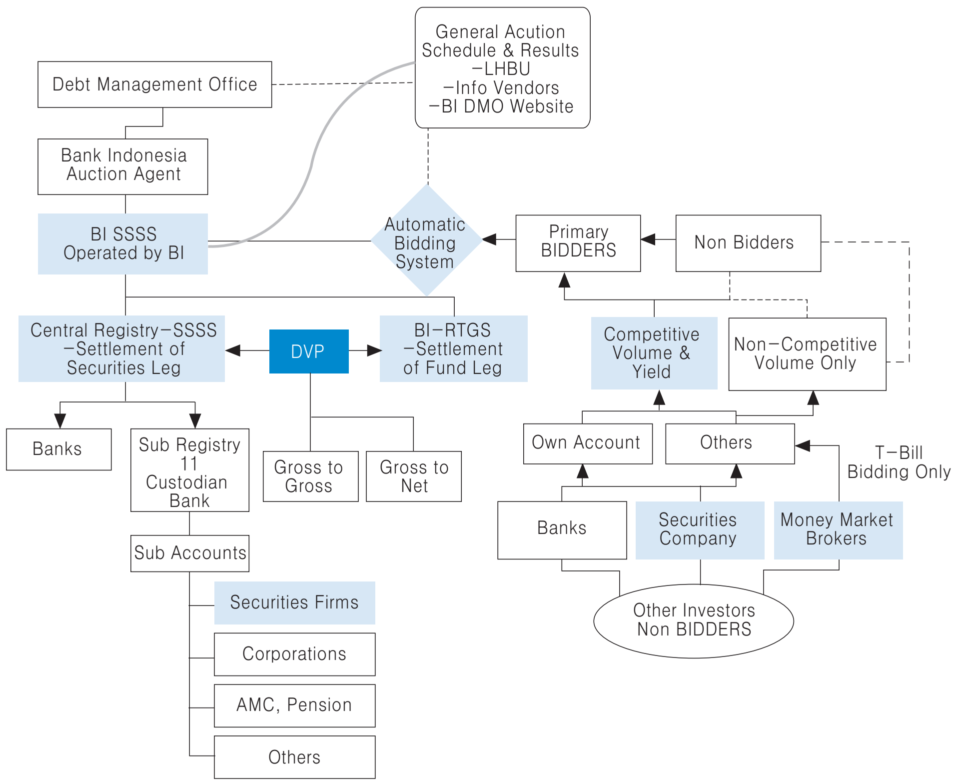
Model 1[8] System i.e. they require sufficient funds prior to auction in order to participate, unlike banks who are members of the payment system and have a clearing account as well as intra-day liquidity facility offered by BI. On the securities settlement side, the central registry will record and allocate the securities to the successful bidder under the name of the banks and the sub-registries who will then record and allocate them to its account in trust. Each sub-registry will have its own internal system to undertake this process both for primary and secondary market activities as these systems are not fully linked to BI-SSSS at this stage. This has created an additional process of manual pre-validation whereby custodian institutions will contact each other to confirm transaction details prior to submission into the central registry and the RTGS System to prevent transaction processing failure from happening. The RTGS component will then process the funds in the respective accounts to clear the trades.

Figure 2-3 ●● Process Description in Primary Market



8 _ Basle Committee DVP Model 1: systems that settle transfer instructions for both securities and funds on a trade-by-trade (gross) basis, with final (unconditional) transfer of securities from the seller to the buyer (delivery) occurring at the same time as final transfer of funds from the buyer to the seller (payment).

2.2.2 Secondary Market Infrastructure

Activity in the Over the Counter Market

The Indonesian Government Secondary Market is an unorganized over-the-counter market whereby participants i.e. any investor with the necessary funds and depository account, may execute transactions with no standard transaction terms in the OTC market. The major intermediation activity on “Spread Based Trading” is facilitated by the securities firms who act as a broker and a dealer with no clear distinction of the separation of the functions. The typical execution cost varies among securities firms with a benchmark at 5 basis points. Banks typically execute transactions directly into the market or use securities firms as agents into the market for confidentiality purposes. The absence of market making activity in the secondary market, the lack of credible benchmark securities or any form of hedging mechanism have affected the overall price formation process. Transaction prices on the other hand may have embedded transactional costs such as withholding taxes, bilateral agreement of “put option” or unofficial buyback obligation to provide liquidity certainty to foreign investors, especially hedge funds, all of which distort the true value of securities. Transactions may be executed based on delivery versus payment or delivery free of payment. The depository and settlement of the securities leg of secondary market activity is handled by the Central Depository Bank Indonesia and the 11 sub-registries of BI-SSSS similar to the description in the primary market and the fund leg settlement is handled by participants in the BI RTGS system who are Banks. Settlement may be in the form of Delivery Versus Payment such as Gross-to-Gross Method (Funds and Securities are settled by way of each transaction) or Gross to Net Method (Securities are settled by way of each transaction but the Fund Leg is netted based on Final Position).

Electronic Initiatives

There are currently two initiatives being pursued in the market to provide Electronic Matching Mechanism. First, the Indonesian Government Securities Trading System (IGSTS) offered by Surabaya Stock Exchange to HIMDASUN members. It is an automated order matching system (Exchange Equity Style) which does not emulate the current OTC business process of spread based negotiated trading. HIMDASUN members are not using the system to execute any trading of government bonds due to issues with the transactional and maintenance cost of the system. On the other hand, HIMDASUN is pursuing an initiative with Bloomberg to establish BLOOMBERG BTS (Bond Trading System), a trading platform on the Bloomberg private information terminal for HIMDASUN members. Members will be able to execute secondary market activity in government bonds such as outright buy and sell, REPO, borrowing and automated trade reporting. The system is currently not used by HIMDASUN members due to its existing contractual relationship with Surabaya Stock Exchange (SSX). The Bloomberg initiative does not charge any marginal fee on top of its terminal services already subscribed to by HIMDASUN members. BAPEPAM on the other hand does not have a clear cut regulatory framework on "Electronic Trading for Fixed Income Instruments" and has taken a conservative position given that the Bloomberg system is operated in an offshore territory where it does not have any regulatory authority. Both initiatives lack the necessary integration with the BI-SSSS system to be able to offer full fledge straight thru processing capabilities.

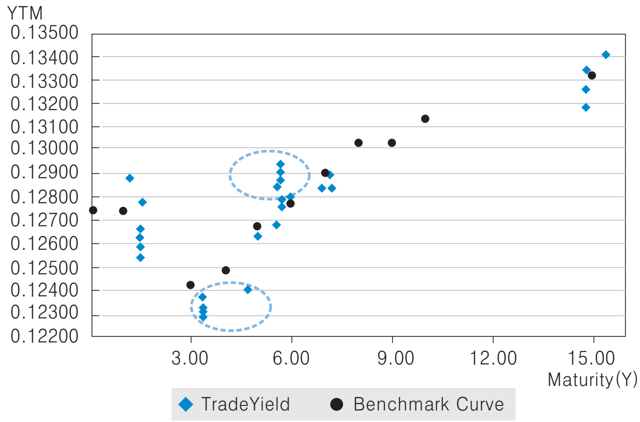
DMO, on the other hand, utilizes its net borrowing limit to rebalance its portfolio by conducting buy back or stock switching of existing outstanding or maturing stock with potential "benchmark" securities as mentioned in the earlier section. DMO utilizes the Ministry of Finance Fixed Income Dealing System (MOFIDS) offered by Surabaya Stock Exchange for its buy back activity (exclusively) with HIMDASUN members.

Information-Trade Reporting

On the post-trade infrastructure, the Surabaya Stock Exchange (SSX) offers a platform called the OTC-FIS which can be used to quote prices, review product information, negotiation and trade reporting for government bonds and corporate bonds. The current regulatory regime does not mandate any form of "Near Real Time" post trade reporting for improvement of market transparency in both corporate and government bond trading. The only economic incentive to report transactions via the SSX OTC-FIS system is the tax relief for securities firms, which does not apply to banking institutions who are taxed in a different tax structure for capital market transactions. The capabilities and the user friendliness of the current system are also questionable as it may not have the necessary validation process to ensure data accuracy among reporting counter-parties.

Information-Benchmark Market Data

The major information source in the market is offered by information vendors such as Bloomberg and REUTERS, both of whom supply information at "global" prices in excess of USD 1,250 per terminal per month. This has limited the potential distribution due to high access cost which limits smaller investors in Indonesia. Bloomberg, in association with HIMDASUN, has also undertaken the consolidation of "indicative" quotation of selected fixed rate series of the government bond. BAPEPAM Rule IV C 2 on "Mark-to-Market for the calculation of net asset value of mutual fund" recognizes the Bloomberg quotation prices on <IDMA> page as the official reference source for government bond prices. The lack of market making obligations by HIMDASUN raises significant doubts over the reliability of "indicative quotation" for valuation purposes. Our team studied the HIMDASUN quotation as well as the SSX Official Closing Price (OCP) derived from reported trades on SSX versus settlement information available from BI and have observed significant deviation of quotations from market execution levels and done level.



(As of Feb. 16, 2006)

Himdasun Benchmark Information Analysis

It is observed that the market micro structure issue, due to the lack of active market making in the secondary market, has distorted the price formation process. Price dispersions in unique series of fixed rate instruments are evident whereby they may trade in a 15 to 20 basis point range a day. The liquidity factor also acts as an agent of distortion or noise. The phenomenon is consistent over a multi-observation period, and in some extreme cases the deviation may exceed 30 basis points. The observation is consistent across the term structure and the skewness of the distribution sometimes indicates the general trend of HIMDASUN members' trading interest. In markets where the participation mechanism is more organized, it is observed that the bid and offer spread is finer[9] with more stable daily distribution of trades versus quotes.

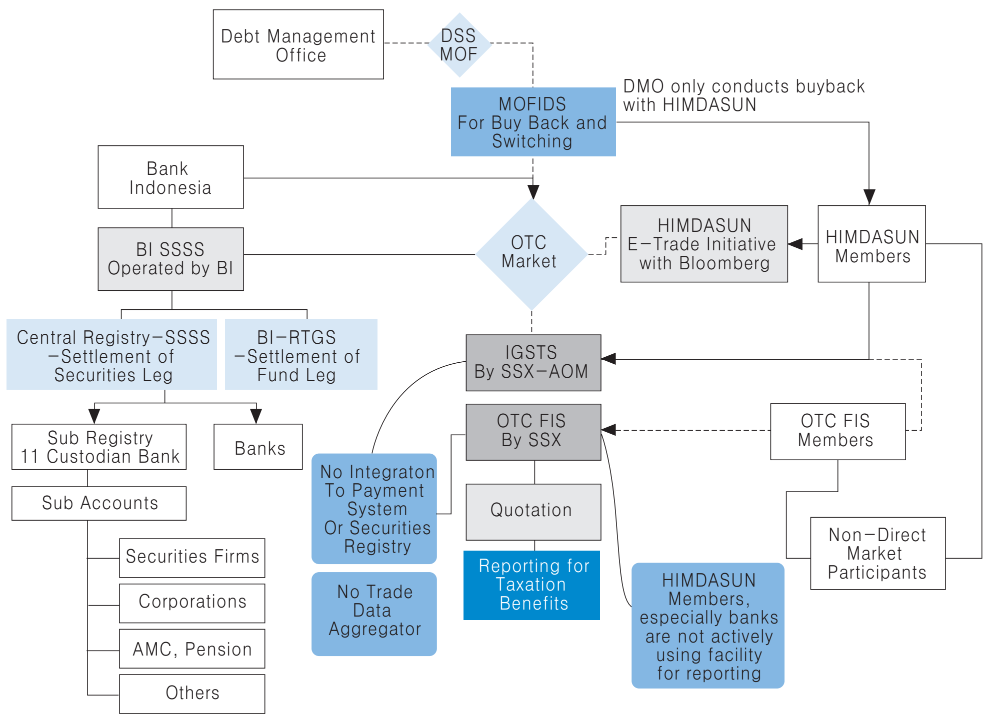
Secondary Market Process Flow

The market activity is concentrated in the OTC market segment and the two electronic trading initiatives mentioned in the previous section are not in the production environment. A typical transaction is initiated by a willing buyer or seller bilaterally via telephone. The buyer

9 _ The World Bank report on East Asian Finance "Road to Robust Markets" by Swati Gosh uses the measure of bid offer spread as an indicator of Government Bond Liquidity. It is a survey based sampling approach from market participants consolidated by the World Bank and Asia Development Bank. Indonesian Bid Offer spread stands on average at 14.3 basis point in 2004 , in comparison to Malaysia 4.3; Korea 2.5; Singapore 3.2 with more mature markets such as US, UK or Germany at below 1 basis point.

will then negotiate a price, value date and other terms and conditions. If a transaction is among wholesale counter parties who are primary members of BI-SSSS, confirmations and settlement is handled by the trading counterparties. If a transaction is among non whole-sale members or a non-primary member of BI-SSSS, then a custodian institution would handle the necessary book entry and settlement procedures with a corresponding member of BI RTGS system for fund settlement.

Figure 2-4 ●● Process Description in Secondary Market



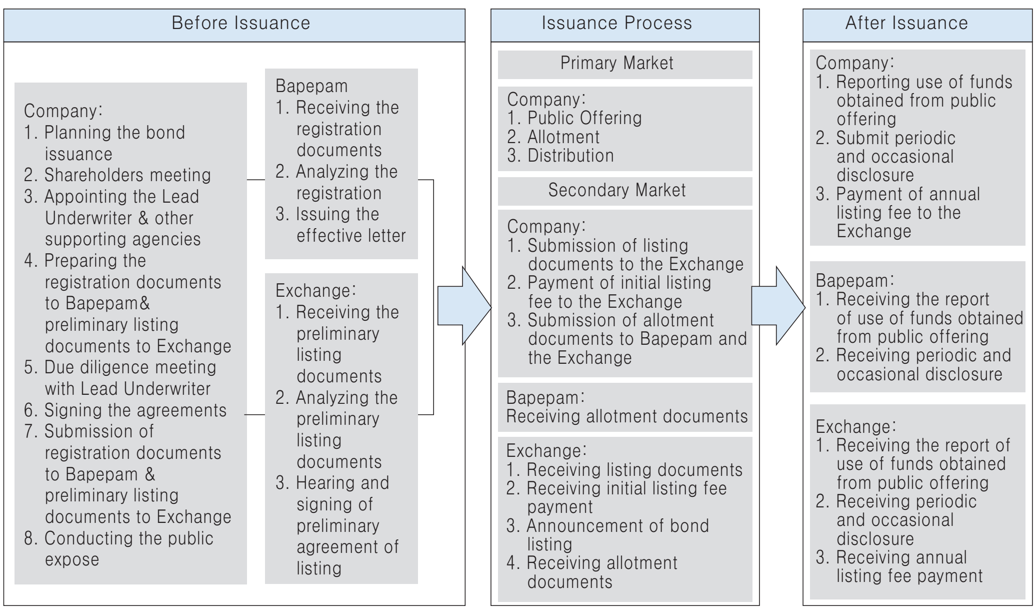
2.3 Market Activity, Infrastructure and Participants in the Indonesian Corporate Bond Marekt

The corporate bond market in Indonesia is a growing market but still relatively small in comparison to the size of the Indonesian economy. As of the end of 2005, there are 264 bonds outstanding by 106 issuers[10], mostly comprising state-owned enterprises and private and public companies (financial sector issuers represent 37% of subordinated bond issuance), who issue simple straight Islamic as well as convertible bonds. The maturity profile ranges from 1 up to 10 years, with a mixture of quarterly or semi-annual fixed or floating rate obligations.

The issuance process is undertaken by a book building or private placement exercise by underwriters who hold a valid license issued by the capital market supervisory agency (BAPEPAM) to operate as a securities company conducting business as an underwriter and/or securities dealer-broker administering securities accounts of customers. Under BAPEPAM, all bonds must be listed on the Exchange (SSX) and the minimum listing criteria are as follows:

- Must have investment grade as per Indonesia Perfindo or Kasnic ratings. If issue is downgraded to below investment grade, SSX will delist the bond; and
- Must have a minimum issuance of IDR 50 Billion (USD 5.2 Million)

2.3.1 Primary Market Issuance Process Flow



10_ Source: SSX Statistics

* Direct depository account holders are securities firms who are clearing members of exchange have delivery account, receiving account, collateral account and lending and borrowing account, securities firms who are non clearing members of Exchange, custodian banks, Kustodian Penjaminan Efex Indonesia (KPEI-Indonesian Securities Clearing), issuer of securities

o Sub Account Holders activity for other investors is handled by the securities firms and custodian banks

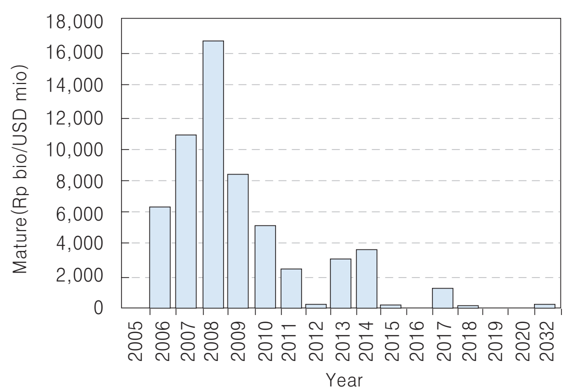
The overall process of issuance and listing on SSX is similar to equity listing, save for the independent rating requirement imposed on the bond issuer. Although it is not a mandatory requirement for issuance but more to maintain the issuer's listing status on the exchange, this has proven to be a flaw in the investor protection function from a total market perspective whereby an issuer may choose not to be rated and loses the listing criteria with the bond still active as a non-rated category.

Table 2-5 ●● Corporate Bond Market Issuance Information

Year	Instrument	Issuer	Value	Year	Instrument	Issuer	Value
1983	7	3	154,718.00	1995	9	4	2,000,130.00
1984	2	0	70,000.00	1996	13	5	2,841,080.00
1985	3	0	130,000.00	1997	24	15	7,204,992.00
1986	1	0	50,000.00	1998	1	0	150,000.00
1987	3	0	131,000.00	1999	9	6	4,283,960.00
1988	11	6	400,000.00	2000	19	15	5,613,000.00
1989	24	13	619,500.00	2001	6	3	2,875,000.00
1990	7	1	535,000.00	2002	14	6	6,150,000.00
1991	3	1	125,000.00	2003	57	36	26,023,093.00
1992	21	10	1,641,533.00	2004	37	16	19,169,824.00
1993	16	9	1,905,000.00	2005	22	7	8,250,000.00
1994	7	3	929,520.00				

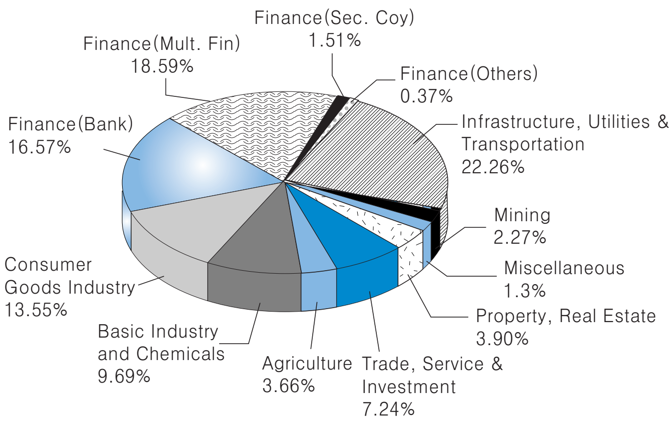
Source: Bapepam Annual Report 2005

Figure 2-5 ●● Maturity Profile Corporate Bonds



Source: SSX

Figure 2-6 ●● Issuer Profile Corporate Bonds



Source: SSX

The trading activity is mostly done off exchange in the OTC market, whereby the most profitable trading activity happens during the "Grey" market or "When Issue" market. There is currently no form of competitive auction process for the issuance of corporate bonds. The transaction process is typically bilateral with the securities firms acting as the major intermediary to facilitate transaction. SSX also provides Fixed Income Trading System (FITS), an electronic matching facility via an Automatic Order Matching (AOM).

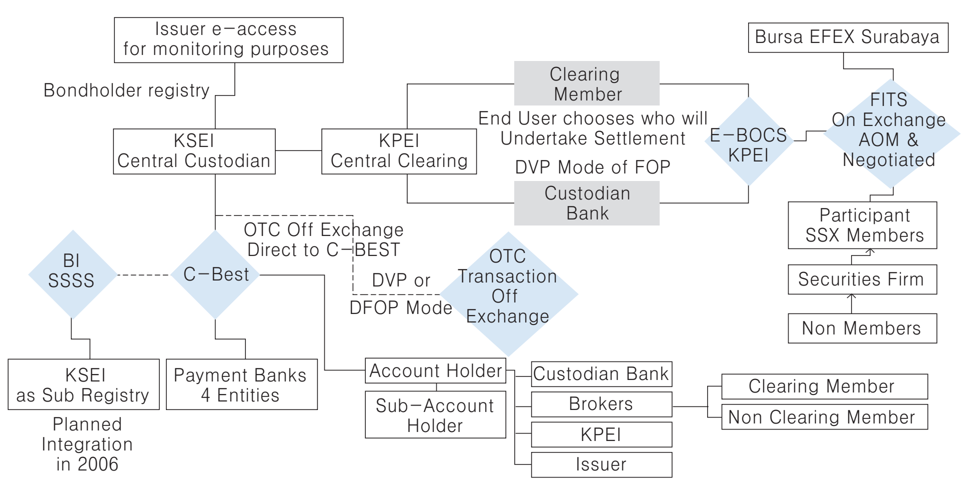
Security Type	All corporate bonds listed on SSX
Trading Method	Automatic Order Matching (AOM) and Put Through
Trading Board	Regular settlement - T +2 (AOM) and negotiated settlement T +1 up to T+7 (Put Through)
Order Prices	Clean Price
Trading Fees	Up to IDR 500M → IDR 20,000; Above IDR 500M → 0.005%
Guarantee Fund	0.00125% of transaction value

FITS is fully integrated with the KPEI (Central Guarantee) whereby all transactions are guaranteed by KPEI, which is fully integrated with KSEI C-BEST (Central Depository and Book Entry System) to allow for straight thru processing of the securities leg of the transaction. Participants in the transaction may choose their settlement agent, either clearing member or custodian banks, to execute the back office settlement with KPEI E-BOCS System. This system is currently operational but there are no transactions executed on FITS as it is seen as a direct competitor with the OTC market. Market participants are also not satisfied with the system's functionality and the cost of execution on the exchange. Post-trade reporting is done via the OTC-FIS system operated by SSX for taxation benefits of the securities firms, similar to the government bond market.

All depository and securities registration for scriptless corporate bond is undertaken by Kustodian Sentral Efex Indonesia (KSEI-Indonesian Central Securities Custody). All activity in the depository is operated via a book entry mechanism and is handled by a system called C-BEST[11], operated by KSEI.

KSEI C-BEST System for scriptless bonds is fully integrated with the Central Guarantee (KPEI) to execute the securities settlement of all transactions executed on the exchange. As most/all transactions are executed off the exchange (OTC), these transactions are directly input into C-BEST by the direct depository account holders of C-BEST, namely securities firms and custodian banks. Not all OTC transactions are guaranteed by KPEI. **There is currently no integration with the BI-SSSS system**. Hence all settlement of the fund leg is executed by the designated payment banks, with which all members of C-BEST must have an account. The designated payment banks will then undertake the necessary payment either via interbank transfer of RTGS or cheque clearing mechanism. For all script based instruments, the custodian institution undertakes the function of the Central Depository.

2.3.2 Secondary Market Process Flow



11_ CBEST is operated on the 2 tier structure of account holders and sub account holders

2.4 Information Infrastruccture

2.4.1 Rating Agencies

Currently, there are two rating agencies in the Indonesian market providing credit rating services for corporate bond issues. Under current BAPEPAM rule there is no mandatory credit rating or mandatory monitoring process throughout the life of the issue except for SSX listing requirements.

Indonesia Rating Agencies are

- PEFINDO: www.pefindo.com. Established in 1994, via an initiative by BAPEPAM and BI, currently the largest with more than 80% market share.
  - ○ Privately owned by 100 domestic institutions (pension funds, banks, securities companies and exchanges)
  - ○ Affiliated with Standard and Poors and adopts its methodology for rating
- KASNIC: www.kasnicrating.com. Incorporated in 1998.
  - ○ Privately owned by PT HT Capital (75%) and individuals (25%)
  - ○ Affiliated with Fitch Ratings

Both rating agencies regularly publish issuer ratings, industry reports and default studies. Both agencies use their own websites as the primary method for information dissemination to investors. They can also publish their rating information in the local daily newspaper but have to absorb the cost of publication.

Under current regulation, rating agencies face some challenges from issuers who refuse to be evaluated annually after issuance. This problem has lead to a significant number of rating withdrawals as evidenced in the PEFINDO default study as shown below in the transition matrix[12] of 1996 to January 2005.

12 _ KASNIC Transition Matrix also shows same trend of migration to NR category, though for the purpose of our analysis we reference PEFINDO as it has greater data coverage.

Table 2-6 ●● PEFINDO Transition Matrix end 2005

Rating(From/To)	Origin (1)	idAAA (2)	idAA (3)	idA (4)	idBBB (5)	idBB (6)	idB (7)	idCCC (8)	idD (9)	NR (10)
idAAA	7	85.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.29
idAA	31	3.23	64.52	9.68	0.00	3.23	0.00	0.00	3.23	16.13
idA	136	0.00	4.41	66.18	4.41	1.47	0.00	0.00	5.88	17.65
idBBB	221	0.00	0.90	5.43	46.15	4.52	1.36	2.71	9.95	28.96
idBB	87	0.00	0.00	0.00	6.90	13.79	3.45	3.45	19.54	52.87
idB	22	0.00	0.00	0.00	4.55	13.64	40.91	4.55	22.73	13.64
idCCC	13	0.00	0.00	0.00	7.69	0.00	7.69	0.00	69.23	15.38

NR rating represents either the issuer's rating withdrawn by PEFINDO or the issuer itself ceases to provide information for PEFINDO to analyze.

2.4.2 Pricing and Investment Information

There are a number of market sources with regards to product data, trade data, mark-to-market prices or benchmarking information in Indonesia due to the fragmented market structure in the OTC as well as the lack of a consolidated trade data aggregator.

SSX undertakes a private initiative for reference pricing for government and corporate bonds. It uses the weighted average price of reported transactions and quotation information to OTC FIS which may not cover the whole population of transactions in the market. SSX also publishes its benchmark Yield Curve Publication IGSYC which uses reported transaction information, SBI Rates and primary market auction data of government bonds and uses the smoothing method Biezer Spline data multiplication approach. The approach has high dependency on first and last data. The data sources for one-month SBI is obtained from one period before the last auction, three-month SBI from the last auction, T-Bills, and benchmark bond using fixed rate bond. SSX publishes on a weekly basis with interim curve on Monday (using previous Thursday to Monday data) and final publication on Thursday. SSX also publishes the Government Bond Index (Total Return Index with Base Date January 1997, bi-weekly publication) which uses the settlement price approximation approach by applying haircuts on credit by rating, industry and market factors determined by bond index working group comprising representatives from Securities Company, Bank and Mutual Fund.

HIMDASUN, the government inter-dealer association, on the other hand, undertakes an initiative for reference pricing for government bonds via Bloomberg IDMA page[13]. It is a quotation approach by HIMDASUN members for liquid securities of government bonds with quote consolidation at 4:00PM for daily publication. They are planning to move into real-time quotation and trading information when the electronic trading initiative with Bloomberg proceeds.

BAPEPAM also has an initiative with KSEI whereby mutual fund managers provide quotations on all the bonds in their own portfolios. Quotation approach for corporate bonds held by mutual funds with internal publication is to be used by the individual fund manager for the calculation of its NAV. There are serious issues with this initiative as there is a direct conflict of interest with regards to the providers of the quotes who are front office dealers themselves, hence there is no separation of front and middle office functions. Our team was not able to have access to the data for analysis but was informed by market participants that there exists systematic risk of over-valuation from quotation value derived under this initiative.

On pre-trade data there are two distinct and non-integrated approaches by the two competing matching mechanisms (SSX and OTC). One is the government bonds quotation via Bloomberg IDMA page which provides no onward dissemination so that only clients of Bloomberg have access to the data. The corporate bonds quotation is derived via SSX OTC FIS but coverage is small, as most are executed bilaterally in the OTC market. The post-trade data, which is “public goods,” is only available at the settlement information level as there is no mandatory trade reporting regime[14] in Indonesia at this moment. For government bonds, it is done by Bank Indonesia but this information is incomplete due to the hierarchy of depository accounts in BI-SSSS (if a trade is executed by two clients who belong to a unique sub-registry, the central registry does not capture the movement of securities). For corporate bonds, it is done by SSX but information is incomplete due to a small percentage of reported trades through OTC FIS and also the timing of reporting (SSX has mentioned that data in OTC FIS may be T-364 days as participants are using it purely to derive taxation benefits). There is another potential source at KSEI’s C-BEST, but again, the information will be incomplete due to potential netting between market participants prior to securities settlement of OTC transactions to C-BEST.

The securities information or the terms and conditions of the issue (securities master) is also available at the two central depositories, namely, government bonds by Bank Indonesia due to

13 _ This initiative is recognized by BAPEPAM for Mark to Market of government securities for mutual funds under regulation IV.C.2.
14 _ Note: If any of the electronic trading initiatives takes off, there is a possibility of Real-Time Trade Reporting but the information may be in multiple places as there are multiple initiatives for government bonds (Bloomberg vs. SSX IGSTS) and FITS for corporate bonds. BAPEPAM, in its 5-year masterplan, acknowledges the dominance of OTC trading over any form of organized electronic trading and has plans to launch a Mandatory Trade Reporting Initiative scheduled to take form in 2006.

its central depository functions with onward dissemination to information vendors, PIPU (Money Market Information System) and its own website and DMO Website. For corporate bonds, by SSX (listed scriptless securities) with onward dissemination to information vendors, own website and OTC FIS. KSEI also undertakes the distribution of securities master data for all securities under its depository. For script-based corporate bonds, it is undertaken by custodian banks or trustees with no specific information dissemination method (mostly on demand by investors).

Research materials are published by individual research teams of banks and securities firms with onward dissemination via their own networks to end clients. The General Static T-1 Market Information is available via most major Indonesian business papers

2.5 Investor Profiles

The current investor's profile in Indonesia shows a systematic misallocation of overall financial market resources which stems from the way the government bond market was initially developed. Banking institutions, who are naturally non-trading institutions, clearly dominate the holdings of government securities. Natural buy-and-hold investors such as pension funds and insurance companies hold a small percentage out of their total investment portfolio[15].

Table 2-7 ●● Investor Profile in Government Bonds Market Sector

Period	Mutual Fund	Regional Bank	Non Recap Bank	Private Recap Bank	State Recap Bank	Insurance	Foreign Holders	Pension Fund	Security Firms	Others	Bank of Indonesia
Dec-02	9%	0%	4%	27%	58%	2%	0%	0%	0%	0%	0%
Dec-03	11%	1%	7%	25%	50%	4%	2%	1%	0%	0%	0%
Dec-04	14%	0%	8%	24%	40%	7%	3%	4%	0%	1%	0%
Dec-05	3%	1%	11%	21%	39%	8%	7%	6%	0%	1%	3%
Average	9%	1%	7%	24%	47%	5%	3%	3%	0%	1%	1%

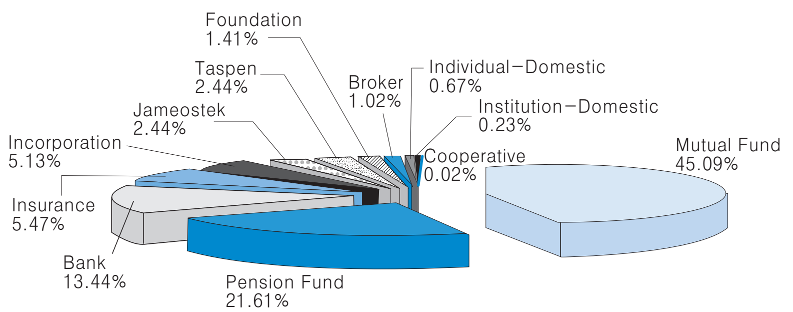
Source: DMO

15 _ There are 4 types of pension funds in Indonesia - Employer Sponsored, Mandatory Provident Fund (JAMSOSTEK), Military Forces Pension and Civil Servant Pension Fund. There is a lack of data on the investment activity of these classes of investors but from our discussion with market participants, it is observed that since 2003 they have been shifting their investments toward banks deposits to take advantage of the rising interest rate. Their portfolios now are skewed towards money market or cash which raises some alarm on the asset and liability management within the industry.

The government has plans to improve the overall profile of the holders of government securities to improve the overall diversification which will affect the stability and liquidity of the market. In its mandate, DMO is undertaking discussions with pensions, mutual funds and insurance industry participants to increase their appetite for long-term demand. Recapitalized banks are also reducing their holdings of recap bonds by transferring from the investment book and selling the securities into the secondary market, hence filling the gap in the supply of long-term bonds.

On the other hand, the overall investor profile in the Indonesian corporate bond market is dominated by mutual and pension funds. The following pie chart shows the ownership profile of Indonesia's corporate bonds as of the end of 2005.

Figure 2-7 ●● Investor Profile Corporate Bonds



Source: SSX and KSEI

Overall, it is noted for both government and corporate market sectors that a lot of improvement will be needed to improve the overall diversification and to build overall confidence with regards to bond market investment in general and also increase foreign participation in the bond market. The majority of the issues stem from the lack of benchmark prices, credit protection and bankruptcy procedures, taxation incentive for investment, correct intermediation, mark-to-market process and credible information infrastructure to protect investors, all of which will require serious attention by the regulators.

Case Evaluation - Mutual Fund Industry

Case Evaluation - The mutual fund industry has been in the spotlight in recent years due to tremendous growth in the number of funds focusing on government bond asset *class. The major players include alliances from the recap banks who transferred their holdings to mutual fund subsidiary companies and began aggressively selling units similar to deposit products. From 2002 to 2004, the market growth was in excess of 30% year-on-year with the number of unit holders tripling by 2003 compared to the levels in 2001. The low interest rate environment during the period and weak mark-to-market process by the fund managers have systematically created a bubble which burst in 2005 when rates began to rise. It can be observed that the total market NAV during 2005 stood at over IDR 100 trillion and has fallen by almost 75% to IDR 29 trillion as of the end of 2005.*

Figure 2-8 ●● Mutual Fund Industry

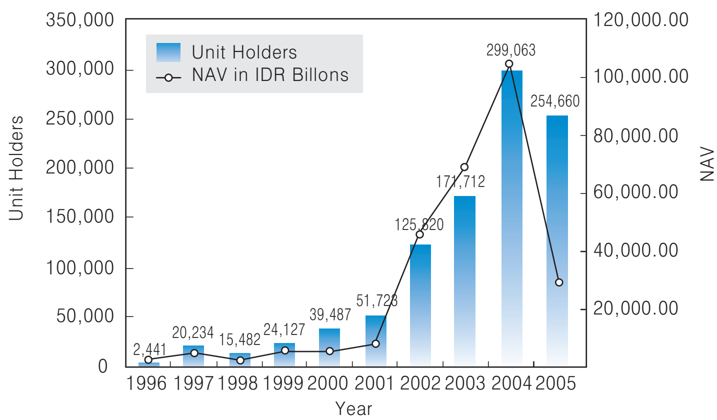


Table 2-8 ●● Number of Funds in Mutual Fund Industry

Year	Number of Funds	Year	Number of Funds
1996	25	2001	108
1997	77	2002	131
1998	81	2003	186
1999	81	2004	246
2000	94	2005	328

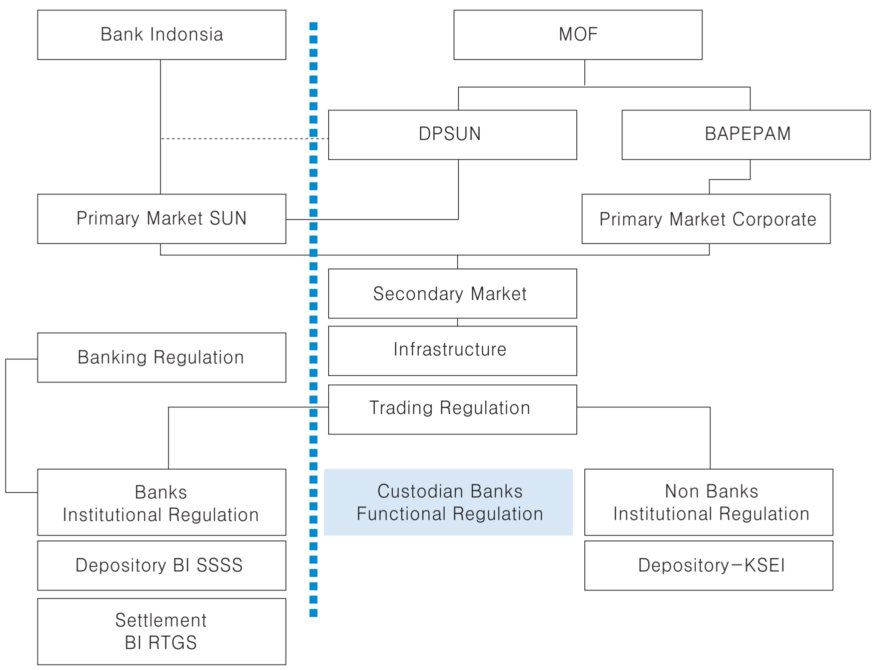
Source: BAPEPAM

2.6 Regulatory Infrastructure

The Indonesian fixed income market is jointly regulated by BAPEPAM and Bank Indonesia. BAPEPAM regulates the secondary market activity of all market participants and Bank Indonesia regulates the primary market indirectly due to its function as the auction and administration agent of the government bond market.

Type of Regulation	Enforcement and Supervision
Primary Market for Government Bonds	BI indirectly regulates via presidential decrees and its own regulation on BI-SSSS activities. In coordination with Debt Management Office of MOF.
Primary Market for Corporate Bonds	BAPEPAM directly regulates via its act on all issuance of securities, monitoring activity by BAPEPAM and exchanges.
Secondary Market Trading of Government Bonds	BAPEPAM directly regulates via its act on all trading activity.
Secondary Market Trading of Corporate Bonds	BAPEPAM directly regulates via its act on all trading activity, monitoring activity by front end regulator SSX.
Depository of Government Bonds	BI directly regulates via presidential decrees and its own regulation on BI-SSSS activities.
Depository of Corporate Bonds	BAPEPAM directly regulates via its act and monitoring activity by KSEI.
Payment System	BI directly regulates via its own act and sub-regulations on payment system activities.
Financial Institution Capital Adequacy Regulation	BI directly regulates via its own banking regulation and supervision department. Market risk currently applies standard approach with a plan to move towards internal model approach.
Non Bank Financial Institution Capital Adequacy Regulation	BAPEPAM applies its NAWC to securities firms.
Market-to-Market Regulation	BAPEPAM applies Rule IVC.2 for mutual fund mark-to-market, no specific rule for securities firms. Bank Indonesia applies the trading prices approach based on its market risk guidelines, no specific reference to source of pricing.

From an overall perspective the regulatory infrastructure is based on different evolution of the capital market and banking market. This, in the current environment of the OTC market activity of cross product, cross market and cross industry transactional flow, has reduced the overall effectiveness of the current structure of regulatory guidelines.



2.7 Summary of “As is” Analysis of the Indonesian Bond Market

The evaluation of the current state of the Indonesian bond market is analyzed according to three major pillars of efficiency - information infrastructure, intermediary infrastructure and regulatory infrastructure and a special emphasis on the government bond market sector as a key fundamental pillar of the bond market segment.

The project team led by BAPEPAM undertook a comprehensive study together with the respective agencies such as BAPEKKI, DMO, Tax Department, SRO’s in collaboration with Bank Indonesia to reflect the current status and major underlying issues which hamper further development of the Indonesian market. The major key observations of the study group are as follows:

In the specific area of the **government bond market** sectors, it is observed that the major underlying issue may be categorized into:

1. Market micro structure issue arising from a non-competitive market structure and an unorganized participation mechanism in primary and secondary markets.

   a. Overall participation is dominated by banking institutions (holdings and trading activity of government bonds in excess of 60% of total).

   b. Unequal access between the major intermediaries such as banks and securities firms to depository and transactional funding mechanism.

      i. Banks have access to inter-bank funding markets as well as Bank Indonesia intraday funding facilities allowing them to have lower cost of operations in primary and secondary market activity.

      ii. Securities firms do not have direct access to central depository for their own accounts and client accounts. Currently, custodian banks are undertaking the role of sub-registry to facilitate access by non banking investors to the depository.

   c. There is no active secondary market making activity by the participants affecting price discovery process, evidenced by very large intraday fluctuations in government securities averaging around 15 to 20 basis points for any specific series of fixed rate obligations.

2. There are no stable benchmark securities in the government bond market which has affected overall price discovery and trading activity.

   a. There is no proper product standardization or benchmark securities (large issue size on standardized maturity tenors e.g. 1 year, 3 year, and 5 year with regular issue to support benchmark securities creation). Current product profiles in government securities are a mixture of floating and fixed rate obligation with small issue size (below IDR 6,000,000,000,000) distributed throughout the curve. Tradability of floating rate obligations in Indonesia is questionable due to the lack of any short term interest rate hedging mechanism such as interest rate futures.

In the specific area of **information infrastructure** it is observed that the major underlying issues are as follows:

1. Weak information transparency measured by the level of information creation process, information access and the referential integrity of information affecting price formation process and market monitoring by regulators.

   a. Market information such as transaction prices, credit and issuer information or benchmark information are extremely scattered with multiple sources with low referential integrity:

      i. There is no market wide consolidation of post-trade data which may be categorized as "public goods" for general reference and market monitoring purposes. In the areas of "pre-trade" the situation is even worse due to lack of any form of market making activity by participants.

      ii. Agency issues also exist with regards to source data providers, especially for the fair valuation or mark-to-market whereby the provider of the fair valuation has a distinct economic objective to provide a biased quote or fair value skewed toward positive valuation of their own portfolio holdings, which may not be the true reflection of the fair value of the instruments. This is further exacerbated by the lack of a validation process to ensure the stability and the valuation consistency of the output.

   b. The rating agency's role is compromised by issuers who refuse to be evaluated annually for their credit standing as evidenced by the "large" percentage of migration from all rating classes towards "Non-Rated Category".

In the specific area of **intermediary infrastructure** it is observed that the major underlying issues are as follows:

1. An unorganized participation mechanism whereby participation is denominated by a "Dealer-Broker Environment" i.e. no market marker exists, individual participants who are mostly non-trading entities are not actively providing bids and offers to the market participants for secondary market liquidity.

2. The market itself is fragmented by nature of the "Dealer-Broker Environment" whereby participants in the over the counter market may execute transactions in any form with no standard trading protocols, value dates, taxation structure, trading platforms (multiple trading platform exists in competition with the over the counter trading activity) and also different level of access to market infrastructure which have hampered the overall capital market straight thru processing capabilities (multiple depository exists with no integration

to payment system).

In the specific area of **regulatory infrastructure** it is observed that the major underlying issues are as follows:

1. Lack of regulatory coordination in market and institution monitoring activities

   a. Different evolution of capital market intermediaries and banking intermediaries have lead to two distinct sets of regulatory guidelines which does not allow for effective supervision in the OTC market whereby cross industry activity with cross product transaction happens.

   b. The lack of market information in pre- and post-trade has reduced the ability of regulators to effectively monitor market activity.

   c. Poor application of mark-to-market by institutions due to lack of benchmark information has affected the capability of regulators in monitoring the institutions capital adequacy and protecting end-investors from price manipulation activities by intermediaries.

2. Lack of regulatory coordination in market development initiatives

   a. Unequal taxation structure across the industry has affected the participation among different classes of investors and has distorted transaction prices.

As observed from the study, the Indonesian bond market suffers heavily from market micro-structure issues in the unequal participation mechanism of intermediaries which operates in a fragmented "Dealer-Broker" environment with poor information infrastructure to support a proper investment decision making process and effective coordinated market supervision.

The Indonesian bond market has tremendous potential to grow as a major component of the overall capital market. Regulators together with market participants must consolidate under a single vision to develop the overall market process and functions to improve the attractiveness and efficiency of the Indonesian bond market.

Table 2-9 ●● Size of Local Currency Bond Market ASEAN+3 and Liquidity Parameters

Size of LCY Bond Market in USD as of End of 2005				Size of LCY Bond Market in USD as Percentage of GDP as of End of 2005			Liquidity Barometer Gov't Bond
	in USD billions						
Country	Govt	Corp	Fin Inst	Govt	Corp	Fin Inst	Bid Offer Spread
China	340.3	12.8	253.7	15.3	0.6	11.4	NA
Hong Kong	16.3	69.3		9.2	38.8		24.3
Indonesia	43.6	4.1	2.8	15.5	1.5	1	14.25
Japan	6,644.6	799.7	1,410.9	145.6	17.5	30.9	2
Korea	226	153.4	277	28.7	19.5	35.2	2.5
Malaysia	51.6	47.7	24.7	39.4	36.5	18.9	4.25
Philippines	40.2	0.2	0.2	40.8	0.2	0.2	NA
Singapore	47	34.9		40.3	29.9		3.2
Thailand	38	24.8	18.2	21.5	14.1	10.3	6.25
Vietnam	4.2	0.1		7.9	0.2		NA

Source: ADB

3. Suggestions for Indonesian Bond Market Development

3.1 The Overall Development Agenda

In view of the major underlying obstacles in the Indonesian market, we are recommending a development agenda that tackles the imminent issues directly with precision and improves the overall market participation mechanism, increases overall transparency and provides a stable underlying base market in government bond sectors for a positive spillover effect to other sectors such as the corporate and derivatives markets. In order to provide a holistic approach and at the same time improve the major pillars, BAPEPAM is deploying a two stage development strategy to be undertaken in relation to information, intermediary and regulatory infrastructures.

Stage 1-First Wave Driver

• Develop the government bond market to act as a fundamental pillar of further market development.

→ Create a more organized participation mechanism via a merit-based cross industry primary dealership program.

→ Improve issuance profile with more standardized issuance in key benchmark tenors along the curve.

• Develop information infrastructure to improve price formation and discovery and simultaneously improve regulatory capabilities in market monitoring

→ Enforce mandatory trade reporting for all participants in fixed income market.

→ Create an independent market-neutral bond pricing agency to undertake fair valuation initiative to improve the overall mark-to-market process of institutions.

• Improve regulatory coordination between BAPEPAM and Bank Indonesia to be able to effectively supervise OTC market activity

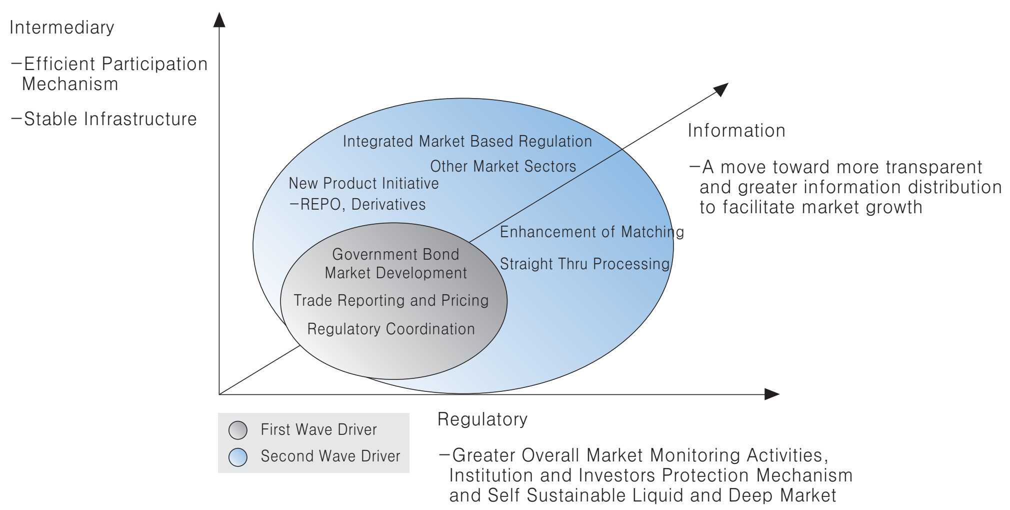
Stage 2- Second Wave Driver

• Enhance matching mechanism in secondary market to move towards overall capital market straight thru processing.

- Develop other market segments such as corporate bond market, structured products, and asset backed securities.

- Develop supporting market for active inventory management in government bonds such as REPO, securities borrowing and lending program, government bond futures and short term interest rate futures.

- Move towards integrated market-based regulatory regime.



The immediate priority development is derived from the imminent need of the market with three key development items selected for “priority” development.

Immediate Key Development Initiatives identified :

- Government bond market development - Primary dealership and product standardization program.

- Development of mandatory trade reporting, trade data aggregation and creation of bond pricing agency.

- Electronic trading platform with retail market consideration.

3.2 Government Bond Market Development

The Indonesian government bond market, as observed from the study, is an oligopolistic "Dealer-Broker" market with no clear economic value of active participation to provide much needed secondary market liquidity. It also suffers major structural issues in market access, unequal transactional cost and the lack of benchmark securities.

The goals of the development will be to create a more **liquid, transparent** and **competitive** market with greater harmonized access across the industry. The development agenda will consist of three fundamental principles:

1. Improve the market micro structure by introducing a primary dealership program which provides proper incentives and benefits in return for market making obligations in primary and secondary government securities.

2. Improve the supply of government securities by issuing new benchmark government bonds or undertaking buy back or stock switching of existing issuance by Debt Management Office.

3. Improve overall transparency in pre and post-trade information of government securities.

Development Agenda	Responsible Entities	Development Activities
Design a merit based Primary Dealership Program encompassing banking and securities industry	Primary - Debt Management Office Secondary - BAPEPAM, Bank Indonesia, Tax Department, SRO's	Design obligations and benefits of primary dealers taking into consideration cross-industry participation. • Financial capabilities to undertake primary and secondary market making obligations • Operational capabilities in areas of risk management, human resources, supporting technological infrastructures • Improvement of market infrastructure access (depository) of non-banking institutions • Harmonization of cross-industry taxation structure Consider supporting development programs such as securities borrowing and lending, REPO, short term interest rate futures, and government bond futures to support effective inventory management by market participants.

Development Agenda	Responsible Entities	Development Activities
Supply-side initiative to build benchmark securities in Government Bonds	Debt Management Office	DMO is recommended to undertake a product standardization program based on the current profile of SUN's outstanding position in the market. The goal of the standardization program is to create more liquid benchmark series along the tenor of the curve. • Undertake stock switching to build benchmark stocks or series in 1, 3, 5, 7, 10, 15 and 20 years. • Reduce floating rate obligation or convert floating rate obligation to fixed rate obligation. • Increase re-opening program in selected on the run securities by switching short end off the run securities. • Increase re-opening program in off the run securities along strategic points on the curve to induce trading and valuation activity.
Improve overall Market Transparency	Primary - BAPEPAM Secondary - DMO, BI and SRO's	Ensure regular monitoring and reporting of compliance for overall obligation in primary dealership program. Ensure effective low cost consolidation and distribution of pre and post-trade data in government securities to improve price formation process.

The key pillar to improve the overall market is for the government bond market to be more stable, more transparent and operate with greater intermediation efficiency. This will naturally promote greater price discovery and formation process, product development in dependent markets such as the corporate bond sectors, derivatives market, etc.

3.3 Information Infrastructure Development

The information infrastructure is one of the fundamental pillars of market transparency. The current market environment of scattered market information, with no pre- or post-trade consolidation, as well as no credible source for benchmarking exercise in risk and profit management, has hampered overall price transparency and regulatory monitoring capability.

To overcome the current environment, it is recommended that BAPEPAM undertake the policy leadership to improve the information infrastructure by developing an integrated trade reporting and bond pricing agency to be able to consolidate all transactions by market participants and to be able to provide consistent fair valuation for mark-to-market purposes.

3.3.1 Trade Reporting

It is recommended for BAPEPAM to issue a mandatory trade reporting regulation to be applied to all market participants. The reporting regime should be based on a zero cost structure or minimal cost structure to provide proper economic incentive for reporting. Supervision can be undertaken via data validation of settled transactions based on book entry movements of securities versus reported trades. A penalty may be imposed on unreported trades by participants to build the "self-reporting culture." BAPEPAM is also recommended to appoint a trade data aggregator to undertake the function on behalf of BAPEPAM, given its limitation in information technology and human resources.

The speed of information collection and dissemination and information dissemination scope should be further analyzed in order to ensure no negative impact on the market. The target of information collection should be towards "Near Real Time," monitoring can be versus other reported transactions or versus quotation levels of market participants to ensure artificial selection effect whereby two counter-parties collaborate to report their transaction at day-end to make certain that their transaction is close to last done prices. The dissemination strategy should be considered for types of information to be disclosed, especially in post-trade.

Development Agenda	Development Entities	Development Activities
Issuance of mandatory trade reporting regulation to appointed trade data aggregator	BAPEPAM	Ensure regulation on trade reporting is able to cover and consolidate market wide transactions. Undertake market study on the scope of reporting, its information consolidation and dissemination strategy to ensure no negative impact on market participants.
Building or enhancing current reporting platform	BAPEPAM Secondary - BI, SRO's and market neutral entity	Ensure that the trade data aggregator is able to undertake its role without any conflict of interest and would be able to deliver a low-cost and credible data collection and dissemination channel.

Scope of Reporting	Activity and Validation Rules	Information Requirement
Post-Trade Reporting Outright buy and sell, REPO and securities borrowing and lending in all fixed income securities	*Wholesale Market Participant* - Seller to report transaction and buyer to confirm transaction. *Wholesale vs. Non-wholesale Participants* - Whole sale participant to report and confirm on behalf of non-wholesale. *Non-wholesale vs. Non-wholesale* - Custodian institution to report and confirm on behalf of participants (challenge to ensure timely reporting if custodian institution is only aware of transaction on settlement date). - One possible alternative is for all trading to be executed with licensed intermediary. BAPEPAM will then mandate the intermediaries to report the transaction.	Securities identifier Counterparty information for regulators view only and own transaction view only transaction details. -Price, yield, value dates, type of transaction, time of transaction. -Volume of transaction. -Underlying securities for REPO or securities borrowing and lending, borrowing or REPO rates, tenor of transaction.
Pre-trade reporting -PD firm bid and offer prices -PD indicative bid and offer prices	*PD to provide quotation to trade aggregator in selected designated benchmark series.* -Validation or monitoring activity versus done deals in trade reporting.	Two-way quotation and securities identifier by PD. Non-PD may provide one-way quotation .
PD position reporting	*All related transactions by PD in government bonds and its associated market (current and future eg SUN Derivates, SUN Futures) at T-1 day prior to issuance date.*	-Securities identifier, volume of holding. -Derivative contract, direction of holdings.

Considerations

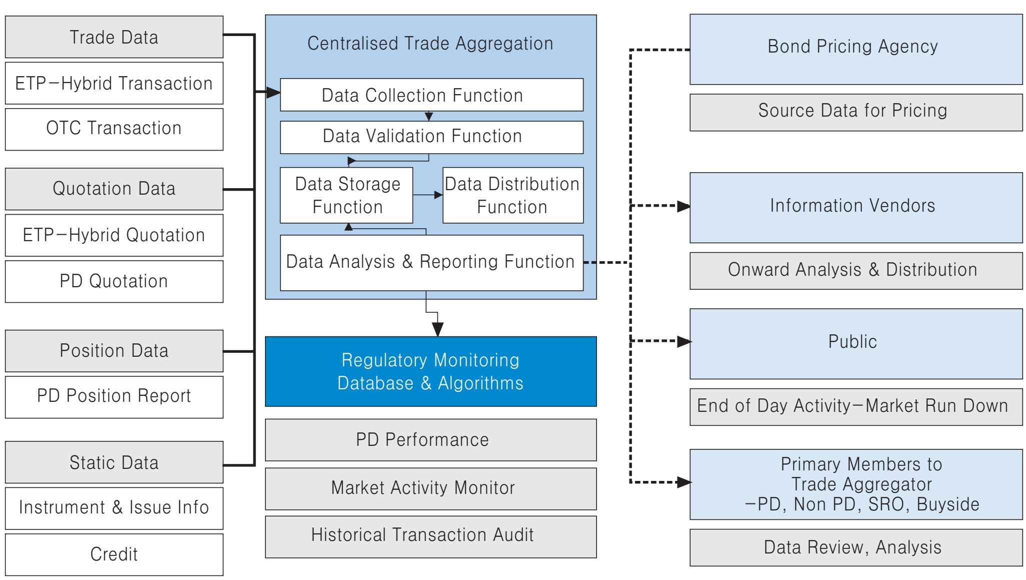
The speed of information collection and dissemination and information dissemination scope should be further analyzed into order to ensure no negative impact on the market.

Target of information collection should be towards “Near Real Time.” Monitoring can be versus other reported transactions or versus quotation levels of market participants to ensure artificial selection effect whereby two counter-parties would collaborate to report their transaction at day-end to make certain that their transaction is considered as the last done price.

The dissemination strategy should be considered for types of information to be disclosed, especially in post-trade.

Pre-trade	• Trade aggregator should disseminate best market prices on a real-time basis. • Limitation to depth level of pre-trade by participants to ensure no negative impact to quote providers.
Post-trade	Dissemination strategy should be based on criteria of volume, whereby large reported transaction may reduce the time to adjust the position prior to the market being fully aware of the transaction. One potential solution is to disseminate the volume of transaction on a *delayed basis*.

Figure 2-9 ●● Key Process in Trade Aggregator

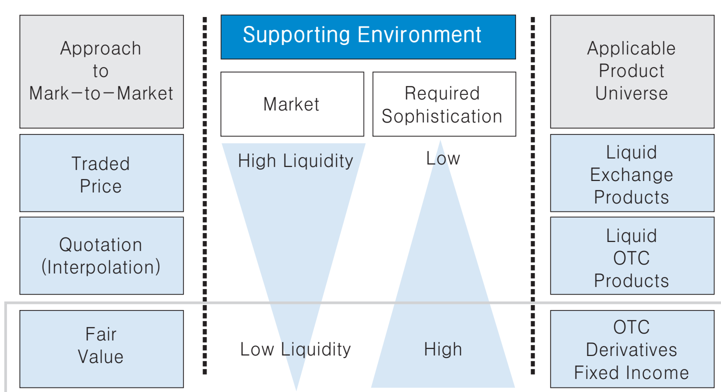


3.3.2 Bond Pricing Agency

The daily valuation of portfolio securities can be one of the most onerous aspects of managing a registered investment company or mutual fund. The developing complexity of securities combined with the increasing influence of foreign markets and non-exchange-traded holdings have made the accurate pricing of securities difficult, at best. Institutions typically rely on a myriad of sources to price their portfolio holdings, including domestic pricing services, broker-dealers, foreign custodians or pricing agents, matrix pricing, or any combination thereof. While the pricing function is typically delegated, fund management and the board of directors or trustees have the ultimate responsibility to ensure that appropriate pricing procedures and supervisory activities are in place. In order to fulfill this responsibility, management and the board need to become familiar with the composition of the portfolio, the overall control environment surrounding the pricing of portfolio securities, and the appropriateness of the pricing sources used.

The challenges in pricing of securities can be categorized further into the type of the product and the type of market in which it is traded. The overall purpose is to arrive at a liquidation value of the securities otherwise known as mark-to-market. Typically, the approach of mark-to-market will be dependent on the level of market liquidity. The more liquid the market the less the level of sophistication required to arrive at the liquidation value. Historically, around the world, the bond or fixed income market may be categorized as a market with relatively low levels of liquidity.

Figure 2-10 ●● Supporting Environment



On the other hand, the bond market may also be categorized as an over the counter market where multi-matching mechanism exists. Its unique characteristics of a variety of issuances by a single issuer, with complex terms and conditions, different maturities and different credit risk profiles, exacerbated by low daily trade volume, demands a credible and consistent approach to be able to estimate the liquidation value.

Key characteristics or process requirement for bond market fair valuation

- Timely and on-going research on the market and issuers will be a key component to accurately reflect the idiosyncrasies of the product and issuers.
  - Full monitoring and evaluation of individual issuance and credit characteristics.
  - Aggregation, filtering and cleansing of market information - bid offer, done prices, volume, etc.

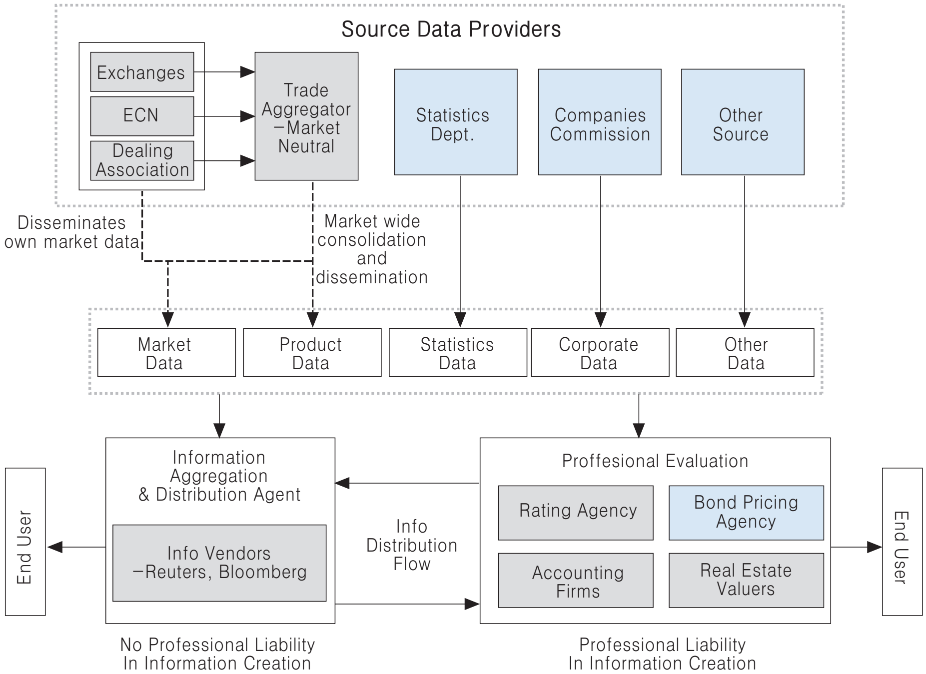
- Market-wide validation and monitoring framework thru an unbiased and interactive network with the market.

- Robust valuation framework encompassing proper modeling methodology, market segmentation approach to dissect the product universe of its class of issuers, liquidity and building proper benchmarking incorporating the supply and demand perspective.

3.3.3 Information Market Value Chain

To understand further how information consolidation and creation happens in the financial market, it is necessary to review the information market value chain, roles and responsibilities of each provider and contributor at each step of the process.

The financial market information value chain may be categorized as initial source data provider, information aggregation agent and professional independent evaluator. Typically, in the case of the fixed income market, the source data provider for the market data may be from a competing matching mechanism such as OTC Market, Electronic Communication Network (ECN) and exchanges. Each will consolidate its own market data for onward distribution to clients and information aggregation agents such as REUTERS or Bloomberg who will then consolidate the respective data and redistribute to end investors. At this stage, both the original source provider and the information agent have no professional liability for the information being provided. At the end of the value chain, the professional evaluator (who is fully responsible for its valuation output and is comprised of data users as well as data creators) will reconsolidate data according to its internal requirement to be able to provide its services such as credit rating evaluation by a rating agency, bond fair value prices by a pricing agency or real estate fair value by a real estate valuer.



3.3.4 Key Challenges In Fair Valuation

As depicted in the diagram above on the information market value chain, there is a clear demarcation between information creation and distribution with professional liability, and information creation and distribution without any liability. Herein lie the major challenges in offering a credible fair valuation for the purposes of marking-to-market which may be categorized into institutional and valuation responsibility issues.

Institutional or corporate level issues are as follows:

- Is the provider of fair valuation service (BPA) independent from market intermediation activity such as investing, providing investment advisory, underwritings, etc.?
  - ○Being part of the intermediation activity compromises the level of neutrality of the valuation of the products as the entity has direct and indirect benefits from a specific movement of the market or product.
    - −e.g.: Rating agency's role in primary market is completely independent from

having any direct or indirect benefits to the issue in order to fulfill its role as an independent credit evaluator to protect investors' interests.

- The ownership structure of the provider should not affect its valuation independence.

- Level of independence from competing market or matching mechanism
  - ○Being a part of a competing market or matching will compromise its role to be able to consolidate information across markets and across matching mechanisms.
  - ○It will also face serious challenges to be able to have a credible, unbiased and interactive validation process with the competing market or matching mechanism where the product it is evaluating is traded (e.g.: Exchange vs. OTC).
  - ○Being a part of a competing market or matching will provide the entity with a direct business benefit of "market movement" i.e. price volatility or directional movement, such as in a lower interest rate environment.
    - –e.g. An exchange providing a closing price for a non-traded stock listed on its bourse or OTC Market Organization providing prices for the securities traded in OTC.

The valuation responsibility issues are as follows:

- The quality of valuation
  - ○The provider of fair value for fixed income must have the necessary professional skill set and the supporting technology infrastructure to incorporate proper process, financial engineering, research, market monitoring and validation framework instead of a consolidation of quotation from market makers. This is especially necessary in markets or products of low liquidity and low trade volume.
  - ○Valuation of instruments must be done at individual level pricing i.e. each bond is priced according to its unique characteristic, reflecting issuer credit worthiness versus the benchmark in its peer group to avoid systematic accounting arbitrage. It must also reflect the level or liquidity of the issue and the underlying exposure in the case of structured bonds, asset backed securities or Islamic issues.

- The professional responsibility
  - ○The entity providing fair valuation (a bond pricing agency) must have professional responsibility for its valuation and proper dispute resolution process in the event of a mispricing of securities to ensure protection for the end user of fair valuation.
  - ○It must also incorporate a continuous improvement in its operation in areas of valuation framework, information aggregation process and validation framework.

3.3.5 The Indonesian Market

The Indonesian market has long suffered from the lack of price transparency in both government and corporate bond markets. The underlying issues in price formation for primary and secondary market stem from the unorganized participation mechanism hampered further by the lack of proper market making activity in all classes of securities. If we were to analyze from a functional perspective by comparing the overall market and its mechanism, we would be able to deduce that no entity in the market is able to offer a credible and reliable fair valuation service to the overall market.

Entities	Independence from Market Intermediation	Independence from Matching Mechanism or Competing Market	Corporate Level Professional Responsibility for Providing Fair Valuation	Unbiased and Interactive Market Monitoring	Robust Valuation Framework with Individual Level Pricing
Individual Financial Institution	No	A part of OTC and exchange matching intermediary	Direct conflict with intermediation business	Direct participant, biased due to individual exposure	In-house capacity limited to own portfolio
Market Organisation e.g. HIMDASUN	No	A part of OTC and exchange matching intermediary	Direct conflict with intermediation activities of members Legal responsibility of an SRO may be limited	Direct participant, biased due to individual exposure	Typically quotation driven approach which reduces granularity and increases accounting arbitrage
Exchanges e.g. Surabaya Stock Exchange	Yes	Provider of matching facilities in competition with OTC Matching	Direct conflict with matching business at the corporate level Legal responsibility of an SRO may be limited	Indirect participation, biased due to competing nature of OTC versus exchange matching	Challenges in information consolidation and monitoring capability due to competing matching position
Bond Pricing Agency	Yes	Yes	Fully responsible for its valuation output	Full monitoring capabilities due to market neutral independence positioning	Full capability to undertake comprehensive valuation at individual level with monitoring framework

3.3.6 Minimum Criteria of a Bond Pricing Agency

The Bond Pricing Agency (BPA) is an independent market-neutral entity that is mandated to provide fair evaluation of fixed income instruments for the purpose of mark-to-market for institutions' portfolio holdings.

The BPA must meet all aspects of minimum criteria to be set out by BAPEPAM. The BPA will be an entity under BAPEPAM regulation and will offer its services in two forms: public-based service to increase general market understanding, and education as well as paid service for portfolio valuation.

Business operating capability	Organization perspective	• BPA must have capacity for continuous research and development in Indonesian fixed income market. • BPA must have minimum qualified human resources to be able to handle data management, daily pricing process, IT management, market network and marketing activities.
	Market feedback to pricing output	• BPA must be able to institute a daily market feedback process in its daily valuation procedure. • BPA must have continuous monitoring process of the market activity and be fully accountable for its valuation output.
	Infrastructure requirements technology and approach	• BPA must have proper IT infrastructure to undertake a consistent valuation process. • BPA must have a proper back-up procedure and disaster recovery to ensure continuity of its services. • BPA must have a proper process to ensure its data integrity prior to any valuation to minimize pricing error. • BPA must have sound and proper methodology and process to be able to undertake consistent evaluation of Indonesian fixed income instruments, taking into account current instrument profiles and future instrument classes such as Islamic fixed income.
	Independence	• BPA must be fully independent of market activities such as matching, trading, investing, investment advisory etc. • BPA must have a well-diversified shareholding structure. In case a financial institution is an investor in the BPA, its shareholding should be limited to a certain percentage specified by BAPEPAM. • BPA must also ensure that its evaluation procedure is independent from its shareholders.
Reliability of services	Institutional feedback process	• BPA must be supported via regulation to enable engagement with the market for proper daily feedback mechanism process on its evaluation output.

Reliability of services	Institutional feedback process	• BPA must also engage the market regularly to evaluate its methodology with respect to new products, events, regulatory environment etc, to ensure that its methodology is current with the market requirements. • BPA must also provide regular reporting to BAPEPAM.
	Business continuity	• BPA must have minimum operating capital to be specified by BAPEPAM in order to ensure its financial health. • BPA must be fully committed to offer its services to the Indonesian market (local incorporation).

Other specific considerations for Indonesia :

1. BPA must show that it has a robust valuation process which is able to handle specific evaluation for emerging markets, in particular the Indonesian fixed income structures, Indonesian ABS structures and also Indonesian Islamic structures.

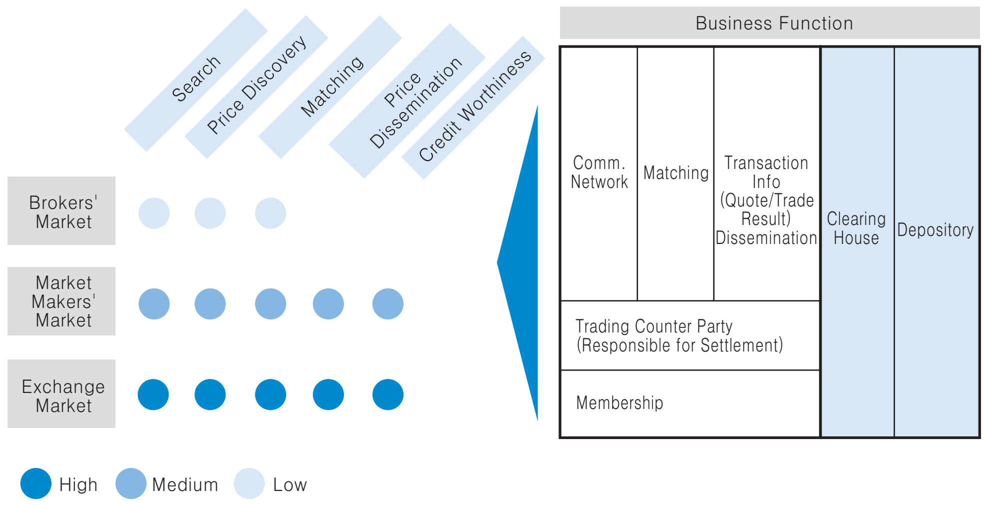
2. BPA must show it has the capacity to build local research and development and to effectively transfer any required technology. It also has to have superior management capability.

3. BPA should also have a proper business plan which incorporates its strategy from a domestic as well as regional perspective and it plans to improve market transparency and overall market promotion and education in the Indonesian market.

3.4 Electronic Trading Platform Development

Electronic Trading Platform (ETP) in the fixed income market has contributed greatly to improving the value chain process in overall market activity from issuance processing, trading and distribution, client management and services and risk management. More importantly, it has improved the general level of price transparency in comparison to traditional phone-based, over-the-counter market. The study group was faced with some critical variables in recommending the ETP development. These include neutralizing competitive disadvantage of non-banking institutions in “transactional” funding, how to offer the most cost-effective and stable transactional infrastructure with consideration of greater participation for different classes of investors such as the “retail” (smaller non-wholesale participants who are unable to execute transactions at large wholesale volume) and ways to facilitate the market requirement of adopting “Inter-Dealer” screen-based trading in the government bond market.

The study group analyzed the experience of other more mature markets in deploying an electronic trading platform in secondary market trading. Its main areas were the intermediary model employed, the product suitability and the required functional aspects of operations. In general, they be categorized into the table below.



The overall structure is to derive the major functional strength of the intermediary mechanism and to position the electronic trading platform to meet Indonesia's specific requirements, considering the limitations in market infrastructure, market maturity and depth of the local bond market.

Type of intermediary model employed and its systems	**Product suitability**	**Major strength functional categories**	**Trading approach -order book**	**Credit risk in settlement and its distribution capabilities**
Broker-based system	Low grade bond, ABS or products with high intermediation activity	• Searching of counterparty and products • Negotiation prior to execution	Typically quote driven mechanism with most activity happening based on bilateral request for quotation	High credit risk as institutions undertake their own bilateral execution risk , distribution typically limited to dealers and large investors

Type of intermediary model employed and its systems	Product suitability	Major strength functional categories	Trading approach -order book	Credit risk in settlement and its distribution capabilities
Market maker-based system	High grade corporate bonds Government bonds Some aspects of quasi-government sector	• Liquidity provider function undertaken by market maker • Negotiation function	May have order-driven mechanism among dealers in mature markets where price discovery process prior to electronic trading is efficient, in less efficient market typically quote-driven system	Medium credit risk due to higher product fungibility and high quality participation of intermediaries
Exchange-based system	High grade bonds Government bonds (More standardized product structure)	• Open and consolidated price discovery • Membership structure allows for exchange to function as central counterparty	Typically order-driven mechanism	Low credit risk as exchange functions as a central counter party. Great distribution capacity utilizing intermediaries in standardized product

It is also observed that the successful deployment of ETP depends heavily on product suitability and how well the system incorporates its business process in the existing over-the-counter market.

The study group derived the necessary measures in order to effectively meet the “critical” variable for Indonesia as follows:

Critical Variable	Remedy	Impact
Transactional funding	Trading to be done based on net settlement basis instead of delivery versus payment.	A central counter party is needed to reduce settlement risk.

Critical Variable	Remedy	Impact
Meeting current OTC business process but must also allow future "retail or smaller" class of investors	Segregate the market into two segments - wholesale and retail/smaller Must be able to offer "quote-driven mechanism" and allow bilateral negotiation via a request for quotation. For "retail/smaller" investor class, allow for consolidation or aggregation of orders to meet minimum trading volume in wholesale market and offer "order driven mechanism" to deliver the execution efficiency of wholesale market. The need for liquidity provider to ensure efficient price formation process and execution efficiency (improvement in areas of market organization or primary dealer initiative).	An Electronic Trading Platform with order and quote driven mechanism. The need for some degree of anonymity to reduce the impact of large order flows in the wholesale market. Incorporate the "Deal-Aggregation" function into the client section of individual trading participants and also among individual participants i.e. at market level.

From the current evaluation of Indonesian infrastructure in electronic trading, there seems to be a major mismatch in terms of functionality and product suitability. For example, products which require heavy intermediation such as corporate bonds are positioned for an exchange operated ETP. The order-driven trading approach currently employed is more suited to mature markets where the price discovery process in the OTC market is relatively more efficient. The underlying settlement infrastructure requires an overhaul and intensive integration to ensure more competitive payment and settlement to be able to offer a low-cost, low-risk integrated trading infrastructure with full straight thru processing capability for the capital market.

Based on the study, we are promoting the development of a hybrid electronic trading platform which is essentially an electronic trading platform operated by the exchange to be able to handle a quote-driven multi-dealer market and an order-driven retail market and be able to offer settlement on a net settlement basis to provide better "transactional" funding for secondary market activity.

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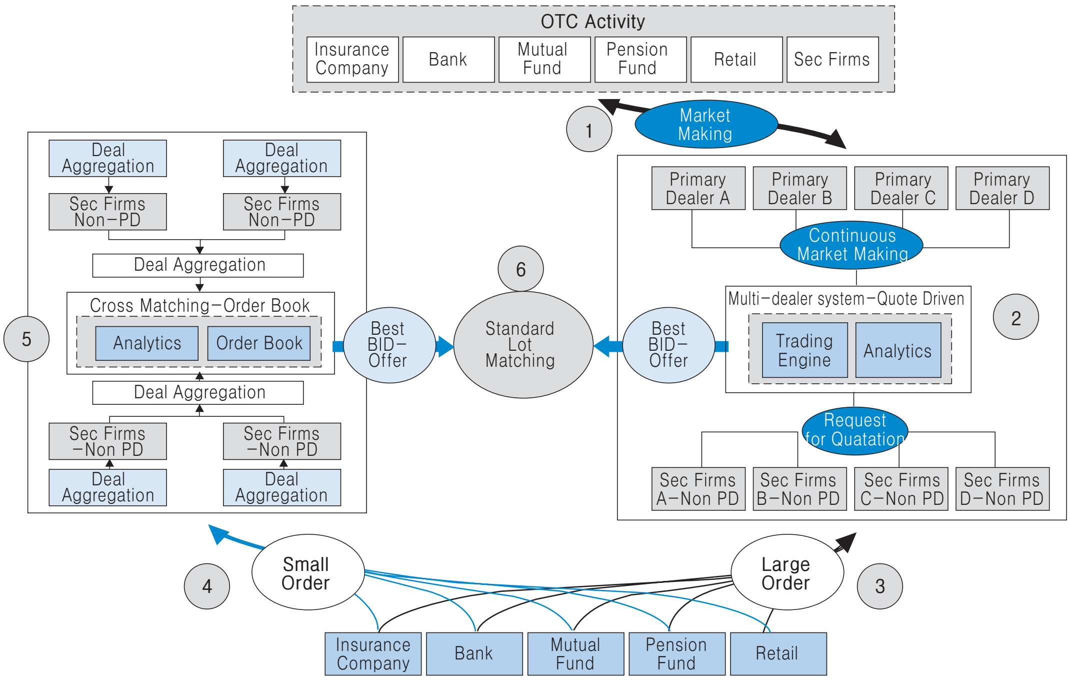
3.4.1 Conceptual Design Structure



1	Existing OTC market will co-exist with the Hybrid ETP whereby dealer may execute transactions with any counterparty on a gross-to-gross basis RTGS settlement.
2	Hybrid market will form as part of market matching infrastructure for inter-dealer market on quote-driven market matching. In this segment of the market, the primary dealers will act as **market makers** (price maker) to provide liquidity on selected designated benchmark securities. Non-PD's will act as price takers to be able to request a quotation or hit PD's best prices. All trading will be done on anonymous basis with the central counter-party (KPEI).
3 & 4	Non PD's may act as broker to brings the order flow of non ETP members depending on the size of the order. The non-PD will direct the order to the market segment - quote-driven or order-driven.
5	The order-driven retail market: this market operates purely on order-driven automated matching. It also has a "deal aggregation function" to aggregate the individual orders from end investor to an ETP member as well as among ETP members. This function serves as a bridge to consolidate the small retail transactions for further execution based on the minimum wholesale volume.

6	The best bid and offer of the wholesale market are firm execution prices which will be the barometer of the order book level. Once the order book volume reaches a standard wholesale transaction lot, the order book bid or offer will be matched with the current running prices in the wholesale market.

3.4.2 Settlement Structure

In order to achieve lower transactional funding cost for market participants, we are recommending the utilization of a central counter party to undertake settlement on a net basis which is essentially delivery versus payment model 3 as identified by the group of 10 countries study by the Basle committee.

[16]The study group identified three common structural approaches or models for achieving DVP (or, more generally, for linking delivery and payment in a securities settlement system):

Model 1: Systems that settle transfer instructions for both securities and funds on a trade-by-trade (gross) basis, with final (unconditional) transfer of securities from the seller to the buyer (delivery) occurring at the same time as final transfer of funds from the buyer to the seller (payment);

Model 2: Systems that settle securities transfer instructions on a gross basis with final transfer of securities from the seller to the buyer (delivery) occurring throughout the processing cycle, but settle funds transfer instructions on a net basis with final transfer of funds from the buyer to the seller (payment) occurring at the end of the processing cycle;

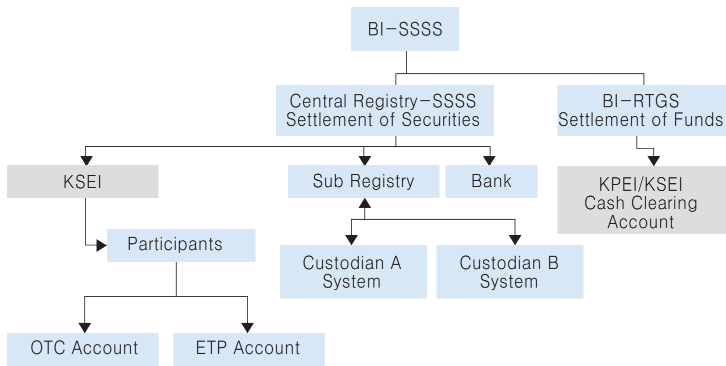
Model 3: Systems that settle transfer instructions for both securities and funds on a net basis, with final transfers of both securities and funds occurring at the end of the processing cycle.

Key requisite to achieve DVP Model 3 for ETP hybrid operation:

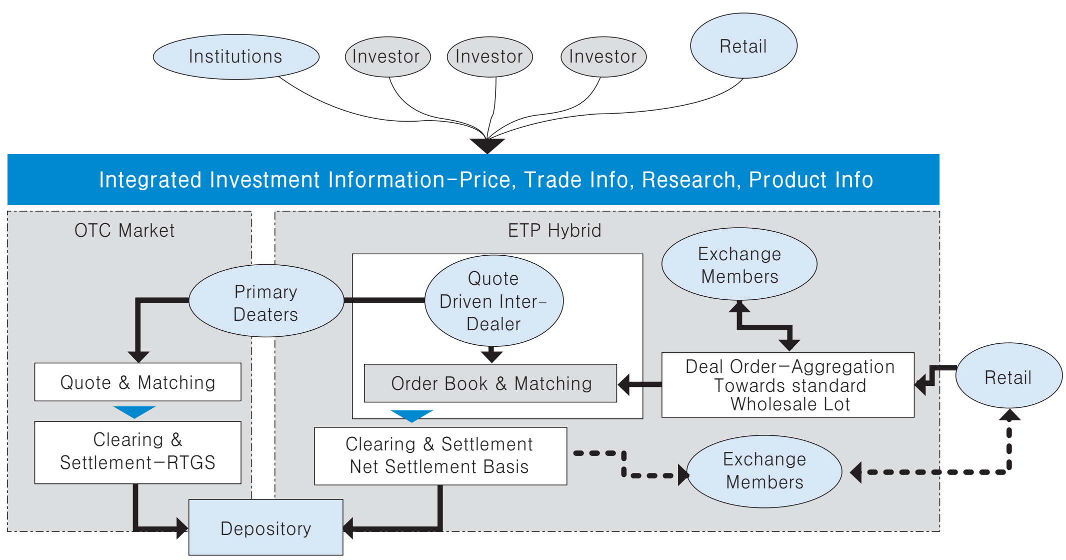
- KSEI must be fully integrated with BI-SSSS system acting as a sub-registry;
- KSEI must have cash clearing account operating on a zero net daily balance;
- KPEI must act as a central counter party to ETP hybrid transaction; and
- ETP hybrid operator must set trading limit to participants and must have online monitoring capability to reduce overall systematic risk.

16 _ Basle committee on payment system and securities settlement study report

Figure 2-11 ●● Account Structure in Depository and Settlement System



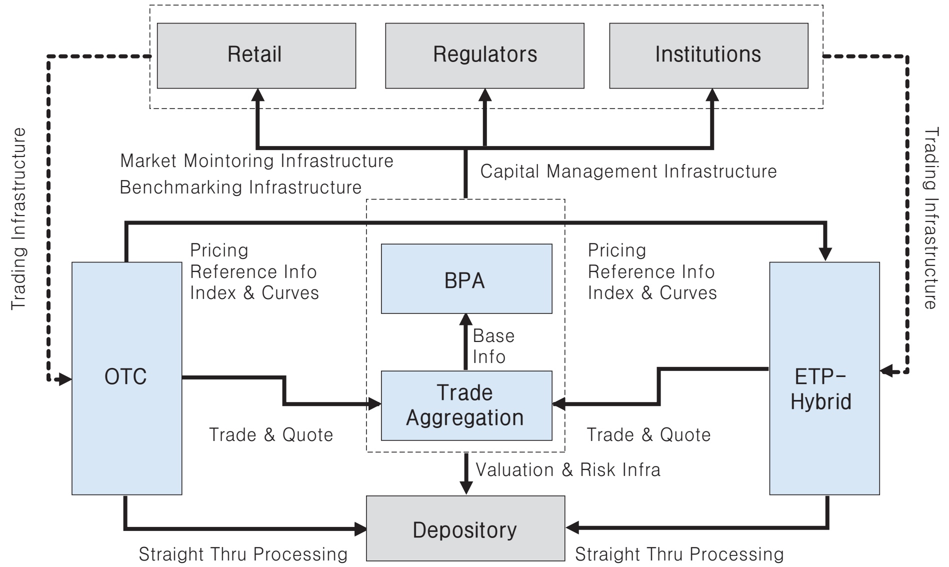
Both banks and securities companies should be allowed to operate their own accounts and the account of the client under the new proposed account structure. In consideration of KSEI's system ability, which is at the lowest level of individual account unlike BIS4 Omnibus Account Concept, the integration of KSEI into BIS4 will be able to achieve a greater flexibility in book entry management intra custodian institution, netting and greater account monitoring and consolidation from a regulatory point of view.



The OTC and ETP will co-exist and both will offer matching to the market players. The development plan incorporates the full critical variable of future inclusion of other classes of investors, greater equalization of transactional funding through net settlement mechanism for non-bank financial intermediaries.

3.5 New Market Architecture

In executing the recommendations, it is envisaged that there will be a fundamental change in the overall market architecture towards a greater overall capital market efficiency and stronger information infrastructure which will improve overall market transparency and greater investor protection.



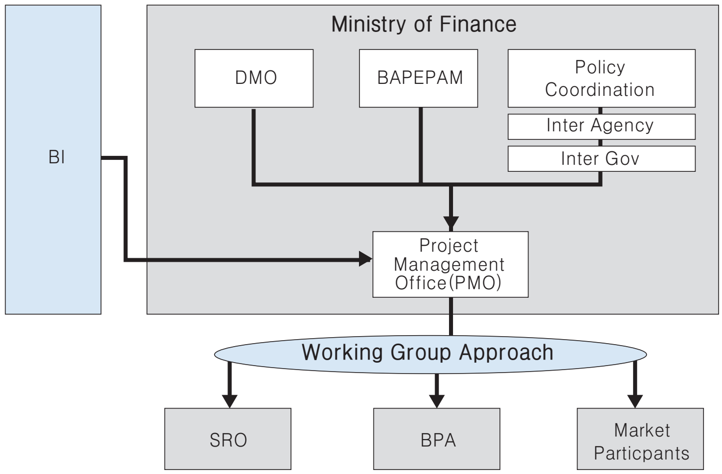
The fundamental pillar of information infrastructure (BPA and Trade Aggregator) will have a central role in improving overall transparency, providing market monitoring and capital management to market participants, regulators and end investors. The improvement of market micro structure (PD program and improvement of market access) will ensure a more competitive secondary market which will be supported by improvements in the trading infrastructure (ETP hybrid initiative and capital market STP initiative). Upon improvement of the fundamental pillars, it is expected that initiatives in government bond benchmarking will boost overall market liquidity which will be supported further by inventory management initiatives such as REPO Market, securities borrowing and lending and development of the derivatives market.

The corporate bond and other market sectors will reap tremendous spillover effects of the main initiative in the infrastructure and the government will be able to derive and execute greater market and product development to increase the depth, complexity and overall capacity of the Indonesian capital market and its stakeholders.

3.6 The Execution Plan

The overall scope of development draws from a tremendous magnitude of inter-dependent development agendas which will require intensive coordination among the regulators, market participants, SRO's, infrastructure providers and private sectors to deliver its full potential and to realize its vision. This necessitates setting up the right policy for market development, designing the right market architecture and the physical development of the needed infrastructure development efforts.

We are recommending for BAPEPAM to spearhead the setting-up of the Project Management Office (PMO) comprising the Ministry of Finance and Bank Indonesia to oversee the overall development of this initiative. Conceptually, as indicated in the work chart below, the individual initiatives may be undertaken by a working group consisting of market participants, SRO's and private sectors for execution efficiency, with regular reporting to the PMO to ensure overall project consistency and reduction of systematic dependencies on each project.



3.7 Concluding Remarks

The existing approach undertaken for market development has been based on an institutional efficiency approach whereby each institution (regulatory authority, infrastructure operator, participants) operate and develop measures related to the bond market based on its given parameter without any consideration of overall market development. Indonesia must move towards a more market driven approach based on a holistic view towards overall market development to enhance and improve the function of the market by creating a more systematic and comprehensive vision of:

- Greater transparency, liquidity and intermediation efficiency, cost-reduction and low risk execution mechanism with consideration of greater participation from other classes of investors and greater supervisory capability in market monitoring, investor's and institutional protection mechanism

The execution must be done step-by-step with full coordination among the respective agencies under a single vision of development towards overall capital market efficiency.

Appendix 1. Primary Dealership Program

1-1. Design Structure

Our recommendations in this area will require more detailed analysis for Indonesian authorities to effectively deploy a workable solution to the market.

The background for our recommendations is aimed towards developing a more competitive and transparent structure with greater supervisory monitoring capability.

1-1-1. Primary Dealer Program

Minimum Criteria	Evaluation by Regulator
Minimum capital requirement to qualify as primary dealer Banks: Break down by tier 1 and tier 2 capital, apply rule of API by Bank Indonesia to take into account further consolidation of banking institution. Non-banks: Undertake evaluation based on minimum operational capital requirement under current BAPEPAM NAWC Framework.	-Consideration of cross industry capacity requirement in areas of non-deposit taking entities (securities firms). Approach may be to benchmark banking institution's market risk minimum capital requirement which excludes the banking book. - Consideration of minimum liquidity requirements. - Consideration of capital structure and holding company structure i.e. should banks and securities firms that belong to the same group be able to apply (collusion effect as well as disintermediation perspective on distribution capabilities)?
Internal capability Risk management capability in asset and liability management, market risk, credit risk and operational risk to effectively manage the interest rate risk, counter-party risk and operational activity in undertaking primary and secondary market transaction and settlement activity. *Comprehensive human resources in* -Front office: Treasury dealing activity in areas of trading, position keeping or position management, limit management, sales and distribution. -Middle office: Position management, limit management and risk management.	-Evaluation of individual institution based on minimum standards across industry considering the current status and level of sophistication of market intermediaries. - Ensuring that participants continuously meet minimum criteria from human resource perspective as well as willingness to maintain the right technology infrastructure to undertake their functions effectively guided by the right risk management framework.

Minimum Criteria	Evaluation by Regulator
-Back office: Transaction validation, settlement validation, reconciliation and profit and loss management. *Supporting technological infrastructure* Basic system functionality requirements Front Office • Deal capture in basic products handled by the institutions • Deal pricing • Valuation routines • Tolerance checking • Real time credit and desk limits Middle Office • Check position and P & L on the fly • Direct access to static data (i.e. counterparty, settlement information) • Automatic price and rate feeds Back Office • Deal acceptance, settlements, confirmations and payments • Real time monitoring • Full general ledger capability • Proper reporting template capabilities for internal and regulatory reporting. • Complete audit and approval facility to reduce operational risk Supporting limit management framework • Across desk • Across dealers • Across product types • Across market segment • Across counter-party Market risk management • Value at risk calculation -Standard approach - Internal model • Sensitivities analysis • Scenario analysis • Valuations & analytics	

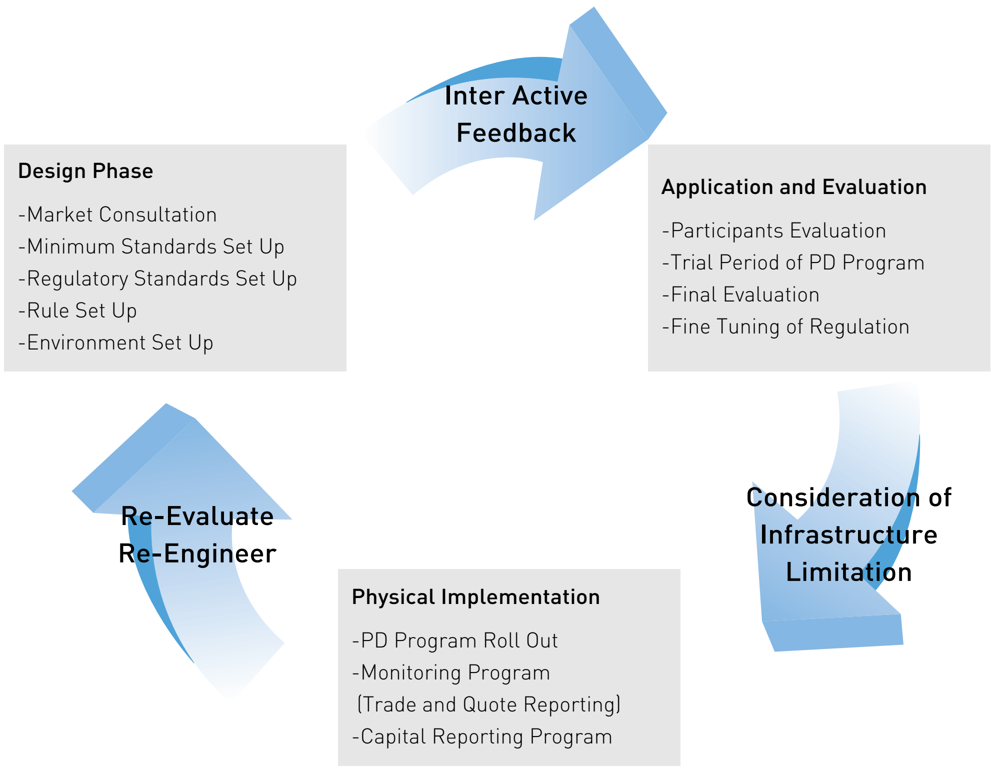
After the initial evaluation criteria on financial and infrastructure capabilities are met, the design of the obligations, benefits and other supporting considerations can be effectively structured for successful execution.

Expectation of obligation	Monitoring indicators	Supporting benefits for consideration	Supporting initiatives to be considered
Ability to undertake meaningful participation in primary market	Minimum successful bidding for own account for each auction. Minimum bidding ratio should be a function of the number of primary dealers vs. 100% to ensure successful primary issuance. e.g. if PD is 10 institutions, then minimum bidding may be 10% of issue size. Inventory building capacity must also be considered for non-bank PD's. Naturally, securities firms are brokers rather than dealers who maintain active inventory in their trading or investment book. Thus, scale of capability may be limited in primary market if securities firm cannot build a supporting order book from its customers. PD to report to DMO overall position in SUN and its associated products or market (IRS, any futures with SUN as underlying or any structured products with SUN's as underlying).	Exclusive participation to Primary Auction in Competitive Bidding.	Primary Dealers to become agent for distribution in Primary Market. DMO to consider abolishing non-competitive bidding. DMO must also have the ability to allocate the successful bidding among PDs to ensure no single PD is controlling the inventory. -e.g. : maximum % of successful bidding to total issue size may be set as part of auction rules. DMO to also consider current primary market access of non-banking institutions. Potential primary market settlement cycle reduction by undertaking its auction in the morning session and undertaking settlement and allocation in the afternoon. Thus, this will require careful consideration with Bank Indonesia with regards to the processing capabilities.
Ability to undertake effective market making activity in secondary market	Minimum trading volume in selected benchmark series designated by DMO. High continuous turnover across trading days to avoid market churning activity to meet minimum trading requirements. e.g. if regulation sets 5% of total monthly turnover, PD may wait until end of month or selectively	BAPEPAM and BI to provide preferential treatment of SUN's inventory for BI minimum reserve or BAPEPAM's NAWC calculation.	Develop Securities Borrowing and Lending Program by utilizing the "Buy and Hold Investors Class." e.g. a Central Borrower may execute a large scale borrowing program to unlock the securities in the investment book. (Key criteria are for the lenders to be able to receive the full rights under the securities such as its coupon

Expectation of obligation	Monitoring indicators	Supporting benefits for consideration	Supporting initiatives to be considered
	participate in market making based on its portfolio strategy. To ensure competitive environment, DMO should set the minimum amount or percentage of individual PD activity (PD to PD activity and PD vs. non-PD activity) to be greater than the [100/number of PD]. e.g. if there are 20 PD Institutions, minimum should be greater than 5% of transaction volume. This will ensure non-collaboration among PDs to reach minimum trading obligation. Minimum bid and offer spread should also be monitored. e.g. DMO may set selectively for "on the run" bonds to be 10 basis points with further reduction towards 5 basis points in the future. The quality of bid and offer prices or quotations should also be monitored based on the actual level of executed prices (last done in the market). PD to report all transactions in outright, REPO, securities borrowing and lending in SUN's. PD to provide quotation of designated SUN benchmarks.	PD may be borrower as well as lender in securities borrowing and lending program. Other participants may only be lenders. PD may on sell or on REPO securities received in a reverse REPO. *Tax department may consider taxation incentives for market making activities. Reduction in profit and loss taxation consideration based on market making activities.* *Operational monitoring may be difficult to ensure proper classification of market making transactions in institutions' trading book vs. own trading activity.*	payments during the lending period). The Central Borrower may then Auction off the Securities under a REPO program with the market by utilizing the current auction mechanism in the Primary Market. -Regular securities supply can be maintained. -May be able to utilize program for monetary operations of Bank Indonesia Versus direct purchase in Secondary Market by Bank Indonesia which effectively increases money supply. Refer - SBL & REPO Appendix for Mechanism Detail. DMO may consider more reopening of existing series to provide additional securities supply. This can be done in consideration of retiring some selected Non-Key Series via a stock switch. ***Long term initiative*** -Develop IRS Market, SUN futures and short term interest rate futures to support further inventory management.
Effective Distribution Network	PD must have a high number and variety of trading counterparties. PD must also be able to introduce new investors to the government bond market. This can be monitored by number of new active accounts administered by PD under its client account in Central Depository.		PD must also be able to operate own account and client account at the central depository for effective management of client activity.

All the proposed recommendations must be fully analyzed based on actual Indonesian market capacity during the actual implementation process.

Implementation Program



Appendix 2. Supply Side Initiative-Benchmarking Activity

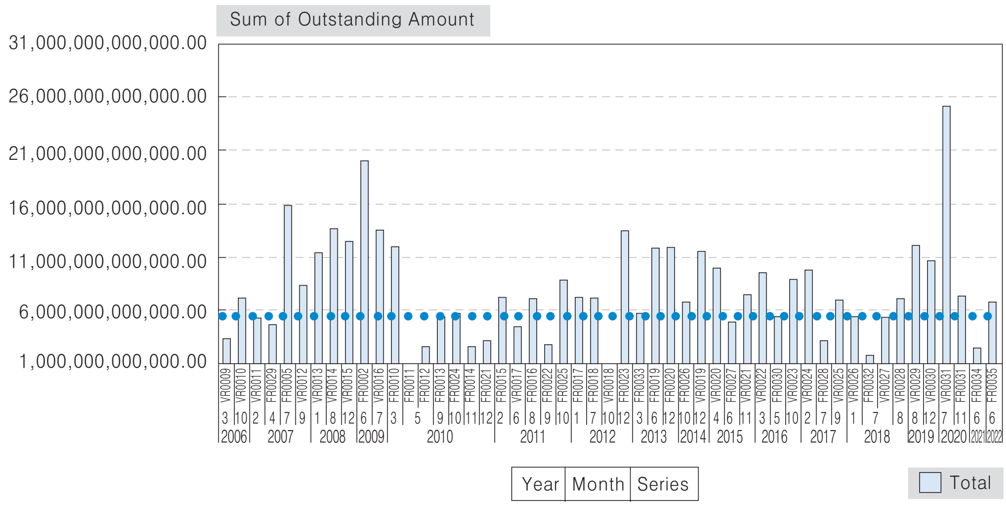
DMO is recommended to undertake product standardization program based on the current profile of SUN's outstanding in the market. The goal of the standardization program is to create more liquid benchmark series along the tenor of the curve.

Target of development

- Undertake stock switching to build benchmark stocks or series in 1, 3, 5, 7, 10, 15 and 20 years.
- Reduce floating rate obligation or convert floating rate obligation to fixed rate obligation.
- Increase re-opening program in selected on the run securities by switching short end off the run securities.
- Increase re-opening program in off the run securities along strategic points on the curve to induce trading and valuation activity.

To have a better view of the exercise, we first need to look at the current debt profile (IDR denominated as of March 2006).

Figure 2-12 ●● Total Debt Distribution in Month and Year



It is observed from the histogram of debt distribution that:

- Multiple series in small issue size below IDR 6,000,000,000,000
- Sporadic distribution of floating obligation vs. fixed rate obligation
  - In extreme cases - year 2009 - all obligation are floating rate
- Sporadic distribution of maturity along month of year
  - Impact to Coupon dates (refer to Figure 2-13)

DMO will need to undertake a study with market participants for:

- Expected benchmark securities minimum outstanding amount - potential target may include 4 large benchmarks in a year spread across individual quarters
- Expected floor of interest rate level to be able to effectively switch floating rate obligation with full market support

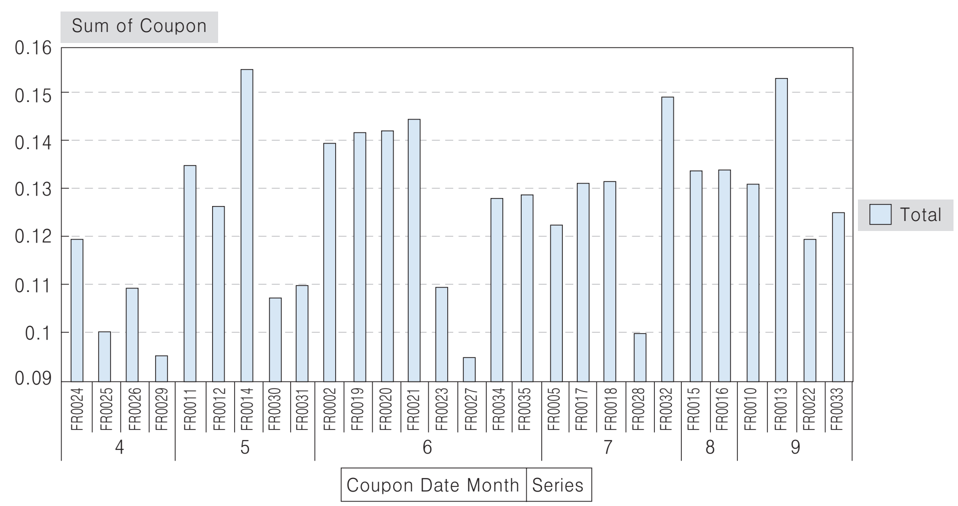
DMO will also need to undertake an internal analysis based on its funding strategy

- Internal Cash-Flow analysis to be able to project receivables to be able to support large concentration of benchmark maturities buckets

Coupon Dates Analysis

The current coupon distributions of fixed rate series are as follows:

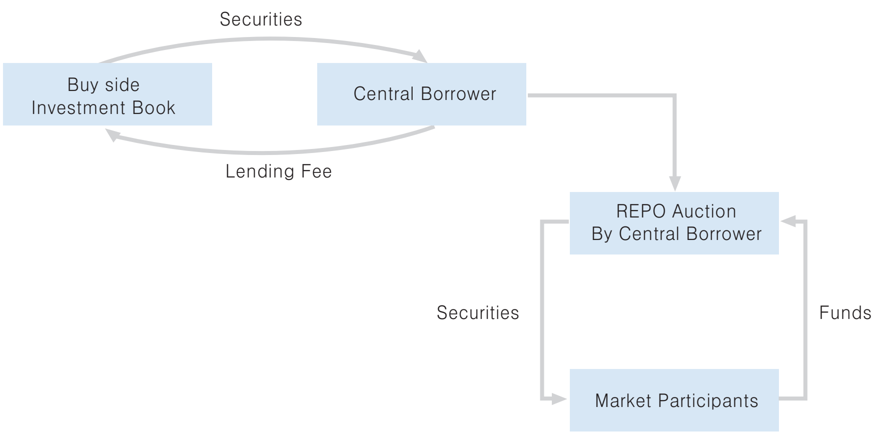
Figure 2-13 ●● Coupon Distribution across Months in a Year



It is observed from the distribution of fixed rate coupon that it is spread out from January to December based on semi annual assumption. As part of the benchmarking exercise, DMO may consider moving towards more standardized coupon structure (fungible issuance) or more standardized coupon dates to be able to move into strips market trading in the future. DMO must also consider its overall cash management if coupon payment activity is too spread out across the year. Moving towards more standardized quarter or half yearly activity will reduce the funding mismatch and provide greater flexibility in accumulating government receivables.

During its benchmarking exercise, DMO must consider the coupon versus current yield effect whereby high premium series like the high coupon bond in lower interest rate environment may move into investment book of natural long term buy side like pension funds or insurance companies which effectively reduces the available supply for trading.

Appendix 3. Repo Market and Securities Borrowing and Lending Program



The structure of the securities borrowing and lending packaged with the REPO activity would be able to facilitate efficient short-term supply of securities and potential monetary operation by the central bank:

- MRA must be executed with all market participants and central lender.
- Securities borrowing and lending agreement to be executed with market participants and central borrower.
- Rights and obligations under securities to remain under original lender (buy side) but must allow for onward transaction to on sell or on REPO securities received from central lender by market participants in secondary market-this will require current review of regulations swith regards to securities borrowing and lending.

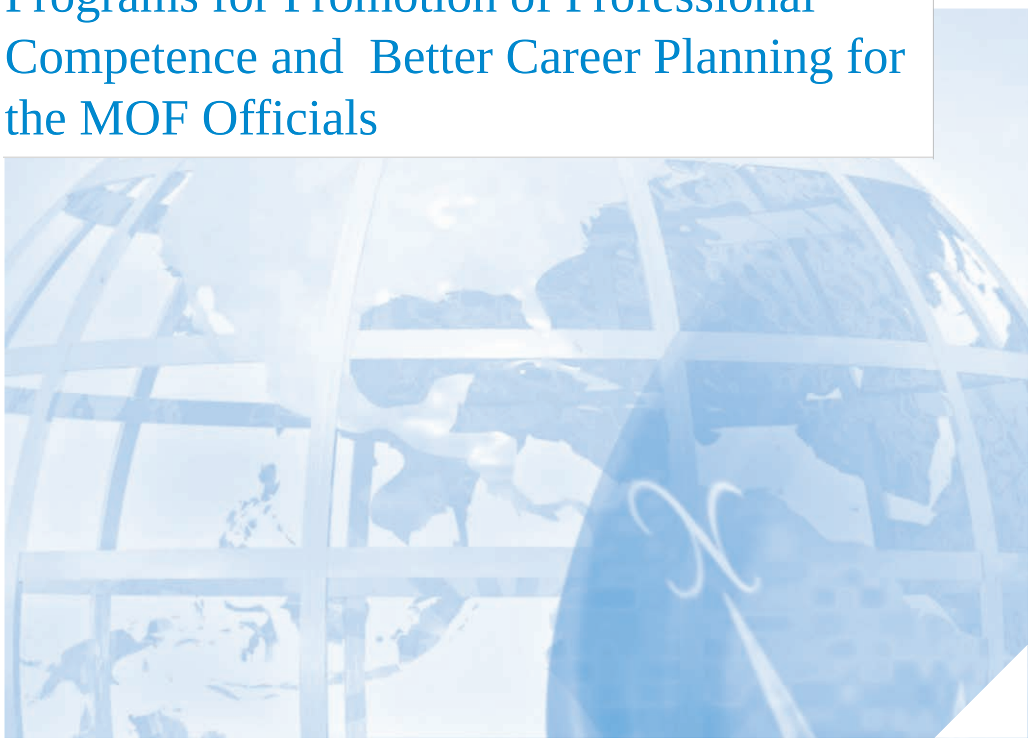
It is recommended for Bank Indonesia to look into Bank Negara Malaysia's ISCAP Program where the central bank in association with large buy side partners undertake a program to borrow securities in the investment book of natural buy and hold investors and provide these securities to the market via a REPO auction for benchmark securities with a profit sharing agreement with the original lenders.

Appendix 4. Minimum Business Specification for ETP Hybrid

Market type	Normal, odd lot and negotiated
Order and quote type	Order and quote qualifiers to be based on price, time and quantity
Books to be supported	Normal order book, quote order book, stop loss order book, odd lot order book and negotiated order book
Trading models	Order driven, quote driven and hybrid
Matching priorities	• To be based on business requirements • Price → Time, Price → Spread → Time
Entities in market	Trading Member (Non PD), Market Makers (PD), Exchange Administrators, Market Data Vendors, Regulators, Settlement Entities (KPEI and KSEI)
Limit management	• User configurable settings for risk management -Pre trade order value limits, post trade limits and exposure management. -Global level, market segment level, instrument level, system must have multi hierarchy concepts to limit assignment • Risk management and monitoring
Risk management and monitoring	• Pre-trade limit on orders by individual trading members, post-trade limit on trading members turnover or exposure • Automatic alerts based on limit level breach or near breach, automatic deactivation upon limit breach, automatic order cancellation based upon limit breach, on-line monitoring of limit utilization by trading member and ETP operators
Product coverage	Stage 1 - Indonesian government bonds trading Stage 2 - REPO trading and -other product class

Chapter 3

Strengthening the Effectiveness of Training Programs for Promotion of Professional Competence and Better Career Planning for the MOF Officials



Chapter 3

Strengthening the Effectiveness of Training Programs for Promotion of Professional Competence and Better Career Planning for the MOF Officials

Ilho Yoo
KDI School

1. Introduction

It goes without saying that the training and education for government officials is very important. Through training, officials can acquire basic skills and knowledge essential for carrying out their duties and up-to-date knowledge to handle environmental change. It has become more important recently with the development of the knowledge-based economy.

Understanding this, governments of every country in the world put great emphasis on educating and training civil servants. This is done in various ways. In many countries, there are government training institutions in charge of training and educating government officials, covering broad areas such as leadership and very specific area such as tax law, and auditing.

Additionally, governments allow civil servants to get education at home and abroad under their own plans and designs once they satisfy certain standards set by the government. In this sense, education and training for government officials is a combination of in-house training and outsourcing. Utilizing in-house training more or vice versa varies depending upon the environment and tradition.

In most countries, training and education for such specific areas as taxation and customs duties is done through in-house institutes. Why is that? Presumably, it is because these areas are uniquely public that it is hard to find experts and qualified teaching staff outside the public sector.

The main purpose of this paper is to derive policy suggestions for the Indonesian government in education and training programs for tax, customs, and budget officials. The background of this research is as follows: The Indonesian Ministry of Finance expressed its concern that the education and training programs that it offers under the management of its Agency for Finance Education and Training (FETA) have not been effective in helping its trainees enhance their professional competencies as MOF civil servants or facilitate their career development. This in turn has been a major obstacle in the Ministry's effective human resource management. Therefore, a major reform of the Indonesian MOF's training system and human resource management has been very much desired.

In this regard, it is attempted here to draw some suggestions for Indonesia from the Korean experiences by critically reviewing them, with particular emphasis on the following areas. First, this research will aim to provide advice on developing a human resource management system based on the performance of each civil servant in the directorates of taxation, customs and excise, and the budget. Second, it will aim to give advice on re-designing training programs and revision of curricula to be utilized in the human resource management of the Ministry of Finance.

This research is basically a case study. Therefore, Korean cases and experiences will be analyzed. Reference institutions in Korea are the National Tax Officials Training Institute, Customs Officials Training Institute, and Central Officials Training Institute. In addition, similar programs offered by the institutions and universities in Korea, Japan (National Tax College, Customs Training Institute), Singapore (Civil Service College) will be examined.

This paper is organized as follows: In the next chapter, the training and education system of Korea is explained and critically reviewed. In chapter III, third country cases - Singapore and Japan - will be explained. In chapter IV, the current Indonesian system will be reviewed. In chapter V, policy suggestions will be derived based on the analyses of previous chapters, followed by the conclusion in the last chapter.

2. Training and Education System in Korea

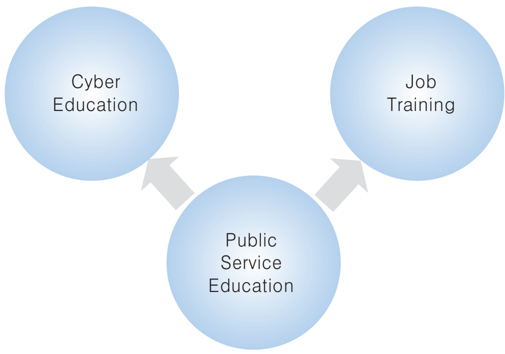
2.1 Training and Education Institutions

There are many training and education institutions for government officials in Korea from the central to local governments. In this chapter, we focus mainly on the training and education institutions for the tax and customs officials.

A. National Tax Officials Training Institute (NTOTI)

The National Tax Officials Training Institute (NTOTI) is the main training and education institute for the tax officials. Its goal is to provide the education for enhancing capability of tax officials, improving the quality of the tax policy and administration, and education for promoting governmental innovation. For that, this institute emphasizes the following: 1) More case studies for solving practical problems, 2) Strengthening cyber training, and 3) Providing fair training opportunities for everybody. Particularly, these days, it emphasizes cyber training, i.e., e-learning.

Figure 3-1 ●● Education Process of the NTOTI



As can be seen in the next table, most of its curriculum consists of the courses on the various tax laws and tax administration. It is reasonable to design curriculum in that way because those are the areas where outsourcing is not easy. Besides, it can be observed that many programs are short term.

Table 3-1 ●● Program Outline (2005)

	Program	Target	Term	Session	Class size	Overall class size
Basic Education	9 grade newly appointed	grade 9	2 weeks	2	200(1st class) 150 (2nd class)	350
	7 grade newly appointed	grade 7	2 weeks	1	56	56
	7 grade promoted (prospective)	grade 7-8	2 weeks	4	150	600
General Job Training	9 grade newly employed job training	grade 9	10 weeks	2	200(1st class) 150 (2nd class)	350
	7 grade newly employed job training	grade 7	10 weeks	1	56	56
	Income tax law (online)	grade 6-9	4 weeks	3	60	180
	Tax administrative work (income tax)	grade 6-9	8 days	3	60	180
	Corporation tax law (online I)	grade 6-9	4 weeks	3	60	180
	Tax administrative work (corporation tax)	grade 6-9	8 days	3	60	180
	Corporation tax (online II): prerequisite for [advanced studies on corporation tax]	grade 5-7	4 weeks	2	40	80
	Additional tax law (online)	grade 6-9	4 weeks	3	60	180
	Tax administrative work (additional tax law)	grade 6-9	8 days	3	60	180
	Property tax law (online I)	grade 6-9	4 weeks	3	60	180

	Program	Target	Term	Session	Class size	Overall class size
General Job Training	Tax administrative work (property tax)	grade 6-9	8 days	3	60	180
	Property tax law(online II): prerequisite for [advanced studies on property tax]	grade 5-7	4 weeks	2	40	80
	Financial accounting (online)	grade 6-9	4 weeks	3	60	180
	Corporate accounting (finance)	grade 6-9	8 days	3	60	180
	Cost price accounting (online)	grade 6-9	4 weeks	3	60	180
	Corporate accounting (cost accounting)	grade 6-9	8 days	3	60	180
	Tax administrative work (levy)	grade 6-9	1 week	2	60	120
	Tax administrative work (withholding)	grade 6-9	1 week	2	60	120
	Practical Taxation in computation post I	grade 6-9	1 week	1	30	30
	Practical Taxation in computation post II	grade 6-9	1 week	1	30	30
	Managerial administration (corporate)	grade 5	1 week	2	40	80
	Managerial administration (individual)	grade 5	1 week	2	40	80
	Lecturer education	grade 4-7	1 week	1	50	50
	Credit card irregular transaction investigation	grade 5-9	3 days	2	80	160

	Program	Target	Term	Session	Class size	Overall class size
General Job Training	Unlisted equity evaluation	grade 5-9	3 days	2	80	160
	Computer accounting	grade 5-9	2 weeks	2	45	90
	Case studies on inspection	grade 5-9	3 days	2	80	160
	Code of civil procedure	grade 5-9	1 week	1	80	80
	Import and national property management	5-technical staff	1 week	8	40	320
	Expenditure and settlement of account management	5-technical staff	1 week	10	40	400
High Grade Job Training	Advanced studies on income tax	grade 5-8	6 weeks	1	40	40
	Advanced studies on corporate tax	grade 5-7	6 weeks	2	40	80
	Advanced studies on additional tax	grade 5-9	6 weeks	1	40	40
	Advanced studies on property tax	grade 5-9	6 weeks	2	40	80
	Advanced studies on consumption tax	grade 6-9	3 weeks	1	40	40
	Advanced studies on accounting	grade 6-7	6 weeks	3	40	120
	Tax evader inspector	grade 6-9	6 weeks	1	50	50
	Financial business inspector	grade 6-9	4 weeks	1	50	50
	International tax inspector	grade 5-9	6 weeks	1	50	50
	International investigator	grade 5-9	8 weeks	1	50	50

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	Program	Target	Term	Session	Class size	Overall class size
High Grade Job Training	International tax transfer price	grade 5-9	4 weeks	1	50	50
	Computer investigator	grade 6-9	10 weeks	2	40	80
	Studies on computer inspection	grade 6-9	1 week	6	40	240
	SQL	grade 6-9	1 week	2	40	80
	Legal affairs professional (advanced)	grade 6-9	6 weeks	1	60	60
	Legal affairs professional (elementary)	grade 6-9	3 weeks	2	60	120
	Consultant I	grade 6-7	3 weeks	1	40	40
	Consultant II	grade 6-7	3 weeks	1	40	40
	Practical Research of industrial classification	grade 6-9	1 week	2	60	120
	Special studies for chief officers	grade 4	23 weeks	2	15	30
Mind Education	Women officers development	6-technical staff	3 days	2	50	100
	Tax payer consultant	6-technical staff	3 days	2	80	160
	Counseling center consultant	grade 6-9	1 week	1	30	30
	Promoted officials education	grade 6, grade 8	3 days	2	150	300
	Managerial leadership	grade 5-6	1 week	2	60	120
	Innovative professional education	grade 4-9	2 days	1	80	80

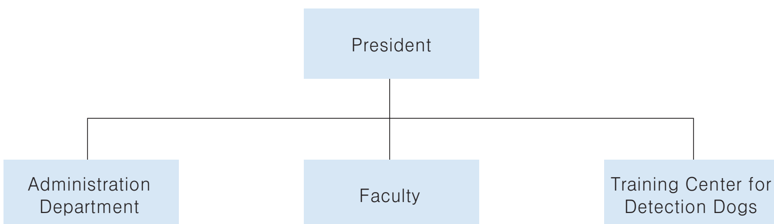
	Program	Target	Term	Session	Class size	Overall class size
Information Utilization Special Education	Access	5-technical staff	2 weeks	4	40	160
	Oracle	5-technical staff	2 weeks	3	40	120
	VBA(Visual Basic Application)	5-technical staff	2 weeks	3	40	120
	Visual Basic	5-technical staff	2 weeks	3	40	120
Others	Future planner	Prospective retirees	1 week	2	20	40
	Bureau of investigation special education	grade 3-9	2 days	4	230	920
	Tax revenue administration annual meeting	grade 3-9	2 days	1	250	250
	Inspector's office special education	grade 3-9	2 days	1	150	150
	Consumption tax officials annual meeting	grade 3-9	2 days	1	240	240
	International taxation annual meeting	grade 3-9	2 days	1	280	280
	Judicial investigation part annual meeting	grade 3-9	2 days	1	240	240
	Counseling center annual meeting	grade 3-9	2 days	1	60	60

B. Korea Customs Service Academy

Korea Customs Service Academy is the training institution founded in 1965 for customs officials whose purpose is to teach basic knowledge and skills for newly recruited and appointed (promoted) officials. Officially, it claims that the major purpose of training in the institute is as follows: i) Training ingenious customs officials who will lead innovative administration of the 21st century, ii) Supporting successful innovation, iii) Establishing training structure to enhance professional skills, iv) Strengthening open education focused on trainees, v) Establishing cyber education system, and vi) Providing incentives to utilize the educational achievement.

Organizational structure of this institute is shown in the following figure.

Figure 3-2 ●● Organizational Structure of the Korea Customs Service Academy



Training and education program in the institute are divided into three categories. They are program for newly appointed and transferred officials, Grade 7 officials' program, and program for newly recruited officials. The following section will explain them in turn.

1) Program for newly appointed and transferred officials

■ Program outline

Objective	Developing basic knowledge required for job performance Building up problem solving capacity as an administrator
Target	Newly appointed or transferred officials
Number of persons	6 people per session
Term	Four weeks (140hrs)

Program organization

Subject	Hours	Percentage (100%)
Official Duties	112	80
General and Cultural Education	21	15
Auditing and Administration	7	5
Total	140	100%

Curriculum

Official duties

Subject	Time allocation			
	Total	Lecture	Participation	Others
Tariff	6	6	0	0
Customs clearance	6	6	0	0
Bonded area and cargo management	6	6	0	0
Special customs	3	3	0	0
Intellectual property rights, geographic indication, FTA	3	3	0	0
Tariff rate and classification	6	4	2	0
Additional duties/exemptions	6	6	0	0
Reimbursement	6	6	0	0
Taxation price assessment	6	4	2	0
Tariff act and investigation proceeding	6	6	0	0
Surveillance on airports and ports	3	3	0	0
Foreign exchange investigation	3	3	0	0
Drug investigation	4	4	0	0
Information and CDW application	5	2	3	0
Trade affairs	10	10	0	0
International cooperation	3	3	0	0
Emergency provision	3	3	0	0
Foreign trade act	6	6	0	0
On-the-job training and innovative discussion	21	0	21	0
Sub total	112	84	28	0

■ General and Cultural Education

Subject	Time allocation			
	Total	Lecture	Participation	Others
General education	15	15	0	0
Conversation with seniors	2	2	0	0
Physical training	4	0	4	0
Sub total	21	17	4	0

■ Evaluation and Administration

Subject	Time allocation			
	Total	Lecture	Participation	Others
Evaluation	2	0	0	2
Administration/miscellaneous	5	0	0	5
Sub total	7	0	0	7

2) Grade 7 officials' program

■ Program outline

Objective	Developing basic knowledge of customs law required for job performance Building up capacity as public officials
Target	Those who have not completed basic education among 7th grade promotes or prospective promotes
Number of persons	50 people per class
Term	- On-line : Early June - Off-line : Late June

■ Program organization

Subject	Hours	Percentage (100%)
Official Duties	42	53
General and Cultural Education	33	41
Evaluation, Administration	5	6
Total	80	100%

● *Curriculum*

■ Official duties

Subject	Time allocation			
	Total	Lecture	Participation	Others
Customs criminal law (online)	10	10	0	0
Customs law	20	20	0	0
Special reimbursement law	2	2	0	0
Taxation price assessment	2	2	0	0
Tariff rate and classification	2	2	0	0
Bonded area and cargo management	2	2	0	0
Customs clearance	2	2	0	0
Additional duties/exemption	2	2	0	0
Sub total	42	42	0	0

■ General and Cultural Education

Subject	Time allocation			
	Total	Lecture	Participation	Others
Physical Training	9	0	0	0
Leadership	4	4	0	0
Conflict Resolution	4	4	0	0
Role of Civil Service	4	4	0	0
Reform of the Participatory Government	4	4	0	0
Special Lecture	8	8	0	0
Sub total	33	24	0	0

■ Evaluation and administration

Subject	Time allocation			
	Total	Lecture	Participation	Others
Evaluation				
Administration/Miscellaneous	5	0	5	0
Sub total	5		5	

3) Program for newly recruited officials

■ Program Outline

Objective	Building up legal and basic knowledge required for customs duties performance Establishing probity as customs official
Target	Newly appointed or prospective employees
Number of persons	50 people per 1 class (100 people in 2 classes)
Term	1st session: February ~ March 2nd session: June ~ July

■ Program Organization

Subject	Hours	Percentage (100%)
Official Duties	84	61
Accomplishments	50	36
Evaluation, Administration	4	3
Total	138	100%

● *Curriculum*

■ Official duties

Subject	Time allocation			
	Total	Lecture	Participation	Others
Customs law	20	20	0	0
Special reimbursement law	6	6	0	0
Foreign trade law	6	6	0	0
Foreign exchange law	6	6	0	0
Domestic consumption tax law	6	6	0	0
Criminal law/code of criminal procedure	6	6	0	0
The national public service law	3	3	0	0
Code of conduct of for public officials	3	3	0	0

Handy office/knowledge management system	3	3	0	0
Security and emergency provision	3	3	0	0
Excel	20	5	15	0
Document drafting and management	2	2	0	0
Sub total	84	69	15	0

General and Cultural Education

Subject	Time allocation			
	Total	Lecture	Participation	Others
Innovation of participatory government	2	2	0	0
On-the-job training	14	0	14	0
Teamwork training	7	0	7	0
Culture exploration	7	0	7	0
Innovation special lecture	3	3	0	0
Sexual harassment prevention education	2	2	0	0
Understanding traditional music	2	0	2	0
Section activity	2	0	2	0
Health of working people	3	3	0	0
Physical and health education	6	0	6	0
Sub total	50	12	38	0

Evaluation and Administration

Subject	Time allocation			
	Total	Lecture	Participation	Others
Evaluation	0		0	
Administration/cellaneous	4		4	
Sub total	4		4	

C. Other Related Training Institutes

1) Training and Education Division of Civil Service Committee

The Civil Service Committee is an institution taking charge of human resource management in the Korean government. Its training and education department set up the training and education policy and supervises all training and education institutions of the Korean government. Its major functions are as follows; first, establish human resource development policies, second, provide support and evaluation to the government ministries related to training of civil servants, and third, offer special training programs for educating the core group of civil servants.

2) Central Officials Training Institute (COTI)

The Central Officials Training Institute is the central training institute to provide necessary education and training for all civil servants. Its curium covers a broad range of issues. Its aim is specified to offer training programs designed to develop core competency among civil servants at the managerial-level, and to do research on effective training methods and support other civil service training institutes.

3) National Tax College

The National Tax College was founded in 1981 to train and educate elementary level tax and customs officials. Its objective was to train and educate elementary level tax and customs officials equipped with the professional skills and knowledge, patriotism, and ethics as civil servants. It was a two year, degree offering, regular college. Once admitted to this college, students were automatically hired as grade 7 tax and customs officials upon graduation, and assigned to an area (tax, customs) mainly according to the student applications.

This college was closed in 2001 after 20 years with an alumni of 5,100. The main reason for this was that there are many private and public colleges that offer similar programs. This has an implication for the future of the government education institutions.

2.2 Problems of the Current System

The training and education system for tax and customs officials in Korea is not without its own problems in spite of the progress made in the past. Thus, the Korean case is not a model to follow in every case. In this section, problems (and resolutions for them) of the current Korea system will be summarized.

1) It is often pointed out that the training and education to meet the needs of specific groups is lacking. For example, it is argued that more training of administrative skills for the officials in the area of R & D is required so that they can carry out the administrative function. It is also pointed out that there should be more education opportunities for high ranking officials (G4 and above). To resolve this problem, introduction of such measures as vouchers, and Individual Learning Accounts used in the U.S.A. are recommended to give more choices to the trainees.

2) It needs to induce more interest in government agency officials and the managers (ministers, commissioners etc.). In other words, the current system is not so successful in attracting the interest of the government officials. To resolve this problem, development of various programs that can induce more interest in the trainees (e.g. e-learning, better teaching materials) is recommended. Also, to make the managers' pay more attention to their staff's education and training, linking the staff's education performance with the managers' work performance should be considered (e.g. allocating part of their scores based on this).

3) A point of criticism is that the expertise of the teaching resources is low. It may be due to frequent rotation of the in-house teaching officials and staff, low salaries and low fees for outside experts. It is somewhat inevitable considering the tight budget. However, enhancing teaching resources is very important. Thus, provision of better treatment to teaching staff (higher salary, promotion) is necessary and more outsourcing should be considered. Also, to enhance teaching skills, performance measures reflecting teaching evaluation are necessary.

4) There should be programs directly related with the performance and actual duty of the officials. In other words, the content of the education and training is not practical enough. To this end, more case studies should be taught and discussed. More use of survey results on the needs of trainees, would be another measure to solve this problem.

3. Third Country Cases: Japan and Singapore

3.1 Japan

In Japan, training and education for tax and customs officials is done by two institutions: National Tax College for the former and the Customs Training Institute for the latter. Each will be explained in turn.

A. National Tax College

Since tax administrative tasks require highly professional expertise, National Tax Agency (NTA) provides various training programs, including training sessions for the newly hired in order to enhance capabilities of NTA staff.

As the central organization for staff training, NTA is furnished with a National Tax College (NTC), which has Central Institute and 12 branches around the country.

(1) Training at National Tax College

NTA assigns selected staff members to NTC as professors and instructors. Many university professors are also assigned to NTC as lecturers. NTC provides the training programs stated below.

a. Training for officials who have passed the Level III (Tax Administration) Recruitment Examination for National Officials

(a) Primary Course

This course is for newly employed officials who have passed the Level III (Tax Administration) Recruitment Examination for National Officials. The trainees attend intensive training at NTC's regional branches for 13 months starting immediately after employment. All trainees are required to live in dormitories.

The training course consists of the following activities:

i) Basic subjects and liberal arts including law and economics to acquire necessary knowledge,

ii) Specialized subjects including tax law, bookkeeping and accounting to gain knowledge and skills necessary as taxation official,

iii) Group guidance to foster common sense and awareness as civil servant, and,
iv) Physical education and cultural activities to build up sound sprit and body.

(b) Basic Training for New Staff

NTA provides this 3-month-long course at NTC branches for new employees who have working experience at a tax office for 11 months after completing the primary course. This basic training aims at gaining essential knowledge and skills for tax officials. Trainees are divided into small groups, which specialize respectively in individual taxation, property taxation, corporate taxation, and revenue management and collection.

The curriculum focuses on expertise in tax law.

(c) Advanced Course I

This course is for staffs who have 7 years or more working experience at NTA and have passed an internal selection test. The course provides a 1-year program at the Central Institute. Trainees are divided into small groups, which specialize respectively in individual taxation, property taxation, corporate taxation, liquor taxation, and revenue management and collection.

The curriculum mainly consists of technical subjects (such as tax law, accounting, bookkeeping and financial statements), basic subjects such as law and economics, and other subjects necessary to acquire specialized in-depth knowledge that will enable trainees to become key staff in tax administration.

b. Training for officials who have passed the Recruitment Examination for National Taxation Specialists

(a) Basic Training Course

This course is for newly recruited officials who have passed the Recruitment Examination for National Taxation Specialists. The course provides a 4-month program at the Central Institute.

The curriculum mainly consists of specialized subjects such as tax law, accounting and bookkeeping to provide basic knowledge and skills as tax officials.

(b) Advanced Course II

This course is for staffs who have working experience at NTA after attending the basic training. The course lasts for 7 months. The trainees are divided into small groups that specialize respectively in individual taxation, property taxation, corporate taxation and revenue management and collection.

The curriculum puts emphasis on technical subjects, such as tax law, accounting, bookkeeping and financial statements, to provide necessary professional knowledge as experts on national taxes.

c. Training for officials who have passed the Level I Recruitment Examination for National Officials

(a) Basic Training

NTA provides this 1-week course at the Central Institute for newly employed Level I Examination officials immediately after joining NTA.

This training course includes basic lectures on NTA's organizational structure and functions.

(b) Training Course in Advanced Tax Business

The 1-month training course, for staff officials with 2 years working experience, is conducted at the NTC Central Institute. Income Tax Law, Consumption Tax Law, bookkeeping and accounting, and business analysis are the main subjects in this course.

(c) Special Training Course for Prospective Administrators

This course is provided for staff officials who have 3 years' working experience at NTA. The course lasts for 3 months, and the curriculum especially focuses on issues in tax law. The purpose is to cultivate a higher level of knowledge and understanding of tax administration matters.

(d) Correspondence Training Course in Tax Accounting

This course is provided through correspondence for staff officials with 2 years' working experience. The subjects include bookkeeping and financial statements.

d. Other Training Programs

(a) Research Course

This course targets selected officials for 1 year and 3 months at the NTC Central Institute. Trainees engage in independent research on a specific topic, through which they acquire a high level knowledge of professional theories and techniques. The results of the research are published as a thesis.

The curriculum allows trainees to attend lectures on law and other subjects at universities or graduate schools to support their research.

(b) International Tax Seminar

NTC Central Institute provides this seminar to develop professional knowledge and skills in international taxation laws and international taxation survey methods. The aim is to improve their technical expertise in taxation on overseas transactions to cope with an increasingly globalized economy.

i) Basic Course

The basic course is provided for staff who have certain years of working experience as tax officials and have passed an internal selection test. The course lasts for 2 months and focuses on acquiring basic knowledge related to international taxation affairs, including international practices and international tax laws.

ii) Practical Course

The Practical Course, lasting 4 months, is provided for selected staff officials who have successfully completed the Basic Course (including the General Course). This program consists of two courses: the International Negotiation Specialist Course and the International Examination Specialist Course.

The curriculum mainly consists of technical lectures on international taxation. Each course puts emphasis on the following subjects.

• International Negotiation Specialist Course

Training is given in English conversation and specialist subjects, such as international taxation systems, with the main aim of cultivating the ability to conduct international liaison duties.

• International Examination Specialist Course

Training is given in specialist subjects such as international taxation survey methods and international transaction practices, with the main aim of cultivating superior ability in examining overseas transactions.

(c) Short-Term Training Courses

These courses are for officials working at regional taxation bureaus and tax offices. The training lasts for a relatively short period and is organized separately for each specialty within NTA. It is provided both at the Central Institute and at its branches.

i) Short-Term Training at the Central Institute

Short-term training at the Central Institute is provided mainly for staff officials of regional taxation bureaus to acquire necessary high-level knowledge and skills for smooth and efficient professional work, or for the supervision of tax office staff.

ii) Short-Term Training at Branches

Short-term training needed for fulfillment of duties is, in principle, conducted at branches to promote the capability and qualification of officials according to their length of service or hierarchical bracket (their post).

• By length of service

This comprehensive training is provided for staff officials to maintain and promote their professional abilities in tax examinations, etc. The training is divided into Courses I to IV in accordance with their length of service.

• By post

Supervisor training is given to newly assigned Chief Examiners, Chief Revenue Officers of tax offices and others. It provides them with knowledge and skills they need as supervisors. Practical training is also conducted for staff officials of tax offices, according to their post, so that they may acquire the expertise and skills needed for their current respective specialties.

(d) Correspondence Training Course

Correspondence training provides accounting course (at the Central Institute) and English course (at the Branches) to help employees with self-study. These courses are for NTA officials working at the head office, regional taxation bureaus and tax offices.

(2) On-the-job training

Regional taxation bureaus, tax offices and tax office blocks conduct on-the-job training. This training consists of various specialized subjects and general subjects that are necessary to cope with ever changing taxation environments.

B. Customs Training Institute

1) Overview of the Customs Training Institute

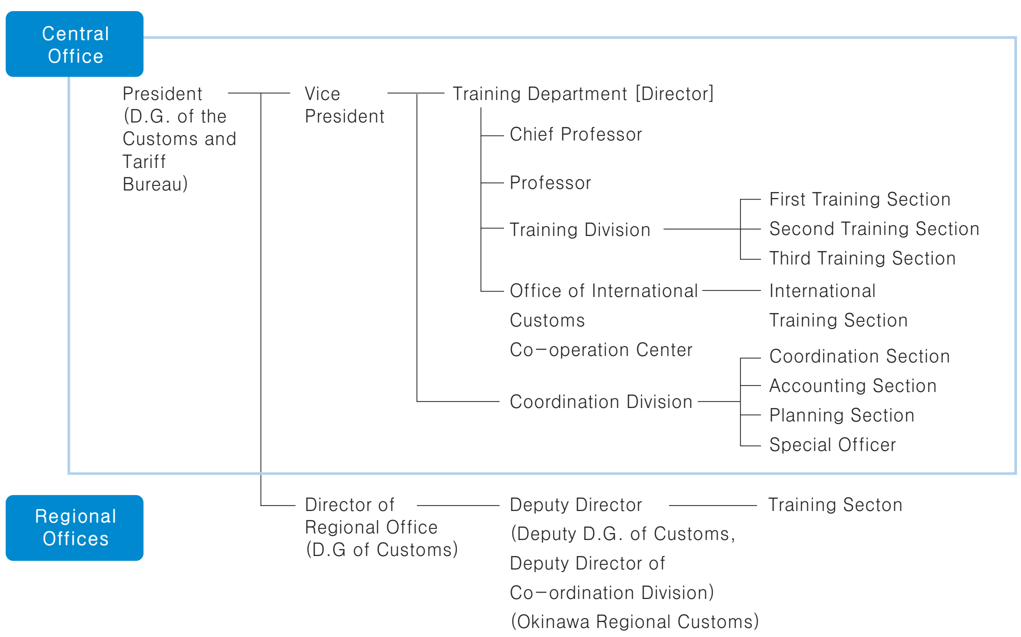
Education and training of Customs officials were initially carried out by individual Customhouses throughout the country as early as 1946. In order to systematize the education and training, the Customs Training Institute was established in August 1953, as a branch agency of the Ministry of Finance.

The Customs Training Institute has its central office in Kashiwa City, Chiba Prefecture, and 9 regional offices where Customs headquarters are located. The number of the staff members is

34, 14 of whom are the staff from the central office. The Director-General of the Customs and Tariff Bureau of the MOF serves concurrently as President of the Institute. The Director-General and Director of Coordination of each Customs division is appointed as Director and Deputy Director of each regional office respectively. In the Okinawa regional office, the Deputy Director in charge of the Coordination Division serve concurrently as Deputy Director of the regional office.

The central office, consisting of 1 department, 2 divisions, 1 office, 7 sections, 1 specialist, chief professor and professors, is in charge of planning of training scheme, conducting training courses, planning and operation of training programs, delivery of lectures, general guidance for the regional offices and general administrative tasks. Organizational structure of the Customs Training Institute is shown in < Figure 3-3 >.

Figure 3-3 ●● Organizational Structure



2) Outline of Training

The aims of training conducted by the customs Training Institute are as follows:

a. to develop the good character required for civil servants while enhancing the level of their culture and sensibility desirable as members of society.

b. to make officials who serve in customs administration acquire necessary knowledge and techniques, and application ability so that they can adequately adapt themselves to the changing environment of customs as well as enabling them to handle the customs work properly and quickly, thereby improving the quality of the customs administration.

Here, it is noted that the training for customs officials consists of OffJT (off-the-job-training) and OJT (on-the-job-training). OJT is conducted by superiors at each customs office in order to acquire the knowledge and techniques necessary for undertaking customs service. In addition, the Institute assists in covering expenses for correspondence education (ex. computer, foreign language etc.) to encourage individual officials, efforts toward self-improvement.

Training for customs officials is provided according to the Annual Training Plan Principle with their purposes and principles, and a training plan for each course is developed and enacted accordingly. The Annual Training Plan Principle is amended annually in accordance with changes in the customs environment.

Training courses at the central office are designed for officials from nine regional customs offices across the nation. Training courses at the central office are centered around theoretical training, including the study of laws related to customs service. Meanwhile, training courses at regional offices are designed for officials of each customs branch, focusing on technical training for practical services.

For basic and general subjects such as general laws, economics, etc., university professors and specialists from outside the Institute are appointed as lecturers. For technical subjects, including customs laws and regulations, professors of the Institute are assigned to the Central Institute, and appointed experienced officials at regional offices.

In cooperation with the Customs and Tariff Bureau, each regional customs, branch and others, the Customs Training Institute is accepting the training courses for the customs personnel from developing countries and elsewhere, in connection with the customs technical cooperation projects of the Bureau.

3) Training Programs and Courses

(1) Management Training Courses

The following training courses are conducted so that officials at management levels can acquire necessary knowledge pertaining to their respective areas of management.

Course	Institution	Objectives	Duration
Executive Management Training	Central Office	Executive officials acquire a wide perspective and fresh vision toward administration and advanced knowledge of management.	5 days
Supervisory Management Training	Regional Offices	Supervisory officials (equivalent to section chiefs) acquire advanced technical knowledge, and techniques of management that revitalizes operations and develops human resources.	4 days
Senior Management Training	Regional Offices	Section chiefs acquire advanced knowledge of management necessary for their management.	5 days
Middle Management Training	Regional Offices	Officials at middle management level acquire general knowledge and skills necessary for their management.	5 days
Junior Management Training	Regional Offices	Newly-appointed officials at junior management level acquire basic knowledge and skills necessary for their management.	5 days

(2) General Training Courses

(a) Training courses for new recruits

The following courses are taught to make new recruits aware of their duties and responsibilities as public employees, and acquire knowledge and skills necessary for efficient customs work.

Course	Institution	Objectives	Duration
Introductory Course for Grade I Employees	Central Office	Teach new recruits (grade I) their duties and responsibilities as public employees, and acquire knowledge and skills necessary for efficient customs work.	16 days
Introductory Course for Grade II Employees	Central Office	Teach new recruits (grade II) their duties and responsibilities as public employee, and acquire knowledge and skills necessary for efficient customs work.	3 months
Introductory Course for Grade III Employees	Central Office	Teach new recruits (grade III) to acquire a sense of responsibility as members of society, become aware of their duties and responsibilities as public employees, and acquire basic knowledge and skills necessary for efficient customs work.	9 months

(b) Training courses for experienced officials

The following courses are performed so that experienced officials can acquire advanced knowledge of comprehensive customs administration.

Course	Institution	Objectives	Duration
Theoretical Training for Grade I Employees	Central Office	Experienced officials acquire advanced knowledge of overall customs administration and ability to contribute to project planning for customs administrative system.	2.5 months
Advanced Course for Grade II and III Employees	Central Office	Experienced officials acquire advanced knowledge of customs administration and its application ability.	6 months
Intermediate course	Regional Office	Experienced officials acquire practical knowledge and skills of customs work.	2 months

(3) Technical Training Courses

The following courses are performed so that customs officials can acquire technical knowledge of customs work.

Course	Institution	Objectives	Duration
Professional Course for Supervisors	Central Office	Senior officials in charge of inspection, customs clearance, post-clearance audit and Hozei area work, etc. acquire more advanced knowledge and skills as experts in their respective fields.	10 days
Professional Course	Central Office	Responsible officials in charge of inspection, customs clearance, post clearance audit and Hozei area, etc. acquire advanced knowledge and skills concerning their respective fields.	2 months
Advanced English Course	Central Office	To improve experienced officials' English proficiency with respect to their daily customs work, expert missions, work in international organizations, and to teach them the skills necessary to teach practical subjects to trainees in invitational customs technical cooperation courses.	2 months

Other Foreign Language Course	Central Office	Officials who need proficiency in Chinese, Korean and Russian to fulfill their duties to acquire knowledge and skills.	1 month
Foreign Language Course	Regional Office	Officials who need proficiency in a conversational foreign language to fulfill their work to speak the language beyond the beginner level.	Regional Offices Decides
Computer Course	Central Office	Officials acquire knowledge and skills necessary to be managers of a network system.	3 weeks
Assistant staff Course for Customs Technical Cooperation	Central Office	Experienced officials acquire knowledge and understanding of technical assistance, and train as specialists in this field.	2 weeks
Instructor Course	Central Office	Officials teaching as instructors of practical subjects in training courses at regional offices acquire knowledge and skills necessary for effective teaching.	12 days
Practical Training Courses Related to Customs Work	Regional Offices	To teach the required technical knowledge and skills to officials who perform surveillance and control, ship search, baggage inspection, violation investigation and disposition of customs offences, collection, delinquency disposition, customs clearance, examination, classification, analysis, equipment-related control and inspection, statistics, post-clearance-audit, valuation, control and inspection related to Hozei area, intelligence management, safety management, general affairs, etc.	To be individually prescribed
Other Training Courses	Central/ Regional Offices	Develop the capability and efficiency of officials, and improve the quality of customs administration by acquiring necessary knowledge and skills.	

3.2 Singapore

In Singapore, training and education for tax, customs and budget officials are basically done through outsourcing. The only in-house training institution is the Civil Service College, which provides basic training in broad areas. This college is similar to the COTI in Korea. The fact that there is no government training institutions makes the Singaporean case unique. This is based on the philosophy that government officials have the right to plan and take their own training and education program depending only on their own judgment of the need and appropriateness. This is clearly explained in the position of Inland Revenue Authority of Singapore (IRAS) and Ministry of Finance (MOF) on the training of its officers.

1) IRAS (Inland Revenue Authority of Singapore)

In IRAS, "Everyone Matters" is the motto and people play an important role in the organization's success. It is said that it believes in training and developing staff so that they can develop their potential, caring for staff's well-being, being responsive to their needs, and valuing staff's feedback.

It provides continuous and comprehensive training and education so that officers in IRAS will be able to perform their tasks effectively and progress in their careers. This will ensure that they are developed to their fullest potential with the relevant skills and knowledge.

It is important to point out that the principle of training is quoted as follows:

> Our people are empowered to plan their own development; they are free to choose the courses they need for the job. We entrust our people to manage their own learning and believe that they would be able to plan their career paths. The training we have includes:
> - Tax Policy and Administrative Courses;
> - IT Courses;
> - Quality Training Courses; and
> - Overseas Training Programs.

2) MOF (Ministry of Finance)

MOF has drawn up a comprehensive learning framework to equip our employees with the knowledge, skills and understanding needed to perform their jobs. All new employees will first be placed under a series of core induction programs designed to introduce them to the Civil Service and MOF. They will then attend basic competency training programs relevant to their respective job scopes, over and above the on-the-job training they will receive. In addition, MOF offers its own post-graduate scholarship and training awards to eligible employees by sponsoring them for courses relevant to MOF functions so as to develop them to their fullest potential. It also has monthly in-house training sessions for all the officers where speakers from the public and private sectors are invited to share their experience and best practices.

3) CSC (Civil Service College)

Today, CSC is the main learning institution for public officers. It comprises four units:

- Institute of Policy Development (IPD)
- Institute of Public Administration and Management (IPAM)
- CSC Consultants (CSCC)
- CSC International (CSCI)

Working closely with key government departments and having a close network of public and private sector trainers from both Singapore and overseas, the College is ever adapting and advancing to bring government officials quality programmes and the latest government initiatives and developments.

In addition, CSC collaborates with various international agencies and organisations for exchange of experiences in leadership, policy development and public administration.

CSC boasts that its vast networks ensure that it remains on the cutting edge in training and developmental technologies and know-how. The services of the College are also increasingly sought by private sector organisations as well as foreign public agencies to reap cross-boundary synergies and to spark learning innovations.

4. Review of the Education and Training System for Tax, Customs and Budget Officials in Indonesia

4.1 Education and Training System

In Indonesia, training and education for tax, customs, and budget officials are carried out by the FETA. It is a part of the Ministry of Finance (MOF) and directly under its control. The purpose of the training and education, obviously, is to provide tax, customs and excise, and budget officials with the basic as well as advanced knowledge and skills necessary to carry out their duties. Particularly, they serve to meet the visions and missions for the officials in each area set by the MOF. These are as follows;

i) Tax Officials

Vision: To be a public service model that performs a world class tax system and tax management that is trustworthy and honored by the public.

Mission:

- Fiscal: Efficiently and effectively collecting domestic revenue from taxes to self-sufficiently support the nation's budget based on tax laws.
- Economic: Supporting government's policies to overcome economic difficulties faced by the nation through tax policies that minimize distortion.
- Political: Supporting the process of the nation's democratization.
- Institutional: Keep reinventing the organization in accordance with public demand, tax technocracy, and modern tax administration.

ii) Customs Officials

Vision: To be equal with world customs and excise instititutions in performance and image.

Mission: To provide the best service for industry, trade and community.

iii) Budget Officials

Vision: To become a professional, credible and accountable organizational unit in the areas of fiscal policy formulation and management, budget management, central and local government fiscal relation development.

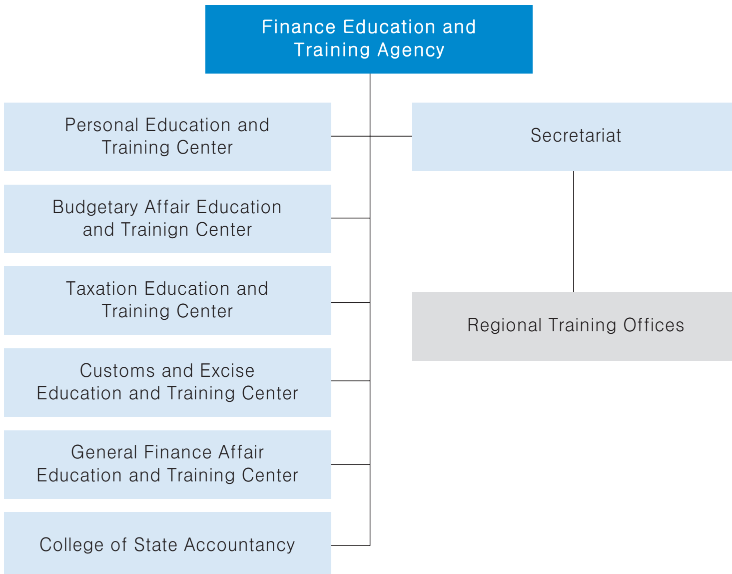
Mission:

- To formulate and implement reliable fiscal policies and state finance planning through formulating, monitoring, and evaluating the state budget and macroeconomic framework.
- To strengthen policies regarding central and local government fiscal balance.
- To implement financing policies and evaluation and develop regional finance information.

- To optimize state non-tax sources, including those from natural resources.
- To increase the quality of supporting elements.

Organization of the FETA is summarized in the following figure.

Figure 3-4 ●● Organization of the FETA



The outline of the training is as follows:

i) Pre-Service Training (Level I, II, and III)

ii) In-Service Training:

- Management/Leadership Trainings (Grade I, II, III and IV)
- Technical Training: General and Substantive (Basic and Specialized)
- Functional Training: Skill and Expertise
- Official Examination (Grade I and II)
- Rank Upgrading Adjustment Examination (Grade I to VII)
- Refresher Training

iii) Education Program in Finance:

- Diploma I Program (D I)
- Diploma III Program (D III)
- Diploma IV Program (D IV)
- Education Program for Accountant Assistant

The process of training and education planning is as follows; First, FETA collects training needs information from the users (DG Tax, Customs and Excise, Budget and Fiscal Balance), especially human resource strategic planning. Then, it designs training programs, containing information about competency profile targeted, program description, instructional objectives, course list, training duration, and participant requirements and accomodation. Finally, the plan is documented in a training calendar.

Curriculum design is basically developed by a professional trainer of FETA. Officials from the DGs (users) are also involved in developing the curriculum to provide link-and-match to the workplace. Course material updates are managed by the program supervisor.

Actual training programs for tax, customs and excise, and budget officials are introduced in the < Figure 3-5 >.

Figure 3-5 ●● Training Programs

Training Program 2006 for DG of Tax	Duration	3 of Courses
Basic Substantive Technical Training		
Level I	70 days	15 courses
Level II	85 days	16 courses
Specialization Substantive Technical Training		
Tax Confiscator	15days	11 courses
Tax Counselor	10 days	11 courses
Tax Computer Operator	9 days	8 courses
Property Tax Survey and Mapping	NA	NA
Property Tax Computer Operator	NA	NA
Refreshing Training		
District Management for Echelon III Officers	5 days	9 courses
Tax Audit Management	12 days	10 courses
Tax Collection/Confiscation	NA	NA
Tax Audit	11 days	19 courses
Teacher Seminar	NA	NA
Skill Functional Training		
Basic Tax Audit	25 days	20 courses
Expertise Functional Training		
Basic Tax Audit	25 days	20 courses
Property Tax Appraiser Assistant	35 days	8 courses
Property Tax Appraiser	25 days	9 courses

Note: NA = Not Available

Training Program 2006 for DG of Customs and Excise	Duration	3 of Courses
General Technical Training		
Basic Military Discipline	4 weeks	7 courses
Basic Substantive Technical Training		
Level I	4 weeks	10 courses
Level II	4 weeks	11 courses
Specialization Substantive Technical Training		
Level I	12 weeks	13 courses
Level II	12 weeks	16 courses
Tactical Intelligence	2 weeks	7 courses
Ship Search	NA	NA
Dog Handler	NA	NA
Transportation Passenger Service	NA	NA
Excise	7 weeks	9 courses
Refreshing Training		
Customs Management	1 week	5 courses
Investigation on Government Employee	1 week	9 courses
Skill Functional Training		
Document Inspector	4 weeks	9 courses
Goods Inspector	4 weeks	13 courses

Note: NA = Not Available

Training Program 2006 for DG of Budget and Fiscal Balance	Duration	3 of Courses
Basic Substantive Technical Training		
Level I	23 days	12 courses
Level II	23 days	12 courses
Specialization Substantive Technical Training		
Local Government Budget Supervision	11 days	9 courses
Budget Planning	20 days	12 courses
Revenue Treasurer	9 days	5 courses
Expenditure Treasurer	16 days	9 courses
Government Procurement	14 days	10 courses
Asset Management	13 days	9 courses
Government Budget Management	16 days	10 courses
Personnel Expenditure Administration	13 days	6 courses
Refreshing Training		
For Echelon III/IV Officer	4 days	4 courses

4.2 Problems of the Current Education and Training System

A. General Human Resources Problems Related to Training and Education

First of all, it has been pointed out that some training programs do not match well with the career development of the officials. There could be several causes for this. First, FETA simply has not been able to develop programs adequately to meet the needs of the officials. Second, the officials are rotated to other positions so often that the acquired knowledge and skills are not utilized well. Whatever the reason, this problem should be resolved because the main purpose of the training and education is on the career development of the officials.

Second, not only at the individual level explained above, but also for the organization (directorate general, ministry) level, some mismatch was found. In other words, training needs assessment and training planning do not match with the needs of the organization in some cases.

Third, passive attitude and low interest by trainees are also problematic. Many officials enroll in programs simply because the training is either mandatory or they want to take a paid-leave from their post in a remote location. There may be several reasons for this; ineffective teaching skills, the lack of programs interesting enough to induce interests of the trainees and so on. The most important reason, on top of all these, must be the inadequate utilization of the training results in general human resource management. Thus, means to link the education and training outcomes with human resource management, especially salary decisions, promotions, etc., should be sought.

Finally, it has been pointed out that there is some difficulty in fixing the training calendar. It is due mainly to errors in estimating the number of participants and predicting the type of training needed.

B. Problems in Curriculum Design

Although some problems could be identified in the current curriculum of the FETA, they do not seem to be major. In other words, except for a few odd programs (e.g. TOEFL preparation), most of the programs are adequate. Rather, some improvements should be made in their contents so that they attract enough interest from the trainees.

As was pointed out in subsection A above, low interest by the trainees is also caused by training materials that do not match well with and cover actual cases sufficiently. It has also been pointed out that there is an overlap in the courses offered in different training programs.

It is found that there is not much difference in curricula between training and education for high ranking officials and low ranking officials. Obviously, it would be desirable to have some distinction between them because duties for the latter are rather routine while those for the former require more adaptability to environmental change. In this sense, it is necessary to develop a training curriculum for high ranking officials to keep up with the changing environment (e.g. new regulations).

C. Problems in Training Delivery

First, it has been pointed out that the shortage of qualified teaching staff is serious. As a matter of fact, it is not a phenomenon unique to Indonesia. In many countries, qualified and able teaching staff are not much interested in the public training institutions (except public universities) because of less than favorable working conditions (low salary, less prospects, and so on). It is most essential, however, to secure them for good training and education. It should be resolved.

Next, it is necessary to enhance the teaching skills of faculty members. This is not unique to Indonesia either, but it is not merely a matter of skills. It is related to the effort to keep up with the new trend and change in the relevant fields. Since professors and trainers have a tendency to settle on the method and materials that they developed once, management should keep challenging and provoking them to develop new teaching skills and methods.

Finally, the fact that the current training media and methods are not sufficiently practical and up-to-date to reflect the changing environment and reality has been criticized. Causes are similar to those for inadequate teaching skills.

D. Problems in Evaluation

First, it has been found that evaluation result follow-up is not done sufficiently. Trainees, once they finish the program, are not likely to check the usefulness of what they learned and weakness and strengths identified during the education and training. This should be done by the training and education institutions.

Also, feedback of the teaching evaluation is not done sufficiently. It is very important and useful in improving trainer performance in the subsequent training. With teacher evaluation feedback, teaching staff could identify their strengths and weaknesses in teaching, which could easily be ignored unless checked.

5. Policy Suggestions

Could the Korean system be the model case for Indonesia? Yes, but with limitation. First, it is necessary to bear in mind that Korea and Indonesia have different historical and cultural background and their social and economic environments are different. Besides, the Korean system is not perfect as shown in chapter II. There is a certain area, however, that Indonesia could follow the Korean examples. Many of both countries' problems are similar. Thus, reform proposals for Korea could be good suggestions for Indonesia as well. Our suggestions will include both: Those applicable to both countries and those which Indonesia could adopt from Korean experiences.

It should be pointed out that the education and training reform could not be implemented optimally if only directed toward the development and delivery of training programs. Training problems should be viewed from the perspective of human resource management and public sector management. In this sense, reform of training and education for government officials should be done as part of the public sector reform. We will start this chapter with this discussion.

5.1 Public Sector Reform, Human Resource Management, and Training

A. Public Sector Reform and the Future of Training

An important issue is how to relate human resource management to the training. There are two general ways to do this. One way is where officials are required to receive certain training and education - usually, the minimum is specified. The other way is where the outcome of the training and education is included in the management process. For example, 20 percent of the total score is from the education results. In most countries, both of these methods are used together and this could be called the traditional approach. Recently, however, a new approach - the implicit approach - is starting to be adopted. Instead of minimum requirement or defining the percentage, the system is designed for the outcome of training to be revealed as part of performance. This trend is related to public sector reform.

Public sector reform started more than two decades ago in countries of the British commonwealth and was diffused worldwide. Instead of input, it attaches great importance to the outcome or output. The outcome (performance) of the officials becomes more important. Thus, in principle, training could not be the goal itself. Rather, it is important as an input.

In this sense, the implicit approach has become more prevalent recently. Yet, the traditional approach is still useful. This may be due to: 1) a possible shortage of training experts in the early stage of economic development, and 2) unlike an area such as budget allocation, public sector reform in human resource management has not progressed that much (It is harder to measure the performance of individuals than agencies or departments). Thus, for low ranking officials whose duties are rather routine, an explicit requirement to receive training and education to carry out their duties effectively is desirable. On the other hand, for high ranking officials whose performance can be measured, it would be better to adopt the implicit approach.

In this regard, performance measurement is important. As a matter of fact, performance evaluation is a key in public sector reform, and has become more and more important. It has wide application in such areas as human resource management, budget allocation etc. For this, it is important to have a good measure of the performance or outcome. It is not easy, however, to have that in the public sector, unlike the private sector. Recently, there have been improvements in evaluating performance of individual officials including such new techniques as "Balanced Score Card (BSC)." Thus, it is possible to have a customized appraisal system for each individual based on his or her competency, although it is still in its early stage. If this system is settled as intended, "meritocracy" can be realized. The Korean government has already begun to introduce such a system, and it could be adopted by the Indonesian government as well.

In sum, enabling the evaluation of individual performance has two important policy implications for training and education. The first is that customer-oriented training is required and possible. Korea is already moving in that direction. The second is developing a "New" function for training and education agencies, consulting for the career development of government officials. Overall, this will be the trend of the future and should be considered as an important long-run reform agenda.

B. In-House Training and Education vs. Outsourcing

Needless to say, training and education of tax and customs officials in human resource management is becoming more important in the age of the knowledge-based economy. However, importance of training and education does not necessarily mean that the government directly provides such education. The reason is that it is always possible to utilize universities and private training institutions. In other words, outsourcing and contracting out can be used. Which mode is more effective and efficient remains to be seen. It is a recent trend that outsourcing is used more, since overall public sector reform emphasizes "small government."

As was indicated in the introduction, however, it is customary to have an in-house training (education) institute to train tax and customs officials. However, there are countries where outsourcing is the major mode of training for tax and customs officials. Examples of countries with in-house training (education) institutes are Korea, Japan, and Malaysia. Singapore, on the other hand, is an exemplary country without in-house training (education) institutes.

5.2 Reform Agenda

Since the reform should be carried out as part of the overall public sector reform, there are many parties involved. These include the Finance Education and Training Agency (FETA, BPPK), the users (instansi pengguna diklat), Ministry of Finance, Personnel Bureau (Biro Kepegawaian), State Administration Institution (LAN), State Personnel Agency (BKN), and the Minister of State Apparatus Supervision (Menpan). In this regard, reform agenda can be divided into three categories according to the level of government – national, MOF, and FETA, which will be explained in turn.

A. Reform Agenda : National Level

At the central government or national level, the reform should be directed toward the overall improvement of the human resource management system so that the training and education outcome is reflected well.

1) First of all, development and implementation of a performance-based human resource management system is needed. In other words, settlement of true meritocracy is the responsibility of the central government. As was pointed out repeatedly, this is a key for human resource management in public sector reform.

   For this purpose, specifically fair performance evaluation measures should be developed. As is well-known, various measures to evaluate performances have been developed and used in many countries, particularly at the department and agency level. As a result, many cases of successful application of these measures in budget allocation are observed. At the same time, it is also true that measures for individual performance have not been developed well. Only recently, such measures as Balanced Score Card (BSC) are beginning to be used. Although it is still in the early stage of development and still leaves much to be desired, the utilization of such measures is meaningful.

   With regard to human resource management, it should be asked whether the current system of staff rotation is optimal. Although a certain degree of rotation is inevitable, too much rotation will ruin the expertise of the officials. It might render the knowledge and skill they acquire through training and education useless. To resolve over-rotation, two measures can be taken; (1) more training to make up for it and, (2) overall redesign of the rotation system.

2) In the long-run, with the settlement of individual performance evaluation as a part of public sector reform, consulting for career development could be added as a new function of training and education institutes.

As was shown, performance indicators for individuals have been developed and used recently. BSC is an example. Done successfully, records of performance will be accumulated. This will, in turn, enable competency assessment and “customer oriented” training and education. This also means that consulting for individual career development is possible. It is optimal to centralize this function to the training and education institutions. To do that, exchange of information, i.e., individual records, is necessary.

This function will become more and more important. Even if private consultants carry out such functions to some degree, a government consulting agency has the relative (and absolute) advantage, because it better understands the uniqueness of the public sector.

3) Besides, in the long-run, full scale outsourcing (or privatization) of the training should be considered. In the meantime, more outsourcing is needed.

Needless to say, public sector reform requires efficiency and effectiveness in the public sector. For that, many functions of the government believed to be carried out only by the government have devolved in the belief that the private sector is more efficient in many ways. In other words, there is far less distinction between the functions of the public and private sectors than before. Training and education is one of those functions. As a result, many government training institutions have been abolished and more outsourcing is being done. Abolition of the national tax college in Korea is such an example. Another example at the national level is Singapore.

It is also true that there are certain limits in privatization. Even in the distant future, some functions will remain uniquely public. This might be the reason why training and education for tax and customs officials are done through government institutions with Singapore as perhaps the only exception. As was pointed out, which mode is more efficient and effective in this specific area remains to be seen. Yet, privatization seems to be the trend in the future. Therefore, more (not total) outsourcing (to the private institutions and universities) should be sought in the meantime. This is a standard “technique” of public sector reform to have competition between public and private institutions. As was the case in Korea, degree programs can be transferred to universities and colleges in the long run.

B. Reform Agenda : MOF

1) As is the case with the overall national government, the Ministry of Finance should also try to implement a performance(competency)-based human resource management system. This, of course, is meaningful only if the training result is well reflected in the performance of the individual official.

   The reason why it is also important at the MOF level lies in the fact that training and education for tax and customs officials will remain in the public domain at least for a while. Without such a human resource management system, it is nearly impossible to induce and attract the interests of trainees (government officials). As was pointed out, attraction of their interests is one of the major problems of education and training systems of both Korea and Indonesia. The best way to do that is to make officials realize that education and training is essential for their own good.

   As a minor proposal, allowing officials with good performance to have sabbatical leave for education can also be considered. It is desirable to support them with scholarship once they pass the standards set by the government.

2) As in many other ministries, harmonizing on-the-job training with regular training and education is necessary because overlap is a waste of time, effort, and money. Moreover, it will cause the officials' disinterest in training and education.

   For this, dialogue and communication between FETA and each department in MOF actually carrying out on-the-job training is necessary. The basic principle will be as follows: Routine jobs not requiring high level expertise and skill should be done through OJT. On the other hand, expertise should be acquired through professional training institutes.

   MOF, as the supervising ministry of related parties, should take an active role in this. It can set the guideline for the "optimal" division of the function.

3) To make managers or supervisors pay more attention to staff training performance, relating performance with staff education results could be considered.

   Obviously, this would not be needed once the education outcome is fully reflected in the performance of the individual official. In that case, managers or supervisors do not have to worry about it because training and education will be a part of staff's self interest. Besides, linking staff education results directly with their bosses' performance might be against the general principle of public sector reform. In this sense, this would be a measure that could be adopted only in the short or medium run.

4) For high ranking officials, it is better to develop their own training and education program, making use of vouchers, outsourcing and so on, even if basic education and training remains as a function of the public or government institutions.

The reason why it makes sense is that the main duty of high ranking officials at the managerial level is less routine than that of low ranking officials and they are required to be adaptive. For these kinds of duties, more diversified, needs-based education and training is necessary. In this sense, the Singaporean case should be considered. It also conforms with the general trend of public sector reform.

Ultimately, in the long run, it is necessary to expand this kind of measure to low ranking officials. What is proposed here is a matter of priority and timing.

C. Reform Agenda : FETA

1) At the FETA level, development of various programs that can attract the interest of the trainees is most important. As was pointed out in explaining the cases of Korea and Indonesia, disinterest and negligence of the trainees is the most serious problem.

In this regard, the needs of trainees should be reflected in training and education programs. One way to do this is by incorporating these in the curriculum as much as possible with the help of such measures as surveys, consulting, etc. The most effective means to do that, however, is to let people choose their own education and training programs. The above mentioned vouchers are a good means. Another means that could be considered is the introduction of the Individual Learning Accounts used in U.S.A. This is a kind of lifelong voucher as its name implies.

E-learning will also be a good measure to look for. This is a not merely a good tool for distance learning. E-learning itself, by utilizing the art of date technology, could be the object of interest in many ways. Of course, E-learning is not without problems. More than anything else, the lack of adequate interrelation between the instructor and trainees is a major weakness. In spite of these problems, however, more use of E-learning is inevitable with the advance of IT technology.

It is also necessary to benchmark examples of institutions in the private sector. Generally, those institutions are known to be good at developing teaching materials and methods which can attract the interest of the trainees.

Some adjustments in duration of the programs should also be made. There is no optimal duration that can be applied to any program. It depends on such characteristics as contents of the program and so on. If it is too short, there can be a problem with effective delivery. On the other hand, if it is too long, it is possible for trainees to lose interest in the program. Besides, it may narrow down the possible choices of the programs and cause the overlap of the contents among programs. In Indonesia, compared to the Korean case, the proportion of longer-term programs is much larger. To induce more interest in trainees, the proportion of programs of short duration should be enlarged. Breaking up one long program into several short term courses can be considered.

2) It goes without saying that good teaching is essential for training and education. As shown, much is left to be desired in teaching performance in Indonesia (as is the case in Korea). Thus, enhancing expertise in teaching resources is necessary.

One way to do that is to include the teaching evaluation results in teaching staff's (professors or trainers) performance measures so that they can be binding. If a part of the performance measure comes from the teaching evaluation, teaching staff salary, promotion, etc. is partially determined by teaching evaluation results. Therefore, they cannot but improve their teaching skills. In many schools and institutions throughout the world, this method is actually used. There is a caveat, however. If this is used (abused) too much, there can be a negative side effect. Teaching staff may try to exchange quality of a program for the better teaching evaluation by making programs or courses too easy. Such teaching evaluation "farming" should be avoided by putting the appropriate limit on its use.

One reason why it is hard to recruit "good" or "qualified" teaching staff and faculty members in the public teaching institutions is the "less than fair" treatment (particularly salary) due to budget limits. Therefore, it is necessary to treat them better. Better treatment includes higher salary, better promotion, etc. Obviously, a budget increase is required.

Also exchange of teaching staff with the other organizations such as universities and private training institutions could be considered because this will give both parties opportunities to learn teaching skills of others.

3) The most common criticism against the training and education program is that the acquired knowledge and skills are not so useful in carrying out their duties. Thus, programs need to be directly related with the actual duty of the officials.

To do that, a thorough review of the current curriculum should be undertaken and revision to include such practical contents should be made. Of course, this does not mean that the current curriculum has major problems. Although there could be room for curricula to be improved (e.g. Website management, TOEFL preparation should be outsourced), it does not seem to be a major problem, as was explained in the previous chapter. Rather, it means that more practical issues should be included in contents of the program.

One way to resolve such a problem is to conduct (more) frequent surveys and reflect their results in the design of programs. Presumably, an effective method is to have more cases in training and education programs. As a matter of fact, the Central Officials Training Institute in Korea announced that it will have far more case studies from this year on. It would be a good recommendation for Indonesia as well.

It should be pointed out here that if the above mentioned customer oriented training is done, this problem could easily be resolved. It again shows the importance of good interaction among training and education institutes, teaching staff, and trainees.

As was shown, one of the problems in curriculum design in Indonesia is that there is not much distinction between programs for high ranking officials and those for low ranking officials. Thus, more programs suitable for high ranking officials should be developed. A good benchmarking example is the Customs Training Institute of Japan where a good division of courses is made.

4) Developing teaching materials, skills, and contents all require the backup of continuous research. Therefore, it is necessary to establish a research center to host research activities done by trainers and trainees.

This center has another function, that is, bringing up the pool of trainers and experts. These resources in turn support the development of training resources at FETA.

A roadmap of the implementation schedule or this reform agenda is shown in the following figure.

Figure 3-6 ●● Road-map for Reform

	Short-run	Long-run
National Level	Implementation of a performance-based human resource management system.	1) Function of consulting for career development is added. 2) Full scale outsourcing or privatization of training and education.
MOF	1) Implementation of a performance (competency)-based human resource management system. 2) Harmonizing on-the–job training with regular training and education. 3) Allow high ranking officials to develop their own training and education program, making use of vouchers, outsourcing, etc. 4) Relating managers' or supervisors' performance with their staff's education results so that they pay more attention to the training performance of their staff.	Allowing officials with good performance to have the sabbatical leave for the education.
FETA	1) Development of various programs that can induce more interest in the trainees. 2) Enhancing expertise of teaching resources. 3) To have programs directly related with the performance and actual duty of officials.	Establishing a research center to host research activities by trainers and trainees.

6. Summary and Conclusion

This paper has attempted to draw some suggestions for the Indonesian training and education system for tax, customs, and budget officials from Korean experience by critically reviewing them. In the review of the Korean system, we found that there are several problems in the Korean system as well. In this regard, some of the suggestions for Indonesia could also work as policy suggestions for Korea. Thus, in this area, Korea is not the “best” model to follow, unlike other cases of development exercises where Korea sets the standard in many ways. This does not mean that analyzing Korean experiences is meaningless because there are many to learn from in the training and education area. Rather, it can only be pointed out that “less” can be learned from the Korean case in this area than in other cases.

As was indicated, reform of training and education for government officials is meaningful only if it is done as a part of public sector reform. In this sense, this paper aims to provide advice on developing a human resource management system based on the performance of each civil servant and most of the policy suggestions are related to overall public sector reform. To do that, we need to identify the problems in the current training and education system in Indonesia. Through review, we were able to identify problems in the curriculum design, training delivery, evaluation, and those factors related to general human resource management. Suggestions here are based on that analysis.

Since public sector reform covers every part of the government, our suggestions could be divided into three areas according to the level of government. These suggestions are summarized as follows.

< Reform Agenda: National Level >

1) Development and implementation of a performance-based human resource management system is needed.
2) In the long-run, with the settlement of individual performance evaluation as a part of public sector reform, consulting for career development could be added as a new function of training and education institutes.
3) In the long-run, full scale outsourcing (or privatization) of training should be considered. In the meantime, more outsourcing is needed.

< Reform Agenda: MOF >

1) Implementation of performance(competency)-based human resource management system.
2) Harmonizing on-the-job training with regular training and education.

3) Relating managers or supervisors' performance with staff education results so that they pay more attention to training performance of their staff.
4) For high ranking officials, it is better to develop their own training and education programs, making use of vouchers, outsourcing, etc.
5) Allowing officials with good performance to have sabbatical leave for education.

< Reform Agenda: FETA >

1) Development of various programs that can induce more interest in the trainees.
2) Enhancing expertise of teaching resources.
3) To have programs directly related with performance and actual duty of the officials.
4) Establishing research centers to host research activities by trainers and trainees.

In this paper, such broader issues directly related with public sector reform, such as the development and use of good performance measure, etc. are addressed. These are included in the reform agenda here because they are important infra for our policy suggestions to be successful.

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Chapter 4

Promoting Trade and FDI in Manufacturing: Korea's Experiences and Possible Lessons for Indonesia

Summary

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1. Trade and FDI Promotion Policies in Korea and Their Implications

Establishing "Exports above All Policy" in the 1960s

Realizing the limits of import substitution policies which had been applied at the beginning of its economic development, early in the 1960s, Korea rapidly changed its policy direction towards export promotion policies from 1964. The government, in cooperation with the Bank of Korea, established the basic system for export promotion such as preferential interest rates applied for exports and reformed the foreign exchange system unifying the rates at the competitive level. In addition, the government, for the purpose of creating an atmosphere in which export promotion would be considered the primary goal of all economic policies, introduced monthly export promotion meeting which was chaired by the President and "Export Day" when the President awarded Towers of Export Accomplishment to successful exporters.

During this period, Korea's major export industries were mainly composed of labor intensive industries such as wigs, eyelashes, clothing, plywood and radios. They were in general produced by SMEs. In order to promote these SMEs' production and export activities, the government established an industrial complex at Guro in Seoul. Korea Trade Promotion Agency (KOTRA) was also created as a public corporation for the purpose of assisting SMEs to explore foreign markets.

Combining Trade Promotion with Industrial Targeting Policies in the 1970s

Korea, confident of its success in acquiring international competitiveness for labor intensive industries by pursuing trade promotion policies during the previous decade, embarked on developing the next generation of industries, namely "Heavy and Chemical Industries" in the 1970s. In order to help HCI industries establish production facilities, the government established industrial complexes in the various regions in Korea. In addition, policy loans, which were mobilized through government-owned banks, were channeled to HCI industries at preferential interest rates. Since the government required that the potential investors should come up with a significant amount of money as initial investments, only those who had accomplished successful businesses during the previous period either in labor intensive industries or in international trade were able to participate in the HCI development program and to benefit from the government support. Major industrial groups such as Samsung, Hyundai, LG, Daewoo etc. were formed through this process.

In order to promote the export of HCI products, the government launched the system of General Trading Company. The major industrial groups who took part in the HCI development program responded to this program as well. These GTCs contributed to developing new markets and bringing into the country the information about overseas markets. The GTCs played not only the role of direct windows for exporting the HCI products produced by their respective industrial groups but also the role of matchmaker between overseas buyers and domestic SMEs.

Structural Adjustment & Trade Liberalization Policies during 1980s

The industrial groups that had invested in HCI industries had competed with each other to capture a larger market share and expand their production facilities during 1970s got faced with shrinking demand in both domestic and world markets in the early part of 1980s. The government tried to limit additional investments in some industries enlisted as sectors to be rationalized.

At the same time, the Korean government wanted to enhance the private sector's initiatives by reducing government interference (both regulations and assistance) and by opening up the domestic market to greater foreign competition.

These market-oriented policies, rationalization and liberalization, resulted in increased efficiency and competitiveness in manufacturing sectors. Korean industries were ready to positively responding to the improved market environment during the latter half of 1980s with the appreciation of Yen, lower oil prices and lower international interest rates.

Looking for a New System for Trade Promotion in the 1990s

Korea had to look for a new system for continuously promoting exports, as the newly launched WTO system prohibited utilizing direct financial and/or fiscal assistance for trade promotion.

The Korean government started to provide export insurance services to exporting firms when they explore new and risky overseas markets through newly established KEIC (Korea Export Insurance Corporation) in 1992. By means of reducing the costs of trading firms, the Korean government has eased its restrictions on the registration system for export and import businesses, the approval system for exports and imports and the list of import restriction items. In addition, in order to upgrade the quality of export products, the Korean government has introduced various promotional measures such as R&D assistance and assistance to "world-class goods."

Liberalization and Promotion of FDI in the 1990s

At the beginning, Korea preferred borrowing rather than attracting foreign direct investment, when it needed to introduce foreign capital. During the three decades leading up to the end of the 1990s, Korea applied various measures to stimulate FDI inflow, but not always in a full-fledged way. In fact, during 1960s and 1970s, the Korean government kept its restrictive policy stances against FDI in order to promote domestic infant industries. The negative system introduced in 1984 marked a turning point for Korea's FDI policies and FDI regulations were gradually liberalized. However, the too timid policy change could not result in effective increase in FDI in Korea up to 1990s.

This policy stance had to be drastically changed into a very active promotional stance right after the Korean economy was severely hit by the Asian Financial Crisis at the end of 1997. This change was introduced as part of the effort to facilitate industrial restructuring in Korea as well as to encourage foreign capital inflow. Since then, Korea has continuously intensified its effort for promoting FDI. The Korean government has completely liberalized its regime regarding FDI. In addition to liberalizing the regulatory system on FDI, the government has applied various measures for improving investment climate.

Possible Lessons in Korean Experiences

Political commitment from the highest level is prerequisite for the effectiveness of trade & investment promotion policies.

The initial export surge in Korea was accomplished in labor intensive industries which had comparative advantage during the first stage of Korea's industrialization. Korea's more advanced industrial structure has been able to be developed based upon its initial success in light industries. The Indonesian government should think of promoting exports of light industries considering the current comparative advantage.

Liberalizing the FDI regime would not be sufficient for effectively attracting foreign capital. It is further necessary to improve general investment climate such as tax system, labor relation, and living environments for foreign managers.

The role played by various institutions for promoting export and investment becomes more important when direct financial and fiscal assistance cannot be employed.

Public institutions for promoting exports should rather target SMEs, because they cannot afford to develop their own global networks.

2. Institutions for Trade and Investment Promotion: Comparison of Korea and Indonesia

Korea's Institutions for Trade and FDI Promotion

The Ministry of Commerce, Industry and Energy (MOCIE) is in charge of formulating and implementing government policies for promoting exports and FDI. Like the Indonesian Ministry for Trade, it plays the role of control tower in promoting trade and investment. For this purpose, it has two Director-Generals: the DG for Trade Policy and the DG for International Trade and Investment.

The Korea Trade-Investment Promotion Agency (KOTRA), as a public corporation, has the mission of promoting exports by providing trading firms with various trade-facilitating services such as business matchmaking, international exhibitions, e-Trade, and trade information.

Invest Korea is part of KOTRA, but it is specialized in promoting FDI in Korea. It provides foreign investors various services such as investment consultation, market and partner research, administrative support, advice on legal, accounting and tax matters, settling-in assistance and follow-up services. The Office of the Investment Ombudsman, attached to Invest Korea, plays the role of troubleshooting for foreign investors.

The Korea International Trader Association (KITA) is a private organization having more than 20 thousand trader members. It plays an important role in promoting trade and investment as if it was a government body. KITA supports traders' overseas marketing, provides trade information, and educates international trade specialists.

KOTRA and KITA are regarded as very helpful and informative institutions by Korean traders as well as Korean manufacturers. Invest Korea is getting more attention paid by foreign investors.

Making KOTRA & Invest Korea More Effective

KOTRA was made a public corporation, an institution to which the government provides its operational budget but which is managed by a government-nominated president, rather than a government agency because government bureaucrats were thought to be less business-friendly than non-government-agents. Its staffs are also supposed to earn revenue income from provision of services, because it is thought that this would make them even more business-friendly.

These arrangements make its staffs attentive to customers' voice. KOTRA constantly strives to make its staff more responsive to customers' needs. The newly introduced "project manager" system for Invest Korea, a project manager having to accompany his/her foreign customers starting from their first visit into Korea up to their full settlement in Korea, is a typical example for providing total services to customers.

In addition, the fact that Invest Korea is regarded as a department of KOTRA spins out a huge synergy effect. Staffs of KOTRA can be posted in Invest Korea and overseas branch offices of KOTRA play the role of contacting points for potential foreign investors in Korea.

As a public corporation, it is supervised by MOCIE. However, the fact that KOTRA is under the annual evaluation test conducted by a group of professional lawyers, accountants and professors obliges KOTRA to be managed in a more performance-based way. Actually, as the result of the evaluation is reported to the government and the parliament, KOTRA should apply the policy recommendations suggested by the evaluation.

The organization of KOTRA & Invest Korea is structured based on service functions they provide. This system seems to be more efficiently adapted for implementing their mandated role for implementing trade & investment promotion measures.

Indonesian Institutions for Trade & Investment Promotion

NAFED aims to assist Indonesian manufacturers to find out and develop overseas markets. Compared to advanced trade promotion organizations in other countries, NAFED is regarded as less efficient and effective because of its structural constraints as a government agency with hiring only government officials.

BKPM (Investment Coordinating Board) intends to coordinate all the matters related to foreign direct investment in Indonesia. Having found that FDI had been slowed recently, the Indonesian government seems to be interested in enhancing its role for promoting investment as well as improving the investment climate related to customs, taxes, labor and SMEs. Having the permitting authorities as well, BKPM seems to be less effective for providing services to foreign investors.

3. Suggestions for the Reform of Indonesian Institutions

The Indonesian government should think of changing institutional status into public corporations for NAFED and BKPM to make them more business-friendly.

NAFED and BKPM may want to organize regular public seminars and open an interactive bi-weekly radio dialogue program in order to communicate more closely with their customers.

The Indonesian government should establish an “objective” evaluation on the performance of these institutions.

The Indonesian government should consider reshuffling the NAFED into a functionally structured organization.

The Indonesian government should consider the option of merging two organizations (BKPM and NAFED) to create a synergy effect between the two organizations.

The Indonesian government should consider sending a study team to Korea for benchmarking KOTRA and KITA.

Chapter 4

Promoting Trade and FDI in Manufacturing: Korea's Experiences and Possible Lessons for Indonesia

I. Introduction

A goal of the highest priority for the Indonesian Ministry of Trade is to induce foreign direct investment in the industrial sector for the purpose of promoting the country's manufactured exports. FDI is considered to be critical in strengthening the competitiveness of manufactured exports. Toward this goal, the Indonesian government has set up and been operating a number of institutions such as NAFED and the Investment Coordinating Board to promote exports and foreign investment in the industrial sector.

The Ministry, however, would like to further enhance the effectiveness of these institutions, undertaking appropriate reform measures, if necessary. For this purpose, the MOT is interested in learning from Korea's own experiences in export- and FDI-promoting institutions such as KOTRA and Invest Korea. More broadly, the MOT is interested in getting lessons from Korea's policy experiences for attracting foreign direct investment and promoting industrial exports, and in getting information about how to improve the environments for foreign direct investment.

To respond to this policy need, this study in the first place tries to retrospectively draw out major characteristics of Korea's trade and investment promotion policies. It shows that Korea successfully conducted "export first policy" in the 1960s, which resulted in development of labor intensive industries. During the 1970s also, when Korea executed strong industrial policies targeting developing heavy and chemical industries, trade promotion policies were continuously pursued. However, Korea was forced to change its trade promotion policy into a more indirect way when the WTO system was launched in 1995. Under these circumstances, Korea relies much more on public institutions such as KOTRA for implementing trade promotion policies. As for the investment promotion policies, this study shows that Korea preferred borrowing rather than attracting FDI at the beginning of its industrialization in the 1960s, even though this policy stance has been gradually transformed into quite active FDI promotion policies. This policy change was forced partly by the Asian Financial Crisis. For the purpose of FDI promotion as well, the role of public institutions such as Invest Korea is very much underlined in Korea. Based upon this retrospective summary, this study suggests several policy implications for Indonesia.

Furthermore, this study surveys public institutions in Korea which contribute to trade and investment promotion policies such as MOCIE, KOTRA, Invest Korea and KITA. More specifically, this study tries to draw out the elements which make Korea's public institutions, KOTRA and Invest Korea, more effective and efficient than their Indonesian counterparts. The 5 following elements: business-friendly aspects, attention paid to customers' needs, synergy effect between institutions, an objective evaluation system and function-based organization are listed as major efficiency elements. Based upon these elements, this study suggests policy implications for reforming Indonesian institutions for trade and investment promotion, namely NAFED and BKPM.

2. Trade and FDI Promotion Policies in Korea and Their Implications

2.1. Establishing "Export above All Policy" in the 1960s

(1) Export-oriented Policies rather than Import Substitution

At the beginning, Korea put priority on converting its dependence on foreign aid to a self-supporting economy when it launched its First 5-Year Economic Development Plan. To do this, the country developed the import substitution industry and expanded social overhead capital, such as electric power, transportation and telecommunications.

Promoting exports was considered a short-term and transitional policy to stabilize the economy rather than a policy to develop the economy. However, considering the situation of foreign markets and Korea's industrial level at that time, it was hard to immediately export products. Instead, the government thought that it would be good to substitute imported goods with domestic products, improve the international balance of payments and then increase jobs, thereby making the import substitution industry capable of exporting products.

In 1964, however, the government focused on export-oriented policies rather than on import substitution. That was because the significance of foreign currency was highlighted as foreign aid was suspended, sharply reducing foreign reserves. Self-confidence played another role in changing policies. Though agricultural and mineral products accounted for 80% of total exports in the 1950s, the share of industrial products rose to 45% in 1963, which gave Koreans confidence. Also, the import substitution industry ended up increasing the demand for foreign currency due to heavy dependence on imports for raw materials.

(2) Establishing the System for Export Promotion

To support exports, the Bank of Korea enacted relevant financial regulations and began to offer exporters preferential financial treatment. In 1962, export finance regulations were established to smoothly fund the purchase of raw materials, production, and shipping and settle export money. Also, systems to supply short-term finance was established, such as the Foreign Currency Denoted Supply Financial System, the System to Guarantee Payment of Imported Raw Materials for Manufacturing Export Goods in 1963 and the Local L/C system in 1966.

The general interest rate was 24% in 1965, while the interest rate for export financing remained at 6.5%, the level of competing countries, widening the interest rate gap up to 17.5%. In order to facilitate investment in the export industry, systems to supply mid-to-long term financing were provided, such as the fund for fostering the export industry in 1964, the fund for converting to export facilities in 1965, and foreign currency loans for importing export industry facilities.

The government also revised the foreign exchange system in favor of exports. In 1961, it tried to promote exports by devaluing the Korean won from 65 won to 130 won against the dollar, but failed to enhance price competitiveness because of inflation. In 1965, the government began to establish a consistent export inducement system, by completely amending the foreign exchange system which had been maintained since the 1950s. First of all, the multiple exchange rate system, which was applied differently according to items and uses, was converted to the unitary floating foreign exchange system in order to reflect actual value of the won. As a result, the Korean won, which was fixed at 130 won against the dollar, was devalued by almost 100% to 256 won.

(3) Major Tools for Export Promotion Policy

1. Exporting firms were allowed to retain foreign exchange earnings for the purchase of imports.

2. Exporting firms were exempted from import controls and tariffs.

3. The state-controlled banks provided financial support for exporters at preferential rates.

4. Tax concessions were granted to exporters.

5. Fiscal policy focused on generating surpluses that could be channeled to key industrial firms.

6. A sliding-peg system of exchange rate adjustment was adopted to prevent a real appreciation of the Korean won.

7. The government set export targets, which influenced firm behavior.

8. Successful exporters received awards from the president.

(4) Export Industries

When most exports were primary goods, the government systematically promoted bonded processing exports in order to expand the export of industrial products. Also, the government facilitated investment, by supporting the conversion of existing small and medium enterprises (SMEs) to exporters and designating specialized export industries. Noting that there were sufficient idle workers and wages were low, it designated bonded processing factories under the Customs Duties Act and set up import and export procedures needed for the Trade Act, which provided means for securing export capability when Korea had no base for exporting industrial products.

The government also commissioned banks to give import licenses and established the Korea Bonded Processing Export Association to encourage the Association to allocate raw materials, thereby streamlining import procedures for raw materials for bonded processing. As a result, there was phenomenal growth in exports such as garments, gloves, silver ware, radios, fishing nets and toys.

Though bonded processing needed participation by Japanese companies, efforts to make SMEs into exporters were also made. The government chose SMEs appropriate to be converted to exporters and provided funds to purchase raw materials for manufacturing export goods. It allocated separate funds for importing materials to increase and expand facilities and offered subsidies for supporting technical guidance in order to lower export costs. In 1964, 150 companies were chosen for implementing the government policies to support costs for training technicians and assist in the invitation of foreign technicians.

Also, an industrial complex of exporters was established to promote efficient investment. In 1964, the Act for Development of the Export Industry Complex was established in order to facilitate exchange of market information and promote joint exports, and set up the complex in Guro, Seoul. Until 1967, 31 companies occupied the complex, including 18 firms run by Koreans abroad, 11 domestic firms and 31 foreign enterprises.

(5) Creating Export Atmosphere

In implementing polices of developing countries, the intention of the highest decision maker is significant. The fact that the President personally encouraged export policies gave companies and the people the impression that exporting was the only way to go forward, and this approach had a great effect. From 1964, when $100 million in exports was accomplished, to 1979 the President personally presided over export promotion meetings every month, which showed strong government intention.

Export-led industrialization was consistently promoted and discussions on substantive matters made it possible to focus government policies on exports. There were side-effects, though, such as hasty implementation of alternative policies, sacrifice of other industries and government intervention in the economy. However, the fact that the President led the export-oriented policies played a considerable role in maintaining the policies and made the people feel the importance of exports.

In 1964, “Export Day” was established in order to commemorate the attainment of 100 million dollars in exports, and the President personally granted “Tower of Export” to the exporters who had achieved high export records. This contributed to creating an export atmosphere and enhancing the spirit of employees of export companies.

Also, to concentrate efforts to increase exports on the part of the business circle, the role of KITA was facilitated and export activities of the circle were strengthened, by enacting in 1962 the Export Association Act for 15 major marine, agricultural and industrial items. The export association participated in concluding agreements for the maintenance of export and import order, publicizing export of goods, conducting market surveys, arranging transactions and promoting joint exports. The association was helpful in implementing government policies in an efficient way, by functioning as a window for discussing corporate grievances and seeking solutions between the government and representatives of the corporate circle.

(6) Providing Marketing Assistance for SMEs’ Exports

In 1962, the government set up KOTRA, initially the Korea Trade Promotion Corporation, to assist businesses in exploring foreign markets. Initially, it considered establishing a government agency which explored foreign markets, while taking exclusive charge of a small amount of exports. For fear of competition with the private sector, however, it set up a government-invested agency which was exclusively in charge of doing research on foreign markets and publicizing abroad the Korean economy and products. Its foreign branches were also established in New York, LA, Hong Kong and Bangkok in that order. Since then, KOTRA has opened an extensive worldwide network of overseas Korea Trade Centers (KTC). Some 103 KTCs are operating in 74 countries as of now. KOTRA also runs 13 regional branch offices in Korea.

(7) Industrial Complexes for Export-oriented Enterprises

In 1964, the Act for Development of the Export Industry Complex was established in order to facilitate exchange of market information and promote joint exports, and set up the complex in Kuro, Seoul. Until 1967, 31 companies occupied the complex, including 18 firms run by Koreans abroad, 11 domestic firms and 31 foreign enterprises.

In 1970, the Act for Development of Free Export Zones was introduced. Masan, a southern port city in 1970, and Iksan, a transportation center in 1973, were chosen as the first free export zones.

The first objective of FEZ establishment was to attract FDI in manufacturing industries. Korea has introduced various incentives for attracting FDI in these FEZs.

2.2. Combining Trade Promotion with Industrial Policies in the 1970s

(1) Launching "Heavy and Chemical Industries Development Plan"

The program of building up heavy and chemical industries was symbolized by the announcement of a "Heavy and Chemical Industrialization Declaration" in January of 1973 by President Park. It set out the following six industries as top priority targeting industries: steel, petrochemicals, shipbuilding, industrial machinery, nonferrous metals, and electrical industries.

Despite the first oil shock in 1973, which looked like to pose insurmountable difficulties for the Korean economy, satisfactory achievement in terms of economic growth and export expansion encouraged the government to pursue the original lines of the heavy and chemical industries promotion scheme.

One should remark on the importance of "sequencing" in this process in the transition from light industries to heavy and chemical industries. In fact, labor-intensive industries, based upon their success in the 1960s, started to play the role of demanding materials produced by heavy and chemical industries in the 1970s: Apparel and textile for petrochemicals, electronic appliances for steel and nonferrous metals, all light industries for industrial machinery, etc.

Since the government required that the potential investors to come up with a significant amount of money as initial investments, only those who had operated successful businesses during the previous period either in labor intensive industries or in international trade were able to participate in the HCI development program and to benefit from the government support. The major industrial groups such as Samsung, Hyundai, LG, Daewoo etc were formed through this process.

For example, LG (at that time Goldstar), Samsung and Daewoo decided to invest in the electrical industries by enlarging their initial Radio and TV assembling businesses, Hyundai, Daewoo and Samsung participated in the shipbuilding industries in order to take advantage of their experiences in the construction businesses, and LG (at that time Lucky) and Samsung took part in the petrochemical industries to provide their textile businesses with new materials.

(2) Development of Individual HCI Industries

In order to foster the electronics industry, special laws were enacted, electronics industry centers were established, model factories for electronics industries were constructed and technologies were developed and instructed. Technicians and engineers were trained and companies that invested in the electronics industry received governmental support. It was a highly motivated plan that aimed at fostering the electronics industry as a main exporting industry resulting in Korea leaping up as an international base for producing and supplying electronics along with Japan and Taiwan.

In 1972, an electronics industrial complex was constructed in Kumi, and funds for fostering the machinery industry and foreign loans were granted for introducing technology and joint investing with the U.S. and Japan. Japan's anti-dumping of color televisions limited exports to the U.S., providing us with the opportunity of attracting concentrated foreign investments and technology transfer was realized early. The electronics industry was able to secure its position as an exporting industry.

The goal of the shipbuilding industry in 1976 was ranking tenth in the global market. The government concluded that since shipbuilding was a fading industry in the West and was labor-intensive, it would be possible to secure global competitive power in a short time. However, there weren't large shipyards to build ships for exports, and the Hyundai Heavy Industries of today was just about to construct the dock on the beach, so it was a very difficult situation. The government totally supported KSEC that existed at the time, and increased domestic demand by supporting domestic ships. The government also established the Shipbuilding Research Institute in efforts to secure technicians.

The machinery industry is composed of industrial facilities and equipment industries, which makes it a difficult industry for a developing country to foster, but Korea had many demands at the time for facilities needed in developing the economy, and so the government decided to promote the machinery industry as an exporting industry and substitute imports with domestic products.

The Machinery Industry Promotion Law was enacted, and it was decided that 89 import machines would be localized and 22 machinery industries would be selected for localization. As a result, machine tools, sewing machines, and motors were selected for export industrialization. When the Seoungri Machinery Corporation concluded a $1.3 million contract in Afghanistan to export weaving machine plants on a deferred payment basis, it provided a chance to confirm the possibilities of exporting machinery. The expansion of the domestic market must precede machinery exports, and so the government led the process of substituting imports with domestic products by sublating bulk construction of factories, making public announcements on the standard localization rate for each industrial facility, and regulating that imports of machinery over $1 million should be reported beforehand.

The auto industry is a synthetic assembly industry with industrial ripple effects and front-and-back effects. Because of these characteristics, the auto industry was the first industry that the government started localizing, but since securing the production volume fit for economic standards was difficult, it was also difficult to gain competitive power. Also, in order to establish a mass production system, the auto industry needed to be fostered as an export industry, but because of the limited demand in the domestic market, it was difficult to gain competitive power in exports.

The shipbuilding industry and the electronics industry, which depended on labor and decisively attracted foreign technology and investments, grew into export industries without any noticeable trials or errors, but the machinery and auto industries, which need accumulated technology based on the domestic market, could not meet the government's goal for export industrialization. Both industries went through troubles developing technology and creating circumstances fit for economic development standards.

(3) Establishing Industrial Complexes for HCI Development and Trade Promotion

In order to provide the industrial sites for those who wanted to invest in heavy and chemical industries, the government decided to establish industrial complexes in various regions in Korea. To do this, the Industrial Base Development Promotion Act was enacted in 1973, according to which 13 heavy and chemical industry complexes were established throughout the country to accommodate plants in steel, petrochemicals, industrial machinery, automobiles, and electrical industries. The industrial complexes were provided with advanced infrastructure such as ports, highways, electricity, water, telecommunications, etc. Additional incentives for the firms wanting to set up their plants in these complexes: credit for investment, tax incentives, consulting services, etc.

(4) General Trading Company System for Promoting Export Furthermore

After the oil shock in 1973, the global economy fell into stagflation, and the sluggish economies of the advanced countries raised trade protectionism and made it difficult for industries to develop new markets. Domestic companies which depended on low-wage labor lost global competitive power, and to receive the benefits of export financing, manufacturing companies started to import and export, and export companies started to manufacture. The profits from expertise and specialization disappeared and the export industry was flooded with many small export companies, causing excessive competition. Moreover, active investments in heavy chemicals brought the need for exports, since the domestic market was very limited. The government felt that in such conditions an efficient overseas distribution network was needed. Thus, the General Trading Company System was born in 1975.

In 1975, requirements for a general trading house were over $1 million in exports and over 10 overseas branches. The major industrial groups who took part in the HCI development program responded to this program as well. The eight initial GTCs designated by the government were Samsung, Ssangyong, Daewoo, Hyosung, Lucky Goldstar (LG these days), Sunkyung (SK these days), Hyundai and Koryo. Except the last one which was set up by the government initiative to assist SMEs, they represented the major industrial groups in Korea at that time.

In competing in international bidding, general trading houses received priority claims, received low-interest prime rates from banks and expansions in working capital for the marketing of overseas branches. General trading houses played a leading role in exports and especially contributed to the exports of plants and heavy chemicals. In 1982, exports by general trading houses took up 50% of total exports.

Table 4-1 ●● Position of GTCs in the Korean Economy

(Unit: US $100 million)

	1977	1986	1991
(A) Sales of GTCs	22.0	206.1	445.7
(B) Nominal GNP	374.3	954.4	2,080.0
A/B(%)	5.9	21.6	15.9
(C) Exports of GTCs	24.9	140.3	303.3
(D) Total exports	100.5	347.1	718.7
C/D(%)	24.8	40.4	42.2
(E) Imports of GTCs	3.2	34.2	108.7
(F) Total imports	108.1	315.8	815.3
E/F(%)	3.0	10.8	13.3

Source: Management Efficiency Institute

The general trading house system made many contributions, and one of them was developing new markets through completing requirements in the number of overseas branches and target countries for exports. It also contributed in improving the information and technologies of domestic companies and training professional manpower. However, the side effects of the general trading house system were conflicts with small and medium sized companies and derangements in market orders by excessive competition between general trading houses. In the 1990s, support for exports was cut down sharply and exporting became diversified, withering the power of general trading houses.

2.3. Structural Adjustment & Import Liberalization Policies in the 1980s

(1) Structural Adjustment Policies

The Korean government changed its policy stance from government intervention to respecting the market mechanism starting from the 1980s. The government wanted to enhance the private sector's initiatives by reducing government interference (both regulations and assistance) and by opening up the domestic market to greater foreign competition.

In fact, the industrial groups that had invested in HCI industries had competed with each other to capture a larger market share and expand their production facilities during the 1970s were faced with shrinking demand in both domestic and world markets in the early part of the 1980s. The government tried to limit additional investments in some industries enlisted as sectors to be rationalized. The designated industries were fabrics, alloyed steel, automobile, diesel engines for ships, heavy electric equipments and fertilizers.

Export incentives and investment promotion measures with related government regulations which had been applied until the 1970s were also removed and/or reduced to enhance the private sector's initiative. For instance, many laws established during the 1960s and 1970s to provide incentives and protective measure for specific sectors were abolished for the transformation into the Industrial Development Law in 1985.

(2) Import Liberalization

In order to introduce greater competition, the Korean government decided to open up its domestic markets to the import. The government inaugurated the Import Liberalization Committee in 1978. In 1984, a second round of import liberalization was held, followed by the government's announcement that foreign commodities in almost all sectors would be allowed into the country. The announcement was made amidst conflicting views that opening the market would strengthen industrial competitiveness or erode the domestic industry. To protect domestic industries from market liberalization, the import diversification system was adopted, in which import from trade deficit country was restricted. The Trade Commission, established in 1986, implemented an industrial injury relief system protecting domestic industries.

(3) Actively Participating in Trade Negotiations

Trade negotiations were carried out according to different countries. With trade surplus countries like the U.S. and Canada, self-regulation measures of local industries were taken, and with trade deficit countries like Japan and Australia, efforts were focused on enhancing trade reverse and promoted trade surplus. Korea sought to expand bilateral trade and diversified economic cooperation with developing countries. Korea contributed to formulating international order by actively participating in the Uruguay Round and MFA IV.

Korea accomplished an unexpected current account surplus in 1986. External factors such as fall in oil prices and strong Japanese yen helped Korea to make a current account surplus in 1986. The government's economic management policy shifted from one based on achieving trade balance to trade surplus. Trade surplus, however, could lead to inflationary pressure as currency evaporates, causing distortion in the industrial structure as a result of investment concentrated on few industries. Trade friction was also one of Korea's concerns as export to U.S. market reached 40% of total exports.

2.4. Looking for a New System of Trade Promotion Policies in the 1990s

The WTO system, which was established right after the Uruguay Round, obliged many countries including Korea to change their trade policy orientations, because direct financial and/or fiscal assistance for the purpose of trade promotion were strictly prohibited by the WTO.

The Korean government tried to transform its trade policy tools into providing indirect support for exporting industries, cutting off direct financial and fiscal assistances.

(1) Reinforcing the export support system

By means of providing indirect support to exporting firms for their efforts in seeking new but sometimes risky markets, the Korean government established KEIC (Korea Export Insurance Corporation) in 1992 in order to provide inexpensive export insurance. For a similar purpose, the Korean government established in the same year a fund for overseas market exploration which was provided to the firms which explored new markets.

(2) Establishing an advanced trade system fitted into global standards

The Korean government changed the registration system for export and import businesses into the report system. It also transformed the positive approval system for exports and imports into a negative one. Furthermore, the government reduced the number of import restriction items gradually as well as the number of items of import diversification.

For the purpose of diversifying export products and enhancing their quality, the Korean government executed various measures such as the system of recognizing and supporting so-called “world-class goods”, promoting parts and materials, plants industries and developing new technology, and facilitating exports of knowledge-based services.

In order to expand the foundation for export, the Korean government started to place emphasis on supporting SMEs’ exports. To do so, the government strengthened financial assistance systems such as export insurance and export/import credit, provided more support for overseas marketing such as exhibitions and market survey teams and expanded trade infrastructure such as paperless trade, exhibitions and training trade specialists.

In order to maintain the base for trade surplus through boosting industrial competitiveness, the Korean government implemented policies for developing industrial technology, establishing infrastructure and establishing & implementing the Basic Plan for Energy Rationalization.

2.5. Liberalization and Promotion of FDI in the 1990s

(1) Preferring Borrowing rather than Foreign Direct Investment

Most of the capital and technology invested for economic development in Korea was introduced through borrowing and licensing, rather than direct investment.

This can be seen from the fact that commercial and public borrowing accounted for over 80% of total foreign capital inflow until 1980. Part of the reason for this was that until 1984, many restrictions on ownership and transfer of profits existed and sectors open to foreign investors were limited.

Table 4-2 ●● Inflow of Foreign Capital from 1962 to 1992

(Unit: US million, %)

	1962~65	1966~72	1973~78	1979~85	1986~92	Total
Public Loans	62 (42.9)	1,130 (32.2)	3,431 (30.6)	10,105 (28.9)	4,688 (15.4)	19,417 (24.2)
Commercial Loans	70 (48.3)	1,950 (55.5)	5,858 (52.2)	7,937 (22.7)	5,206 (17.1)	21.022 (26.2)
FDI	13 (8.8)	227 (6.5)	704 (6.3)	1,157 (3.3)	5,684 (18.7)	7,785 (9.7)
Bank Loans	- -	205 (5.8)	1,007 (9.0)	11,892 (34.1)	4,318 (14.2)	17,422 (21.7)
Bonds-Financial Institutions	- -	- -	219 (2.0)	2,989 (8.6)	5,978 (19.7)	9,186 (11.5)
-Private Firms	- -	- -	- -	834 (2.4)	4,515 (14.9)	5,349 (6.7)
Total	147 (100.0)	3,512 (100.0)	11,219 (100.0)	34,914 (100.0)	30,389 (100.0)	80,181 (100.0)

Source: Reproduced from *30 year History of Foreign Capital Inflow in Korea*

(2) Sporadically Pursued FDI Promotion Policies in the 1970s, 1980s and 1990s

However, the establishment of the Free Export Zone in 1970, aimed mainly at encouraging exports, was successful in reversing the situation somewhat. This is evidenced by the jump in direct investment inflows to 190 million US dollars in 1983, though they had previously decreased after the oil shock in the 1970s.

The turning point in inward investment policy came in 1984 with the passage of the Foreign Capital Inducement Law, which introduced the negative list system. All business sectors except listed ones are now open to foreign direct investment.

This new movement would continue, albeit in a specific sector, in the 1990s. Recognizing the necessity of foreign direct investment in high-tech industries after the quick increases of wage rates in the second half of the 1980s, Korea designed policies to attract foreign capital in high-tech industries from the early 1990s. Preparation for the globalization of the world economy and the rise of Korean firms' overseas investment were also motives for the redesign of inward investment policies.

An important series of policies included tax incentives for direct investment in high-tech sectors, simplification of investment procedures in 1992, and the Five-Year Plan for foreign direct investment liberalization introduced in 1993. Partly due to the new policies and partly due to the strong market conditions in Korea, inward investment increased sharply until 1997.

Nonetheless, the government's investment policies could still be considered as passive overall. The ratio of foreign direct investment to gross capital in Korea averaged a miniscule 0.9% in the 1990s. In comparison, the ratios of the other countries, excepting Japan, exceeded 10%.

Table 4-3●● Trends in Foreign Direct Investment

(Unit: US million, %)

	1995	1997	1999	2000	2001	2002	2003	2004	2005
Amount	1,947	6,971	15,531	15,212	11,286	9,093	6,469	12,786	11,562
Growth rate	47.8	117.6	75.4	-2.1	-25.8	-19.4	-28.9	97.7	-9.6

Source: MOCIE
Note: Approval or Report basis.

In other words, the greater receptiveness displayed by the government to foreign direct investment was characterized by targeting. The objectives of these policies were mainly to introduce or promote high-tech industries, mainly through technology transfer. Policy makers and businesses implicitly agreed that firms in major and important industries should be owned or at least controlled by Koreans. In this respect, the prior stable economic growth may have misled policy makers into believing there was no need for national promotion activities such as building up the country's international reputation and image. This mentally dominated until the recent financial crisis.

(3) Changing to Active Promotion Policies for FDI

Reflecting this, industries open to foreign investors were limited. For instance, after joining the OECD in December 1996, Korea's proposed reservation list in the negotiation of the

Multilateral Agreement on Investment (MAI) was criticized as the longest among all members.

The advantages that had attracted foreign investment were the good prospects for dynamic economic growth and the high-quality labor force. However, complicated and obscure regulations, combined with a nationalistic attitude towards foreign investment and ambiguity in policies, were and still remain as major barriers to foreign investors.

Since the outbreak of the financial crisis, the introduction of foreign capital has been considered critical to ease the shortage of foreign exchange. Accordingly, financial liberalization has been pursued in various areas, including short-term capital movement. More areas have also been opened to foreign investors to promote foreign direct investment. They were inevitable steps considering that raising funds from abroad, by issuing bonds or through borrowing, was nearly impossible. Furthermore, FDI is an efficient way to secure the foreign funds necessary for domestic restructuring.

After the foreign exchange crisis, policies on the inflow of foreign capital including direct investment have taken top priority. Currently, the objectives have shifted to attracting as many investors as possible, even though the prospect for foreign direct investment is not bright.

(4) Newly Implemented Policy Tools for FDI Promotion

Promoting network-type investment such as R&D centers, logistics centers and regional headquarters: This policy aims at making Korea into the business hub of Northeast Asia. To do so, the government and Invest Korea explore potential investments and dispatch investment promotion teams to potential investors.

Intensive effort to lure service industries: Regarding service industries as new growth engines, the Korean government tries to attract more FDI in these sectors by deregulating conditions for foreign investment as well as to enhance the competitiveness of domestic industries. Joint delegations of interested ministries to target strategic businesses such as logistics, tourism, business services, etc. are often organized to be sent to specific countries.

Promoting parts/ materials and green field type-investments in manufacturing sector: In order to address chronic trade deficit with Japan, the Korean government tries to target investment promotion in parts/materials industries. Invest Korea runs a project manager/project designation program to intensively manage investment projects until they are successfully completed.

(5) 4 Stages of Korea's Investment Promotion Policies

The first stage can be categorized as a phase of restrictions and regulations on foreign investment. During this period, the government was concerned with the possible control or dominant power which foreign companies might have over Korean companies and domestic industries.

In the second phase, from 1984 to 89, Korea's foreign investment system began to form its ground as the government started realizing the limit of continuous foreign capital borrowing and realized the necessity of foreign investment inducement.

In the third phase of the foreign investment system in Korea between 1990 and 1997, the investment system became liberalized. With the foundation of WTO, there was continuing pressure and demand for an open-door policy for Korea's trade and investment, and after Korea joined OECD, the Korean government reviewed its foreign investment system and promoted liberalization.

The fourth phase of advanced promotion in foreign investment was an effective and crucial method to overcome the financial crisis. In order to support foreign investment, Korea has allowed cross-border M&A and foreign nationals to purchase 100 percent of the target company's stock.

(6) Korea's Current Investment Promotion Policies

During the recession period following the financial crisis at the end of 1997, Korea implemented a stringent program for structural reforms over a wide range of areas with the collaboration of the IMF. The basic principle that lay throughout these structural reforms was "restructuring traditional systems along market-oriented lines". The reform program touched upon the 4 following major areas: financial sector, corporate sector, public sector, and labor market. During this process of reforming the economic system, the Korean government also launched a more open foreign direct investment system as well.

Korea's current FDI regime is based on the Foreign Investment Promotion Act enacted in 1998. Through the introduction of this Act, policies on foreign direct investment and related systems have been restructured to make investment in Korea easier from a foreign investor's perspective.

Above all, under this Act, foreign and domestic investments are treated identically, and dividend remittance is guaranteed. No specific restrictions may apply unless such investments violate laws and ordinances.

In order to promote its further integration within the global economy, Korea enhanced its level of FDI liberalization to internationally accepted standards by broadening the range of industries open to foreign investment.

Currently, out of a total of 1,058 business sectors in Korea, only two remain closed to FDI. Twenty-six business sectors are partially opened, but these will be further liberalized in the near future. Accordingly, 99.8 percent of Korea's economy is open to participation by the world business community.

(7) Improving Investment Climates

Since Korea has limited land area and high labor costs compared to other competitors, it gives many incentives to foreign investors.

Korea offers tax holidays to highly intensive technology related business, R&D business, and companies working in the foreign economic zones. These businesses are granted tax holidays of corporate income tax and income tax up to 7 years, and some tariff cuts are given to capital related foreign investment. Large-scale investment companies are designated as foreign investment areas and are provided with benefits such as tax cuts or leasing costs exemption.

In addition, for foreign investors investing in high-technology, Korea gives cash grants (5-15%) depending on technology level or employment size.

Incentives alone would not be enough to induce foreign investment. The government has established and been implementing the 5 year plan to improve the foreign investment environment.

Foreign investment environment can be divided into two areas: business and living environment.

The plan for improving the business environment aims to identify and resolve any difficulties in labor, tax, finances, foreign exchange, and administrative services that foreign companies may encounter in Korea.

The plan for improving the living environment seeks to identify and improve inconveniences in education, housing, medical care, transportation, entry and departure process, and culture. We are currently working on 54 out of 106 tasks. The government is carrying out quarterly reviews of the improvement process with other government offices and aims to continuously enhance the investment environment.

2.6. Possible Lessons in Korean Experiences

(1) Political commitment from the highest level is prerequisite for the effectiveness of trade & investment promotion policies

The first lesson to be drawn from Korea's experiences for Indonesia how to make trade & investment promotion policies effective is that promotion of exports and FDI in industrial products is, most of all, a holistic national campaign requiring the political commitment of the whole nation and especially to be led by the President himself, and covering the whole array of economic policy instruments. If Korea's experiences are to be followed, the paradigm for the management of the economy has to be re-examined and re-oriented, to the extent necessary, with the Korean model as a bench mark. The first prerequisite, though, should be the exercise of the President's leadership for the creation of the national consensus in support of promotion of exports and FDI in industrial goods.

(2) Well-developed labor intensive industries can play the role of a starting point of more advanced industrialization.

Korea, endowed only with abundant cheap labor at the beginning, did not have alternatives other than developing simple labor intensive industries. When these labor intensive industries acquired sufficient competitiveness, they started to play the role of an industrial base for developing other industrial sectors. As these labor intensive industries created demand for components, materials and even machines, the newly launched "heavy & chemical industry development program" was able to be successfully implemented. A virtuous circle of industrialization continues in Korea, with established competitive industries creating markets for other technologically advanced industrial sectors such as semiconductors and LCD-TFT.

(3) Improving investment climate as well as liberalizing the FDI regime is very important to efficiently attracting foreign capital.

When the Korean economy was hit by the 1997 Asian financial crisis, the Korean government swiftly changed its policy stance to liberalize its regulatory system for FDI. However, the initial surge in FDI started to stagnate because of a relatively unfavorable investment climate such as tax system, labor relations and living environments for foreign manages and workers. Only after the Korean government had embarked on serious effort to improve investment climate, did FDI restarted to increase again.

(4) The role played by various institutions for promoting export and investment gets more importance when direct financial and fiscal assistances cannot be employed.

When the Uruguay Round was settled in 1994, direct financial and/or fiscal assistance for the purpose of export promotion was prohibited even for developing countries. Therefore, export promotion policies conducted by most countries are now focused on providing indirect assistance such as providing better information about foreign markets, providing opportunities to participate in international exhibitions, and providing better-qualified trade specialists. In terms of FDI attracting policies also, providing too many financial and fiscal incentives is regarded as harmful to competition. So, providing better investment environment and better informative assistance is regarded as important by most countries.

For this reason, the role played by public institutions, especially for the purpose of export and investment promotion, seems to be decisive. In this regard, the efficiency and effectiveness of these organizations can be transformed into a competitive edge between countries.

(5) Public institutions for promoting export should target rather SMEs, because they cannot afford to develop their own global network.

At the beginning, most export promotion policies provided by the Korean government were focused on the export activities of SMEs. In fact, there were few large enterprises at all at that time. While Korea's industrialization deepened, a number of large industrial groups were formed, especially after the heavy and chemical industries developed successfully. For these large industrial groups, establishing their own global network was not a difficult job but an indispensable one. However, for most SMEs, getting information on international markets and getting access remained very difficult; therefore the assistance provided by public institutions was very precious to SMEs.

3. Institutions for Trade and Investment Promotion: Comparison of Korea and Indonesia

3.1. Korea's Institutions for Trade & FDI Promotion

(1) MOCIE: As the Control Tower of Trade and FDI Promotion Policies

The Ministry of Commerce, Industry and Energy (MOCIE) is in charge of formulating government policies for promoting manufacturing exports as well as attracting foreign direct investment. Therefore, the ministry plays the role of control tower in promoting trade and investment with the power of coordinating the promotional activities implemented by other public or private bodies.

This ministry was initially launched as the Ministry of Commerce in 1948 when the first Korean government was inaugurated. At the time, it took charge of primary industries such as fisheries and mining as well as secondary and tertiary industries including manufacturing and commercial activities. The energy section was separated off from the ministry as an independent ministry named Ministry of Power and Resources in the 1970s to better cope with the oil crisis. However, later on, the energy and resources section was re-integrated into the ministry to efficiently implement industrial policies.

Among the announced tasks of the ministry, two policy objectives (trade promotion and FDI promotion) come to the forefront, which means they are regarded the most important tasks to be pursued.

■ MOCIE's Announced Tasks

1. Establishing and implementing policies to increase export and expand balanced trade

2. Attracting foreign investment and promoting industrial and economic cooperation with other countries

3. Establishing and implementing policies on energy conservation, alternative energy, energy safety and development of domestic and overseas resources

4. Establishing and implementing policies on securing stable supply of energy such as oil, gas, electricity, nuclear and coal and on strengthening competitiveness of the energy

industry

5. Establishing and implementing policies on the development of future-oriented industrial development including enhancement of industrial competitiveness, advancement of the distribution and service industries, spread of e-commerce and digitalization of industries

6. Establishing strategies to efficiently locate industries and promote balanced national development

7. Establishing and implementing industrial technology policies including technological development, transfer, commercialization, industrial standardization and the design industry

8. Establishing and implementing policies to boost competitiveness of major industries such as parts and materials, automobiles, shipbuilding, machines, steel, petrochemical and textiles

9. Exploring and nurturing new industries such as semi-conductors, digital, bio and new materials.

The ministry has set up two independent Directorates-General for the purpose of formulating and pursuing trade promotion and FDI promotion policies.

The Directorate-General for Trade Policy is in charge of trade promotion policies. The DG has two divisions specialized in trade promotion.

The Trade Policy Division is responsible for the following tasks:

→ To formulate and implement short-to-long term trade policies, i.e comprehensive trade promotion policy
→ To administer trade-related laws i.e. International Trade Law, Trade Automation Promotion Law
→ To expand inter-Korean economic cooperation, especially in the areas of trade and investment
→ To handle matters related to establishing trade infrastructure
→ To execute policies for E-trade

The Overseas Marketing Promotion Division is responsible for the following tasks:

→ To implement export promotion policies for small and medium enterprises and start-ups

→ To deal with domestic and international expositions, including construction venues
→ To conduct trade promotion activities, including trade conferences
→ To select and promote" Made in Korea" products

The Directorate-General for International Trade and Investment is in charge of foreign direct investment promotion and bilateral trade & investment cooperation. The DG has two divisions specialized in FDI promotion.

The Foreign Investment Policy Division is responsible for the following tasks:

→ To take the lead in FDI and introduce new technologies from abroad
→ To create sounder environment for international investors
→ To administer FDI related laws, such as Foreign Investment Promotion Act
→ To designate foreign investor zones and execute FDI budgets
→ To strengthen multilateral cooperation with the OECD and APEC in investment

The Foreign Investment Promotion Division is responsible for the following tasks:

→ To formulate and implement measures to attract foreign investment
→ To compile FDI related statistics and analyze trends
→ To manage investor relations activities
→ To oversee investments accepting investor application, granting permit

(2) KOTRA: In Charge of Implementing Trade Promotion Policy Tools

KOTRA is in charge of implementing export promotion policies by providing export-facilitating services as following:

Business Matchmaking

On request, KOTRA introduces overseas buyers to the most appropriate business partners in Korea through its wide-ranging inquiry network as well as business meetings held year round. KOTRA provides buyers visiting Korea with assistance in arranging business meetings with Korean companies and collecting information on Korean products and suppliers. KOTRA also dispatches groups of Korean exporters abroad to explore global markets with the help of local Korea Trade Centers.

International Exhibitions

KOTRA organizes international exhibitions in Korea as well as large-scale Korean product shows in strategic markets abroad. In addition, KOTRA arranges the participation of domestic companies in similar events overseas through its “Korea Pavilions”.

E-Trade

KOTRA operates the Cyber Business Center at its Seoul headquarters where overseas buyers can hold online business meetings with domestic companies regardless of time and location.

For the purpose of effective trade promotion, KOTRA plays the role of collecting and diffusing the information about foreign markets, especially new markets for Korean exporting firms. To do so, KOTRA conducts the following activities:

In-depth Research and Seminars

Through the analysis of the information gathered by its local and overseas networks, KOTRA draws insightful conclusions on a variety of trade and investment issues that help firms to respond promptly to the rapidly-changing global economic environment. With the help of Korea Trade Centers at home and abroad, the research teams operating at KOTRA’s head office issue publications as well as hold seminars on world trade regimes and regional market conditions.

Trade Information Library

The Trade Information Library at KOTRA’s headquarters offers current information on each country’s market and investment conditions gathered through its Korea Trade Centers. It provides an extensive range of resources such as business directories, tariff schedules, periodicals and much more. Computer access is readily available at the Library, enabling users to quickly access the information they require.

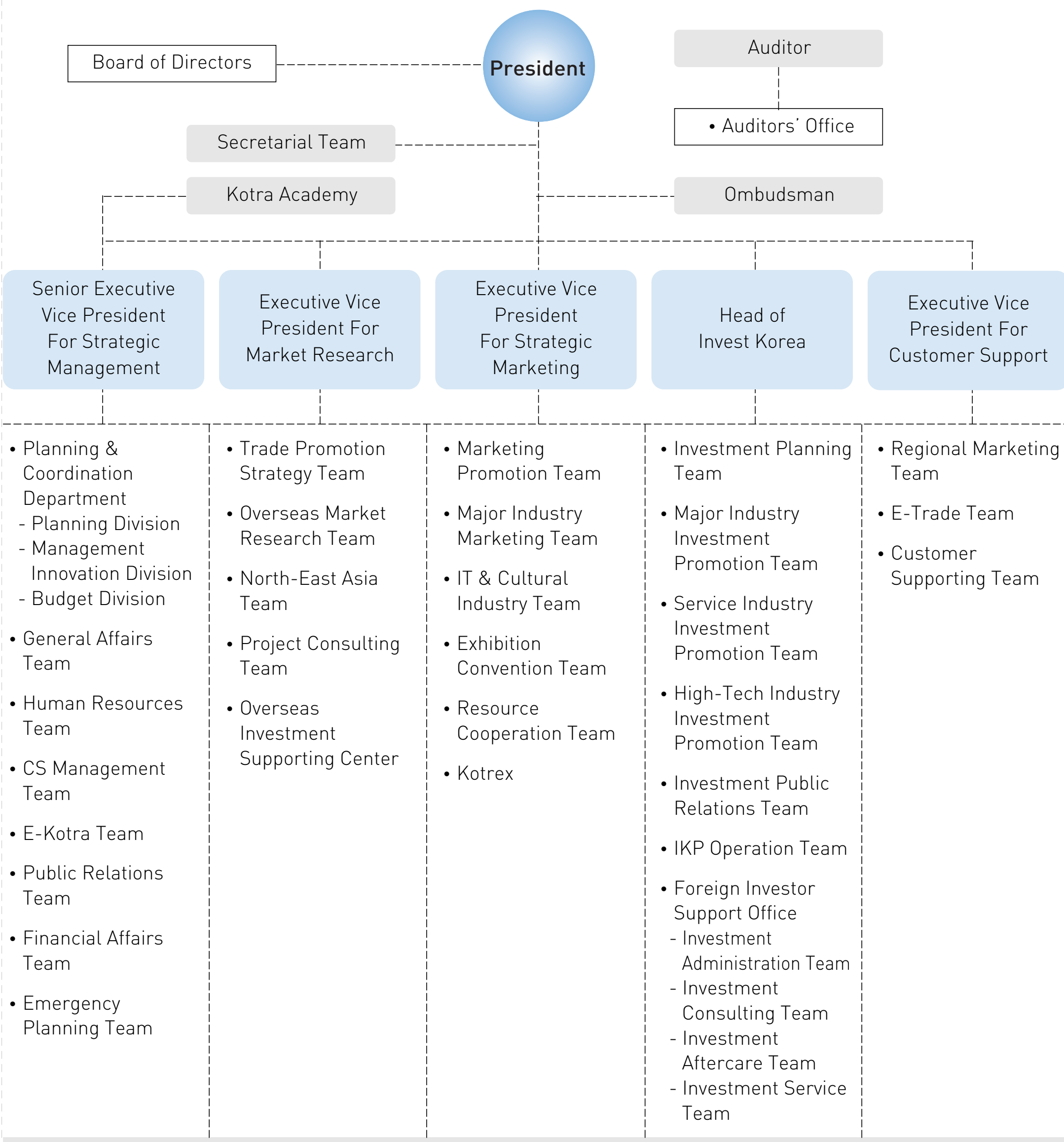
Overseas Investment Support Center

While inbound investment promotion is led by Invest KOREA, outbound investment support is provided by the Overseas Investment Support Center. The center offers Korean companies detailed information on each country’s investment conditions and procedures. For those foreign governments eager to attract Korean investors, the center helps hold investment promotion seminars in Korea by arranging the participation of relevant domestic companies.

Cooperation with Other Organizations

KOTRA actively engages in international cooperation with similar organizations by exchanging ideas and sharing information. Seminars and workshops are hosted to promote better communication and render assistance to foreign trade and investment missions that visit Korea. Such close ties with relevant foreign organizations will enhance mutual understanding of different cultures to the benefit of each country’s economy.

Figure 4-1 ●● KOTRA’s Organizational Chart



KOTRA Academy

While working abroad, KOTRA personnel gain insights into world markets and therefore can provide the kind of first-hand inside information its customers need. In order to share KOTRA's expertise more effectively, KOTRA Academy was launched as a professional learning center in the field of international business. All courses are focused on field training and curriculums are flexibly arranged in accordance with customers' needs.

The organization of KOTRA is strictly reflecting its functions for trade and investment promotion. Putting apart the investment promotion function executed by Invest Korea, three major functions such as strategic management, market research and strategic marketing are set for conducting trade promotion activities. Recently, the function for customer support has been added to make KOTRA more customer-friendly.

(3) Invest KOREA: As the Investment Promotion Catalyst

Invest KOREA is the Korean national investment promotion agency established with the sole purpose of facilitating the entry and successful establishment of foreign business into Korea. To provide a comprehensive service to meet the foreign investors' every need as a one-stop window, Invest KOREA is staffed with experts from various ministries and relevant organizations.

An integrated package of professional services is delivered through designated project managers in Invest KOREA. The scope of activities includes:

○ Investment consultation
○ Market research and partner search
○ Administrative support
○ Advice on legal, accounting and tax matters
○ Settling in assistance
○ Follow-up service

The role played by Office of the Investment Ombudsman (OIO)

A major component of Invest KOREA is the Office of the Investment Ombudsman, a troubleshooting service to help foreign companies resolve any difficulties they may have in doing business in Korea. For the successful establishment of foreign business in Korea, the OIO's "Home Doctors" provide one-on-one service in such areas as construction, finance, tax, labor, law and matters of daily living including housing, visas and children's education.

Invest KOREA's Global Network

Invest KOREA operates a network of overseas branch offices in 34 leading Korea Trade Centers. With each branch located in a major world business center, Invest KOREA can justifiably claim to be on the doorstep of investors everywhere.

(4) KITA (Korea International Traders' Association): a Private Organization for a Public Cause

KITA is by nature an industrial association among trading companies. It provides a variety of direct services such as business arrangements and trade consulting. It assists trading companies in resolving grievances by reporting them to relevant government authorities. It also plays the role of building trade infrastructure by training trade experts, establishing cyber trade infrastructure and hosting international special exhibitions

<Supporting Overseas Marketing>

KITA organizes international trade shows and exhibitions at the Convention and Exhibition (COEX) center. Equipped with modern and flexibly designed facilities to accommodate various sizes and types of exhibits, COEX holds some100 international exhibitions a year.

KITA promotes export opportunities for member companies through participation in international trade exhibitions. For many such exhibitions, KITA organizes exclusive and consolidated national pavilions.

KITA organizes and dispatches trade missions and market survey teams overseas to promote bilateral trade relations and to explore new business opportunities. KITA also assists visiting delegations in making business arrangements and preparations in Korea.

KITA provides up-to-date business matchmaking services through worldwide electronic business networks such as EC21, GTP Net, BRE Network, and And WTC On-Line. In addition, KITA provides "Cyber MartKorea" and "Korean Trade Directory" to promote Korean export products worldwide.

KITA organizes various functions and events to enhance mutual understanding on trade issues, thereby helping to resolve private-sector trade disputes through dialogue. It also works together with its overseas counterparts and international economic organizations to provide member firms with opportunities to interact fully with the international community.

<Providing Trade Information and Research Service>

KITA studies issues relating to international trade and economy and makes policy recommendations to the government on behalf of its members. It also conducts research and surveys on domestic and overseas economic conditions to help member firms adapt to the changing economic environment. KITA collects and disseminates information on the international trade environment and helps trading companies better understand changes in global business conditions.

KITA provides the country’s largest database specializing in trade information. The information services offer a customized collection of some 40 comprehensive trade-related databases on up-to-date economic and trade statistics, trading systems and procedures, and international trade issues. The databases also include lists of Korea’s importers and exporters as well as overseas buyers and suppliers. The services are mainly in Korean, but some of them are in English for foreign traders.

KITA provides e-commerce solutions such as EC21 and other B2B cybertrading networks. In partnership with the UN Trade Point and World Trade Centers Association, KITA offers a “free virtual trade website service” where Korean and foreign traders can exchange information on their companies and products as well as trade leads.

The trade library (http://lib.kita.or.kr) is a unique resource center with more than 30,000 trade-information sources, including overseas directories, numerous publications, and statistical data. Computerized data- bases and facsimile services ensure timely delivery of information.

<Educating International Trade Specialists>

Since 1965, KITA has operated the World Trade Academy (WTA) to provide specialized training for international businessmen. It offers numerous trade-related courses, including trade practices, inter- national marketing, office automation and Internet, and foreign languages. The WTA trains approximately 10,000 trade specialists each year.

The WTA opened the Cyber Trade Campus, which makes full use of the Internet. It offers foreign businessmen as well as Koreans various programs on international trade from beginning to advanced level.

The IT Academy is an integrated training and education divisions of the Korea International Trade Association (KITA), Korea’s leading business organization in the field of global commerce for over 55 years. IT Academy’s training and education staff consists of academic and business professionals each having a proven track record in the IT industry. 700 students are trained daily inside the academy’s state-of-the -art center, consisting of 20 lecture platforms, 11 computer labs, and 6 foreign language study rooms.

3.2. Making KOTRA & Invest Korea More Effective

(1) Business-friendly organization

Differently from their counterparts in Indonesia, KOTRA and Invest Korea do not take the form of government agencies. They are public institutions because they are financed by the government, but they act like private companies. In fact, their official status is as public corporations. Therefore, their staffs are not government officials and do not have any controlling authorities. They tend to be more business-friendly than government officials.

They act as service providers and not as permission controllers. Actually, KOTRA and Invest Korea do not have any authority to control private companies’ activities. They just try to provide more services for the purpose of trade and FDI promotion.

As public corporations, they are also interested in yielding revenues out of providing services, which makes workers in KOTRA and Invest Korea even more business-minded.

Table 4-4 ●● Major Revenues of KOTRA

(Unit: Billion Won)

	1990	1995	2000	2005
Providing services based on customers’ requests	0.1	0.4	1.0	3.6
Organizing promotional projects	3.3	5.4	12.1	28.3

Source: KOTRA

KOTRA runs more than 100 overseas Korea Trade Centers (KTC) throughout the world. For those KTCs again, they are quite independent from Korean embassies at local countries.

Korean staff members working at the KTCs are in general dispatched from KOTRA headquarters. They are not government officials either. In general, overseas KTCs employ many local staff, Korean compatriots or local people.

Among those KTCs, KTCs which are established in either developed countries or some large developing countries also play the role of branch offices for Invest Korea, which is the contact point for potential foreign investors.

Table 4-5 ●● Korea Trade Centers in the world

Regional Headquarters	Cities with KTCs
Asia & Oceania	Auckland, Bangkok, Chennai, Colombo, Dhaka, Hanoi, Hochiminh city, Jakarta, Karachi, Kuala Lumpur, Manila, Melbourne, Mumbai, New Delhi, Phnom Penh, Singapore, Sydney, Yangon
Middle East & Africa	Amman, Baghdad, Beirut, Cairo, Casablanca, Dubai, Kuwait, Muscat, Riyadh, Tehran, Tel Aviv, Alger, Johannesburg, Lagos, Nairobi, Tripoli
Japan	Tokyo, Osaka, Nagoya, Fukuoka
China	Beijing, Chengdu, Dalian, Guangzhou, Qingdao, Shanghai, Hong Kong, Wuhan
Europe	Amsterdam, Athens, Berlin, Brussels, Budapest, Bucharest, Copenhagen, Frankfurt, Hamburg, Helsinki, Istanbul, Lisbon, London, Madrid, Milano, Munich, Oslo, Paris, Prague, Sofia, Stockholm, Vienna, Warsaw, Zagreb, Zurich
North America	Chicago, Dallas, Detroit, Los Angeles, Miami, New York, San Francisco, Washington, Toronto, Vancouver
Latin America	Bogota, Buenos Aires, Caracas, Guatemala, Lima, Mexico City, Panama, Santiago, Santo Domingo, Sao Paulo
Russia & CIS	Almaty, Kiev, Moscow, Tashkent, Vladivostok, Novosibirsk

Source: KOTRA

(2) Attentive to customers' needs

KOTRA has proposed as a catch-phrase for its activities, “customer-focused,” setting this as a management objective.

To do this, KOTRA is focusing on the following actions:

- Fostering closer relations with customers to provide more responsive service, assistance and information

- Understanding and anticipating customers' needs, and then exceeding their expectations

- Seeking new ways to deliver extraordinary customer service

- Being agile and adaptive; utilizing customer feedback to create fast and innovative solutions

Table 4-6 ●● Customers' Use of KOTRA Services (2005)

Category	Services	number of users
Providing Information on Foreign Markets	Seminars	1,958
	Research on request	4,286
Marketing Services	Domestic exhibitions	456
	Market consultation	4,185
	Advertisement	699
	Business trip for sales	626
	Participation in overseas marketing	1,752
	Overseas exhibitions	1,083
Investment Attraction	Participation in IR on Korea	130
	Grievances of foreign companies	180
	Culture exploring travel	22
Services to Members	Global window	729
	Services related overseas trade centers	1,084
Others	Trade academy	153
	Other	34
Total	15 services	17,377

Source: KOTRA

In order to respond more closely to customers' needs, KOTRA applies a system called "Enhanced CRM (Customer Relation Management)". They set up a customer consultation desk, which is open even on Saturdays.

In order to directly listen to customers' opinions, KOTRA invites a lot of customer participation in KOTRA's management. For example, customers are invited to participate in the consultation committee to the president and on-line request center.

In order to effectively implement the recently added function, Customer Support, which has becomes one of four major functions of KOTRA, KOTRA has introduced a Customer Satisfaction Officer and a Customer Support Team at its headquarters.

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Invest KOREA provides all necessary help for foreign investors through the Project Manager and Home Doctor systems.

Project Managers provide support in various areas such as information gathering, plant site selection, consulting on FDI incentives, meetings with government officials, and preparing administrative documentation from the initial stage of the investment until the actual business set-up.

Once the business is set-up, the Investment Ombudsman and Home Doctors continue the support by resolving any difficulties that might be encountered by the investors while doing business in Korea and by trying to create a more favorable investment environment.

(3) Synergy Effect between KOTRA & Invest Korea

There is a very close relation between KOTRA, a trade promotion institution, and Invest Korea, an investment promotion institution, which creates a formidable synergy effect between the two institutions.

In fact, Invest Korea is a part of KOTRA at the similar level with departments of strategic management, market research, strategic marketing and customer support.

Invest KOREA is staffed with three kinds of specialists:

- KOTRA employees who have extensive expertise and experience in supporting inbound foreign direct investment (FDI)
- Public servants from other related government agencies
- Experts from the private sector in fields such as accounting and law (including tax and labor law)

The fact that KOTRA employees can work sometimes for KOTRA and sometimes for Invest Korea facilitates again the synergy created between two institutions.

In addition, KOTRA and Invest Korea share the enlarged domestic and foreign branch offices to collect more localized information and to provide customer-close services. Overseas KTCs can provide marketing information to potential Korean exporters and information about Korea's investment environments to potential investors in Korea.

Table 4-7 ●● KOTRA's Network

	1960s	2005
Overseas	4 branches New York, LA, Hong Kong and Bangkok	103 branches in 74 different countries
Domestic	None	13 regional offices

Source: KOTRA

(4) Under an "Objective" Evaluation

The performance of KOTRA & Invest Korea is under an "objective" evaluation, which makes these institutions more reform-minded and ready to change.

As a public corporation, KOTRA is supervised by MOCIE and scrutinized by the board of audit and inspection and the parliament.

In addition, KOTRA's performance is evaluated each year by a group of specialists composed of professors, lawyers, accountants and researchers. The four major elements of this evaluation are general management (including customer satisfaction), major projects, personnel management and fiscal management.

KOTRA continuously reforms its structure based upon the evaluation. Low performing functions are always under pressure to be scrapped.

All services and all functions that KOTRA and Invest Korea are providing and conducting are under the assessment made by the Business Scoreboard System again.

(5) Functionally-structured organization rather than regionally-structured

The organization of KOTRA & Invest Korea is mainly structured based upon functional characteristics.

Four major departments of KOTRA are composed as follows:

- Strategic Management: planning & coordination etc.

- Market Research: 5 teams with trade promotion strategy, overseas market research, North-East Asia, project consulting, overseas investment support

- Strategic Marketing: 5 teams with marketing promotion, major industry marketing, IT & cultural industry, exhibition & convention, resource cooperation

- Customer Support: 3 teams with regional marketing, e-trade, customer support

Major functions of Invest Korea are defined as follows:

- Investment planning team

- Major industry investment promotion team

- Service industry investment promotion team

- Hi-tech industry investment promotion team

- Investment public relations team

- IKP operation team

- Foreign investor support team

- Investment administration team

- Investment consulting team

- Investment aftercare team

- Investment service team

The system of functionally-structured organization seems to be more efficiently adapted for implementing government-mandated trade and investment promotion policies and listening to customer's opinions.

3.3. Indonesian Institutions for Trade and Investment Promotion

(1) NAFED: National Agency for Export Development

The National Agency for Export Development (NAFED) was set up in 1971 as a special service agency of the Ministry of Trade in order to help Indonesian manufacturers to identify and develop overseas markets.

To accomplish the above-mentioned objective, NAFED tries:

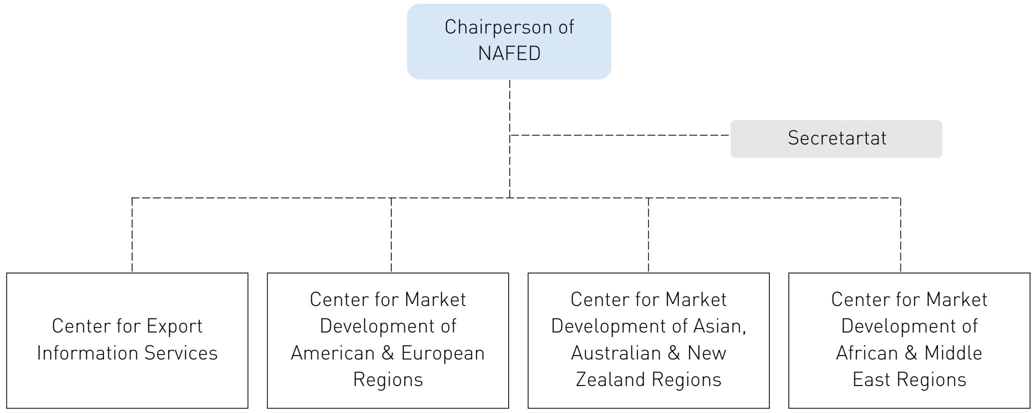
- To formulate policy and establish guidelines to encourage and support the expansion of non-oil and gas products
- To provide information services and market coordination
- To implement and organize export promotion
- To expand the range of export products and markets

Now, over 300 experts work for these missions at NAFED. Since NAFED is a government agency under the supervision of the Ministry of Trade, the experts working at NAFED are all regarded as government officials.

NAFED is headed by a Chairman who is assisted by a secretary and 4 directors of center: Center for Export Information Service (PPIE), Center for Export Development in America and Europe, Center for Export Development in Asia, Australia and New Zealand, and Center for Export Development in Africa and Middle East.

The Center for Export Information Service has three divisions: Data Collection and Processing Division, Database and Information Network Division and Information Service and Publication Division. Three other centers with regional coverage have three divisions respectively: Industrial Product Division, Craft Product Division and Agriculture Product Division.

Figure 4-2 ●● Structure of NAFED



Source: website of NAFED

Compared to KOTRA, the structure of NAFED is characterized as regionally oriented rather than functionally divided. The services provided by divisions under regional centers can be overlapped.

NAFED provides various services about overseas markets to Indonesian manufacturers such as market intelligence and analysis on selected markets (in general, selected by NAFED, not on demand by clients), workshops and seminars (the most eminent being “Annual Export Consultation Forum”) on potential markets, and buyer-producer match making (provided in general through “Buyer Reception Desk”). All services provided by NAFED are free of charge, which is quite different from the case of KOTRA.

By means of export promotion, NAFED organizes annual activity programs such as trade fairs in Indonesia, coordinates Indonesian exporters’ participations in international trade fairs and organizes selling missions to targeted overseas markets. The most renowned trade fairs organized in Indonesia are “Resources Indonesia Exhibition and “Regional Export Products Trade Fairs.”

NAFED established “Export Training Center” in view of growing up export experts in 1990 with assistance from the Japan International Cooperation Agency. Since 2002, NAFED has been expanding the training center services in several regions in Indonesia including Surabaya, Medan, Makasar and Banjarmasin.

NAFED runs “Overseas Industry and Trade Representative Offices” in the most targeted markets in general by sending its staff to Indonesian Diplomatic Representative Offices (embassies, consulate generals etc) in 26 cities around the world. In addition, NAFED has “Indonesian Trade Promotion Centers” in 6 other cities such as Budapest, Dubai, Johannesburg, Los Angeles, Osaka and Sao Paolo. In the provinces of Indonesia, NAFED runs “Domestic Branch Offices of Industry and Trade Service” in 30 cities.

The Indonesian Government seems to be considering “reforming NAFED” in order to improve its efficiency and effectiveness by benchmarking advanced trade promotion organizations in other countries such as KOTRA, SITRA, JETRO and TDB. According to a paper prepared by NAFED for the final review workshop (NAFED, 2006), NAFED seems to want to change its orientation, structure and job culture.

Contrast between NAFED and TPOs Already Making Change

Table 4-8 ●● Contrast between NAFED and TPOs Already Making Changes

	NAFED (Old Ways)	Advanced TPOs (New Ways)
Philosophy	Internal Driven (Supply side)	Market Driven (Demand Side)
Activity Focus	Trade Exhibition & Trade Mission	Match-making, Product (Export) Development
Nature of Service	Generic	Segmented, depending on exporters' skill & capability
Culture	Pure-Bureaucratic	Entrepreneurial-Professional
Organizational Structure	Based upon Market Areas (Centers as Coordinators)	Functional, in one integrated supply chain

Source: NAFED, *Transformation of the National Agency for Export Development*, a paper prepared for FRW in Seoul, May 2006.

Finding that the current NAFED has the following problems, the paper suggests that the Government should transform NAFED into an organization with a new structure & culture and new attitudes as an international matchmaker towards 2009: first, level of exporters' satisfaction about NAFED tends to be low, second, benefits of NAFED are mostly insignificant, relationship between what is done by NAFED and increase in export performance is not so obvious, third, image and need for NAFED fade more and more.

(2) BKPM: Investment Coordinating Board

In order to coordinate all the matters related to foreign direct investment in Indonesia, the Indonesian Government created the Foreign Capital Investment Advisory Board at the beginning in 1967 based upon the Law Number 1 of 1967 on Foreign Investment. The task of the Board was to give advice to the President with respect to the implementation of foreign investment.

With the enactment of a Law on domestic investment in 1968, for the purpose of promoting and coordinating at the same time both foreign and domestic investment, the Indonesian Government established a new body called the Technical Committee on Investment. The task of the Committee was to study and evaluate investment applications, both foreign and domestic. To this stage, the Committee did not have the authority to issue investment permits.

The necessity of including functions for better coordination in the issuance and control of investment permits and expanding through promotion pushed the Indonesian Government to create a new body called the Investment Coordinating Board (BKPM, Badan Koordinasi Penanaman Modal) which replaced the Technical Committee in 1973.

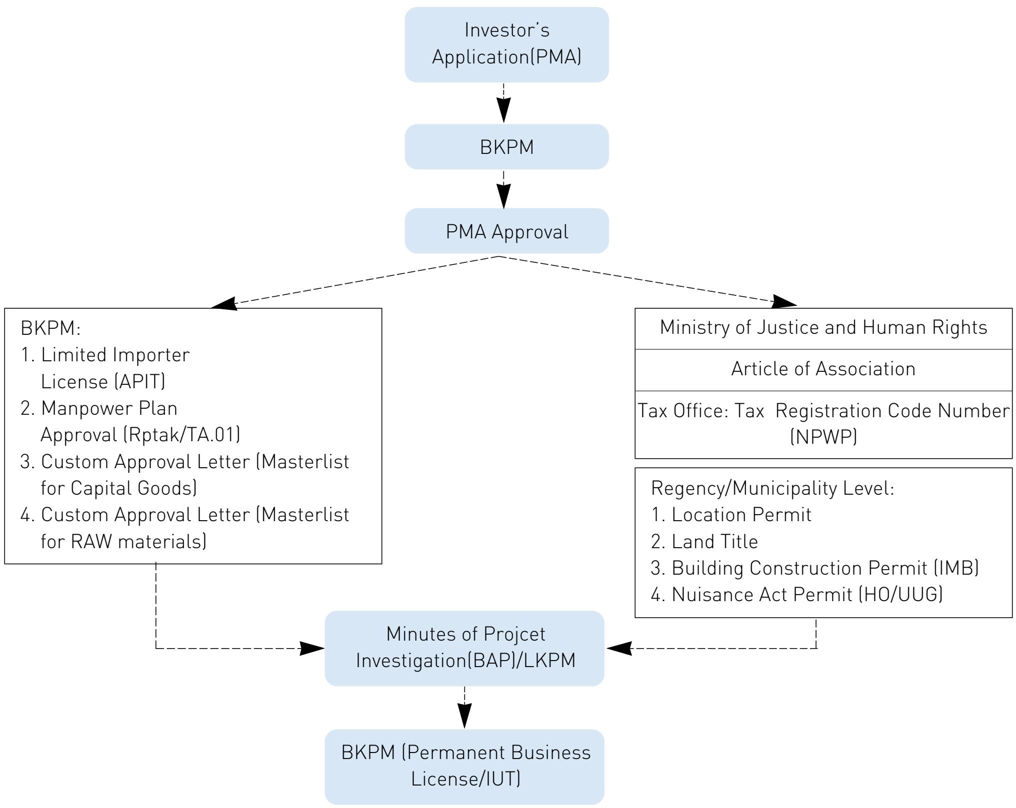
BKPM is a non-departmental government agency serving under and directly responsible to the President of the Republic of Indonesia. The task of BKPM is to plan and administer investments both foreign and domestic and to assist investors to find feasible investment projects and suitable local partners and to overcome any problems that might arise during implementation stages.

In order to carry out its task, BKPM has the following authorities: to prepare macro-level national planning on investment, to formulate investment policies to support macro-level development, to establish investment information systems, to grant approvals and to control investments with highly sophisticated and high risk strategic technology in its implementation, and other authorities in compliant with regulations related with the preparation and implementation on investment.

BKPM is headed by a Chairman who is assisted by a main secretary and five deputy chairmen, Deputy for the Development of Investment Climate, Deputy for Investment Promotion, Deputy for Investment Relation, Deputy for Investment Services, and Deputy for Investment Realization. The Deputy Chairman for Investment Promotion is assisted by three directors responsible respectively for domestic promotion, overseas promotion and media promotion. The Deputy Chairman for Investment Cooperation is assisted by three directors responsible for bilateral & multilateral cooperation, regional cooperation and business cooperation. Therefore, the function for promotion of foreign direct investment is mainly assumed by two directors for overseas promotion and media promotion. The directors under the Deputy Chairman for Investment Cooperation are in general in charge of cooperation at the government level mainly by participating in international road shows for Indonesia. In this sense, the functions of BKPM seem to be more focused on investment control than on investment promotion.

Foreign investors (domestic investors also) who want to establish a company (100% ownership or joint venture) in Indonesia should come to BKPM to submit their application documents to the Government of Indonesia. BKPM will in turn examine various elements for approval by itself such as importer license, manpower plan, and custom approval letters and request related government agencies such as the ministry of justice and human rights, the tax office and regional governments to investigate related matters. When BKPM's examination and other agencies' investigations are finalized, then the Chairman of BKPM will issue the investment approval to the applicants. According to BKPM, the entire process would take a maximum of seven working days, except for projects which still need a letter of recommendation from related technical government agencies (see Figure 4-3).

Figure 4-3 ●● Foreign Direct Investment(PMA) Application Procedure and its Implementation Permit



The Indonesian Government seems to be committed to reform its public institutions for trade & investment promotion.

Concerning the public institution for investment promotion, the Indonesian Government recently issued the Presidential Instruction Number 3 of 2006 entitled "Policy Package for Improvement of the Investment Climate." The Policy Package was issued considering the fact that foreign direct investment in Indonesia recently has been stagnant because of slower domestic economic growth and growing competition with other Asian countries such as China, India, Thailand, and Vietnam.

In order to attract more foreign investments, the Indonesian Government seems to be committed to improve the investment climate especially related to the following aspects: general policies (including strengthening investment service institutions and synchronizing regional and central regulations), customs, taxes, labor and small and medium enterprises and cooperatives. In addition to this, the Government also issued policies and programs for improving infrastructure.

For the purpose of strengthening investment service institutions, the following programs are suggested to be pursued by related ministries:

1. Revision of the Investment Law containing basic principles, amongst others: expansion of the definitions of capital, transparency, equal treatment of domestic and foreign investors (other than the negatives list) and dispute settlement.

2. Revision of regulations related to investment: compiling a List of Business Sectors Closed for Investment (Negative List) and open for investment with conditions, with rules that are clear, simple, explicit and transparent, and formulating a clear division of tasks between the Central Government and Regional Governments regarding investment affairs.

3. Revitalization of the National Team for the Enhancement of Exports and Investment focusing on activating a discussion forum with the business community in order to solve problems of export and investment.

4. Acceleration of business licensing and investment and the establishment of companies: reviewing a number of rules on licensing in commerce, the process of establishing a company and business licensing, realizing an integrated service system for investment with a clear division of authority between the central government and regions, and providing information regarding the required licenses.

Apart from the above-mentioned official initiative, a serious consideration of merging the two trade & investment promotion institutions into one, similarly to the case of KOTRA, is being made among related ministries and experts, whereas the staffs of BKPM seem to want to strengthen their authorities and to raise the status of BKPM to the ministry level (based upon interviews with Professor Djisman and staffs of BKPM in April 2006).

4. Suggestions on the Reform of Indonesian Institutions

(1) The Indonesian government should think of changing institutional status into public corporations

The Indonesian institutions for trade and investment promotion, both NAFED (National Agency for Export Development) and BKPM (Investment Coordinating Board), are part of the government. So, the people working there are generally government officials. They are more accustomed to directing private businesses' actions than to providing services.

As BKPM has investment permission authorities, the government officials working there seem to be in a superior position to customers coming to BKPM. This might have hampered making those public institutions more business friendly and making officials working there business-minded.

Therefore, it would be necessary to transform the status of those two public institutions into public corporations in order to make NAFED and ICB more business friendly and in order to inject business-minded human resources into those organizations.

(2) NAFED and BKPM should listen carefully to customers' voice

Holding regular public hearings or seminars, by inviting customers (including foreign customers), on the role of NAFED and ICB would be an efficient way to find solutions for enhancing their institutional capacities. NAFED seems to have embarked on this program by organizing regular public seminars and by opening an interactive bi-weekly radio dialogue program. These kind of initiatives should be further explored and applied to BKPM also.

Setting up an on-line desk for hearing customers' requests and grievances may be the first step to take for this purpose. Inviting representative customers to the decision making process of these public institutions would also be an option to be explored.

Introducing a grievance solving body (especially for foreign investors' grievances) like Ombudsman Office for Invest Korea is another option to be explored also.

(3) The Indonesian government should establish an "objective" evaluation system

Exposing public institutions to an "objective and professional" assessment would make those institutions transform into more performance-based ones. KOTRA, like other Korean public corporations, is always under this pressure. Every function that KOTRA and Invest Korea run is investigated as to whether they are effective for the purpose, whether they are cost-effective, and whether they are efficiently managed.

Therefore, badly functioning, very costly and/or badly managed activities would be eventually scrapped.

So, introducing an "objective and professional" assessment for the activities run by BKPM and NAFED would create more pressure for further reform to those institutions and they can get pertinent professional advice from the evaluating team about how to enhance institutional capacities.

(4) The Indonesian government should consider reshuffling the NAFED into a functionally-structured organization

The current organization of the NAFED structured on overseas regions (America & Europe, Asia & Oceania, Africa & Middle East) looks inefficient.

Transforming the organization of NAFED into either industry-by-industry structured or functionally structured (benchmarking the KOTRA case) would be a good option to be explored.

(5) The Indonesian government should consider the option of merging two organizations (BKPM and NAFED)

The Ministry of Trade in Indonesia is in charge of formulating both trade promotion policies and investment promotion policies (now preparing a new investment law). This is quite similar to the case of the Korean Ministry of Commerce, Industry and Energy.

However, when it comes to implementing those promotion policies, the tasks are separated into two very different public institutions, BKPM and NAFED. It does not seem efficient to keep two different implementing government bodies.

For a practical matter also, if the two organizations are merged, then it will create a synergy effect in many areas, for example, they can share the overseas branch network, and the network will get higher efficiency by doubling human resources.

(6) The Indonesian government should consider sending a study team to Korea for benchmarking KOTRA and KITA

In order to follow-up the KSP program and to learn Korean experiences in a more detailed way, especially the successful cases of KOTRA and KITA, it is highly recommended that the Indonesian Ministry of Trade dispatches a study team, consisted of representatives from MOT, NAFED, BKPM and private trade experts, to Korea.

(7) Suggested roadmap for actions

Firstly, the Indonesian government should think of sending study team during the second half of 2006.

Secondly, the Indonesian government can introduce the system for hearing customers' voice and evaluating the performance of public institutions during 2007.

Thirdly, transforming NAFED to a more function-oriented organization can be applied until the second half of 2007.

Finally, changing the status of public institutions into public corporations and merging NAFED and BKPM can be implemented towards 2008 and 2009.

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Chapter 5

Small and Medium Enterprises Development Strategy to Support the Export-Oriented Industry and the Role of the Export-Import Bank

Summary

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1. Overview of Korean Economy and Korean SMEs

During the last thirty years, Korea's fast economic growth has depended mainly on the spectacular growth of its exports. Not only Korea's exports volume grew exponentially - more than eight thousand-fold since the year of 1960 - but its characteristics have changed dramatically from the export of low-tech/labor-intensive goods to high-tech/capital-intensive goods. Over the same period of time, the share of the exports from Korean small and medium enterprises (SME) out of the Korea's total exports exhibited impressive growth, as well. Among the many factors which attributed to the exponential growth and dramatic change of Korea's exports, Korean government's trade promotion policies, newly adopted and regularly modified in order to adapt to the development of Korean economy, can be the most important factor. In case of SME promotion policies, Korean government also introduced various kinds of institutions, promulgated or revised relevant laws and regulations, and adopted policies in order to accelerate the development stage of Korean SMEs. As a result, Korean SMEs grew out of themselves and reached to the point where they are account for approximately 40% of total loans of Korean companies and employs 87% of total work forces.

2. Major Features of SME Support by Korean Government

The growth of Korean SME has depended mainly on two factors : effective network of SME support and the successful functions of individual entities in the network. First, the network of SME support headed by Small Business Administration, a central government agency which is responsible for SME promotion on governmental level and composed of various public and private entities, forms the backbone of Korean government's SME support. Second, all the entities in the above mentioned network are solely and comprehensively devoted to the promotion of SMEs' in specific development stages by providing information, financing and consulting. Small Business Administration, for example, the key policy maker is responsible for overall policy making and prosecution in SME promotion. Other agencies such as Korea

Eximbank, guarantee institutions like Korea Credit Guarantee Fund, Small Business Corporation, and Korea Federation of Small and Medium Business are playing important roles in providing fund, information and consulting to Korean SMEs.

3. Major Features of SME Support by Korea Eximbank

Since its establishment in 1976, Korea Eximbank, as an Official Export Credit Agency (ECA), provided financing services, mainly loans and guarantees, to export-oriented SMEs in Korea and it has continuously developed its financing services in order to remain competitive in the rapidly changing economic environment. Up until 1989, Korea Eximbank's financing activities mainly focused on export credit financing, foreign direct investment-related financing, and financing for the exploitation of natural resources. Since 1990, Korea Eximbank's SME support began in earnest and contributed to the growth of Korean SMEs by providing short term financing instruments, which were mostly needed by the export-oriented SMEs. The outbreak of, so-called Asian crisis delivered a severe damage to the entire system of SME support financing and almost paralyzed the normal function of the system. Faced with the unprecedented challenge, Korea Eximbank, as a 'sovereign player', swiftly responded to the challenge by pro-active market intervention. In doing so, Korea Eximbank successfully helped restoration of the trade of Korean SMEs and the revitalization of the SME themselves.

SME support system of Korea Eximbank is mainly composed of direct loans to SMEs because the timeliness and efficacy of direct lending overwhelms those of indirect financing in terms of SME support. Two of the most popular SME support financing programs are 'Comprehensive Export Loan' and 'Special Credit Loan'. Especially, Special Credit Loan, our research paper concluded, best satisfies Indonesian Exmibank (BEI)'s imminent interest in Building SMEs' capacities by providing appropriate financing services. Special Credit Loan, which was introduced in 2002 and modified by Korea Eximbank and eventually secured a huge success during the last four years, specifically is focusing on the first vendor companies, BEI's prime target customers.

4. Policy suggestions

Based on consultations with the staff of BEI in November and December of 2005 respectively, both BEI and research team agreed to focus on the three main issues ; (1) the legal status of BEI, (2) organization, branch network, and governance structure of BEI, (3) SME support program. A large portion of this paper was devoted to the in-depth analysis on practices of Korean SME support system and Korea Eximbank's functions and whether they can be transplanted into the Indonesian economic system.

(1) As per the legal structure of BEI, researchers recommend that BEI should acquire the full status of ECA through obtaining the blessing of the Indonesian Congress and unlimited and unconditional guarantee of the central government of Indonesia. This conclusion was reached by the close observation about the fact that competitive financing by Korea Eximbank resulted from the unlimited and unconditional guarantee from the Korean government, which BEI, as 'Badan Usaha Milik Negara (BUMN)' does not have.

(2) Considering the competitiveness of Indonesian export financing and the effectiveness of the Indoesian government's export credit policy, researchers concluded that consolidation of BEI into other financial institution is hardly useful. As per the branch network, researchers recommend BEI to revitalize its SME support activities by opening branches in Palembang (South Sumatra), Balikpapan/Samarinda (Kalimantan), Makassar (Sulawesi and Nusa Tenggara Barat), and Semarang (Central Java) areas, major centers of economic activities.

(3) As per specific SME support programs, researchers recommend BEI to consider the adoption of Special Credit Loan, Export Factoring and Forfaiting, three possible programs, all of which researchers concluded, could be instrument for BEI's activities in helping export-oriented SMEs in Indonesia, most of which lack appropriate financing sources.

Small and Medium Enterprises Development Strategy to Support the Export-Oriented Industry and the Role of the Export-Import Bank

1. Introduction

As various preceding researches discovered, among other factors the exports played a vital role in accelerating Korean economic growth during the last three decades. Even though exports by the big conglomerates continued to account for more than half of the total exports of Korea, it should be noted that, the Korean SMEs expanded their shares in the total exports of Korea and it also contributed to the soundness of Korea's industrial and economic structures through continuous growth and expansion during the last thirty years. In order to improve the capacities of export-oriented SMEs, the Korean government adopted various kinds of policy measures, including the policies about financing, and put them into practice. The Korean government proactively and continuously changed and developed the policy measures for the purpose of keeping abreast with the development of the Korean economy and the fast-changing economic environment of the world.

The system of financial support for export-oriented SMEs also steadily developed keeping its pace with the growth of Korean economy. Currently Korea is fully equipped with appropriate financial support system. It is mainly administered by Korea Eximbank and a couple of guarantee institutions, specifically targeted on SMEs in specific developing stages - incubating stage, domestic-oriented state and export-oriented stage.

On the other hand, Indonesia is presently trying to transform its economy from a natural resource based economy into one which exports high value-added products. As part of this effort, the Indonesian government established BEI in 1999 and have been searching for measures which could dramatically increase BEI's capacities and improve its SME support programs. Although Indonesia still remains in an immature stage in terms of the economic, industrial and governmental development and lacks competitive SME support system, its keen interest in finding effective SME support system for export-oriented SMEs are evident.

In order to respond to the above mentioned interest of the Indonesian government, this research aims to examine (1) Korea's export promotion strategies adopted on specific development stages, (2) the objectives of key policy measures and export strategies which correspond to them, and (3) other strategies which accompanied the export promotion strategies and policy measures. Secondly, zeroing in on the development of SMEs and support systems for them, this research discusses how those support systems were adopted in accordance with the development of the Korean economy.

Together with the general introduction to Korea's SME support system, this research paper, at the request of BEI, focuses on the systems and programs of Korea Eximbank and gives a large portion to the practical use of the systems and programs.

Finally, policy suggestions of this research paper centers on three main topics and their applicability to the Indonesian economy. Between the staff members of BEI and the research team during the first and second visit to Indonesia, the topics were already agreed. And they are (1) legal status of BEI, (2) organizational structure, branch network, and governance structure, and (3) SME support program.

2. Overview of Korean Economy and Korean SMEs

2.1 Korea's Successes in the past

Over the last three decades, the Korean economy experienced one of the most spectacular growths in the global economy. As a result, in 1996, Korea joined the 10 Thousand-Dollar GDP per capita group and was accepted as a member of the OECD. The country is now on the verge of becoming one of the top ten economic powers in the world.

Like Japan before it, and along with the other East Asian economies, Korea's economic success was largely founded on exports. Exports grew from 33 million dollars in 1960 to 285 billion dollars[1] in 2005. With its exports growing more than eight thousand-fold during the last forty-five years, the county's exports have grown consistently faster than those of the OECD.

In the process, Korea has developed leading positions in some major industries. The country became the largest shipbuilding nation by edging out Japan, the largest manufacturer of DRAM chips in the world, again by overtaking Japan, the 6th largest steel producer as POSCO became the second largest steel company in the world, and the 5th largest producer and exporter of

Table 5-1 ●● Korea's Exports and Its Contribution to Economic Growth

	Exports (US$ Mil)	Exports' Contribution to Economic Growth (A, %)	GDP Growth (B, %)	Exports' share in GDP Growth (A/B, %)
1970	835	3.0	8.8	34.1
1980	17,505	1.5	-2.7	-
1990	65,016	0.9	9.5	9.5
2000	172,268	2.4	8.5	28.2
2001	150,439	0.5	3.8	13.2
2002	162,471	2.8	7.0	40.5
2003	193,817	3.4	3.1	111.2
2004	257,745	4.3	4.7	93.3

Sources : The Ministry of Commerce, Industry and Energy (MOCIE)

1 _ Preliminary figure by Ministry of Commerce, Industry and Energy at the end of 2005

automobiles. This growth and global competitiveness helped Korea transform itself from a war-torn, largely agrarian economy into one of the world's largest industrial powers. Very few, if any, economies in the whole world can look back upon such achievement over the last 30 years.

Exports played an important role in many facets of the Korean economy. Many economic research institutes and associations, including the Korea's Ministry of Commerce, Industry and Energy, estimate that a large portion of Korea's economic growth is attributable to exports and the share of exports' contribution to economic growth is growing fast in recent years.

Along with growth in export volume, the characteristics and quality of Korean exports underwent profound changes during the last three and half decades. One of the most prominent changes is the change of major export items. Korea, slowly but steadily, shifted its major export items from low-technology and labor-intensive industries such as fabric to high-technology and capital-intensive industries such as automobile and semiconductors.

Table 5-2 ●● Korea's 10 Major Export Items in 1970 and 2004

(US$ Mil)

	1970			2004		
	Items	Amounts	Shares	Items	Amounts	Shares
1	Fabric	341.1	40.8	Automobile	26,577	10.5
2	Plywood	91.9	11.0	Semiconductors	26,516	10.4
3	Wigs	90.4	10.8	Wireless telecommunication equipment	26,223	10.3
4	Iron ore	49.3	5.9	Computers	17,123	6.7
5	Electronics	29.2	3.5	Ships	15,657	6.2
6	Confectionary	19.5	2.3	Petrochemical products	10,203	4.0
7	Shoes	17.3	2.1	Iron products	8,527	3.4
8	Cigarettes	13.5	1.6	Synthetic resin	8,426	3.3
9	Iron products	13.4	1.5	Display equipment	7,630	3.0
10	Metal products	12.2	1.5	Auto parts	5,925	2.3
10 Major Items		677.5	81.1		152,807	60.2

Sources : MOCIE

It also needs to be noted that growth in exports of high-tech industries contributed to the expansion of subcontractors (usually SMEs) involved in those industries. As high-tech industries such as automobile and semiconductors require a large number of highly sophisticated subcontractors, the subcontractors in those industries, in accordance with changes in the industrial system of Korea, improved their production and R&D capabilities.

The second point is that the share of SMEs' exports in Korea's total exports grew from 23% in 1965 to 35.6% in 2004.[2] The expansion of SMEs' shares in exports was founded on a couple of factors. First, the Korean government's various measures for SME support, especially in the 1960s and 1970s, contributed to the expansion of SMEs' share in total exports. Second, Korean SMEs entry into export-oriented industries is also accountable for expansion of their exports. Transformation of Korean SMEs from largely family-run and agrarian SMEs into manufacturing-oriented ones contributed to their march into international markets. Third, some medium enterprises' transformation from a subcontractor mainly belonging to one or two large companies into self-sustaining exporting enterprises also contributed to the expansion.[3]

Table 5-3 ●● Shares of Korean SMEs' Exports in Korea's Total Exports

(US $ Mil)

Year	Total Exports	SMEs' Exports	Shares (%)
1965	181	42	23.0
1970	1,004	323	32.2
1975	5,427	1,872	34.5
1980	17,505	5,624	32.1
1985	30,283	8,414	27.8
1990	65,016	27,382	42.1
1995	125,057	49,474	39.6
2000	172,268	63,509	36.9
2004	253,845	90,385	35.6

Sources : SMBA

2 _ Since 2001, Korean SMEs' shares in Korea's total exports have stayed above 40%. However, sharp increase in international oil prices and appreciation of the Korean won, which moved from 1,195won per 1 dollar at the end of 2003 to 1,013won at the end of 2005, inflicted more serious impact on SME's exports and their profitability compared to impact on large companies' exports. Thus, SMEs' shares in total exports shrank from 42.2% in 2003 to 35.6% in 2004.

3 _ It should also be noted that SMEs have improved the structure of Korean exports. For instance, the exports of Korea's large companies are limited to five or ten major items such as electronics or automobiles. However, Korean SMEs' exports have a more diverse spectrum from light-industry products to high-tech products. This alleviated Korean exports' heavy dependence on a limited number of items and neutralized negative impacts such as cyclical downturn in one or two industries on Korean exports.

2.2 Transition in Korea’s Trade Policy

It was the government that played a locomotive role in building such an economic foundation of the nation by boosting exports.

Until the 1960s...

Up to the early 1960s from liberation in 1945 from Japanese occupation, the government deliberately maintained a highly overvalued exchange rate and strict controls over imports. Minimal imports were permitted, with payments being settled with money mainly from foreign aid. The situation of the Korean economy remained in a state of deterioration due to political instability and 3 year-long Korean War during 1950-53.

Only after the first five-year economic development plans were adopted in 1962 did the Korean economy gain meaningful momentum for growth. The country constructed its industrial foundation by exporting labor-intensive light industrial goods to the major advanced countries. Since the country lacked the foundation for economic growth in terms of equipment, technology and capital for investment, it was crucial to earn foreign currency through exports, which could be utilized in building up the foundation for further economic development.

The government allocated financial resources, usually obtained from exports, preferentially to export-related sectors. Preferential loans were provided to exporters, whose access to bank loans was automatically guaranteed at much lower interest rates than usual. Indirect taxes imposed upon export-related business entities were exempted and direct taxes to exporters such as corporate and income taxes were reduced on earnings from exports.

Non-financial measures were also adopted by the Korean government. For example, monthly export promotion meetings were presided over by the president and exporters were praised as main contributors to economic growth.

Until the 1980s...

Throughout the 1970s, particularly from 1973 to 1979, the Korean economy experienced substantial changes in its industrial structure, with the drive toward developing heavy and chemical industries (HCI) such as steel, shipbuilding, machinery, non-ferrous metals, chemicals and electronics.

Export incentive schemes still prevailed during this period although they were gradually reduced. Rather, more emphasis was placed on developing the heavy and chemical industries.

Since businesses and firms were reluctant to invest in risk-high and uncertain projects in this green field of heavy industry, the government adopted a carrot-and-stick policy to induce them to join those projects.

The rationale for choosing the heavy and chemical industries as strategic industries was:

1. In order to complete the industrial structure of an advanced economy; (Though Korea accomplished rapid export growth and economic development with the labor-intensive light industries since 1960, capital goods and basic raw materials as well as machines and industrial equipment were imported)

2. The heavy industries were believed to have high growth potential due to their high income elasticity to demand and high productivity increase. Moreover, it was argued that high front and backward (up and downward) linkage effects could enable other industries to take advantage of spillover effects. (Development of heavy and chemical industries was believed to have accelerated economic growth.) Furthermore, the spillover effects were expected to flow not only into large companies but also small and medium companies, which were first involved in HCI and then other industries.

3. Through import substitution of capital goods, parts, and raw materials, the balance of payment would improve.

4. Development of heavy and chemical industries was prerequisite for sustained growth of exports.[4]

Import substitution rather than import liberalization was pursued during this heavy industry policy-drive period. In short, the economic policy in the 1960s and 1970s was focused on export promotion and infant industry protection.

Heavy and chemical industries usually need a huge amount of investment and have inherently the characteristics of increasing return to scale, and needless to mention, high-end technologies. Naturally, increasing supply of long-term credits and tax incentives were deemed as the most powerful supporting policy tools.

Such points imply that Korea had great potential to achieve international competitiveness in

4 _ There is another rational behind this; under the sustained tension between North and South Korea, the government had the necessity of developing defense industries, which crucially rely on the heavy industries. Some partial withdrawal of the American forces and diplomatic conflicts between US-Korea over human rights in the 1970s had increased the importance of self-reliance in national defense.

these industries, utilizing a well-trained but low-wage labor force, only if the chance to accumulate production skills and managerial know-how was given over a certain period.

In the early 1980s, the Korean economy began to transform from a government-led economy to a market-economy. The transition was based on the recognition that the Korean economy had grown to such an extent that government intervention was less efficient than the market mechanism. Government intervention, it was thought, might have worsened problems from market failure rather than preventing them. The private sector was believed to have grown enough for efficient resource allocation.

Beginning in 1986, Korea's current account recorded a surplus for 3 consecutive years. Korea's import restrictions could no longer be justified by the BOP provisions under GATT. The government could not but change the export promotion and infant industry protection policies. In 1988, the imports of major manufacturing products were fully liberalized and all agricultural products were scheduled to be liberalized in 2001.

Until now...

Since the early 1990s, the Korean economy has been continuously transforming itself under the trend of globalization. The rapid change of the international business environment was a sizable burden to Korea, but it was inevitable. Korea's globalization efforts were epitomized by joining the OECD in 1996. However, in the following year, 1997, the financial crisis struck Korea and the IMF bailout program began. It presented many challenging tasks, and sometimes shocking blows to the national economy. In exchange for the bailout loans, Korea had to adopt various measures to elevate foreign investors' confidence, such as trade liberalization, capital movement liberalization, corporate restructuring and labor market reforms.

Ironically, Korea has been continuously pursuing liberalization as a strategy to recover from the 1997 financial crisis. As an attempt to prevent another crisis in the future and to recover as fast as possible, the Korean government undertook a great deal of economic liberalization measures. FDI and stock investment, including M&A by foreigners, have been fully liberalized.

2.3 Overview of Korean SMEs

In the early 1960s, the Korean government adopted an export-oriented growth strategy, and laid the groundwork for economic growth. In order to push through these strategies, the Korean government set up a heavy and chemical-oriented industrial policy in the 1970s. In the 1980s, some serious imbalance between classes, between regions and between firm sizes started surfacing due to more than a decade of a large firm-led economy.

Hence, it was in the 1980s when the Korean government started paying serious attention to SMEs. The government started taking proactive actions in promoting SMEs and established more solicitous policies and more efficient execution systems.

In the past, SMEs were at a disadvantage to large companies in all aspects. In particular, SMEs were not able to compete with large companies in accessing both information and new markets. Indeed, national economic strategy had become so much large enterprises-oriented that Korea has often been contrasted with other East Asian economies like Taiwan where SMEs have continued to play a comparatively much more important role.[5]

The importance of Korean SMEs can be easily found. SMEs in Korea have been playing a significant role in creating jobs and increasing income, as well as contributing to the rapid economic growth through incessant technological innovation and the production of quality products. SMEs are an essential part of job creation in Korea. As of the end of 2003, SMEs accounted for over 99% of all businesses in number and they provided about 86% of all jobs and shipped 36% of the total export volume in 2004.

5 _ International Comparison of Major features of Manufacturing SMEs is as follows.

	No. of SMEs			**No. of SME Employees (thousands)**		
	Total	**SMEs**		**Total**	**SMEs**	
		No.	**Shares(%)**		**No.**	**Shares(%)**
Korea('99)	91,156	90,449	99.2	2,580	1,830	73.0
Japan('98)	373,713	370,154	99.0	9,838	7,130	72.5
Taiwan('98)	148,990	145,281	97.5	2,611	2,089	80.0
U.S.('97)	393,840	345,703	87.8	18,633	7,277	38.4
U.K.('98)	332,070	329,540	99.2	4,334	2,149	49.6
Germany('95)	825,469	822,968	99.7	11,194	7,643	68.3

1. Korea : SMEs with employees from 5 to 299
2. Japan : SMEs with employees from 4 to 300
3. Taiwan : SMEs with paid-in capital of 60million NT dollars or with fewer than 200 employees
4. U.S. : SMEs with fewer than 500 employees
5. U.K. : SMEs with fewer than 250 employees
6. Germany : SMEs with fewer than 499 employees or yearly sales volume of less than 100million Deutsche Mark

Sources : K. Y. Lee (2002), Modern SMEs Economy, Jishik Sanup Sa, Seoul, Korea

Table 5-4 ●● Number of Korean SMEs

Year	Total	Micro	Small	Medium	S&M	Large
1999	2,777,986	2,511,766	2,705,820	63,192	2,769,012	8,974
2000	2,864,134	2,548,026	2,777,278	76,803	2,854,081	10,053
2001	2,876,817	2,560,638	2,791,809	80,142	2,871,951	4,866
2002	2,953,124	2,616,307	2,862,173	85,998	2,948,171	4,953
2003	3,004,105	2,670,990	2,913,850	85,447	2,999,297	4,808

Source : SMBA

Table 5-5 ●● Number of Employees by Firm Size

Year	Total	Micro	Small	Medium	S&M	Large
1999	10,829,961	4,726,232	6,683,899	2,182,102	8,866,001	1,963,960
2000	11,530,908	4,905,478	7,220,047	2,457,601	9,677,648	1,853,260
2001	11,650,034	4,958,293	7,301,411	2,668,386	9,969,797	1,680,237
2002	11,975,672	5,136,043	7,611,440	2,773,580	10,385,020	1,590,652
2003	12,041,387	5,232,697	7,695,568	2,779,062	10,474,630	1,566,757

Source : SMBA

2.4 Historical Viewpoint I: Development of Korean SMEs

The recent successful performance of Korean SMEs, which was shown in more than 80% of employment and 36% of total Korean exports, was not done by SMEs' efforts only. The collaboration and cooperation among and between SMEs themselves, Korean government and other related agencies, whether private or public, made the success possible. Since Korea's liberation in 1945, Korean SMEs as well as the Korean economy in which they have been operating experienced major ups and downs in terms of Korean government trade policies, SME related policies and coordination and cooperation between the major players in SME supporting systems.

Until the 1960s...

Since Korea's liberation from Japan in August 1945, the Korean economy had to face some difficulties due to social and political confusion and the Korean War until the truce of July

1953. The real growth of the Korean economy started from the early 1960s. The Korean government adopted an economic policy that focused on industrialization with a rapid growth strategy under government control. The Korean government decided to change its import substitution policy into an export-oriented policy at a measured speed. Due to this drive toward an export-oriented and high-growth development policy, the Korean economy was able to start growing very sharply, centering around the manufacturing industry.

Although a small number of SMEs, weak in competitiveness and mostly family-run in nature, were created during this period, their performances and footprint on the Korean economy were negligible. However, since the adoption of the first five-year economic development plan, Korean SMEs started to show impressive performances. For example, SMEs, largely in fabric and wig industries, accounted for 23% of total Korean exports in 1965.

Until the 1980s...

At the beginning of the 1970s, the Korean government changed its macroeconomic policy by focusing more on heavy and chemical industries rather than light industries. As a result of these changes, light industries rapidly shrank and industry structure was also promptly revamped. The production ratio to GDP of the manufacturing industry exceeded that of the agriculture, forestry, and fishing industries for the first time in Korean history during this period. The 1980s can be considered a period of economic restructuring and stable growth.

The annual economic growth hit 9.6% in the 1970s; however, at that time, Korea confronted a worsening imbalance in macroeconomics. Thus, the Korean government implemented a very strong economic stabilization policy from the end of the 1970s up until the early 1980s. This stabilization policy helped the Korean economy reinvigorate. Economic experts reported that advantageous circumstances such as ‘three low phenomena’ (low US dollar, low interest rate, low oil price) led to high growth of Korean exports and its fast economic growth.

Until now...

When considering the Korean economy of the 1990s, one can see a period of transition from distorted industry and market structure that resulted from excessive investment in heavy and chemical industry along with preferential development policy for specific industries. Recently, a cash of SME bankruptcies caused by the sluggish economy brought about a severe ordeal for Korean people. Many SMEs went bankrupt due to the ongoing credit crunch arising from credit card delinquency and shrinkage of sales due to economic stagnation. Yet, it is believed that the crisis will provide SMEs with new opportunities for another take-off. Korean SMEs are encouraged to change themselves in various ways to strengthen their competitive edges, despite their financial difficulties. Above all, Korean SMEs are trying to lessen debts under the restructuring program and thus improve their financial status and cash flow.

In addition, they have started increasing investment in R&D for the purpose of reinforcing their technological competitiveness. SMEs are aggressively attempting to transform to knowledge-based businesses to correspond to a fast changing market. They are also endeavoring to strengthen cooperation with overseas enterprises or enter foreign markets to prepare for the international trend of market liberalization.

And Prospects are...

To meet the demands of the 21st century, first, Korean SMEs started to recognize that they need to respond to the immediate changes in economic conditions domestically and abroad. On the international front, Korean SMEs are bracing themselves to learn to survive in an era of stiff competition across national borders and amid fierce rivalries for technological hegemony. It is expected that the methods of survival under such stiff competition are also drastically changing, as the Information Age makes deeper inroads into the business world.

On the domestic front, structural reforms now being implemented in the nation's economy will proceed in the right way, while regulations that restrict fair competition will be eliminated. Accordingly, Korea must inevitably embrace an economic system based on market forces and full independence of the private sector. At the same time, administrative decentralization is ushering in an era of true local autonomy. The recent international and domestic economic environments make it essential to expand the functions and importance of SMEs, so Korean SMEs are expected to make considerable progress by expanding their roles and significance not only in quality but also in quantity in the 21st century.

2.5 Historical Viewpoint II: Development of Financial Systems for Korean SMEs

In the previous section, we briefly examined the development of Korean SMEs and how the Korean government and other related entities played their roles during the last four decades. In this section, we would like to pay closer attention to financial systems specifically designed for Korean SMEs and how the systems evolved in accordance with the changes and development of Korea's economy.

Until the 1960s...

After the Korean War, hyperinflation as well as financial needs for reconstruction led the Korean government to adopt tight financial policies, which, as a result, brought on serious financial difficulties for Korean SMEs. A couple of special purpose funds such as the UNKRA (United Nations Korea Reconstruction Agency) fund (1954) were channeled to Korean SMEs during the 1950s. A small number of financial instruments for SMEs, which were also introduced in this era, include 'discount on commercial bills (1955)' or 'government fund for SME promotion (1956)'.

In the 1960s, the Korean government adopted Korea's first-ever 'five-year economic development plan', and set its first step toward becoming an industrialized country. A series of laws and regulations regarding SME promotion and support were adopted by the Korean government. They include 'Laws on SME Cooperatives (1961)' and 'Basic Laws on SMEs (1966)'. Secondly, financial institutions solely or mainly focused on SME support were established. Those institutions were Industrial Bank of Korea, which was established in 1961 under the law of 'Industrial Bank of Korea Act', and Kookmin Bank (1963), which renamed itself KB after its merger with Housing and Commercial Bank of Korea in 2001. Thirdly, Bank of Korea, a central bank of Korea, adopted in 1965 'Guidance Ratio for SMEs', which recommended commercial banks in Korea maintain the ratio of their loans to SMEs compared to their entire loan portfolio at more than 30%.

Until the 1980s...

Since the 1970s, the Korean government started focusing its financial and technological resources on heavy and chemical industries as mentioned before. As a result, calls for financial support for SMEs, which had been given less attention were continuously raised by Korean SMEs. To satisfy their financial needs, Bank of Korea changed some rules and criteria related to 'Guidance Ratio for SMEs'. For example, it recommended regional banks, whose headquarters were located outside of Seoul, extend more of their loans to SMEs. By doing so, Bank of Korea intended to expand financial resources accessible to regional SMEs. The Korean government augmented its legal system regarding SME support by adopting 'Laws on SME Promotion (1978)' and other SME-related laws and regulations. In 1976, Korea Credit Guarantee Fund (KCGF), the major guarantee fund for SMEs, was established, and its primary role was and still is providing guarantees for SME borrowing from financial institutions such as commercial or government banks.

The 1980s were hard times for the Korean economy and Korean SMEs. Two oil shocks resulted in economic depression, high-rising consumer prices and deterioration of Korea's trade balance. The Korean government slowly but steadily shifted its financial resources for Korean SMEs to enhancing competitiveness of Korean SMEs (1) by directly or indirectly promoting their R&D, and (2) by supporting subcontractors (usually SMEs) competitiveness. First, Bank of Korea raised once again its 'Guidance Ratio' for regional banks from 55% to 80% in 1986 while imposing the ratio even on the foreign commercial banks in Korea in 1985. The Bank of

Korea also fine-tuned some of its 'trade financing' instruments, which until then had been channeled to both large and small and medium enterprises, so that SMEs could be the sole and foremost beneficiaries of the instruments. Supplemental laws on SME support were adopted and various kinds of governmental or half-public/half-private funds were established. Korea Technology Credit Guarantee Fund (KOTEC) was founded in 1989.

Until now...

In the 1990s, Korea braced itself for upcoming changes such as liberalization of Korea's financial regulations and entry into the World Trade Organization (WTO). With Korean SMEs' competition with foreign companies getting fiercer, the Korean government adopted multi-faceted SME support policy measures.

First, Bank of Korea raised 'Guidance Ratio' for commercial banks from 35% to 45% in 1992. The Korean government created 'SME Restructuring Fund' in 1993 in order to facilitate SMEs' restructuring activities. Second, the government improved the accessibility to financial resources for SMEs. The Korean government expanded its capital contribution to credit guarantee funds, such as KCGF and KOTEC, from 410 billion won in 1995 to 500 billion won in 1996 and allowed both funds to provide guarantees for SMEs up to 17 times their paid-in capital from 15 times paid-in capital.

It also established regional-based 'Credit Guarantee Cooperatives' in major provinces in Korea. Korean Export Insurance Corporation (KEIC), a corporation responsible for credit insurance, was established in 1992[6]. Small and Medium Business Administration (SMBA), a governmental agency responsible for SME support, was created in 1996.[7]

Third, private funding resources for Korean SMEs were expanded. SMEs themselves, usually venture companies or medium-sized ones, started to explore funding sources such as KOSDAQ (Korea Stock Dealers Automated Quotation)[8] listing or primary CBOs.[9] Commercial banks of Korea revamped their SME support activities and expanded their loans to SMEs, which was largely possible as a result of the bank's upgrading of credit rating and subsequent availability of cheap funds.

6 _ Before the creation of KEIC, credit insurance was extended by Korea Eximbank.
7 _ Before the creation of SMBA, SME support activities were performed by Ministry of Commerce, Industry and Energy.
8 _ For example, KOSDAQ-listed companies raised 3,105 billion won from the KOSDAQ market in 2005 via IPO or 'capital increase with consideration'.
9 _ Collateralized Bond Obligation, an investment grade bond backed by a pool of usually junk bonds.

Table 5-6 ●● Korean Banks' Loans Outstanding to SMEs

(billion won)

	2000			2004		
	Loan Outstanding	Loans to SME	Shares	Loan Outstanding	Loans to SME	Shares
Commercial Banks	211,090	80,082	38%	384,122	138,353	36%
Regional Banks	19,267	13,148	68%	35,567	22,634	64%
Special Banks[10]	99,573	36,966	37%	143,297	82,671	58%
Banks Total	329,931	130,196	39%	562,985	243,657	43%

Sources : Financial Supervisory Service of Korea

Finally, SMBA and other SME-related agencies are proactively adapting themselves to fast-changing environments. For example, in the beginning of 2006, SMBA decided to redirect its 'preferential financing programs' to SMEs with high technology and feasibility and recommended KCGF, KOTEC and regional guarantee cooperatives to select their priority customer groups and concentrate their resources on those priority customer groups.

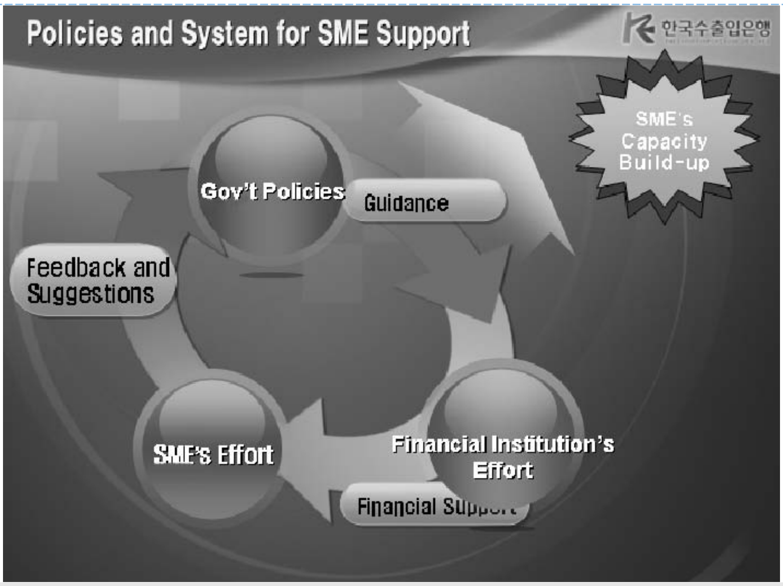
10 _ Special banks include Korea Development Bank, Industrial Bank of Korea, Korea Eximbank, National Agricultural Cooperatives Federation, National Federation of Fisheries Cooperatives

3. Major Features of SME Support by the Korean Government

3.1 Policies and System for SME Support

Before we examine Korea's SME support policies, it should be noted once again that many entities' coordinated efforts are required in order to effectively support SMEs. As depicted in the diagram on the right, major entities, such as government, whether central or local, financial institutions and SMEs play crucial roles respectively. In Korea, there are more than a dozen entities directly or indirectly involved in SME support policies and system. Those are:

Figure 5-1 ●● Policies and System for SME Support



- Small and Medium Business Administration (a main governmental agency responsible for SME support, which also runs 'Export Assistance Centers' in major cities in Korea)

- Small Business Corporation (a non-profit governmental agency created in 1979 in order to implement government policies for the promotion of small and medium sized businesses)

- Korea Federation of Small and Medium Business (Federation of SMEs) was established in 1962 as an advocate for small and medium size companies in order to protect their rights and benefits

- Korea Trade-Investment Promotion Agency (KOTRA, initially the Korea Trade Promotion Corporation, which was established in 1962 as a national trade promotion organization)

- Korea Credit Guarantee Fund (KCGF, a public financial institution established in June 1976 in order to provide guarantee services for the liabilities of promising enterprises lacking tangible collateral)

- Korea Technology Credit Guarantee Fund (KOTEC, which was founded in 1989 in order to provide credit guarantee services for the liabilities of technology-based enterprises while promoting the growth of technologically strong SMEs and venture businesses)

- Industrial Bank of Korea (IBK, which was established in 1961 with the public policy role of promoting growth among Korea’s SMEs)

- The Export-Import Bank of Korea (an official export credit agency established in 1976, in order to provide comprehensive export credit and project finance to support Korean enterprises in conducting business internationally)

- Korea Export Insurance Corporation (KEIC, which was established in July 1992 in order to compensate the losses arising from export transactions and overseas investments that cannot be handled by the commercial insurance systems)

- Korea Enterprise Data (Cretop, a credit information service company spun off from KCGF in March 2005)

- Korea Federation of Banks

- Other entities or institutions such as industry-specific associations or cooperatives

The above-mentioned entities or agencies have prominent characteristics such as:

- Most of them were created in order to achieve a special purpose or goal in SME support.

For example, the role of SMBA, a governmental level agency established in 1996, is to set up a governmental plan for SME support and coordinate other entities’ SME support activities. IBK and Kookmin Bank (now KB), created in 1961 and 1963 respectively, were at first established in order to help small or micro enterprises.

- Some of them are focusing on SMEs in a specific development stages.

For example, while SMBA and SBC support SMEs in all development stages, KEIC or Korea Eximbank are solely focusing on SMEs in the export-oriented stage. On the other hand, venture capitalists usually work with SMEs in the incubating stage.

- Usually, two or more entities cooperate in order to enhance the effectiveness of SME support policies.

For example, loan guarantees from KCGF or KOTEC cover not 100% but 75-90% of SME loans, leaving the rest to financial institutions (usually banks). As a result, if a specific SME default on its loans from a bank, the bank's exposure to the SME is not entirely covered by guarantee institutions. The concept of 'partial guarantee system' makes financial institutions as well as guarantee institutions pay close attention to the borrowers.

Another example could be cooperation between governmental agencies and private sector entities. For instance, special purpose governmental funds for SMEs are created by SMBA but channeled to SMEs via financial institutions, not by SMBA itself. By doing so, SMBA and other governmental agencies formulate SME support policies and monitor the efficiency of the private institutions' SME support activities.

3.2 Different Support for Different Stages

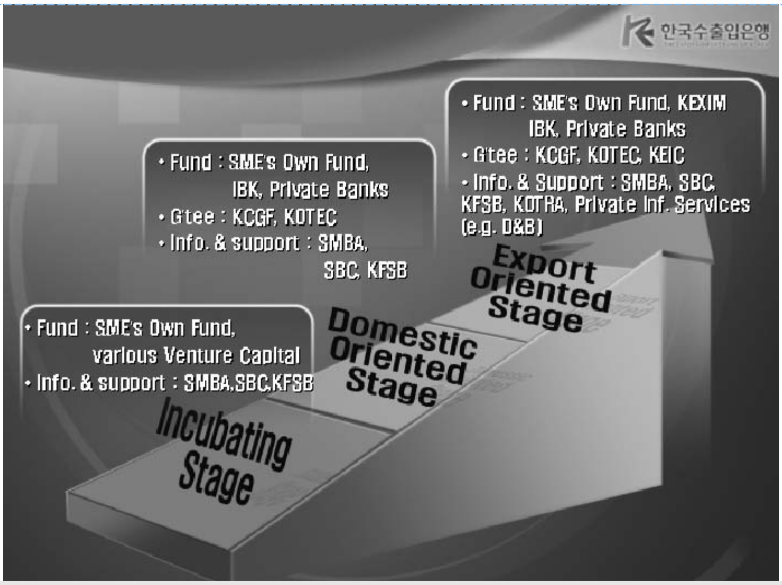
Various institutions listed in the previous section have various missions and functions. The diagram on the right illustrates how they can contribute to SME activities in accordance with the SME development stage.

In the incubating stage, usually, SME's own funds and various venture capital are utilized. During this stage, various information and support is available from SMBA, SBC and KFSB.

After the incubating stage, SMEs reach the domestic market oriented stage. In this stage, SMEs can enjoy additional support from IBK and private banks in addition to their own funds and venture capital. Sometimes, their loans from financial institutions are guaranteed by KCGF or KOTEC. In the export oriented stage, SMEs can get more expanded support from financial institutions. This support includes loans and guarantees from KEXIM and export insurance from KEIC. In terms of information about foreign markets, SMEs can obtain useful information from KOTRA or private information services such as D&B.[11]

11 _ The institutions can be categorized by other criteria such as what business cycle of SMEs the

Figure 5-2 ●● Different Support for Different Stages



3.3 Roles and Functions of SMBA

In Korea, Small and Medium Business Administration (SMBA) is in charge of SME support. It was first established in February 1996. In February 1998, function of policy-making on SME support, which belonged to MOCIE until then, was transferred to SMBA. From then on, SMBA expanded its roles and functions while opening new regional offices in major cities in Korea.

SMBA envisions itself as creating 'SMEs full of vitality and creativity as a main economic growth engine and job creator'. In order to achieve this vision, SMBA is focusing on 'establishing an efficient SME-support system through improved institutions' and 'creating a business environment conducive to start-up and growth of SMEs. In doing so, SMBA aims to foster "small but strong SMEs" by enhancing their innovative capability and global competitiveness. SMBA's six major business areas are summarized as follows:

institutions are focusing on. Business cycles of a company usually comprise the information gathering stage, production and shipment stage, and collection stage. For example, KOTRA is usually focusing on market information collection, which is the first business cycle. Other financial institutions, such as banks or guarantee funds, are needed in the production and shipment stage when the financial resources for production are needed. Some financial institutions such as Korea Eximbank provide relatively long financing for SMEs, usually two or more years, which covers the collection stage.

- Facilitating Start-up and Enhancing Entrepreneurship
- Providing Effective Financial Services
- Ensuring Stable Supply of Human Resources for SMEs
- Enhancing the Market Access of SMEs
- Building Technological Innovation Capacity for SMEs
- Promoting Venture Business

3.4 Financial Services of SMBA

Among the six business areas of SMBA, financial services provided by SMBA are the most important. Those intending to start up an enterprise, or expand/restructure an existing business, will face the most common difficulties with financing. This is mainly because banks usually require collateral before agreeing to extend loans to SMEs, and their technology and corporate value cannot be correctly assessed for underwriting.

- The SMBA provides direct and indirect financing support for SMEs to ensure that creative and innovative SMEs will not fail because of difficulties with financing.

- As indirect financing services, the administration provides security assurance service for SMEs ineligible for bank loans due to lack of collateral and technology. This service allows them to borrow needed funds from KCGF, KOTEC, and local KCGF offices.

- Also, small business owners, enterprises in the start-up phase, technology-oriented SMEs and SMEs awaiting reorganization are provided policy funds through SBC (Small Business Corporation). In order to support SMEs with direct financing from the market, the SMBA plans to utilize venture capital and KOSDAQ market.

- Promising SMEs that lack collateral are provided venture investment funds from venture investment companies and venture investment partnerships.

- KOSDAQ market and the third market are in operation to enable direct financing of small and medium venture companies from the market.

① Credit guarantee services : In an effort to enable SMEs lacking collateral to access needed funds, credit guarantee organizations provide guarantee services for them by issuing credit guarantee letters. Currently, KCGF, KOTEC, and local KCGF offices are in charge of the guarantee services, and the government financially supports such organizations.

② Technology Appraisal Securitization Program: Through this program, the SMBA helps SMEs get loans through the securitization of the appraised value of their new technology. An institute that specializes in assessing technology estimates the value, feasibility and marketability of a new technology. A financial institution may then offer a loan based on the assessment. This program is significant in that SMEs with superior technologies can take loans from financial institutions even without other backing collateral.

③ Policy Fund for SMEs : The SMEs can borrow needed funds at low interest rates for the purpose of start-up, facility investment, automation, and commercialization of new technologies. The total policy funds operated in 2004 amounted to 3 trillion won.

④ Account Receivable Insurance Program: The program is designed to protect SMEs against management difficulties stemming from the failure to collect payments. This program for insurance on account receivables (sales on credit + notes receivable) was initiated in 2004, and is expected to ensure SME management stability by preventing back-to-back bankruptcies.

⑤ Venture Investment Funds : To ensure a stable supply of resources for innovative SMEs, the SMBA plans to mobilize 400 billion won of venture investment funds through set-up of 108 venture capital firms, and 431 venture capital cooperatives. The administration focuses on expanding the basic infrastructure for investment in venture businesses and improving investment climate. To build a foundation for stable growth of venture capital, the SMBA is initiating programs including the formation of the “fund of funds” (80 billion won) for financing venture funds, and the shaping of an active secondary market for venture capital (800 billion won).

4. Major Features of SME Support by Korea Eximbank

4.1 Export Credit Agencies

Before we examine the SME support activities of Korea Eximbank, we would like to briefly discuss the nature of the export credit agencies. By doing so, we can clearly understand how export credit agencies' SME support activities, especially for export-oriented SMEs, are being operated.

These days, export credit agencies play a role of central importance in international trade and investment flows. The first ECA is ECGD of UK, which was established in 1919. Its original purpose was to encourage and support export (at that time initially to Russia) that would not otherwise have taken place. However, most ECAs in operation today have been set up in the last 25 years.

Their traditional role is to support and encourage exports and outward investment by insuring international trade and investment transactions, and in some cases by providing trade finance directly. However, ECAs come in all shapes and sizes, and there is no such thing as a typical ECA.

Most of them insure both political risks and commercial risks on exports, and until the last decade they operated as government entities or on account of their governments. There was little competition for business, as there tended to be one ECA in each country.

Korea's 2 ECAs are Export-Import Bank of Korea (or Korea Eximbank or KEXIM) and Korea Export Insurance Corporation (or KEIC). They were once in one organization. Export insurance belonged to Korea Eximbank's business until KEIC was spun off from Korea Eximbank as an independent agency in 1992.

Korea Eximbank was established in 1976 as a special government financial institution, according to a special legislation, the Eximbank Act, and began export insurance business in the consecutive year, 1977. In 1987, Korea Eximbank started to operate the Economic Development Cooperation Fund or EDCF, which is an ODA or Official Development Assistance and, in 1991, Inter-Korean Cooperation Fund (IKCF).

In 1992, Export Insurance Sector was separated and established as an independent organization under the Ministry of Commerce, Industry and Energy, which is now Korea Export Insurance Corporation or KEIC.

4.2 Korea Eximbank - Mission

Korea Eximbank's mission is to promote the sound development of the national economy and economic cooperation with foreign countries. Korea Eximbank engages in a variety of financial business activities to achieve its purpose. It extends financial support for export and import transactions, overseas investment projects, development of natural resources overseas and trade finance, and operates the Economic Development Cooperation Fund (EDCF) and the Inter-Korea Cooperation Fund (IKCF).

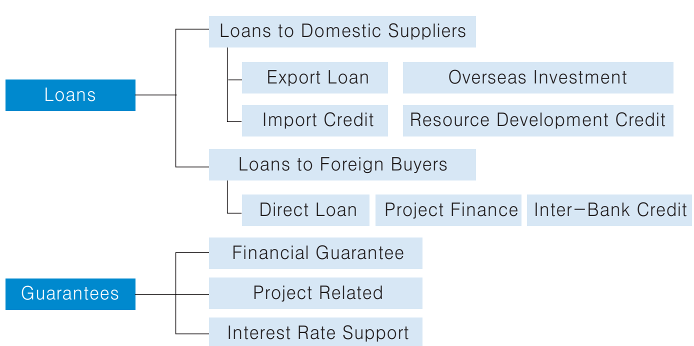
Its business mission is stipulated in the Act like this. Korea Eximbank :

- ...provides financial services, such as loans, guarantees, and other financial facilities to its customers for export and import transactions, overseas investment projects, and the development of natural resources abroad
- ...has a complementary but pioneering role and function for the national economy, which would be hard for commercial banks to shoulder
- ...always conducts business with prudence

4.3 Businesses

First, Korea Eximbank's financial services, which render finance and guarantees needed for international transaction of Korean companies can be categorized into two groups : loans and guarantees.

Figure 5-3 ●● Loans and Guarantees



Loans can be classified into 2 categories, according to the borrower: Export Loan to Korean suppliers and Direct Loan to foreign buyers. Direct loans to foreign buyers include Project Finance and Inter-Bank Facility as a credit line to foreign banks, in order to help them finance buyers purchase of Korean goods and services

Since established, Korea Eximbank has extended Export Credits exceeding USD 100 Billion. to over 80 countries. Financing performance in 2004 totaled about USD 13 Billion. Notably, since the Asian Crisis, project-related guarantees have sharply increased. On the other hand, the financing side has been relatively sluggish, since it once recorded a dramatic increase in 1998. That was mainly owing to short-term trade related finance such as re-discount on trade bills.

4.4 Changing Roles and Functions

Setting-up Stage as an ECA (1976 - 89)

Since the outset of business in 1976 until the end of the 1980s, Korea Eximbank took steps for setting up its position and functions as an ECA, by contributing to improving balance of trade and fostering conventional **smoke-stake** industries. Major tools were ‘Deferred Payment-based Supplier’ credit in the form of ‘Export Financing and Credit for Overseas Investment’ and ‘Major Resources Development’.

Role Strengthening Stage (1990 - 96)

From 1990 until the outbreak of the financial crisis in the late 1990s, Korea Eximbank’s role was strengthening competitiveness of Korean companies in the global market. Services were focused on diversifying services; it introduced new facilities such as short-term trade related financing and supported new industries such as electronics. The 1990s was a crucial period for Korea Eximbank’s SME support activities. Korea Eximbank strengthened its SME support activities by introducing new financial instruments, such as Comprehensive Export Loan which were, from the beginning, only for SMEs. This stage resulted in asset growth.

Maturity Phase (since 1997)

During the Asian crisis, the trade finance system of Korea’s banking sector was seriously harmed and did not work properly. Korea Eximbank tried to fix the market failure, appearing at the trade finance system, as a sovereign player. The bank actively provided short-term trade credit and project-related guarantees to boost external transactions.

Since Korea emerged from the 20 billion dollar IMF relief package in August 2001, the Bank has been making an effort to shed conventional financial services and put new financing schemes and services into practical use. Examples are project finance, framework agreements, interest rate support system, project lines of credit, revolving lines of credit, etc.

Current Issues

Demand for traditional ECA finance decreases as Korea's traditional industries lose their competitive edge and industrial structure changes. Korea Eximbank needs to develop new markets by diversifying its financial products. Financing SMEs is also a keyword for most ECAs.

4.5 Korea Eximbank's Financial Services for SMEs[12]

As already mentioned in the sections above, Korea Eximbank's SME support activities were vitalized in the 1990s. As shown in the figure below, its loans extended to SMEs grew

12 _ During the first and second meeting with the staff of P.T. Bank Ekspor Indonesia (BEI), which were held in November and December of 2005 respectively, a large portion of the meetings was devoted to discussion about the three main topics: (1) recommendable legal status of BEI, (2) Korea Eximbank's financial instruments for SMEs, and (3) better ways to link SMEs and big corporations.

First, staff of BEI expressed their interest in the legal status of the Korea Eximbank, such as the ownership structure, the way Korea Eximbank is audited by independent auditors, and whether Korea Eximbank is fully guaranteed by the Korean government.

Second, they also expressed especially keen interest in Korea Eximbank's financial products for export-oriented SMEs. Intensively discussed were major features of Korea Eximbank's financing schemes for SMEs, how they are operated in the 'real market', whether or how the financing schemes can be applied to other countrie, such as Indonesia, and how the risk management system for SME support is operated.
They requested the research team to include detailed description and case studies about Special Credit Loan of Korea Eximbank in the mid-term report. In-depth descriptions of the Special Credit Loan and an exemplary case were presented in the sections below.
However, the expected difficulties and limitations of Special Credit Loan to BEI's portfolio were also seriously discussed. They include the difference between the industrial structures of Korea and Indonesia, financial and managerial capabilities of SMEs of Korea and Indonesia, and market practices of Korea and Indonesia. Both parties agreed to work in close consultation with each other on these matters and formulate recommendations to BEI in the study visit.

Third, staff of BEI have interest in an effective way to link large corporations (usually the exporter) and the Indonesian SMEs (usually subcontractors). Upon BEI's request, the research team included in this mid-term report the features of Network Loans currently offered by some commercial banks in Korea.

Table 5-7 ●● Korea Eximbank's Loan Disbursements to SMEs

(billion won)

Year	1987	1988	1989	1990	1995	2000	2005
Total	497	530	581	731	4,049	8,096	15,071
SME	2	19	55	102	419	2,262	3,788
Share(%)	0.47	3.51	9.47	13.92	10.35	27.94	25.14

Sources : Korea Eximbank

exponentially from the 1990s and reached 3,788 billion won in 2005.

Rapid expansion of Korea Eximbank's SME support activities shown in the table above was possible due to many factors. One factor could be steady expansion of the branch network of Korea Eximbank, which rendered Korea Eximbank's interactions with SMEs more frequent and convenient. Another factor could be the introduction of new financial programs for SMEs, which began to be adopted or vitalized during the 1990s.

4.5.1 Manufacturing Loan for Small Business Export

One of Korea Eximbank's traditional programs for SMEs is manufacturing loans. KEXIM has two types of manufacturing loans that are provided to Korean exporters manufacturing export goods: Short Term Loan and **Small and Medium size Contract Loan**.

Short Term Export Loan is short term finance with production and repayment period of 6 months to 2 years. There is no limitation on the size of the contract, and KEXIM covers up to 100% of the export contract value, less the received amount such as receivables. The repayment term is either 15 or 30 days after the last payment date of the export contract.

The key distinction between Short Term Export Loan and **Small and Medium size Contract Loan** is the production and repayment period. The production and repayment period is up to 6 months with a sum not exceeding **USD 20 million** for **Small and Medium size Contract Loan**. All other conditions are the same as those of Short Term Export Loan.

Manufacturing loans cannot be a perfect program to each and every company. In fact, manufacturing loans may not be suitable for small and young companies because they were not designed with consideration for the peculiar features of small companies. Manufacturing loans are for contract size of USD 20 million and production & repayment period of up to 2 years. So, the best candidates for this loan program can be medium-sized companies, not small and young companies. To tackle this problem, in 2002, KEXIM introduced a loan program called **Special Credit Loan**.

Another problem arises when the exporter maintains a long-standing relationship with a buyer. With manufacturing loans, every shipment must be followed up by providing appropriate documents such as B/L to KEXIM, which can be troublesome or even annoying to exporters and KEXIM. To simplify this process, KEXIM introduced ‘**Comprehensive Export Loan**’.

4.5.2 Special Credit Loan

Special Credit Loan is almost identical to Small and Medium size Contract Loan except a few differences, such as:

1. It has a limitation on the loan amount (USD 20 million)
2. It does not require collateral unless the loan amount does not exceed the limitation

Borrower	Small & Medium Size companies
Contract Size	Contract size not exceeding USD 20 million
Coverage	Up to 90% of contract value less previously received amount
Amount Limited	1. Non L/C : Min {USD0.5Million, 50% of Owner's equity} 2. L/C : Min {USD1Million, 50% of Owner's equity}
Repayment Term	Up to 15 days after the last payment date of the export contract (within 6 months)
Other Factors	No collateral required

The main features of special credit loan are:

Small and young companies tend not to have high credit ratings or collateral even when their businesses are very promising. Therefore, it is difficult for them to get financial support from commercial banks. So, ‘**Special Credit Loan**’ was introduced to efficiently support promising SMEs that have a low credit rating.

When extending ‘**Special Credit Loan**’ to SMEs, Korea Eximbank does not use its in-house credit rating system, which may not be efficient in evaluating small and young companies' credit standing. Instead, the loan officer uses a simplified test, which evaluates less than 10 factors such as company performance and ability regarding export and the security of the export contract.

Because this loan does not require any collateral, risk management is the crucial factor for the success of ‘Special Credit Loan’. To manage risk effectively, it is important to select the appropriate promising SMEs, but this is very difficult as well. Usually, loan officers can not make decisions solely based on financial statements because small and/or young companies are very vulnerable to shocks from outside. So, it is highly recommended to try to grasp the real state of the companies by means of, for example, visiting sites frequently. Some other measures also can be used, such as agreements between the company and Korea Eximbank, which allows Korea Eximbank to directly manage the cash flows from the export contract. Detailed explanation can be found in the case study discussed below

4.5.3 Case Study : Special Credit Loan

• Borrower

ProTest. Co., Ltd, the borrower, was established in 2002. Its main business is semiconductor testing, program development, and manufacturing of semiconductor parts. ProTest has just started exporting goods as a subcontractor of Hynix Semiconductor Inc., an internationally known semiconductor manufacturer. Even though ProTest has a short business history and small sales volume, it was thought to have the capabilities for export as a promising SME with ISO-9001 certification.

• Selecting the appropriate company

Unlike the non-memory semiconductor sector, the memory sector does not rely heavily on outside orders in Korea. However, ProTest anticipated that the level of reliance on outside orders would increase as the memory semiconductor sector evolves into the system of horizontal division of labor, and entered the business by establishing Test (Wafer, PKG) House.

ProTest is a technology-driven company. The CEO of ProTest was Head of the technology team at Hynix Semiconductor Inc., and the company was continuously trying to focus on R&D activities by establishing a research institute. On the anticipation of an increase in orders from Hynix and other semiconductor manufacturers, ProTest was planning to extend its facilities. Therefore, the demand for funds was increasing.

Before coming to Korea Eximbank, ProTest had been trying to finance the funds for manufacturing export goods, but the majority of financial institutions were reluctant to extend loans without collateral because (1) the borrower had short experience, and (2) it was difficult to get financial information from credit information institutions as the sales volume of the borrower was less than USD 5 million.

Korea Eximbank, first, also thought it would be difficult to extend the loan for the same reasons, but loan officers visited the sites of ProTest to see if it was possible to extend the newly introduced 'Special Credit Loan'. After careful investigation, Korea Eximbank concluded that ProTest had enough capacity for performing exports because it had (1) high-tech testing facilities, and (2) various technical certificates.

• Current Situation

Korea Eximbank had good reason not to extend the loan because the export deal was not on L/C basis. However, Korea Eximbank decided to support ProTest after securing the loan in creative ways. Korea Eximbank made an agreement for account management with another commercial bank with which ProTest had an account and secured the payments from Hynix as repayments for the loan.

Korea Eximbank has already extended the 'Special Credit Loan' to ProTest six times and the loan amount has increased to USD 420 hundred from the initial USD 200 hundred. As a result of the financial support from Korea Eximbank, ProTest struck a long-term supply contract with Hynix and terms of the contract also improved.

As the sales volume is estimated to be about USD 10 million in 2005 (104% increase from the previous year) and there is growing anticipation of the improvement in credit rating, ProTest is expected to graduate from 'Special Credit Loan' and move onto Export Loan with more preferable conditions.

As we see from the process of development of a small company, Korea Eximbank accumulated the experience and confidence that if could support SMEs without enough collateral and credit rating. This new loan scheme not only helps SMEs in need of funds, but also contributes to extending Korea Eximbank's range of business in a creative way.

4.5.4 Comprehensive Export Loan

Comprehensive export loan was, initially, introduced to provide loans to Korean exporters maintaining a long-standing relationship with a foreign buyer.

The process goes like this:

1. The Korean exporter provides Korea Eximbank with an export record of the previous 6 months or 1 year.
2. Korea Eximbank extends a loan to the exporter in the amount of 90% of the previous export record.

3. At the end of each loan period, Korea Eximbank re-examines the exporter's financial condition and export record and decides whether it will:
   (1) Revolve the loan as it is,
   (2) Increase the loan amount, or
   (3) Decrease the loan amount.

The reason why this loan program is called 'Comprehensive Export Loan' is that, unlike the case of Manufacturing Loan, Korea Eximbank does not question how and when the money is to be used by the exporter.

Borrower	Small & Medium sized companies and large corporations excluding top 5 listed by Financial Supervisory Service
Contract Size	Based on 1-year (or 6-month) export record
Coverage	1. Up to 50% of 1-year of export record 2. Up to 90% of 6-month export record (100% for venture companies and small companies)
Amount Limited	1. USD 30 million for large corporations 2. USD 10 million for small & medium size companies
Repayment Term	6 months - 1 year
Other Factors	Currency Exchange Option

The key features of this loan are like this :

* Case Study of Network Loan

Some commercial banks and Industrial Bank of Korea are currently extending 'Network Loans' to SMEs that are vendors of big companies. To manage risk effectively, it is important to select the appropriate promising SMEs.

The process goes like this:

1. Financial institution extends the loan to SME (vendor).
2. SME deliveries goods to the big corporation.
3. At the end of the inspection process by the big corporation, the old loan contract between the financial institution and SME is cancelled and a new contract between the financial institution and big corporation is created.
4. Finally, the big corporation repays the loan amount.

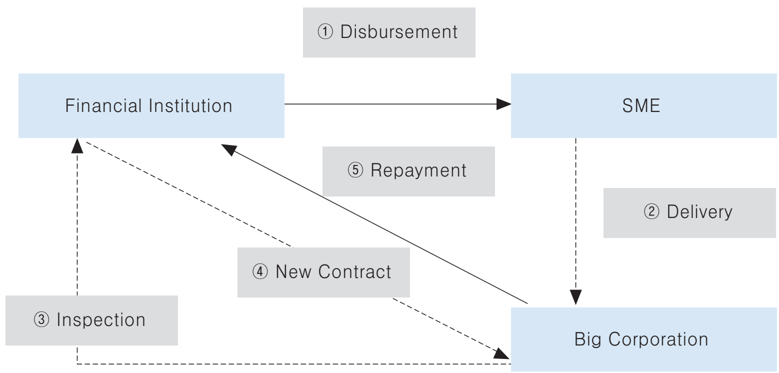
Network Loans have many benefits for SMEs and even for big corporations. As for benefits for SMEs;

First, by utilizing Network Loans, SMEs can lower their interest costs. Without Network Loans, SMEs have to self-finance during the time gap between their delivery of goods to large corporations and the actual payment by the big companies based on SMEs' own credit rating, which is usually lower than that of big companies. However, in case of Network Loans, the interest costs can be lowered as soon as the borrower is changed from SME (with lower credit rating and thus higher interest rates) to big companies (with higher credit rating and thus lower interest rates) at the completion of the inspection process.

Second, the fact that a specific SME is a beneficiary of a Network Loan can have various kinds of indirect benefits. For example, Network Loans are, in nature, similar to big company guarantees for SME borrowing because the big company succeeds SME borrower status at the completion of the inspection process. That's why the big company should and will be very careful in selecting the beneficiary of Network Loans and only a small number of very competent SMEs can be eligible for these loans. If a specific SME is eligible for a world-class big company's Network Loan system, the SME can promote the fact publicly in order to attract more orders from other companies.

However, for the success of this scheme, some prerequisite conditions should be met. Firstly, the quality of SME products must be tightly monitored. When there is a problem such as defective goods delivered by vendor SMEs, poorly managed SMEs cannot take necessary follow-up actions. Secondly, there should be a long term relationship between SMEs and big corporations. If the contract were on a short term basis, neither big corporations nor SMEs would feel the need to utilize this kind of scheme.

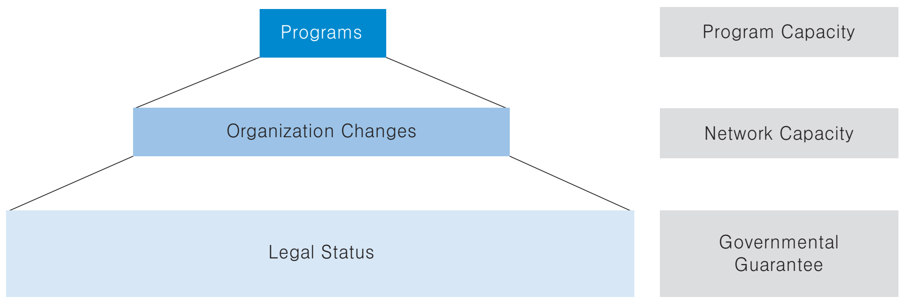
Figure 5-4 ●● The Structure of Network Loans in Korea



5. Recommendations

Our recommendations focus on the above-mentioned three issues : BEI's Legal status, optimal organization and specific SME support programs.

Figure 5-5 ●● Framework of Recommendations



5.1 Legal Status

Regarding BEI's legal status, our research team's evaluation focused on two issues: BEI's lack of governmental back-up and governance of BEI.

5.1.1. Current Status and Weaknesses

BEI is 100% fully owned by the Indonesian government and actively involved in the export credit market. However, it is not yet fully guaranteed by a sovereign entity such as the Indonesian government. Export Credit Agencies are established and are being operated in more than 80 countries in the world, and most of them (whether banks or guarantee institutions) are fully guaranteed by their central government, which enables the Agencies to put themselves on the same level as their governments in terms of credit ratings. The Agencies' so-called 'sovereign rating status', in turn, can strengthen their competitiveness compared to other agencies which are not guaranteed by their governments.[13]

5.1.2 Best Practice: in case of KEXIM

In case of Korean Eximbank, the Korean government makes it clear that the Korean government guarantees Korean Eximbank for any net loss if the reserves of Korean Eximbank are not sufficient to cover the loss. Article 37 (Making Up for Loss) of 'The Export-Import Bank of Korea Act' stipulates that 'Any net loss incurred by the Export-Import Bank during any fiscal year shall be covered by its reserves. If the reserves are insufficient to cover the net loss, the (Korean) government shall provide funds to cover such net loss.'[14]

5.1.3 Recommendations

Our research team's recommendations can be summarized as follows: First, considering the possible enhancement in BEI's competitiveness and fund-raising capacity, which can be best achieved by adoption of sovereign status, our research team's first and foremost recommendation to BEI and the Indonesian government is that BEI's lack of governmental back-up must be dealt with in a swift manner.

In many cases, including Korea Eximbank, governmental back-up, in the first place, enables Eximbanks to raise funds at very competitive rates either from international financial markets or from other financial institutions. Those funds, in turn, could be channeled to SMEs and other strategic industries and businesses at very competitive rates. Funds provided to SMEs at competitive rates can give them a great strategic edge.

BEI is a state-owned company (Badan Usaha Milik Negara, BUMN), which is wholly owned by the Indonesian government. However, it has two weaknesses in terms of its legal status.

13 _ Calls for BEI's 'sovereign rating status' were continuously raised by professionals from BEI and other researchers in independent research institutions. They include Mr. Arifin Indra, President Director of BEI, who, in his address about 'The Role of Export Strategy in Boosting Economic Growth' in Makassar in September 2005 (http://www.bexi.co.id/Berita/Berita%20Koran-September.pdf), emphasized the importance of changes in BEI's legal status. In 'Bisnis Indonesia' of September 6th, 2005, Mr. Eko Supriyanto, researcher of InfoBank Research Bureau also stressed the weakness of BEI, which are caused by the lack of governmental guarantees, and called for governmental back-up.

14 _ So far, no financial deficit has happened in Korexim during the 29-year life of Korea Eximbank.

1. BEI was established by the departmental ordinance and not by 'law'. However, most of the Eximbanks, including Korea Eximbank, was established on the basis of its own act[15].
2. BEI does not enjoy the status of Export Credit Agency (ECA) because it lacks sovereign status that enables most ECAs to enjoy sovereign status.

In case of Eximbank Act, we strongly recommend that the Indonesia Eximbank Act, not the departmental ordinance, should be drafted and promulgated after being ratified by the House of Representatives or Dewan Perwakilan Rakyat (DPR) of Indonesia.

In order for BEI to obtain sovereign status, specific steps that can be adopted by BEI are recommended as follows:

1. As for the entity that will provide governmental back-up, we recommend the Ministry of Finance, which oversees and regulates the banking industry as the main authority, guarantee BEI for any net loss if the reserves of BEI are not sufficient to cover the loss.
2. As for the type of guarantee, it should be neither a conditional guarantee nor limited guarantee. Rather, in order to obtain sovereign status, unconditional and unlimited guarantee is strongly recommended.
3. As for how the governmental guarantee is stipulated, we would like to recommend that
   (1) the Export-Import Bank of Indonesia Act be drafted and promulgated, and
   (2) the governmental guarantee by the Ministry of Finance be included in the Act.

5.2 Organization, Branch Network and Governance Structure

5.2.1 Modality of Eximbank

There are two options to organize export financing: (a) having an independent export credit institution, and (b) having the central bank and/or commercial banks perform some trade-financing functions. Each option has its own merits and demerits as follows.

As it is already known, the Korean government adopted the first option, which was to establish an independent export financing institution. The Korean government and KEXIM's justification for an independent agency is that, as an independent agency, Korea Eximbank can:

15 _ In the case of Korea, Korea Eximbank was founded on 'The Export-Import Bank of Korea Act', which was drafted by the Ministry of Finance and Economy and later ratified by the National Assembly of Korea.

Table 5-8 ●● Merits and Demerits of Each Modality of Eximbank

	Merit	Demerit
Independent Export Financing Institution	Easy to achieve efficiency	Can be costly to maintain the institution and operate the financing program
Utilizing Existing Institutions	Does not always reflect the priorities and needs of export financing	Can be economical

(1) Have a credit rating almost indistinguishable from that of its government, due to being wholly owned by the government;
(2) Be able to fund the consolidated balance of its lending by borrowing in the capital markets in an aggressive and professional manner and obtain the finest terms on offer;
(3) Effectively achieve a sound result by setting a long term strategic goal for export financing and developing its own technique and know-how in a relatively short period; etc.

5.2.1.1. BEI's Current Status and KEXIM's Case

Indonesia adopted the independent institution as BEI's modality. Having an independent institution solely devoted to export financing can be efficient in providing export financing to businesses and corporations. Besides the issue of 'independent agency' versus 'existing institution', there is another issue facing the 'independent agency'; whether to separate or not.

More specifically, regarding the establishment of an independent export credit agency, there are a couple of models; to separate ECAs into an export credit institution and an insurance institution, or to combine the above two functions into the same institution. The decision by the government on ECA operation system would be largely dependent on the economic situation of the country and the stages of development of commercial banks, and, as a result, there is no prototype. Types of major country ECAs are list below.

Advantages and disadvantages of one integrated ECA can be summarized as follows. First, a synergy effect can be expected. If one institution performs lending and insurance activities, each department can share other departments' information, know-how and various kinds of resources. Second, it is possible to provide one-stop services under one integrated system. However, conflicts of interest can exist. For example, if both lending activities, which are inherently risk-averse, and insurance activities, which inherently have risk-taking

Table 5-9 ●● Types of Major Country' ECAs

Integration Type		Separation Type	
US	US EXIM (loan, insurance, guarantee)	Korea	KEXIM(loan, guarantee) KIEC (insurance)
Canada	EDC (loan, insurance, guarantee)	Japan	JBIC (loan, guarantee) NEXI (insurance)
UK	ECGD (IRS, insurance, guarantee)	France	Natexis (loan, guarantee) COFACE (insurance)
Australia	EFIC (loan, insurance, guarantee)	German	KfW (loan, guarantee) HERMES (insurance, guarantee)
Taiwan	EIBT (loan, insurance, guarantee)	China	EIBC (loan, guarantee) SINOSURE (insurance)

characteristics, are under one institution, it is possible for conflicts of interest to strangle the optimal utilization of export financing activities.

In case of KEXIM, it had been charged with both export credit and insurance until July 1992, when the insurance function was relocated to the newly established insurance institution or the Korea Export Insurance Corporation (KEIC). From the viewpoint of export promotion, direct export credit is more effective than insurance and guarantees, due to a larger autonomous financial base as compared to insurance and guarantees.

Before October 2, 1998, Bank Ekspor Impor, which is a different entity from the current BEI, was one of the four major independent state-owned banks all of whose equities were 100% state-owned. During the course of banking sector reform, former Bank Ekspor Impor, together with three other state-owned banks, was merged into Bank Mandiri in October 1998. In July 2003, 30% of Bank Mandiri's equity was privatized. In 1999, the new BEI, which still exists as a state-owned bank, was created.

5.2.1.2 Recommendations

Recently, discussions about a possible merger between BEI and Bank Tabungan Negara (National Savings Bank) have surfaced in and out of the banking industry of Indonesia. Our research team's opinion is that we cannot find any material advantages in the two institutions in terms of either BEI's future capabilities and the Indonesian government's export financing activities.

During the last ten years, Korea Eximbank and our research institute have continuously noticed a couple of characteristics and trends in the export financing markets. They are:

(1) ECAs in developed countries are still requested by their governments and business community to perform their export financing activities in such a way that business entities can effectively export their products.

(2) ECAs in developing countries are eagerly preparing for the establishment of their own ECAs or trying very hard to enhance their ECAs competitiveness. Korea Eximbank, upon request from China Eximbank and the Ministry of Finance of Vietnam, provided 'Study Visit Program', which is similar to one given to the BEI's delegation during March of 2006, to the two developing countries' ECAs. In the case of Vietnam, the Ministry of Finance of both Vietnam and Korea are planning a follow-up program in the latter half of 2006.

(3) Although we are witnessing the dissolution of JBIC of Japan, our research team's conclusion is that the decision to dissolve JBIC was made for a very political reason. It was neither because JBIC's competitiveness declined nor because it lost its meaning for existence. So, we don't believe it is appropriate to jump to the conclusion that BEI of Indonesia can be dissolved or merged into other unrelated or irrelevant institutions.

5.2.2 Branch Network

The second issue in our preliminary evaluation would be about BEI's organizational strengths and weaknesses. Our evaluation of BEI's organization tells us that the improvement of effectiveness in BEI's SME support activities, which can be achieved by its expansion of branch network, needs to be addressed. Based on Korea Eximbank's experiences with SME support, a wide network of branches and competency of staff stationed in the branches are crucial factors in SME support.

5.2.2.1 BEI's Branch Network and KEXIM's Network

In order to support SMEs effectively, SMEs' accessibility to appropriate financing is one of the most important factor. Hence, expansion of the network of localized branches is thought to be crucial. So, BEI is advised to set up at least 4 or 5 more branches that can cover geographically important areas throughout Indonesia.

Because SMEs vary in size/ability/sector, their financial needs are not the same. So, financial institutions, which intend to support SMEs, should not apply the same policy to all of them. On the contrary, customized policies should be designed to meet the specific financial needs of SMEs.

In case of KEXIM, it now has 11 local branches in Korea[16]. This number can be said to be quite a lot considering the size of Korean territory or the examples of other ECAs,[17] but KEXIM believes that it is very important to provide accessibility to SMEs to design policies in their favor.

Below are the examples of strategies that are being exercised to support SMEs in Suwon Branch of KEXIM. Suwon branch is one of the newly-opened branches in KEXIM. However, its performance in SME support has been spectacular from the very first year of establishment.

| Box | Strategies to support SME's

Suwon Branch

(1) Policies in Favor of SMEs

- More lenient eligibility for Comprehensive Export Loans is applied to SMEs
- Differentiation of loan amount (e.g. up to 90% of the total contract amount for SMEs, and up to 80% of the total contract amount for big companies)
- Wider range for Foreign Currency Option (e.g. for SMEs, Foreign Currency Option (FCO) between foreign currency and another foreign currency is granted. However, for big companies, FCO only between Korean Won and foreign currency is granted)
- Additional consideration in credit evaluation(e.g. more favorable consideration about SME's financial status), etc.

(2) Major Principles: Targeting SMEs

- Target SMEs: first, vendors/suppliers/partners of large exporting firms (big electronic companies such as Samsung or LG)
- Consequently, target firms engaged in regionally specialized industry

(3) Specific Measures Exercised to Target SMEs

- **Firm Specific Structured Finance**

- Provides mixed and varied financial instruments to a single firm according to its transaction type

* e.g. short-term manufacturing loan, or special credit loan followed by discount on trade bills or factoring/forfeiting

16 _ Busan, Taegu, Changwon, Kwangju, Incheon, Kangnam(Seoul), Taejeon, Suwon, Ulsan, Jeonju, Cheongju

17 _ US EXIM has just 7 regional offices and EDC(Canada) has just 4 regional offices.

* Suwon Branch offered 14 different types of financial facilities to its customers, which recorded the most of all branches in 2005.

• Interest Discount Coupon

- A scheme under which an existing customer is to be provided with an interest rate discount for its loan once a new loan is completed for a new customer it introduced to the branch.
* It helps find new customers and attract repeat customers as well.

• Overseas Investment Credit for a firm to accompany its big corporate customer across borders

- Three merits of the credit
* Easy to identify potential customers
* Low credit risk as the borrower secures a reliable customer
* Helps improve the branch's revenue as it carries a long-term outstanding balance

| Box |

As shown above, targeting SMEs and providing them with customized financial facilities is essential for successful SME support. For this purpose, loan officers for SMEs should come close enough to understand the special needs of their clients. It is not enough to wait for clients to come with their needs; officers have to be there and be ready to find ways to meet the needs of the clients.

5.2.2.2 Recommendations

Now, BEI has just 2 offices throughout Indonesia, in Medan and Surabaya. Indonesia is such a big country that 2 posts are not enough to cover the geographically important regions such as South Sumatra, Kalimantan, Sulawesi, and Central Java.

So, it is regarded as necessary for BEI first to set up 4 or 5 regional offices in the city of Palembang (representing South Sumatra region), Balikpapan/Samarinda (Kalimantan), Makassar (Sulawesi and Nusa Tenggara Barat), Semarang (Central Java) as key regional posts.

After the businesses at these regional posts are established, BEI could extend the network to the economically important areas such as industrial zones or remote areas like Nusa Tenggara Timur and the Papua region.

Figure 5-6 ●● Recommended Local Branch Network

● : Present Offices ● : Cities where regional posts should be set up

5.2.3 Governance Structure

5.2.3.1 KEXIM's Practice

5.2.3.1.1 Governing Structure of Korea Eximbank

The governing structure of Korexim features the two-tier system in decision making and comprehensive supervision and intervention of the government at the basis of ex ante and ex-post.

A. Decision Making Bodies

Decision making bodies of Korexim comprise the Operations Committee and the Board of Directors, of which the committee is charged with the basic policy and key strategy relative to Korexim's management and operation. Meanwhile, the latter is responsible for important management and business decisions, except for matters under the Operations Committee's jurisdiction

The Operations Committee is composed of nine members from concerned authorities and related organizations; the president of Korexim as chairman, and senior representatives from the Ministry of Finance and Economy, the Ministry of Foreign Affairs and Trade, the Ministry of Commerce, Industry and Energy, the Financial Supervisory Commission, the Korea International Trade Association, the Korea Federation of Bank and the Korea Export Insurance Corporation. In this context, the Operation Committee functions as an outside direct system as in other public entities or commercial banks.

The Board of Directors is composed of seven members from management; the president of Korexim as chairman, and executive directors. Its role takes the character of management execution rather than management supervision, due to no participation of outside directors, as in other commercial banks

The reason why Korexim runs a special policy making body of the Operations Committee is due to need for policy coordination between related government authorities and organizations to ensure relevance of business operations with the government policy and national economic situation

B. Supervision Ex Ante and Audit Ex Post

The government, which holds the personnel commission on Korexim's management, supervised overall business operation of Korexim by means of yearly approval of Korexim's business plan and budget, which includes the magnitude of business forces and organization.

In addition, to ensure managerial soundness of Korexim, Korexim is periodically inspected by multiple authorities: the Board of Audit and Inspection, the Ministry of Finance and Economy, the Financial Supervisory Commission, as well as the National Assembly's audit and inspection.

5.2.3.1.2. Korea Eximbank's relationship with the Government

The government provides Korexim with government funds in the form of capital injections or loans, while it fields a comprehensive supervision and intervention.

A. Support

Since Korexim has no account for receiving credit, its major capital inflow is from the government funds and its own borrowing in the international capital market.

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Table 5-10 ●● Current Status of Capital

(100 million won)

Legal Capital	Paid-in Capital			
	The Government	Bank of Korea	Korea Industry Bank	Total
40,000	19,772 (60.0%)	11,650 (35.3%)	1,536 (4.7%)	32,958 (100.0%)

Specifically, if any financial deficit occurs, the government is responsible for providing funds to cover Kexim's deficit beyond its general reserves. So far, no financial deficit has happened in Korexim.

B. Supervision and Administration

The government has authority to appoint and dismiss the management.

(i) The President of the Republic appoints Korexim's president upon the recommendation of the Minister of Finance and Economy.

(ii) The Minister of Finance and Economy appoints Deputy president and executive directors upon the recommendation of Korexim's president.

(iii) The Minister of Finance and Economy appoints the Auditor.

Korexim has to get approval from the Minister of Finance and Economy for its yearly business plan, which includes magnitude of financing and borrowing.

Korexim shall prepare an operating manual setting forth the methods and procedures for lending funds, discounting drafts or notes, and guaranteeing obligations under paragraphs (1) and (2) of Article 18, and shall obtain the approval of the Minister of Finance and Economy thereof after a resolution of the Committee. The same shall also be applied to any amendments to the operating manual.

In the case of revising the Operation Manual, which has the characteristics of regulation as it sets out the methods and procedures of lending funds, discounting drafts or notes, and guaranteeing obligations under the Export Import Bank of Korea Act, the resolution of the Operations Committee and the clearance of the Minister of Finance and Economy are needed.

One month prior to the beginning of each fiscal year, Korexim has to submit its draft budget for the next fiscal year to the Minister of Finance and Economy for his approval. By this means, the government can essentially control Korexim's organization, and number of forces. Even in the case of using contingency of the budget, Korexim needs approval from the Minister of Finance and Economy.

Within two months after the closing of each fiscal year, Korexim shall prepare a report on the settlement of accounts and submit it to the Minister of Finance and Economy. The Minister of Finance and Economy has the right of approval for most accounting matters and processes like closing accounts, disposal of profit, and use of surplus. The Minister of Finance and Economy supervises the operations of Korexim in accordance with the provisions of the Export Import Bank of Korea Act, and may issue directives necessary for such supervision. The Financial Supervisory Commission exercises supervision to ensure the soundness of management in accordance with the provisions of the Presidential Decree, and may issue directives necessary for such supervision.[18]

5.2.3.2 Recommendations

Our research team's recommendation about the governance issue includes the following issues.

(1) It is important to have an effective governing structure over a state-owned bank. To determine the effectiveness of the governing structure, however, we need to consider the possible trade-offs between the governing structure composed of many governmental entities and one composed of only one or two entities.

(2) At the incipient stage of Eximbank, it is convenient for both the government and BEI to have a simplified governing structure. The government can exercise consistent control over BEI with a simplified governing structure. BEI can also pay its undivided attention to the guidance of the governing structure.

5.3 SME Support Program

Finally, our recommendations include SME support programs which can be adopted by BEI. During the study visit of BEI members from March 20th to 24th, the major features of 'Special Credit Loan' and 'Comprehensive Export Loan' of Korea Eximbank were heatedly discussed.

18 _ Relative to the government supervision and administration, please refer to the Export Import Bank of Korea Act and its enforcement decree.

In addition to the above mentioned loan programs, our research team would like to provide information about Korea Eximbank's trade finance program, in which staff from BEI expressed their keen interest during the study visit. We believe that our trade finance program would be a great asset to BEI, which has strengths in short-term financing. There are two types of trade financing programs of Korea Eximbank; export factoring and forfeiting.

Our research team believes that in-depth explanation about the technicality of the two loan programs and the trade finance program is not needed in this final report because much of the information regarding those two loan programs and the trade finance program was already provided to BEI before and during the study visit. We would like to introduce a brief summary of the trade finance program of Korea Eximank and continue providing detailed information about the program even after this Knowledge Sharing Program with BEI is finished.

'Export Factoring' is the purchase of export receivables by the factor arising from trading in goods or services, before maturity dates of such receivables and without recourse[19] to the exporter, regardless of whether the debtor fails to repay its debt obligation. Export factoring is a comprehensive financial package that includes receivables financing, credit protection, sales ledger management and collection.

'Forfeiting' is the purchase of an exporter's trade receivables by the usance letter of credit at a discount on a "Without Recourse" to the exporter. Forfeiting allows an exporter to grant attractive credit terms to improve the chances of sales opportunities without tying up cash flow or assuming the risks of possible late payment or default. The exporter is fully protected against unfavorable interest and/or currency rate movement during the credit period.

19 _ The exporter is not responsible for the payment even when the foreign buyer fails to fulfill its debt obligation for its financial difficulties on maturity.

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