The 21st Century Public Policy Institute

Study Group Report

Asian Bond Markets Development and Regional Financial Cooperation

February 2011

The 21st Century Public Policy Institute

Preface

Recognizing that business actors across the region must play a leading role in creating a more vibrant Asian economy through using the vitality of the private sector and closer regional cooperation, Keidanren hosted the 1st Asian Business Summit in Tokyo on 15 March 2010. In the Summit, the participants actively discussed the subject of Asian bond markets as part of "Promoting Regional Monetary and Currency Cooperation," and agreed in the Joint Statement that "we will study the creation of needed infrastructure, such as settlement systems, guarantee agencies, rating agencies, and related legal systems."

As a follow-up, the 21st Century Public Policy Institute of Keidanren established a study group to work on the Asian Bond Market Development and Regional Financial Cooperation Project (Chairman: Mr. Kawai (Dean and CEO, ADBI), Secretariat: Daiwa Institute of Research Ltd., Members: university professors and experts from research institutes).

Members of this study group held study and discussion sessions focusing on the behavior of market participants, market practices and market infrastructure. In the process, through the cooperation of Asian business associations the study group surveyed through questionnaire Asian financial institutions and corporations. In addition, several members also visited select Asian economies to exchange views as to how the private sector can cooperate to develop and deepen Asian bond markets with a wide range of local experts from emerging Asia as part of this research project. Such experts included government policymakers, stock exchange officials, credit rating agency personnel, members of think tanks, and market participants from Hong Kong, South Korea, Indonesia, Malaysia, the Philippines, Singapore, Thailand, and India.

This report is a summary of the Asian Bond Market Development and Regional Financial Cooperation Project. Following the analysis of Asian bond markets, their progress and past policy efforts, it also provides policy proposals, including those to improve market infrastructure such as reforms of related laws, regulations, and institutions.

We hope that this report will contribute to Asian bond market development.

February 2011
The 21st Century Public Policy Institute
Project Leader
Masahiro Kawai

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Overview of the proposals

Private sector-driven initiatives

Proposal 1: Establish an Asian Credit Rating Agency (tentative name; to be abbreviated as ACRA)

Harmonize credit rating services and standards throughout Asia by establishing an ACRA

Proposal 2: Launch a private-sector version of a peer review for each economy's bond market and establish a framework for handling suggested improvements

At the private-sector level, collate matters related to bond issues and bond investments by non-residents so as to help establish a framework that promotes institutional reform in each economy

Proposal 3: Promote the development of cross-border products utilizing the Credit Guarantee and Investment Facility (CGIF)

Work to promote the development and issuing of securitization bonds by helping CGIF with cross-border issues

Proposal 4: Develop Asian corporate bond indices

Develop, publish, and use indices that reflect fluctuations in Asian corporate bond markets so that index-based financial products can be provided

Proposal 5: Provide information on cross-border bond investments

Create a system that enables investors to use information on bonds in the region when making investment decisions

Approach for public sector (international organizations, governments, and public institutions)

Proposal 6: Create an Asian Corporate Bond Fund (a public–private partnership offering)

Launch as a public–private collaborative fund for Asia that invests in Asian corporate bonds (including those for public infrastructure companies and energy companies)

Proposal 7: Introduce an Asian mutual recognition system (fund passporting) for investment trusts

Introduce an Asian mutual certification system for mutual funds, thereby promoting the integration of mutual fund markets in Asia

Proposal 8: Establish pan-Asian rules for the issuing of medium-term notes (MTNs)

Draw up a draft proposal for the establishment of pan-Asian rules for the issuing of MTNs based on the findings of a study group made up of experts and private enterprise representatives

Proposal 9: Issue bonds denominated in a basket of Asian currencies

Strive to further develop bond markets by issuing bonds denominated in a basket of Asian currencies (starting as a joint initiative with international institutions)

Proposal 10: Enhance the competitiveness of the Japanese bond market

Approach the Financial Services Agency, the Ministry of Finance, the Bank of Japan, and other public organizations to cooperate more closely on promoting the formulation and implementation of a policy to improve the functioning of Tokyo as an international financial center and the Japanese bond market

1 Introduction

1.1 Background: Structural change in the world economy

Since the onset of the global financial crisis of the late 2000s, the world economy has increasingly been driven by emerging economies—particularly those in Asia—and the role played in the current global economic recovery by advanced economies has become progressively smaller. As advanced economies such as the United States (US) and Europe still face a number of challenges in 2011—including the need to reduce their enormous private-sector debt, rebuild their financial systems, and restore fiscal sustainability—it may well take quite some time before the world economy recovers with accompanying job growth to previous levels from this financial crisis. Emerging Asian economies—such as China, India, and Association of Southeast Asian Nations (ASEAN) member states—however are now experiencing a recovery that would lead to sustainable growth, supported by the significant rise of the middle class in these economies.[1]

Given this structural change in the global economy, Japan needs to implement a new growth strategy based on collaboration with its Asian neighbors. Instead of attempting to restore growth to its economy on the back of its domestic market and resources alone, Japan should seek to rebuild its economy by benefiting from the dynamism of the emerging Asian economies. In fact, given that the entire Asian region now constitutes a vast addressable market for it, Japan should actively assist the growth of these emerging economies. Specifically, Japan needs to:

- Seek to achieve economic integration with emerging Asian economies by entering into an economic partnership agreement (EPA) that will encompass the whole Asian region;
- Provide assistance for the building of a region-wide infrastructure, including transport and energy networks, in emerging Asia;
- Assist in the transformation to an environmentally friendly, low-carboneconomy;
- Develop Tokyo into a competitive international financial center, enabling Japan to help meet the growing funding needs of emerging Asian economies;and
- Strengthen the framework for financial cooperation with emerging Asian economies in order to contribute to the sustainable development of Asian financial markets.

[1] While there are growing signs of a decoupling of the growth rates and inflation trends of emerging economies from those of advanced countries, many emerging nations are beginning to pursue tighter monetary policies at a time when advanced economies are continuing to pursue extremely loose monetary policies, causing a significant amount of capital to flow into emerging economies in Asia and the rest of the world. See Kawai and Lee (2010) for post-global financial crisis challenges in Asia.

Against this background, the further development of the region's markets for long-term bonds denominated in local Asian currencies is becoming increasingly important.

1.2 The bond market that Asian economies need

It was the 1997-98 Asian financial crisis that made the region's policymakers and market participants fully acknowledge the importance of the Asian bond market. Previously, emerging Asian economies had depended on a significant amount of foreign currency-denominated short-term loans to fund long-term domestic investment, thus giving rise to a double mismatch (i.e., both a currency mismatch and a maturity mismatch). Consequently, once foreign loans were not rolled over, the value of Asian economies' currencies started to decline sharply, bringing about an extremely serious challenge to the business activity and the financial systems of those economies. What made matters worse was that these Asian economies lacked a solid framework for the supervision and regulation of their banking systems, and their banks' balance sheets were fragile due to their unsound lending practices. It was against this backdrop that policymakers and market participants came to recognize the need to create a more balanced financial system by further developing the market for Asian currency-denominated long-term bonds, thereby channeling a huge amount of Asian savings into long-term investment in Asian currency-denominated instruments in the region. It was also believed that such a mechanism would help resolve the double mismatch problem faced by these Asian economies, and remedy their financial systems' excessive reliance on banks.

In addition to the reasons described above, there are four other reasons why the bond market has taken on greater importance for Asian economies in recent years. First, the dynamic economic growth that continues to be experienced by emerging Asian economies—such as China, India, and ASEAN member states—is expected to create increasingly large funding needs, thereby raising the significance of the role played by the bond market. Second, because it is becoming increasingly important to invest in Asian projects related to infrastructure development, environmental preservation, energy saving, and climate-change mitigation, the bond market is thought to have a meaningful role to play in facilitating fundraising throughout the region. Third, multinational corporations—particularly Japanese ones—setting up operations in emerging Asian economies have high hopes with regard to the bond market's ability to raise long-term funds in local Asian currencies. Fourth, the bond market is taking on increasing importance as a venue for relatively secure long-term investment of assets at a time when some emerging Asian economies are, on the back of the development of national social security systems, witnessing the establishment of pension management and insurance institutions, while the expanding numbers of middle-income earners are resulting in increased wealth accumulation.

According to research published by the Asian Development Bank (ADB) and the Asian Development Bank Institute (ADBI) (ADB and ADBI [2009]), the monetary value of Asian demand for infrastructure development is expected to total US$8.3 trillion between 2010 and 2020, which amounts to about US$750 billion annually. Such infrastructure will consist of energy, transportation, telecommunication, water, and sanitation systems. In that study, they argue that, in order to meet such funding needs, the launch of an Asian Infrastructure Fund (AIF), a body that will assign appropriate priorities to infrastructure projects in the Asian region that are expected to generate particularly high returns, is essential. The AIF will also channel international funds, both public and private, to investment in such projects[2]. Given the need to invest in not only infrastructure, but also environmental preservation and projects to build a low-carbon economy in emerging Asia, a tremendous amount of development funds will need to be raised. While it will be essential to obtain funding from Asian governments, governmental bodies, and various public institutions—such as the ADB, the World Bank Group, the Japan Bank for International Cooperation (JBIC), and the Japan International Cooperation Agency (JICA)—public funds alone will not suffice, making private-sector fundraising indispensable.

One move that may prove effective would be to channel even just a small portion of Japanese household financial assets, which amount to 1,450 trillion yen (including the 800 trillion yen's worth of assets that are held as deposits at banks, postal savings and other deposit-taking firms), into investment in emerging Asia. The transformation of Tokyo into an attractive international financial center should enable Japanese investors to diversify their investment portfolios. The first step toward achieving this would be to create a more conducive environment that allows Asian governments and public institutions to issue samurai bonds (yen-denominated foreign bonds issued in Japan), and then to introduce a framework for the issuance in Japan of bonds denominated in the currencies of emerging Asia, thereby enabling Japanese investors to invest in foreign currency-denominated bonds. With Asia likely to experience intensifying competition among its various financial markets, such as those of Hong Kong and Singapore, and with Shanghai expected to join their ranks, a lack of reform effort by Japan will result in the nation's financial markets being left behind, which in turn would result in the erosion of its established position. In addition, Japan must encourage emerging Asian economies to develop markets for local currency-denominated bonds that will have a special appeal to Japanese investors. To promote such a development, it will be vitally important that issues that exist in those economies" bond markets—namely, the lack of liquidity arising from the various regulations and restrictions that are currently in place and the obstacles to efficient cross-border transactions caused by such red tape and market practices—be addressed.

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[2] Covering various locations throughout Asia, such infrastructure investment is anticipated to expand total real income in developing Asian countries by US$13 trillion from 2010 onward. It is also desirable to establish a Pan-Asian Infrastructure Forum, with the aim of coordinating the integration of existing domestic infrastructure development plans and sub-regional infrastructure development plans toward achieving a "seamless" Asia.

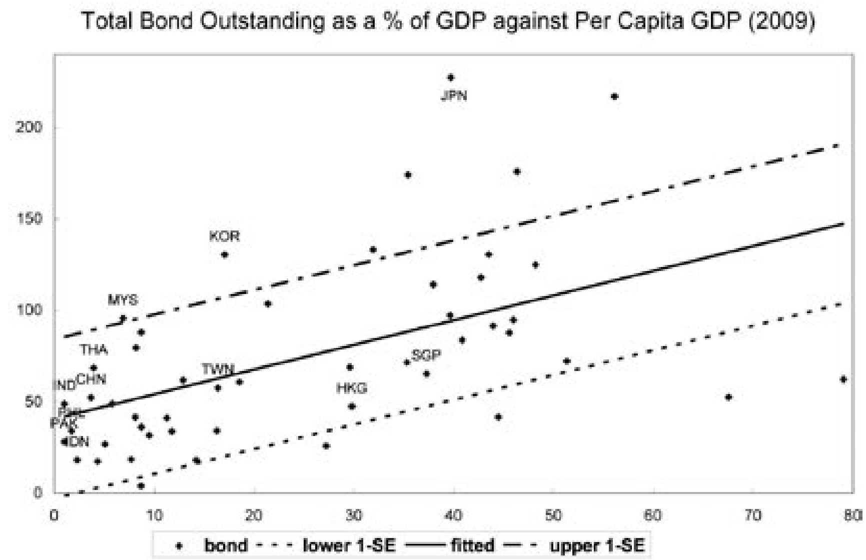
This further development of the Asian bond market will allow private enterprises to raise long-term funds for capital spending. In addition, the transformation of local currency-denominated bonds into a vehicle for long-term, secure investment will benefit not only the household sectors of the Japanese, South Korean, Hong Kong, and Singaporean economies, which are now experiencing a rapid aging of their populations, but also those of the Chinese and Thai economies, which face the prospect of their populations aging in the near future. As long-term bonds would provide pension funds and other institutional investors with important asset investment opportunities, it is essential to ensure the further development and expansion of this market.

1.3 Development of the Asian bond market

It is clear that, to date, steady progress has been achieved in the development and deepening of the Asian bond market. This market is supported by both the Asian Bond Markets Initiative (ABMI), which focuses on the supply side of the market, and the Asian Bond Fund (ABF) project, which focuses on the demand side. The former represents an initiative undertaken by finance ministers of ASEAN+3 countries (i.e., the ten ASEAN member states plus China, Japan and Korea), while the latter represents one undertaken by the Executives' Meeting of the East Asia Pacific Central Banks (EMEAP), an organization made up of eleven central banks in East Asia and the Pacific. The development and promotion of the Asian bond market attracted strong interest from participants in the Asia-Pacific Economic Cooperation (APEC) Finance Minister Process,.

These policy efforts greatly contributed to the expansion of the primary market for sovereign bonds and quasi-sovereign bonds, allowing market participants to construct a benchmark yield curve. Figure 1.1 plots the data available for the total local currency-denominated bonds outstanding as a percentage of GDP for 2009 in countries and economies around the world, which include the OECD countries and major emerging economies (vertical axis) against per capita GDP for the same year (horizontal axis). The solid line represents the average for all samples and dotted lines show one standard deviation away, upward and downward, from the average. These lines indicate that the higher the per capita income level of a nation (or territory) is, the deeper its bond market becomes. They also highlight that the bond market size in South Korea and Malaysia is significantly greater than the sample average. A similar graph (not included) for total corporate bonds outstanding would again reveal that South Korea and Malaysia are ahead of the pack, while countries like China, India, Indonesia, and the Philippines are trailing behind the international average. This confirms that, despite the Asian bond market's notable development to date, the level of bond market development still varies greatly from one economy to another.

Figure 1-1 Development and Deepening of Bond Markets



Source: BIS, IMF.

Another finding we made was that the level of Asian cross-border bond transactions conducted within Asia is extremely low. Data for 2008 would show that 53% of cross-border bond transactions undertaken by Asian investors were for investment in North American and European bonds, with a mere 20% for investment in Asian bonds. This is because the Japanese investors, the biggest investor in the region, are far from active investing in emerging Asian bonds. This is in stark contrast to the situation in Europe, where as much as 73% of cross-border bond investment is made in European bonds, pointing to a very high proportion of intra-regional bond investment in comparison with Asia. While Asia's percentage of intra-regional bond investment compares favorably with that of North America (14%), it should be noted that in North America, US bond investors' exposure to Canada and Mexico is low as US investment is focused on global issues and, thus, its investment in the region tends to be small. Overall, while intra-Asian bond investment has increased in recent years, it has yet to reach a meaningful level, leaving a significant potential upside for the coming years.

One initiative under the ABMI's policy efforts that has achieved remarkable progress is the task of establishing the Credit Guarantee and Investment Facility (CGIF), a fund whose objective is to provide credit enhancement to private issuers in the Asian region. The launch of the CGIF is designed to boost the issuance of corporate bonds with relatively low local credit ratings, thus facilitating increased activity in the primary corporate bond market. Another initiative that has made significant headway is the project undertaken by the EMEAP to set up the ABF, with an emphasis on creating an environment that will help private-sector financial institutions to introduce investment trusts that track the Asian bond market.

Progress is also being made in efforts to build a market infrastructure for cross-border securities settlement, which so far has been conducted by international securities settlement system operators (such as Euroclear and Clearstream) as well as by US and European financial institutions which provide global custodian services. While such conventional international settlement methods are efficient, Asian investors relying on such services are exposed to significant risk arising from time zone differences. This is known as Herstatt Risk. Time zone differences that exist for fund payment and securities settlement make it challenging to recover money from a counterparty financial institution that has run into financial difficulties or gone bankrupt during the creditor's non-business hours. Given the increasing volume of cross-border securities transactions that are being conducted within Asia, it is necessary to establish an Asia-wide settlement system that will allow investors to settle transactions during Asian business hours, and so further promote sound cross-border securities transactions.[3]

1.4 The significance of private-sector financial cooperation in Asia

As has been described above, regional financial cooperation aimed at developing the Asian bond market has, to date, been driven by public-sector groups such as the ASEAN+3 finance ministries and the EMEAP central banks. Going forward, however, efforts to strengthen the framework for such financial cooperation will have to be undertaken mainly by private-sector entities (i.e., issuers, investors, intermediary firms, securities exchanges, and credit rating agencies) that will be able to make use of various private-sector ideas in the operation of the ABF and the ABMI. The newly launched ASEAN+3 Bond Market Forum is expected to play an important role in presenting such private-sector ideas.

One challenge that will need to be addressed in the coming years is the further development and deepening of the Asian bond market and the promotion of bond market integration in the Asian region. To develop and deepen bond markets, a series of measures has to be taken, such as expanding corporate bond markets, diversifying investor base which would bring in market liquidity, liberalizing cross-border capital transactions, and strengthening and harmonizing market infrastructure such as regulations, market rules, and practices. Therefore, policy action must be taken with a focus on these issues.

To promote regional integration of Asian bond markets, it will be essential that capital flow regulations and foreign exchange controls be relaxed, and that rules, systems, and accepted market practices be harmonized. Given this, various efforts

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[3] There are also continuous discussions on other issues such as cross-border issuance and investment, enhancing credit ratings, and securitization.

should be made to promote cross-border bond investment within the Asian region, thus contributing to regional integration of Asian bond markets. For market practice, it is particularly important that the private sector should strengthen regional financial cooperation and make policy recommendations to policymakers (governments, central banks, and international organizations).

2 Current status of the Asian financial and capital market

2.1 Overview of the Asian bond market

2.1.1 Post-Asian financial crisis developments

According to market experts, one of the causes of the Asian financial crisis was the "double mismatch" problem, a mismatch arising from foreign currency-denominated short-term borrowings from developed nations to meet the local currency-denominated funding needs for long-term domestic investment proceeds of. The recognition of this problem caused an increasing number of policymakers and experts to acknowledge the need to reduce foreign borrowings and strengthen their bond markets by channeling domestic individual savings. That led to the establishment of the ABMI and the ABF, and develop initiatives to grow the Asian bond market through collaboration among countries in the region (for details, see Chapter 5). As a matter of fact, as shown in Figure 2-1, both government and corporate bonds market in Asia have been growing since the Asian financial crisis, with their combined values having grown nearly ten-fold to US$5.57 trillion as of June 2010, compared with US$0.56 trillion at December 1997.

Figure 2-1 Emerging Asian bond market

(bil USD)

	Dec. 1997 (A)	Jun. 2010 (B)	(B)/(A)
Government bond	246	3,313	13.4
Financial institutions bond	173	1,276	7.4
Corporate bond	148	985	6.6
Total	568	5,575	9.8

Note 1: Including the following countries/economies, China, Taiwan, Hong Kong, Korea, Indonesia, Malaysia, the Philippines, Singapore, Thailand, and India.
Note 2: Including only bonds which are issued domestically (Not including the bonds which are issued in offshore).
Source: BIS; compiled by DIR.

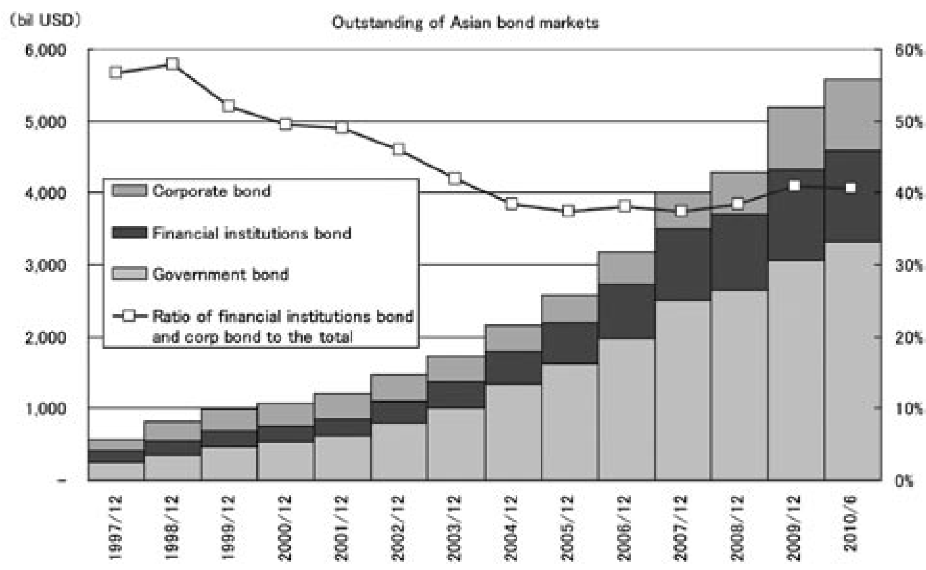
The increased issuance of government bonds is attributable to the increased fiscal spending by the those nations suffered from the financial crisis in rescuing financial institutions and stimulating economic recovery, as well as to the strategic bond issuance undertaken by Singapore in an effort to provide greater liquidity to the market. As for corporate bonds, the increased issuance has naturally been driven by growing fundraising needs resulting from economic development. Another factor has presumably been the increasing interests in fundraising through issuance of corporate bonds, as a substitute for bank borrowings, at a time when the superior position of banks as funding providers has been eroded by the evolution of the financial services industry (see Chapter 3 for a detailed theoretical study of fundraising methods).

In terms of growth rate, government bond issuances have been outpacing corporate bond issuance because government bonds tend to drive the early stages of bond market expansion. Such increased issuance of government bonds leads to the creation of benchmarks, thereby setting the positive environment for corporate bond issuances in the primary market. Consequently, the matured government bond market is a prerequisite for the growth of the corporate bond market.

When the global financial crisis that erupted in 2007, the credit contraction resulted in the widening of credit spreads but the value of total bonds outstanding in Asia increased rather than decreased (Figure 2-2). It demonstrates that the bond market serves as a distribution/allocation system for funds and a safe haven for investment funds even in times of financial market turmoil.

One observation is that, after bottoming out in the 2005 to 2007 period, financial institutions bond and corporate bonds, as a percentage of the overall bonds outstanding, have been rising, probably due to the effect of the global financial crisis that broke out in 2007. However, that may be an indication that, with the government bonds fulfilled their roles of creating yield benchmarks to a great extent, the Asian bond market is gradually shifting from a phase from government bond driven to a corporate bond driven growth.

Figure 2-2 Bond outstanding expanded in also 2007 (global financial crisis)



Note 1: Including the following countries/economies, China, Taiwan, Hong Kong, Korea, Indonesia, Malaysia, the Philippines, Singapore, Thailand, and India.
Note 2: Including only bonds which are issued domestically (Not including the bonds which are issued in offshore).
Source: BIS; compiled by DIR.

2.1.2 Status of the bond markets in different Asian countries

A broad look at the overall market landscape in Asia shows that since the Asian financial crisis bond markets in the region have continued to grow, but the degree of bond market evolution and the pattern of bond market-related developments vary from one country to another (for country-by-country bond market size, see Figure 2-3 and Figure 2-4). While in 1997 there was a wide divergence among Asian nations in terms of government bond market value as a percentage of GDP, such divergence has been narrowing recently to a 30% to 50% range or so. On the other hand, Korea, Malaysia and Thailand have been showing an increasing corporate bond market value as a percentage of GDP, respectively, while Indonesia and the Philippines have not, pointing to a significant divergence that exists among different Asian economies in the context of bond market evolution.

Shown below is an outline of the history of the evolution of individual Asian countries' bond markets:

(1) China: Given that there were no outstanding corporate bonds in the country in 1997, China's corporate bond market has undergone a remarkable evolution and development, supported by the Chinese authorities' move to deregulate the issuance of commercial papers (CPs) and asset-backed securities (ABSs). Further support was provided by allowing medium term notes (MTNs)[4] issuance in 2008, as part of the measure that allowed the issuance of a diverse range of bonds. Also contributing to the evolution of the nation's corporate bond market has been the liberalizing such other regulations as those on issuance procedures. As a result of such developments, China's bond market now accounts for nearly half of the overall Asian bond market.

(2) Hong Kong: The bond market is as efficient and transparent as that of Singapore. In 1990, inaugural exchange fund bills were issued, as a means of maintaining its currency board system and developing the local currency-denominated bond market. Such exchange fund bills were issued with long maturities in order to develop the interest rate benchmarks. Separately, in 2009 the Chinese government issued RMB-denominated government bonds with the objective of enhancing the Hong Kong financial market's international position and internationalizing the RMB.

(3) Korea: While the Korean corporate bond market had been well developed by 1997, its subsequent growth since the early 2000s has been mediocre, due to the increasing credit uncertainty caused by the collapse of the Daewoo Group in 1999 and the accounting scandal of the SK Group in 2003. Even today, such past developments cast a shadow over many aspects of the market, including corporate bond maturities. This can be seen from the view (expressed by a local industry source in an interview) that "there is no company in Korea that can claim it won't default over the next ten years."

(4) Singapore: The Singapore bond market is as efficient and transparent as that

[4] For details of MTN, see the column shown at the end of this section.

of Hong Kong. The State continues to issue government bonds, despite the existence of a fiscal surplus, for the purpose of maintaining yield benchmarks and promoting bond transaction activities.

(5) Indonesia: Prior to the outbreak of the Asian financial crisis, Indonesia's bond market had been extremely small in size, as the government had been not allowed to issue government bonds and was obliged to maintain balanced budget. Since the issuance of government bonds aimed at helping bank recapitalization in 1999, however, the country's bond market has started to undergo development, and this in turn has resulted in the expansion of both government and corporate bonds. Meanwhile, the issuance of Islamic bonds started in 2008 in the country.

(6) Malaysia: Since 1997, the Malaysian bond market has been growing reasonably well in terms of its size as a percentage of national GDP. With the government continuing to focus on the expansion of Islamic financial markets, the Malaysia Stock Exchange became the world's largest stock exchange in terms of total value of listed Islamic bonds in 2009.

(7) The Philippines: The Philippines' corporate bond market remains small, although the government bonds had been issued even before the onset of the Asian financial crisis for the purpose of funding fiscal deficit. In 2005, a bond exchange was established to serve as an electronic secondary market for government bonds, resulting in increased liquidity of government bonds.

(8) Thailand: During the period from 1987 to 1997, no government bonds were issued in Thailand. But, after the outbreak of the Asian financial crisis, the development of the country's bond market was made, which led to the growth of the market for both government and corporate bonds. The issuance of Baht-denominated bonds by non-resident companies has been deregulated.

(9) Vietnam: Although Vietnam's bond market is still small in size, it is experiencing a rapid expansion. In 2003, a capital market roadmap for the period until 2012 was formulated by the State Securities Commission in cooperation with the ADB. The roadmap's planned initiatives include the introduction of the primary dealer system and the liberalization of capital inflow regulations, and the establishment of a local credit rating agency.

(10)India: Although India was insulated from the impact of the Asian financial crisis due to its stringent capital control regulations, such market regulations hinder the country's corporate bond market to grow and the market remains small.

Figure 2-3 Country-by-country bond market size

(bil USD)

	Dec. 1997				Jun. 2010			
	Bond Outstanding				Bond Outstanding			
		Gov't bond	Financial Institutions bond	Corp bond		Gov't bond	Financial Institutions bond	Corp bond
China	83.6	45.1	38.5	–	2,843.0	1,591.1	808.7	443.2
Hong Kong	41.1	13.1	24.4	3.6	117.1	85.9	19.3	11.9
Taiwan	105.2	32.1	23.8	49.4	225.3	135.6	31.9	57.8
Korea	153.2	32.5	52.6	68.2	1,049.1	444.8	275.6	328.7
Singapore	23.7	13.1	7.9	2.7	115.3	91.4	21.4	2.4
Indonesia	4.3	0.9	1.4	1.9	105.5	95.4	4.7	5.4
Malaysia	54.5	19.4	22.9	12.3	205.4	105.0	42.7	57.7
The Philippines	16.7	16.6	–	0.1	58.1	55.7	–	2.4
Thailand	10.4	1.4	0.0	9.0	201.3	144.0	3.1	54.2
India	75.2	72.4	1.7	1.2	654.6	564.1	69.0	21.4
Emerging Asia Total	568.1	246.5	173.2	148.5	5,574.6	3,313.0	1,276.5	985.2
Japan	4,148.5	2,284.3	1,405.3	458.9	12,456.9	10,536.0	1,116.2	804.8
The United States	11,604.6	4,455.7	5,288.7	1,860.3	25,081.5	10,326.9	11,909.1	2,845.5
England	701.4	465.4	203.6	32.4	1,549.9	1,223.2	306.4	20.4

Source: BIS; compiled by DIR.

Figure 2-4 Country-by-country bond market size (as a percentage of GDP)

	Dec. 1997				Jun. 2010			
	Bond Outstanding				Bond Outstanding			
		Gov't bond	Financial Institutions bond	Corp bond		Gov't bond	Financial Institutions bond	Corp bond
China	9%	5%	4%	–	60%	33%	17%	9%
Hong Kong	23%	7%	14%	2%	56%	41%	9%	6%
Taiwan	35%	11%	8%	16%	63%	38%	9%	16%
Korea	28%	6%	10%	13%	131%	56%	34%	41%
Singapore	25%	14%	8%	3%	71%	56%	13%	1%
Indonesia	2%	0%	1%	1%	20%	19%	1%	1%
Malaysia	54%	19%	22%	12%	99%	51%	21%	28%
The Philippines	20%	20%	–	0%	37%	35%	–	2%
Thailand	7%	1%	0%	6%	76%	54%	1%	20%
India	18%	18%	0%	0%	53%	45%	6%	2%
Emerging Asia Total	19%	8%	6%	5%	64%	38%	15%	11%
Japan	97%	54%	33%	11%	247%	209%	22%	16%
The United States	139%	53%	63%	22%	176%	72%	83%	20%
England	52%	34%	15%	2%	71%	56%	14%	1%

Note: Using GDP data of end 2009, when calculating the bond market size as a percentage of GDP in Jun. 2010.
Source: BIS, IMF; compiled by DIR.

Liquidity in Asian bond markets is generally lower compared with bond markets in developed nations. Such low levels of liquidity will cause potential impediments to bond market growth in the future. The lack of secondary market capacity to absorb supply may present obstacles to bond trading by investors. Figure 2-5 shows bond trade turnover by country and highlights the level of liquidity in each market. Individual markets' trade turnover cannot be directly compared to each other because bond maturity structure differs from one market to another and trade turnover is also dependent on the maturity of bonds. (As a case in Hong Kong, the unusually high trade turnover for government bonds is due to the high volume of short-term trading of exchange fund bills, being used for operating the currency board system.) Another point to note is that in the way of introduction of new product (e.g. MTN's deregulation by the Chinese government) the changes in the bond maturity structure makes it difficult to directly compare different markets' bond trade turnover in a chronological way.

Figure 2-5 Bond trade turnover by country (period: quarterly)

	Government bond		Corporate bond	
	Mar. 2005	Sep. 2010	Mar. 2005	Sep. 2010
China	0.25	0.99	0.08	1.41
Hong Kong	12.30	34.71	0.06	0.05
Korea	0.86	1.19	0.16	0.25
Indonesia	0.19	0.27	0.06	0.13
Malaysia	0.41	0.65	0.24	0.07
The Philippines	1.32	0.99	N.A.	N.A.
Singapore	0.68	1.01	N.A.	N.A.
Thailand	0.42	0.83	0.05	0.04
Japan	1.16	1.18	0.19	0.07

Source: AsianBondsOnline; compiled by DIR.

Among other indicators showing the level of liquidity, trading spreads deserve an attention (Figure 2.6). Trading spreads are considered as one of indications of market liquidity since a narrow trading spread keeps transaction costs low, increasing liquidity as a result.

Figure 2-6 Trading spread in each countries/economies

(bps)

	Gov't bond		Corp bond	
	2000	2010	2000	2010
China	15.0	2.2	n.a.	5.7
Hong Kong	3.5	5.1	8.0	12.5
Korea	1.8	1.1	5.0	2.6
Indonesia	100.0	31.7	100.0	99.7
Malaysia	4.9	2.6	15.0	16.0
The Philippines	47.5	3.1	40.0	30.5
Singapore	1.6	3.0	10.5	10.4
Thailand	2.8	3.1	10.0	11.1
Vietnam	n.a.	13.2	n.a.	25.0

Source: ADB "Asia Bond Monitor – 2010 November" and "Asia Bond Monitor – 2006 November"; compiled by DIR.

Looking at the liquidity of government bonds in individual markets, trade turnover has been growing in all countries except the Philippines, pointing to the overall trend of growing liquidity in such markets. Trading spread in the entire Asian region is continuing to improve despite widening spread witnessed in markets like Hong Kong, Singapore and Thailand.

On the other hand, overall corporate bond liquidity has not shown a meaningful improvement. With the exception of China, Korea and Indonesia, trade turnover in other countries has declined (China's increased trade turnover has been due to MTNs whose maturities are relatively short), and trading spread has been visibly improving only in Korea and the Philippines.

Separately, a comparison of trading spreads in individual markets shows wide spreads in Indonesia and Vietnam, for both government and corporate bonds, leaving much room for improvement. On the other hand, trading spreads in Malaysia and the Philippines are narrow for government bonds but wide for corporate bonds, meaning these countries' corporate bond markets must improve liquidity.

The improvement in government bond liquidity described above has not led to a meaningful improvement in corporate bond liquidity. It is probably because that the issuance size of corporate bond has not been sufficiently large enough for institutional investors whose investment limit could be large.

Column:

MTN

The MTN (Medium Term Note) program is a scheme by which bonds may be issued in a flexible manner, according to the issuer's funding needs. It can be used by Japanese companies, including financial institutions and major non-financial companies, as a means of raising a large amount of funds denominated in foreign currencies. To date, the issuance of MTNs has been made mainly in London and European market (EMTN market. The European MTN program was once regulated in compliance with the self-regulated rules of the ICMA [International Capital Market Association] rather than by governmental supervisory authorities. Since 2000, the FSA of the UK has been acting as the listing authority under the Financial Services and Markets Act 2000.

Meanwhile, when European market encountered the market turmoil by global financial crisis in 2008, local currency-denominated MTNs was issued in Asia in which the issuance cost was competitive when swapped to US$.

In China, the Bank of China sanctioned the issuance of Medium Term Notes (MTN) in the nation's inter-bank bond market in April 2008 under the self-regulated rules prescribed by a self-regulatory body (the China Inter-bank Market Dealers Association). The regulatory liberalization in turn led to a series of issuances of three- to five-year maturity MTNs by those companies mainly from energy/power, industrial, basic materials and real estate business operators. China boasts a level of growth in MTN outstanding that puts it ahead of the pack (Figure 2-7). MTN became a major form of debt issuance in China by private sector surpassing corporate bond.

In Malaysia at the end of 2009, as much as 59% of the corporate bonds outstanding in the nation were Islamic bonds, of which 52% were Islamic MTNs.

Figure 2-7 Breakdown of corporate bond outstanding in China

(bil RMB)

	Mar. 2008	Dec. 2008	Dec. 2009
Commercial bank debenture	314.5	388.7	588.4
Gov't-owned corporation bond	376.1	521.9	720.2
Private company corp bond	92.8	158.4	376.9
CP	371.6	420.3	456.1
ABS	37.2	55.1	39.9
MTN	0.0	167.2	862.2

Source: Asian Development Bank, Asia Bond Monitor

In Indonesia, in response to the increasing MTNs issuance, is in the process of revising its regulations, involving an initiative undertaken jointly by the country's stock exchange and regulatory body for enhancing issuer transparency for listing MTNs, categorized as private placement bonds in the country.

2.2 Current status of the equity market and the banking sector

Figure 2-8 and Figure 2-9 show the size and the value of the banking sector, stock market and bond market as a percentage of national GDP for selected countries, respectively.

Although the government sector tends to raise fund through issuance of government bonds rather than bank loans, the corporate sector tends to raise fund by predominantly bank borrowings instead of corporate bonds and financial institutions bonds,

Of note here is the fact that, while the total balance of bank loans has been larger than that of bonds outstanding, in most nations the bond balance growth has outpaced that of bank loans over the past eight-year. Though the Asian bond market is still in an early development stage, its growth will continue to be driven by the growth of government bonds, but the above data suggests that the Asian corporate bond market has been also undergoing steady development.

Equity market capitalization as a percentage of GDP shows that Hong Kong and Singapore have been ahead of the rest of other Asian countries (Figure 2-9), presumably due to the large number of foreign companies listed on exchanges in those countries. Hong Kong and Singapore have largely cemented their positions as Asian financial centers, and the high growth potential for enterprises that want to list on their exchanges could lead to the growth of capital market in the region.

Figure 2-8 Size of banking sector, equity and bond markets (amount of money)

(bil USD)

	2001/12						
	Bank loan outstanding		Bond outstanding			Equity market cap	Total
	To gov't	To private	Gov't bond	Financial institutions bond	Corp bond		
China	133	1,472	133	102	4	526	2,369
Hong Kong	27	252	16	22	7	506	831
India	85	138	128	0	2	259	612
Indonesia	67	34	47	1	1	23	173
Japan	1,778	7,516	3,631	1,235	614	2,265	17,038
Korea	17	396	130	70	239	194	1,047
Malaysia	8	139	32	13	22	119	333
The Philippines	10	30	24	n.a.	0	21	85
Singapore	22	100	29	15	6	117	289
Thailand	15	144	21	0	15	36	231

(bil USD)

	2009/12						
	Bank loan outstanding		Bond outstanding			Equity market cap	Total
	To gov't	To private	Gov't bond	Financial institutions bond	Corp bond		
China	557	6,349	1,460	752	354	3,573	13,045
Hong Kong	84	333	70	19	12	2,305	2,822
India	295	656	564	69	21	2,524	4,130
Indonesia	62	164	88	5	5	215	539
Japan	3,968	8,571	9,654	1,085	783	3,306	27,367
Korea	60	971	426	331	311	835	2,933
Malaysia	32	258	94	41	55	289	769
The Philippines	23	61	53	n.a.	2	86	226
Singapore	58	195	88	22	3	481	847
Thailand	34	292	126	3	52	177	683

(times)

	2001/12 → '2009/12						
	Bank loan outstanding		Bond outstanding			Equity market cap	Total
	To gov't	To private	Gov't bond	Financial institutions bond	Corp bond		
China	4.2	4.3	11.0	7.4	87.1	6.8	5.5
Hong Kong	3.1	1.3	4.3	0.8	1.7	4.6	3.4
India	3.5	4.8	4.4	396.6	12.3	9.7	6.8
Indonesia	0.9	4.9	1.9	6.3	4.0	9.3	3.1
Japan	2.2	1.1	2.7	0.9	1.3	1.5	1.6
Korea	3.4	2.4	3.3	4.7	1.3	4.3	2.8
Malaysia	4.0	1.9	2.9	3.1	2.5	2.4	2.3
The Philippines	2.3	2.0	2.2	n.a.	4.2	4.2	2.7
Singapore	2.6	1.9	3.0	1.5	0.5	4.1	2.9
Thailand	2.3	2.0	6.0	17.6	3.5	4.9	3.0

Source: AsianBondsOnline, IMF, BIS, SEBI; compiled by DIR.

Figure 2-9 Size of banking sector, equity and bond markets (as a percent of GDP)

	2001/12						
	Bank loan outstanding		Bond outstanding			Equity market cap	Total
	To gov't	To private	Gov't bond	Financial institutions bond	Corp bond		
China	11%	123%	11%	8%	0%	44%	198%
Hong Kong	16%	149%	10%	13%	4%	299%	491%
India	18%	29%	27%	0%	0%	55%	129%
Indonesia	14%	7%	10%	0%	0%	5%	37%
Japan	38%	161%	78%	26%	13%	49%	365%
Korea	3%	74%	24%	13%	45%	36%	196%
Malaysia	8%	148%	34%	14%	23%	127%	355%
The Philippines	13%	40%	31%	–	1%	27%	112%
Singapore	24%	108%	31%	16%	7%	127%	311%
Thailand	12%	117%	17%	0%	12%	29%	188%

	2009/12						
	Bank loan outstanding		Bond outstanding			Equity market cap	Total
	To gov't	To private	Gov't bond	Financial institutions bond	Corp bond		
China	12%	133%	31%	16%	7%	75%	274%
Hong Kong	40%	159%	33%	9%	6%	1104%	1351%
India	22%	49%	42%	5%	2%	189%	309%
Indonesia	5%	13%	7%	0%	0%	17%	43%
Japan	79%	170%	191%	21%	16%	65%	542%
Korea	7%	121%	53%	41%	39%	104%	367%
Malaysia	15%	125%	45%	20%	26%	139%	371%
The Philippines	15%	39%	33%	–	1%	54%	142%
Singapore	36%	119%	54%	14%	2%	295%	519%
Thailand	13%	110%	47%	1%	19%	66%	256%

(times)

	2001/12 → '2009/12						
	Bank loan outstanding		Bond outstanding			Equity market cap	Total
	To gov't	To private	Gov't bond	Financial institutions bond	Corp bond		
China	1.1	1.1	2.8	1.9	21.9	1.7	1.4
Hong Kong	2.5	1.1	3.5	0.7	1.3	3.7	2.8
India	1.2	1.7	1.6	140.5	4.4	3.4	2.4
Indonesia	0.3	1.8	0.7	2.4	1.5	3.5	1.2
Japan	2.1	1.1	2.5	0.8	1.2	1.3	1.5
Korea	2.3	1.6	2.2	3.1	0.9	2.9	1.9
Malaysia	1.8	0.8	1.3	1.4	1.1	1.1	1.0
The Philippines	1.1	1.0	1.1	n.a.	2.0	2.0	1.3
Singapore	1.5	1.1	1.7	0.9	0.3	2.3	1.7
Thailand	1.0	0.9	2.8	8.1	1.6	2.3	1.4

Source: AsianBondsOnline, IMF, BIS, SEBI; compiled by DIR.

In Korea, while companies have continued to raise funds mainly through bank loans, the outstanding value of Korea's corporate bonds and financial institutions bonds market compares favorably with the outstanding value of bank loans in that nation. The total value of Korea's bond market (financial institutions bonds plus corporate bonds) is a little more than 70% of the outstanding balance of bank loans (to the private sector) in the country, and slightly less than 80% of its equity market capitalization. All in all, Korea's corporate bond market is well developed among other Asian counterparts in terms of the level of growth of the corporate bond and financial institutions bond market, in comparison to other financial markets such as the stock market and bank market.

On the other hand, the corporate bond markets in Indonesia and the Philippines show low level of bank loans outstanding as a percentage of GDP, as shown in a country-by-country comparison. There seems to be a link between the bank loans outstanding as a percentage of GDP and Marshallian k (money supply divided by nominal GDP),[5] an indicator for financial maturity. Viewed from the perspective of the latter, the figures for Indonesia and the Philippines may suggest that there is much room for improvement for these two nations' bank financing market, not to mention their bond markets.

As described above, there exists diversity among different Asian countries, with Hong Kong and Singapore characterized by their developed equity markets, Korea by its developed corporate bond and financial institutions bond market, and Indonesia and the Philippines by their still-limited bank financing.

2.3 Credit rating system in Asia

2.3.1 Asian capital (corporate bond) market[6]

The practical purpose of credit rating is to help investors identify the credit risk of debt obligations arising from bond issuance (the risk of the bonds not being redeemed pursuant to the provisions of the bond contracts) as accurately as possible prior to the bond investment with the aim of managing investment. On the other hand, the economical purpose of credit rating is to eliminate information asymmetric on credit risk, thereby enhancing interest rate structure in the capital market (interest rate composition commensurate with credit risk premium) and market efficiency (the elimination of inefficient agency costs) while facilitating cross-border capital flows.

[5] Naturally, the value is not equal to Marshallian k because the loans outstanding and deposit balance differ from each other, and other money supply factors such as cash are not incorporated.

[6] This section is focused on the credit rating system of the Asian region, excluding the Japanese credit rating system and agencies.

Companies in many Asian countries externally raise funds, predominantly through bank loans, for the purpose of funding both operating expenses and capital spending. Historically, there has been an established pattern by the Asian banks that extend financing to a borrower company based on a special focus on the bank-customer relationship. As a result, the following types of inefficiency related to the raising of long-term funds and their investment may exist. Namely, there is a concern that a company may not be able to sufficiently manage its corporate financial management operations in an effective manner and incur refinancing risk from term mismatch as a result from funding, spending and long-term operating expenses through short- to medium-term bank loans. If medium- to long-term loans are being provided by the bank, the bank becomes experience the balance sheet stress associated with the effort to compensate for such mismatch which may have a negative impact on the bank business management. As for the capital investment, the limited availability of domestic long-term fund investment vehicles, such as life insurance and pensions, may lead a company into investing a significant amount of funds in instruments denominated in US dollars and other foreign currencies, thereby incurring foreign exchange risk. In consideration of Asian nations' capital markets whose roles to channel long-term funds to entities in need of funding, , countries like Malaysia, Korea and Thailand have experienced a sharp rise in their total corporate bonds outstanding as a percentage of GDP since the Asian financial crisis (1997 to 1998). Further study is needed to find out whether the rise in corporate bond issuance was due to increase in substitute financing instruments for bank loans(i.e. underwrite private placement issue to avoid single borrower's limit) or the result from the growth of bond market with improved information asymmetries.

A brief look at the current status of corporate bonds markets in 11 nations, excluding Japan,[7] among 15 member nations of the ACRAA[8], an organization consisting of Asian credit rating agencies[9] that distribute credit risk information, shows that the total corporate bonds outstanding as a percentage of GDP is high in Malaysia (40.9% in 2007), Korea (24.0%), Thailand (14.4%) and Taiwan (9.2%) with other Asian countries showing a 3% range or lower. While in five Asian nations (Korea, China, Indonesia, Uzbekistan, Bangladesh), corporate bonds are issued on a merit system base due to strong government regulations relating to corporate bond

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[7] The 11 nations/territories, excluding Japan, consist of Malaysia, South KoreaKorea, Thailand, Taiwan, India, China, Indonesia, the Philippines, Pakistan, Uzbekistan and Bangladesh. This report's description of the capital markets and the credit rating systems and agencies of these 11 nations/territories is partly based on "Structuring a Credit Risk Rating Model in Asia," edited by Yoshitaka Kurosawa, to be published (in English) in 2011 by the Center for China and Asian Studies, College of Economics of Nihon University

[8] The Association of Credit Rating Agencies in Asia (ACRAA) is an organization of Asian credit rating agencies established in 2001 with the assistance of the Asian Development Bank (ADB), for the purpose of strengthening cooperation among credit agencies in East Asia. The ACRAA is composed of 28 credit rating agencies from 15 countries/territories, including Japan (as of November 2010).

[9] In Japan, credit rating service providers are usually referred to as "credit rating companies," as they are typically ordinary joint-stock companies. However, the term "credit rating agency" is used in this section, since credit rating recently has come to take on an increasingly public significance due to the introduction of relevant regulatory laws.

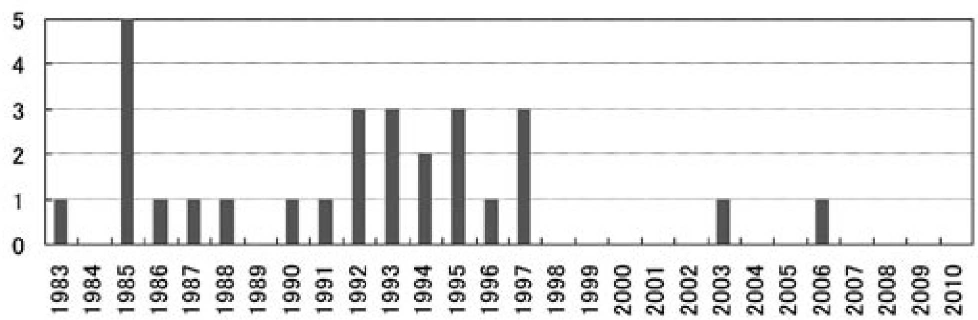
issuance, financial regulators in each of these nations have taken a positive stance on the issuance of corporate bonds and the development of the corporate bond market. On the other hand, in seven countries (India, China, Indonesia, the Philippines, Pakistan, Uzbekistan and Bangladesh), there is a high level of information asymmetric relating to credit risk, despite the existence of local credit rating agencies, making it necessary for these nations to enhance their risk analysis capability and credit rating systems.

2.3.2 Credit rating agencies in Asia

In 1909, Moody's of the US was set up as the first credit rating agency. Over the 60 years or so following the Moody's launch, credit rating services were developed only in the US. It was not until the establishment of CBRS and DBRS in Canada in 1972, Extel in the UK in 1978, and a credit rating agency in Australia in 1981, when credit rating services came to existence in non-US locations.[10] A series of new credit rating agencies were set up outside of the US, and the number of credit rating agencies in the world totaled 112 (in 46 countries/economies). Among them, 38 agencies are located in Asia (15 countries/economies).[11]

While the first credit rating agency launched in Asia is believed to have been KRC of Korea, (1983), the establishment of five credit rating agencies in 1985 in Japan, both local and foreign-affiliated,[12] coincided with a surge in interest in

Figure 2-10 Number of credit rating agencies in Asia



Note: Showing 28 agencies, of which foundation date can be obtain
Source: Figure 1-11

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[10] See Kurosawa [1985], Page 167 to 191.

[11] For a list of Asian and world credit rating agencies, see the official website of NPO Fair Rating: http://www.fair-rating.jp

[12] While the Japanese credit rating agencies previously consisted of the Japan Bond Research Institute (currently R&I), the Japan Credit Rating Agency (JCR) and Nippon Investor Service (currently R&I), with foreign-affiliated agencies consisting of Moody's Japan and Standard & Poor's Tokyo, the three Japanese agencies are represented in the figures as only two entities: R&I, which was created due to the 1998 merger of the Japan Bond Research Institute, and Nippon Investor Service. Fitch of the US opened its Tokyo office in 1989. Foreign-affiliated credit rating agencies are not included in the list of Asian credit rating agencies shown in the figures. Hence, the credit rating agencies established in 1985 shown in the figures consist of four entities, including the two Japanese agencies, Korea's KIS and the Philippines' CIB.

Figure 2-11 Asian credit rating agencies (as of Nov. 2010)

Country	Name of Rating Agency
Azerbaijan (1)	AzeriRating
Bahrain (1)	Islamic International Rating Agency*
Bangladesh(2) <1995>	Credit Rating Information & Services Ltd* <1995>
	Credit Rating Agency Bangladesh* <2003>
China(9) <1988>	Shanghai Far East Credit Rating Co., Ltd* <1988>
	Shanghai Brilliant Credit Rating Co., Ltd* <1992>
	China Chengxin International Credit Rating Co., Ltd (CCXI)* <1992>
	Dagong Global Credit Rating Co., Ltd* <1994>
	China Lianhe Credit Rating Co., Ltd* <1995>
	Shanghai Credit Information Services Co., Ltd.
	Centrus Credit Rating Co., Ltd
	Shanghai Wanglong Co., Ltd
	Shanghai Tiancheng Co., Ltd
India(5) <1987>	Credit Rating Information Services of India Ltd (CRISIL)* <1987>
	Investment Information & Credit Rating Agency Ltd (ICRA)* <1991>
	Credit Analysis & Research Ltd (CARE)* <1993>
	Brickwork Ratings India Pvt. Ltd.*
	SME Rating Agency of India Limited (SMERA)
Indonesia(2) <1993>	Pefindo Credit Rating Indonesia* <1993>
	P.T. Moody's Indonesia* <1997>
Japan (2) <1985>	Rating and Investment Information, Inc. (R&I)&I) <1985>
	Japan Credit Rating Agency, Ltd. (JCR)* <1985>
Kazakstan (3)	RFSA
	JSC*
	KzRating <2006>
Korea (4) <1983>	Seoul Credit Rating & Information, Inc (SCRI)* <1992>
	Korea Investors Service, Inc (KIS)* <1985>
	Korea Ratings Corporation* <1983>
	National Information and Credit Evaluation (NICE)* <1986>
Malaysia(2) <1990>	Rating Agency Malaysia Berhard (RAM)* <1990>
	Malaysia Rating Corp (MARC) (MARC)* <1995>
Pakistan(2) <1994>	JCR-Vis Credit Rating Co. Ltd* <1997>
	The Pakistan Credit Rating Agency Ltd (PACRA)* <1994>
Philippines(2) <1985>	Philippine Rating Services Corp (PhilRatings) * <1985>
	Credit Information Bureau, Inc <1985>
Taipei, China (1)<1997>	Taiwan Rating Corporation (TRC)* <1997>
Thailand(1)<1993>	Thai Rating & Information Services Co. Ltd (TRIS)* <1993>
Uzbekistan(1) <1996>	Ahbor Rating* <1996>
15 countries	38 rating agencies

Note: "*"means an ACRAA member (28 agencies). "( )" means the number of rating agency. "< >" means the foundation date of a rating agency, or in country column "< >" means foundation date of the first rating agency.

Source: Website and document of each rating agency securitization in the 1980s, followed by the launch of other credit rating agencies in that decade in Korea, the Philippines, India, China and Malaysia (bringing to 10 the total number of credit rating agency launches in the 1980s). In 1990s, economic growth in Asia resulted from investment boom from the US, Japan and overseas Chinese promoted further establishment of new credit rating agencies (16 total CRAs established).Early in 2000s after the Asian financial crisis, only two new credit rating agencies were established because of criticism for providing the inaccurate credit ratings by existing rating agencies. During this period, however, the industry witnessed the launch of the Association of Credit Rating Agencies in Asia (ACRAA) in 2001 against the background of the Asian Development Bank's policy of fostering credit rating agencies. After that launch, various issues, including the need to improve accuracy in assigning credit ratings and to standardize rating methods, have been identified by industry experts. At the time of and after establishing local credit rating business, a total of 14 Asian credit rating agencies received assistance and/or equity participation from other international credit rating agencies such as Moody's, S&P, Fitch, R&I and JCR.

Most of the Asian nations have a regulatory framework for credit rating industry to operate and the credit rating system.[13] In the wake of the Lehman shock in 2008 on the back of the subprime mortgage securities turmoil of that year, the US, Japan and EU nations revised their policies on the establishment and operation of credit rating agencies from their previous licensing or designation systems to a registration system to promote competition. However, the licensing system is still in place in 11 non-Japanese Asian nations. Separately, while the exchange of information between different rating agencies is strictly prohibited in the US and Japan, an exchange of views is carried out between credit rating agencies on a regular basis at events such as ACRAA meetings. The application of credit ratings by such Asian based agencies is broad, without being confined to corporate bonds and public bonds. Credit ratings are being assigned to a variety of financial instruments including bank loan contracts and private placement bonds in accordance with the unique criteria in each country, and are also being assigned to business entities, with such ratings be used by commercial banks (in Pakistan, Uzbekistan and Bangladesh, among others). Meanwhile, in Malaysia and Indonesia, credit ratings are also assigned to Islamic bonds (Sukuk). Although most Asian credit rating agencies have adopted US or Japanese credit rating methodologies, their information regarding credit rating does not necessarily represent the bond default probability. Some credit rating agencies maintain the practice of assigning credit ratings to corporate bonds in ranking, based on quantitative metrics and qualitative factors, with the country's government bonds placed at top (AAA), with the objective of helping financial regulators coordinate corporate bond issuances and allowing industry associations to identify company rankings (in credit rating agencies in China, Indonesia, the Philippines, Pakistan,

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[13] The description of the characteristics of Asian credit rating agencies is based on research on the 11 non-Japanese Asian countries/economies, shown in Note 7, and on enquiries carried out by the author of this report.

Uzbekistan and Bangladesh as well as some agencies in Malaysia). The public disclosure of cumulative default rates by different rating scales (covered by a later section), as data serving to indicate the degree of credit risk, is produced in only six nations (Malaysia, Thailand, Korea, India, Indonesia and the Philippines) among the 11 non-Japanese countries. While credit rating information is mainly used by institutional investors (including those without large investment portfolios), it is also used extensively by corporate bond issuers as well for business management purposes, and by commercial banks as a reference for loan provision management (in India and China).

2.3.3 Enhancement of the Asian region credit rating system

In order to use credit rating information in the Asian region in a standardized manner, it is necessary to standardize the definition of information provided from the credit rating, namely, the "expected default rate." If the provision of credit rating services is aimed at presenting a relative ranking of corporate bond issuances in a given nation and at restricting (or encouraging) corporate bond issuances, foreign investors, not to mention locals, will find it impossible to use such credit ratings for the purpose of managing investment in financial assets. Reliable credit rating information (credit risk information) indicating the expected default rate must be disseminated in Asian nations in order to issue and distribute bonds (corporate bonds, government bonds, and public bonds) based on the economic principles within the region. To do so will require market participants to have a common understanding on the methods for using credit rating information and build a bond market focused on an appropriate credit risk/reward relationship. At the same time, credit rating information will need to have accuracy and stability on cumulative default rates and rating transition retention rate. Shown below is an outline of the requirements that must be fulfilled by credit rating information and the desirable method for improving of credit rating system.

(1) How investors should use credit rating information

Investors who invest in domestic or overseas bonds must obtain information on bond default probability (credit rating information) in order to quantitatively manage (control) future rates of return. Here is a model-based explanation of how investors should use credit rating information. Among the three types of investors assumed (see Figure 2-12), a risk-averse investor (Portfolio A) prefers bonds with a low default rate at the expense of return rate while a risk-loving investor (Portfolio C) invests in bonds with a high return rate at the expense of risk. On the other hand, a risk-neutral investor (Portfolio B – in the middle between A and C) invests in bonds with modest risk and return rate. First, let's assume that each type of investor will invest 10 million yen in bonds at a time when the default rate (risk) is accurately forecasted by credit rating agencies, and a yield (interest rate) commensurate with the associated default rate is set by the market (the relationship between risk and return is covered in a later section).

In the event when the credit rating agency accurately forecasts the actual default rate, each type of investor will achieve a return of 10.6 million yen (a return rate of 6%). (For the calculation method, see the formula shown below each section's principal amount received). On the other hand, in the event of the actual default rate being lower than forecast by the credit rating agency (a default rate of 0% in Figure 2-12), the risk-loving investor (C) will achieve the highest return rate, and in the event of the actual default rate being higher than forecast by the credit rating agency (excluding AAA, 5 percentage points above forecast for BB and B, 1 percentage point above forecast for other ratings), the risk-averse investor (A) will achieve the highest return rate. Rating information by credit rating agencies does not represent a forecast of a default rate on a daily basis. Rather, such risk information represents a default rate as a medium- to long-term benchmark, as shown in the section stating "the expected return in the event of the default rate being as forecast" discussed in Figure 2-12. Once credit rating information serving as a standard benchmark is provided, the investor will be able to use that standard to invest in a manner commensurate with the investor's preference, thereby creating a portfolio consisting of multiple different types of risks.

Figure 2-12 How investors should use credit rating information

	Portfolio A (a risk-averse investor)		Portfolio B (a risk-neutral investor)		Portfolio C (a risk-loving investor)	
Rating	AAA	AA	A	BBB	BB	B
Credit risk (10 Year)	0%	1.5%	2.0%	5%	30%	50%
Interest rate	6%	7.6%	8.2%	11.6%	51.4%	112%
Investment amount (mil Yen)	8.00	2.00	5.00	5.00	2.00	8.00
Return in the case of the actual default rate being as forecast (mil Yen, return rate)	10.60 (6%)		10.60 (6%)		10.60 (6%)	
Calculating formula	8.00*(1+0.06)*(1−0) +2.00*(1+0.076)*(1−0.015)		5.00*(1+0.082)*(1−0.02) +5.00*(1+0.116)*(1−0.05)		2.00*(1+0.514)*(1−0.3) +8.00*(1+1.12)*(1−0.5)	
Return in the case of the actual default rate 0% (mil Yen, return rate)	10.63 (6.3%)		10.99 (9.9%)		19.99 (99.9%)	
Calculating formula	8.00*(1+0.06)*(1−0) +2.00*(1+0.076)*(1−0)		5.00*(1+0.082)*(1−0) +5.00*(1+0.116)*(1−0)		2.00*(1+0.514)*(1−0) +8.00*(1+1.12)*(1−0)	
Return in the case of the actual default rate being higher than forecast (mil Yen, return rate)	10.58 (5.8%)		10.49 (4.9%)		9.60 (−4%)	
Actual default rate	AAA: Pd=0, AA: Pd=1% up		Both A and BBB: Pd=1% up		Both BB and B: Pd=5%up	
Calculating formula	8.00*(1+0.06)*(1−0) +2.00*(1+0.076)*(1−0.025)		5.00*(1+0.082)*(1−0.03) +5.00*(1+0.116)*(1−0.06)		2.00*(1+0.514)*(1−0.35) +8.00*(1+1.12)*(1−0.55)	

Source: Kurosawa [2007], page 85

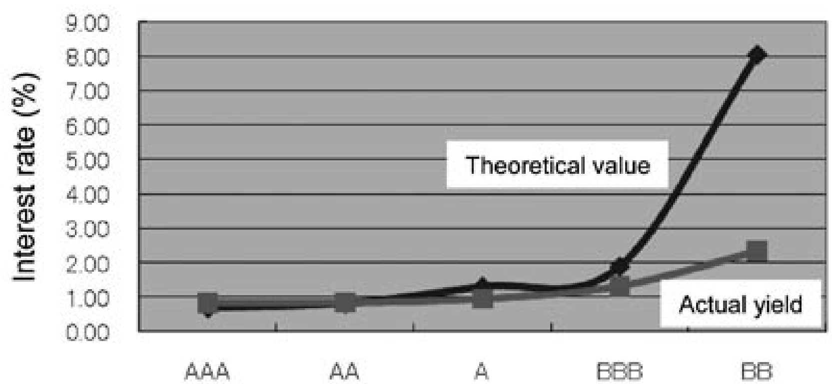
(2) How a bond yield commensurate with risk is determined

In an efficient and fair capital market (Efficient Capital Market Hypothesis[14]), regardless of the risk level of a bond invested in by the investor, he/she may expect the same return with an interest rate commensurate with that risk being set by the market. An interest rate commensurate with the risk involved, q (expected

[14] For more information on the Efficient Capital Market Hypothesis relating to bonds, see Kurosawa [2007], Page 79. Going beyond such hypothesis, in the bond markets of the US, Canada and Japan, yields are set at a level that corresponds to the actual risk involved.

return demanded by investors), will be as shown in the formula $q = (rf + Pd) / (1 - Pd)$, assuming that the risk-free interest rate is rf (e.g. the yield on AAA-rated government bonds) and the credit risk is Pd ($0 < Pd < 1.0$). Therefore, the risk premium rp against the risk free interest rate rf will be as shown in the formula $rp = q - rf = (1 + rf) Pd / (1 - Pd)$. Figure 2-13 is a comparison of the theoretical values (q shown above) of corporate bonds in the Japanese corporate bond market (time to maturity 4 years, credit rating assigned by the R&I) and the actual yields in that market. In the absence of a corporate bond market for bonds rated BB or lower (any BB-rated corporate bond in the market is a bond whose credit rating has been downgraded from BBB or higher as a result of business performance deterioration) in Japan, there exists a discrepancy between theoretical values and actual values. Yet bonds rated AAA to BBB exhibit yields that are generally in line with theoretical values, allowing investors to use credit ratings in the same manner as shown in Figure 2-12. The rating agency's accurate assigning of credit ratings enables the investor to know what level of premium is warranted, based on the theoretical value, whereas inaccurate credit rating information hinders the investor's ability to achieve a yield composition commensurate with the credit risk, putting the market in a state of confusion.

Figure 2-13 A comparison of the theoretical values and the actual yields (in the Japanese corporate bond market (time to maturity 4 years))



Source: Kurosawa [2007], page 91

(3)Relationship between credit rating and cumulative default rate[15]

In order for credit rating information to be used effectively for bond investment management information, the accurate and stable dissemination of such information is important. Figure 2-14 shows cumulative post-credit rating assignment (post-new credit rating assignment and post-credit rating change) default rates, presented in a model format. One phenomenon revealed by the model is that a group of bonds rated A does not default for a period of two years after the initial credit rating assignment or credit rating change, with the group's cumulative

[15] For the relationship between cumulative default rate, rating transition and market yield, see Kurosawa [2009]

default rate migrate to 0.2% after three years and 1.5% after five years. If the credit rating agency's dissemination of credit rating information is followed by each year's cumulative default rate remaining close to the expected default rate (accuracy), while staying stable each year (stability), investors can use such credit ratings as forecast information and bond investment management information. Suppose the 3-year-out default rate of a bond rated A has turned out to be 0.3%. That will have hindered the investor's achievement of expected returns. Separately, suppose such default rate has turned out to be 0%. That shows that a bond rated AA would have sufficed , meaning that the bond issuer has paid extra interest. While the expected default rate by credit rating scale is not included in the credit rating's definition by credit rating agencies themselves, investors do hope such rates will not fluctuate greatly each year, thus giving high recognition to credit rating agencies with strong performance both in the accuracy of cumulative default rate forecasting (no disparity between different rating levels' disseminated credit ratings and the actual default rates) and in stability (the maintaining of different rating levels' actual default rates at a certain level over a long period of time). Nevertheless, it is practically challenging to maintain both accuracy and stability in credit rating information. Even data from Moody's and Standard & Poor's shows that an accuracy and stability of 50% or higher is maintained for a period of only five years or so (cumulative five years), in the case of investors' tolerable rating range of AAA to BBB, and for only two years or so (cumulative two years) in the case of ratings of BB or lower.

Figure 2-14 Cumulative post-credit rating assignment default rates

Ratings symbols	yr 1	yr 2	yr 3	yr 4	yr 5	yr 6	yr 7	yr 8	yr 9	yr 10
AAA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AA	0.0	0.0	0.0	0.0	0.2	0.5	0.8	1.1	1.3	1.5
A	0.0	0.0	0.2	0.7	1.5	1.6	1.7	1.8	1.9	2.0
BBB	0.0	0.2	0.3	1.0	2.0	2.5	3.0	3.5	4.0	5.0
BB	2.0	3.5	5.0	7.5	10.0	14.0	18.0	22.0	26.0	30.0
B	8.0	10.0	12.5	16.0	20.0	26.0	32.0	38.0	44.0	50.0

Source: Actual performance of cumulative default rates of Moody's and S&P (shown in the each website)

(4) Rating transition

Rating agencies revise the credit rating when the basic assumptions included in the initial outlook have changed following the assignment of the rating, but overly frequent revision will result in the erosion of such credit rating's role. Figure 2-15 shows the corporate bond rating transitions that occurred in a given year (2005), published by Moody's Japan, highlighting the way in which beginning-of-the-year credit ratings were changed by year-end. For example, 0.1% of A-rated bonds were upgraded to Aaa within one year of the assignment of the previous rating, with 89% unchanged at A (retention rate 89%), 3.7% downgraded to Baa and 5.3% removed from the credit rating list (i.e. withdrawal). Any delay in the execution of rating revision, after the basic outlook has changed, will result in the erosion of the accuracy and stability of the cumulative default rate. On the other hand, if overly frequent rating revisions are made for the purpose of maintaining the stability of the cumulative default rate, the information's value will be impaired. Therefore, a credit rating agency is required to keep the rate of rating retention, over a period of one to five years after the initial rating assignment, as high as possible in order to enjoy it is status as a provider of reliable credit rating information to the investor community as.

Figure 2-15 Corporate bond rating transitions that occurred in a year (2005)

Rating at the beginning of year	Rating at the end of year									Total
	Aaa	Aa	A	Baa	Ba	B	Caa-C	Default	With drawal	
Aaa	**89.2%**	5.8%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	4.2%	100.0%
Aa	0.0%	**92.5%**	2.0%	0.1%	0.1%	0.0%	0.0%	0.0%	5.3%	100.0%
A	0.1%	1.8%	**89.0%**	3.7%	0.1%	0.0%	0.0%	0.0%	5.3%	100.0%
Baa	0.0%	0.3%	6.4%	**84.3%**	3.2%	0.8%	0.0%	0.2%	4.8%	100.0%
Ba	0.0%	0.0%	0.7%	9.3%	**74.2%**	7.3%	0.5%	0.0%	7.9%	100.0%
B	0.0%	0.0%	0.1%	0.0%	7.9%	**75.9%**	4.4%	1.1%	10.6%	100.0%
Caa-C	0.0%	0.0%	0.4%	0.7%	1.4%	21.4%	**55.1%**	7.7%	13.3%	100.0%

Source: Website of Moody's Japan, "Special comment 2005"

(5)Desirable enhancement of the credit rating system

For the existing credit rating agencies (agencies shown in Figure 2-11), the task of providing credit risk information pertaining to cross-border bond transactions appears to be challenging. The qualitative analysis of bond credit risk is not necessarily the such existing credit rating agencies' principal part of business. They are more equipped to provide a relative ranking of bonds issued in each nation by using financial standing-based standards that place the nation's government bond credit rating (AAA) at the pinnacle of the structure. In addition, those agencies are charged with the role to coordinate bond issuance and offer information designed to assist the provision of bank loans. The existing credit rating agencies also face challenges, including the absence of credit rating methodology standardization and the insufficient accumulation of past financial data necessary for forecasting future default rates. For a credit rating agency to be regarded as the provider of reliable credit rating information to investors, it must fulfill its obligation of disclosing past cumulative default rates and the credit rating transition matrix, while showing that such information is of such quality that investors may use it for investing in bonds. With regard to the credit rating information necessary for cross-border bond transactions, it is crucial to eliminate any sense of mutual mistrust regarding the reliability of information. Otherwise, investors will not use such credit rating information to invest in bonds.

One potential step would be to reorganize the ACRAA, composed of existing Asian credit rating agencies, into an Asian credit rating agency designed to play the role of facilitating cross-border bond transactions, or to set up an organization, provisionally called the Asian Credit Rating Agency (ACRA), with the cooperation of multiple credit rating agencies, designed to play such a role.[16] It would be a practical arrangement to allow existing credit rating agencies focus on domestic functions (e.g. bond issuance coordination), including the analysis of credit risks, and allow the ACRA serve as a credit rating agency dedicated to the measuring of credit risks. The ACRA's role should be to provide credit rating services pertaining to Asian government bonds (denominated in local or foreign currencies) as well as cross border corporate bonds issuance through standardized methodologies, while receiving the support from existing credit rating agencies such as issuers', financial data. It is also important to promote long-term financing for infrastructure development and corporate growth, taking advantage of Asia's well-established bank financing, and to enhance the securitization of bank loans for the purpose of assisting institutional investors intending to make long-term investment in pension and insurance contracts, with the ACRA assigning appropriate credit ratings to relevant instruments or entities. It represents an effort to channel capital market funds to the bank loan market.

2.4 Insights and challenges

The following four points can be cited as challenges for the Asian bond market.

Firstly, the size of bond market and extent of bond market development vary from one Asian nation to another, which has given rise to differences of opinion among different Asian countries, causing impediment to the furthering of financial cooperation in the region.

Secondly, the development of the bond market, and corporate bond market in particular, is limited. Many Asian nations' bond markets are small in size compared with their banking sectors and equity markets, and also in terms of growth rate, such bond markets have been outpaced by the latter two categories. Corporate bond markets in many Asian nations are still in an early development stage, with government bonds, not corporate bonds, driving growth. In a way, government bond investment steadily taking hold means that the groundwork toward corporate bond market development is now being laid.

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[16] Currently, the ACRAA (membership: 28 credit rating agencies) is not necessarily an open enough organization, as can be seen from the fact that its membership does not include Rating and Investment Information, Inc. (R&I) of Japan. Joining the organization should be made easier, with certain eligibility requirements, in order to develop it into a pan-Asian credit rating agency. In the EU, the European Association of Credit Rating Agencies (EACRA) was set up in May 2010 in Paris (as an entity incorporated under French laws). EACRA is composed of five credit rating agencies (two from Germany and one each from Spain, Ukraine and Turkey).

Thirdly, liquidity is fairly limited in the Asian bond markets. While government bond liquidity is continuing to show improvement, liquidity in the corporate bond markets leaves much room for improvement.

Fourthly, the interpretation of given credit rating information varies from one Asian country to another, and credit ratings do not necessarily conform to expected default rates.

Lastly, the credit rating issue mentioned in the fourth point needs to be elaborated on. In order to transform the ACRAA into a specialized credit rating agency or establish the ACRA (see (5) in 2.3.3), it will be necessary to accumulate data to perform quantitative analysis, train analysts equipped with specialized knowledge, and build a financial base for sound organizational operation (sufficient capital). As for data accumulation, the advanced methodology adopted by banks under the Basel II accord will be a minimum requirement. It will be essential to accumulate, as historical data, chronologically-organized past three- to five-year data on company finances and earnings deterioration/improvement, and to convert the chronologically-organized main data and default data into a model format according to business type, scale of operations and category of economic environment. Figure 2-16 shows a matrix chart for a quantitative credit rating analysis that has been created in a model-like format with a focus on listed Japanese companies (manufacturing industry). It will be required to have such credit rating criteria in place based on actual historical data by country, type of business, scale of operations and category of economic environment. The creation of these criteria requires a fairly large amount of time, know-hows and experience, because accuracy and stability in cumulative default rates by different credit rating scales, shown in Figure 2-11, must be maintained in the event of a default. In addition, the accumulation of historical data designed to be used for estimating a loss rate in the event of a default (loss rate for the creditor) is indispensible. Since quantitative analysis alone does not suffice for credit rating (over the last several decades, numerous attempts were made to undertake credit rating based on statistical and quantitative judgments alone to no avail), it is necessary to develop analysts who are capable of incorporating qualitative assessment into their judgments together with quantitative analysis, as a means of maintaining accuracy and stability in cumulative default rates. Credit rating agencies' financial positions must be kept solid as once a credit rating agency becomes focused on revenue growth, all too often it ends up with a business model focused on assigning biased credit ratings to the detriment of its judgment on accuracy and stability . Separately, industry experts should discuss the potential introduction of a common currency unit (Asian Currency Unit or ACU) for facilitating the issuance of large-sized cross-border-type bonds to avoid rating discrepancies affected by issuer's domiciled country's foreign exchange risk.

Figure 2-16 A matrix chart for a quantitative credit rating analysis in a model-like format

(mil Yen)

Credit rating	Net debt with interest/ Operating CF	Net debt with interest/ EBITDA	EBITDA/ interest cost	Interest coverage ratio	ROA	ROBA	Composition ratio of net debt with interest	Equity capital ratio	Operating profit after interest cost	EBITDA	Operating CF
AAA	1.76	1.05	97.54	60.50	9.86%	36.45%	−18.99	57.15	6,243	9,909	6,201
AA＋	1.76	1.05	57.71	37.03	7.80%	16.58%	−11.06	51.54	1,551	3,007	2,951
AA	1.76	1.05	55.74	36.18	6.76%	14.64%	7.40	51.28	1,104	2,224	1,795
AA−	2.41	1.46	55.74	36.18	6.76%	14.08%	9.61	51.28	537	1,198	900
A＋	2.41	1.46	37.28	20.82	5.58%	14.08%	10.56	51.07	374	865	615
A	4.48	1.46	37.28	20.82	5.58%	14.08%	10.56	46.01	237	526	347
A-	4.48	2.27	35.12	20.82	5.58%	14.08%	15.14	42.96	237	477	344
BBB＋	6.10	2.67	22.18	12.46	3.69%	8.11%	28.61	41.47	84	216	161
BBB	9.18	3.48	19.65	10.89	3.69%	6.49%	28.85	41.47	62	182	136
BBB-	9.18	4.76	11.45	4.94	2.94%	5.10%	40.87	34.68	62	182	136
BB+	13.94	10.52	6.92	3.13	2.46%	5.10%	58.29	25.43	50	182	136
BB	19.13	10.52	4.70	2.02	2.46%	5.10%	67.90	20.33	50	182	104
BB-	19.90	13.60	4.09	1.64	0.84%	0.29%	67.90	20.33	9	80	97
B＋	19.90	13.60	3.15	1.64	0.36%	0.29%	73.35	18.98	9	80	19
B	19.90	13.60	3.15	1.64	0.36%	0.29%	73.35	18.98	9	80	19

3 Structure of corporate funding needs and the bond market

3.1 Theoretical analysis of fundraising vehicles

3.1.1 Function and significance of the bond market

(1) Banks' superiority in developing nations

There are a number of rational reasons for banks' structural superiority in developing nations (World Bank [2001]). Firstly, if a borrower company switches its primary lending bank, the company will incur a considerable amount of switching cost since the bank has sufficiently accumulated in-house information on the borrower company during the process of business dealings by both parties (the "hold-up" issue). For this reason, at least in the short term, the bank has a certain kind of controlling power over the borrower company as an effective monopolistic financing provider (Rajan and Zingales [2001]). By using such power, the bank is able to generate information relevant to the borrower company, even in developing countries whose economic and legal systems have yet to be developed to a proper level. In addition, with regard to the recovery and preservation of monetary claims, the bank is capable of curbing any potential challenge by wielding such controlling power. On the other hand, the securities market's functions are predicated on public disclosure of information and the exercise of rights under laws. Therefore, in developing nations with a low level of system development, such functions are subjected to serious limitations.

Secondly, the fact that the bank can generate information from its in-house data base contributes to its superiority over the securities market in terms of information generation (Levine [2004]). The market is faced with the challenge that many market participants are free-riding on information generated by other investors, without generating any information themselves, which results in a deficient level of information generation by the market (the "free-rider" issue). In addition, the paid information provided to investors by credit rating agencies and securities companies comes only after such information becomes public, making such information unsuited to trading on the market (the "lemon" issue). On the other hand, the bank uses information generated by itself, making it insulated from such free-rider and lemon issues.

Thirdly, by generating information as the proxy of many bank depositors, the bank is able to save information generation cost while avoiding duplicate information generation efforts (Allen and Gale [2000]). Meanwhile, the bank's role as proxy for depositors may create a conflict in which the bank's investment target differs from the depositors'. Still, investor's decision tends to easily coincide with one another, as developing nations' industries generally are centric to conventional technologies and business formats. All in all, the benefit of the depositor relying on the bank for information generation and investment target selection should outweigh any downsides.

Fourthly, the way the financially troubled company is treated by the bank will differ greatly from the way it is treated by the corporate bond and equity markets. The bank will find it easier to devise a measure to address the situation in a flexible and appropriate manner since transactions between the bank and the borrower company are undertaken on a one-to-one basis, making it straightforward for both parties to conduct renegotiations in the event of a post-transaction adversity (Rajan and Zingales ibid.). On the other hand, corporate bond and equity market participants will find it challenging to have renegotiation conducted between many investors and the company, even in the event of the company facing financial trouble. The bank's special qualities include the ability to assess a situation properly and the flexibility to take the steps necessary to address the concerned issues, putting the bank at an advantage over corporate bond and equity holders. This is because the bank is able to avoid the prospect of the borrower going bankrupt and being liquidated when the company may well be rehabilitated and its business restored to normal with the provision of additional assistance.[17]

Fifthly, some experts argue that the bank, acting as the monopolistic provider of financing, is desirable for small- to medium-sized companies and emerging companies that have only weak business fundamentals because, in a way, the bank's monopoly allows the bank to assess its dealings with the borrower company from a long-term perspective (Rajan and Zingales ibid.). In other words, given that the bank can maintain a monopolistic business relationship with a specific company over a long period of time, the bank is able to assume the company's debt during the temporary financial difficulties based on the confidence that it will be able to generate sufficient profits in the future to repay the money to the bank. Such practice is not possible in a securities market that does not allow the investor to maintain a monopolistic business relationship with a specific issuer company.

Sixthly, for entities in developing countries, bank financing is the easiest and most feasible means of managing risk. Households in such nations are highly averse to risk due to their low level of asset holdings. In addition, the function of financial markets in such nations is severely limited as a result of system underdevelopment and shortages in the specialized workforce. In such an

[17] There are some expects who argue that market money's special quality of not easily providing an opportunity to renegotiate with the company has the function of subjecting company management to rigorous discipline. Yet developing countries lack the legal system and specialized workforce that serve as the basis for such discipline.

environment, the bank's role of facilitating various entities' risk management is a natural result of development (Levine [1997]).

(2) Financial development and the erosion of the bank's superiority
Companies' need for the securities market:
As the economy continues to grow, the bank's above-mentioned superiority in the view of companies undergoes erosion. This is because, first of all, the bank wielding its controlling power over the borrower company as a monopolistic financing provider will cause serious detriment to such company (Rajan and Zingales ibid.). Generally speaking, the more enhanced the system infrastructure becomes, including information disclosure, the less superior the bank becomes over the market in terms of information generation. Likewise, the bigger and better known the company is in the business market, the less superior the bank becomes in the above respect. A big company with a solid business foundation will find little benefit in having its loss shouldered temporarily by the bank. In other words, the more the economy grows and the more enhanced the legal and financial systems become, the stronger corporate demand becomes for fundraising through corporate bond and equity issuances. Likewise, the more a company becomes well-known in the market, the stronger corporate demand becomes for such fundraising.

The second reason is the negative impact of the effective implementation of loan rollovers that may require frequent revision on the loan's terms and conditions even for long-term financing. Underlying this is the fact that bank financing in developing countries is often provided in the form of short-term loan rollovers. In developing nations with a high level of asymmetric information, the bank tends to set short loan periods, with the objective of performing frequent monitoring of the borrower company and factoring the newly found information into its loan terms and conditions (Fukuda [2004]). If the bank's information generation ability is of satisfactory quality, the borrower company's practice of repeatedly raising short-term funds will not put itself at a disadvantage.[18] However, if the bank's information generation ability is of extremely low quality, the borrower company's practice of relying on short-term loans from the bank will result in a challenge to the company's business activities. Put differently, the practice of short-term loan rollover imposes heavy liquidity risk on the borrower company.

In recent years, South East Asian nations have succeeded in their efforts to enhance their market system and remedy the issue of asymmetric corporate information and at the same time they have been witnessing a growing number of large enterprises that are well-known in the market. Going forward, it is expected that new business models not suitable to the bank's proxy function will assume

[18] If asymmetric information does not exist and agreement is well in place, the value of the company remains the same regardless of whether short-term funds are raised repeatedly or long-term funds are raised.

greater importance. Yet those South East Asian countries still have significant room for improvement with regard to their capital market enhancement. A case in point is the existing issue of arbitrage between short-term and long-term funds not functioning well in the market. Judging from such circumstances, companies in South East Asian nations must have a growing need to issue corporate bonds (BIS [2006]).

Households' needs for the securities market:

As household income grows and asset accumulation progresses, the ability of households to assume risk as economic entities increases, resulting in the diversification of household demand for assets (Yabushita [1995], World Bank ibid.). While households with a relatively low level of income and asset holdings make asset selection with a focus on stability, households with a high level of income and asset holdings prefer to hold assets with a higher return by tolerating risk. For this reason, as a general tendency, the more developed the economy becomes, the stronger household demand becomes for securities with high risk and high return, making it increasingly challenging for bank deposits to meet households' asset needs, given their security but low returns. This will potentially result in households allocating a smaller amount of money to bank deposits.

Indeed, the decline in its proxy function causes the erosion of the bank's superiority (Allen and Gale [2000]). As developing nations' industry structure becomes more advanced, coupled with the growing importance of innovative technologies and business models, the bank depositor and the bank (acting as the depositor's proxy) will increasingly find themselves differing from each other over assessments on the potential borrowers. On the contrary, in the case of fundraising through corporate bond or equity issuances, the ultimate fund provider itself is able to directly select an investment target, making such types of fundraising more advantageous.[19]

In emerging Asian nations, there has been an emergence of fairly large middle-income households showing an increasing need for higher risk assets. Consequently, in the growing economy the more risk-tolerant the household becomes, the more active the household becomes in investing money in the market, which in turn leads to greater importance of the institutional investors commissioned with asset management by the household.

Separately, as the economy continues to grow, the insurance sector and pension scheme will become an important provider for preserving the household's economic foundation. In developing countries whose economic system still remains underdeveloped, the households heavily depend on social systems involving

[19] Boot and Thakor [1997] argue, from a slightly different perspective, that at an early stage of economic development the bank assumes particular importance, given the relative superiority it has in borrower monitoring, rather than borrower screening, whereas after a period of economic development the market gains in its importance given its superiority in screening functionality.

mutual assistance, based on mainly family ties and neighborhood relationships. However, with the economy continuing to grow, such social system-driven mutual help will generally become less important, and the well-organized modern insurance system comprising life insurance, other types of insurance, and pension scheme will be of greater . In particular, in a mid-income level economy, the insurance sector tends to achieve rapid growth and the role of institutional investors become important.

(3) Financial liberalization and the fragility of banks

In developing economies, banks are saddled with a significant fragility involving the financial system. Acting as a funding intermediary, if a bank's lending practice is geared to longer tenor loans, it face constant risk of collapsing resulting from bank runs caused by panic (Diamond and Dybvig [1983]). In the event of a bank collapse, its in-house information will be lost, in turn causing domino-like company failures and serious damage to the entire economy.[20] For this reason, prior to financial liberalization, the whole financial system is subjected to extensive regulations by regulators with the aim of averting the failure of banks.

Since the advent of financial liberalization, bank's risk underwriting ability (credit risk and market risk) has been subject to strict limitations. This is because a bank has to control its exposure to credit risk and interest risk at a level commensurate with its capital position as required by BIS regulations. In the event of the bank's loan portfolio becomes significantly large, or if its loan maturity profiles become greatly extended, its ability to assume the associated risks will be put into question and the bank's risk underwriting ability becomes more contracted compared with that of the market. In addition, the bank is required to keep its capital position above a certain level under the capital adequacy regulations and it results in the bank's funding costs becoming higher in comparison to those of the securities market, a place where funds are raised directly from general investors. As banks rely on deposits for a significant part of lending, their ability to underwrite long-term interest rate risk is limited. Such constraints are particularly severe for banks in developing nations, as a high proportion of the deposits held are short-term nature.

The introduction of the new BIS accord (Basel II) is also expected to have a meaningful effect on the behavior of banks in developing countries (Yoshii, Kozu [2007]). Incorporated into the new BIS accord is a more sophisticated measurement of credit risk and operational risk, which requires individual banks to formulate a clear-cut business strategy. In order to build an optimal risk asset portfolio in accordance with their corporate policy, banks will need a large-sized capital market supported by the secondary market where various financial instruments, including securitized instruments and corporate bonds, are traded.

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[20] A series of bank failures was a significant factor that contributed to the deepening of the Asian crisis (Stiglitz and Greenwald [2003], Yoshitomi and Shirai [2001]).

As a step toward enhancing the entire economy's risk underwriting ability, the effective access to the market is essential. This is because institutional investors as a group of important participants in the securities market have characteristics that are different from those of banks. Major institutional investors such as pension funds and insurance companies are subjected to investment regulations that are less rigorous than those governing banks, and are thus able to enjoy relatively low funding costs. In addition, pension and insurance companies highly capable of taking long-term interest rate risk as pension and life insurance polices represents long-term nature. Separately, given their large investment portfolios under management, institutional investors have the capacity to assume individual risk by means of diversification. This gap that exists between banks and the securities market in risk underwriting ability will allow the securities market enjoy potential superiority over banks in raising larger and longer term funds.

The enhancement of the bond market is necessary for non-banks as well. Securities companies in developing economies have an earnings structure that is greatly dependent on brokerage commission revenue from trading, which could result in unstable operations and volatile revenues at the mercy of stock market conditions (Asian Development Bank [1999]). The growth of the bond market will help such securities companies' to diversify revenue sources including non-equity products and increase their business operations that would help modernizing their organization. In addition, access to the bond market will allow them to trade securities on their proprietary account more easily and make it possible for such companies to develop new hybrid products composed of equities and bonds. Their investment in the bond market is likely to result in increased generation of information designed to facilitate investment based on a longer term perspective. The enhanced bond market will enable non-banks, dependent on the sourcing of market money, to raise funds efficiently and allow them to stabilize their business operations and provide a broad range of services. For non-banks engaging in asset management in the market, including pension funds and fund management companies, the enhancement of the bond market will provide an opportunity to generate non-speculative and stable revenues and contribute to the increased operational stability and modernization.

3.1.2 Function of bonds and the funding needs of companies

As the economy continues to grow, the securities market comes to play an increasingly significant role in the financial system with a growing need for companies to raise funds through the issuance of securities. Yet, only certain companies will identify a need to issue corporate bonds. For a company, the means of raising funds externally consists primarily of bank borrowing, corporate bond issuance and equity issuance. A comparison of these methods shows that there are three characteristics that make corporate bonds more attractive for fundraising: the ability to raise funds 1) through debt financing 2) through the market, and

3) involving the raising of long-term funds.[21] When examining companies that need to issue corporate bonds, it is necessary to understand the likely profiles of companies preferring each of the three characteristics of corporate bonds.[22]

(1) Companies preferring fundraising through debt financing

First of all, the following will identify the likely profile of a company preferring to raise funds through debt financing through corporate bonds issuance as debt capital instruments. Based on a trade-off approach predicated on the assumption that no asymmetrical information or contract deficiencies exist, the increased funding from debt capital market will lower capital costs due to the positive effect of income tax deduction. On the other hand, such increased fundraising will also give rise to increased risk premiums due to increased probability of bankruptcy. Thus the company must decide on the debt ratio in a manner that will allow it to maximize enterprise value, based on an examination of the balance between these positive and negative effects. Therefore, (i) the higher the income rate is, and (ii) the lower the bankruptcy probability is (due to sound financial position), the more likely the company is to conduct fundraising through debt financing.

In the agency cost approach, which is based on the assumption that asymmetrical information and contract deficiencies do exist, there are even more factors which affect the company's fundraising. Under such an approach, (iii) when a serious conflict of interest between the shareholder and management occurs, the company is more likely to conduct fundraising through debt financing in order to reduce the free cash flow of management. Separately, (iv) when the shareholder is prone to abuse its limited-liability and thereby create a moral hazard as a result of the serious conflict of interest between the creditor and shareholder, the company is more likely to conduct fundraising through non-debt financing. In addition, the company is more likely to conduct fundraising through debt financing if (v) management behavior is not easily observable by outsiders, (vi) if growth and investment opportunities are limited or (vii) if the company's liquidation value is significant. Conversely, the company is more likely to conduct fundraising through non-debt financing when (viii) it is easier to change dividend policy or replace assets.

(2) Companies preferring market money over bank loans

Next, the following will identify the likely profile of a company preferring to raise funds for debt financing through the issuance of corporate bonds rather than through bank loans. According to Diamond [1991], who focused on the difference

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[21] The enhancement of the bond market was selected by South East Asian nations as the key issue for financial reform after the Asian financial crisis. The need to enhance domestic markets' capacity for long-term fundraising, as a means of avoiding double mismatch in currency and loan term, was recognized. While corporate bonds consist of both long-term and short-term bonds, the strengthening of long-term fundraising is the major focus of bond market enhancement in South East Asian countries.

[22] For an empirical study of corporate bond issuer companies in South East Asia, see Nagano [2005]

between bank and corporate bonds in terms of their information generation function, the issuance of corporate bonds is confined to companies with a limited need for information generation, such as: (i) companies in a highly sound financial position, characterized by high profitability and low debt ratio, and (ii) companies with superior creditworthiness, supported by their solid past debt repayment track record. Bolton and Freixas [2000], who likewise focused on the information generation function, argue that a company's available fundraising methods are prioritized in the following order: internal reserves, venture capital financing, bank loans and finally corporate bond and equity issuances. They also argue that the issuance of corporate bonds and equity is confined to (iii) only companies with strong earnings. In a similar argument, Hoshi et al. [1993] state that corporate bond issuance will work to the advantage of companies unlikely to cause moral hazard, thus requiring limited monitoring, and that such companies typically have (iv) promising investment opportunities, (v) a significant level of assets with high collateral value and (vi) a limited amount of debt. Meanwhile, by focusing on the proxy function of banks, Allen and Gale ibid., claim that fundraising through the market may take precedence for (vii) companies whose enterprise value is based mainly on sophisticated technological information and/or innovative business models.

(3) Companies preferring long-term debt capital

Lastly, the use of corporate bonds as long-term debt capital instruments needs to be discussed. On this point, Fukuda [2003] argues that, assuming the existence of contract deficiencies and asymmetric information, (i) the higher the potential revenue from the project is, (ii) the bigger the agency cost becomes, due to management's own high profits and (iii) the larger the gross debt amount is, the more likely the company will prefer long-term funds (corporate bonds) over short-term funds (bank borrowing).[23] Hart and Moore [1994] also claim that corporate bond issuance is preferred by companies when the repeated practice of raising short-term funds may potentially cause detriment to management based on the assumption that there exists a contract deficiency between management and the shareholders allowing management to enjoy benefits not verifiable by the shareholders.

3.1.3 Market enhancement and channel reliance

According to a comparative system analysis, system development tends to involve channel reliance (Aoki [2001]).[24] For this reason, the growing need for a shift from a bank-centric to a market-centric financial system, coupled with the increasing potential need for a bond market, will not bring about an immediate system

[23] When a company itself is faced with asymmetric information, it will choose short-term funds (Flannery [1986]) because company management will find it desirable to make investment while revising information as frequently as possible. Such a company will be able to use additionally-acquired information more effectively by using short-term loans, rather than long-term loans, for that purpose.

change and bond market growth. This is because the rapid change of an existing system requires the changing entity to incorporate a package of subsystems into the existing system that mutually perform externality, and this entails significant costs. Measures to be taken to improve the functioning of the securities market as a venue for the rational distribution/allocation of funds include: the protection of minority shareholders' rights, the strengthening of corporate information disclosure obligations, the enhancement of credit rating agencies' quality, an improvement of securities companies' information generation ability, and an enhancement of institutional investors' sophistication. However, detrimental factors affecting the securities market exist in interdependent and mutually causal relationships, making it necessary to formulate a comprehensive policy package in order to remedy the situation. In South East Asian countries, given the bank-centric systems that has been built over the years, a policy effort needs to be made to develop markets into US/UK-style securities markets (Okuda, Mieno [2009]).[25]

In order to overcome the challenge of channel reliance and enhance the bond market, active policy support from the government will be essential. For the market-centric system to function efficiently, it will be vitally important to ensure that investors are being allowed access to reliable public information, which will have to be supported by legal/accounting system enhancements, expert development and the establishment of various types of financial institutions. In addition, coordination of the overall components of such system infrastructure will need to be managed to enable such components to function in a mutually complementary manner after enhancement. The government is expected to play the role of coordinator in an active manner, while making efforts to utilize financial and technological assistance from international financial institutions.[26]

In enhancing the bond market infrastructure, private sector need to make policy recommendations. The construction of a new infrastructure may potentially

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[24] The Asian financial crisis, the opening of the banking market to foreign players and the introduction of the Basel II accord are likely to provide an opportunity to fundamentally reassess conventional bank business management and achieve a transformation of the economic system.

[25] Given the channel reliance involved in system development, one option worthy of discussion concerning the enhancement of the bond markets of Asian nations is to aim at achieving a so-called market-centric indirect financing platform while actively leveraging the functions served by banks (Ikeo [2006]). Developing countries are still faced with the challenge of a significant level of asymmetrical information while the extent of market information generation in such nations is insufficient. Under such circumstances, one effective step for laying the groundwork for the expansion of the market's role would be to facilitate the issuance of bonds for the foreseeable future by leveraging banks' information generation ability. Such leveraging would be conducted by having banks provide guarantees on corporate bond issuance and/or by securitizing banks' loan portfolios.

[26] Currently, experts are working on the enhancement of the Asian bond market. Such efforts consist of the Asian Bond Market Initiative, being conducted under the framework of the ASEAN+3, and the program implemented by the Asian Bond Fund under the framework of the EMEAP. Separately, the ADB is assisting these bond market enhancement projects through six newly-launched working teams covering, among other issues, settlement, credit guarantee, securitizing and credit rating (see chapter 5).

involve conflicts of interest between the incumbent players and the new entrant players, making it necessary to pay due attention to the opinions of such new players as well as those of the incumbents. In order to overcome the challenge of channel reliance and, in turn, build an infrastructure capable of functioning efficiently as its entity, the private sector, as the principal player, must actively participate in policy formulation while involving itself in policy coordination, rather than accepting government-devised policies in a passive fashion.

Also important for the enhancement of the South East Asian bond markets will be policy recommendations from the Japanese private sector. In recent years, there has been an increasing number of Japanese companies setting up operations in South East Asian markets, accompanied by a rising trend of Japanese financial institutions and non-Asian credit rating agencies expanding their presence in Asian financial markets. Japanese companies targeting such markets will become potentially important bond issuers as their needs for local currency-denominated long-term funds will likely grow. Meanwhile, Japanese financial institutions and credit rating agencies will be able to expand their potential customer base for local Asian bonds by providing Japanese investors with available information. Potentially, such companies and financial institutions, as new market entrants, may become important players capable of changing the conventional bank-centric Asian financial system. In that respect, it will be highly desirable to reflect any requests from the Japanese private sector in the initiatives when changing the financial systems of emerging Asian nations.

3.2 Fundamental structure of corporate fundraising in Asia

3.2.1 Basic characteristics

This subsection provides a summary of past and present financial structures in East Asia, which will serve as the basis for analyzing the bond market development in the region. In addition, this subsection will highlight the potential for future structural transformation. Central to the fundamental viewpoint expressed in this summary is the entity in need of funding, namely, corporate funding.

In Asia, the study of the Asian financial crisis pointed out structural problems from the perspective of corporate governance, namely, excessive reliance on bank loans and underdeveloped capital market. Meanwhile, in terms of the “need” for the bond market, such overreliance on bank loans has been identified as responsible for the worsening of mismatches in both loan maturity and currency. This understanding, as part of an analysis of money flow in the macro economy, is fairly reasonable and persuasive. However, when one observes East Asian financial structures from the perspective of corporate financing, the reality may look rather different. Observations based on the perspective that the development of the corporate bond market is beneficial to fundraising entities should be helpful.

(1) Inactive debt financing

Figure 3-1 and Figure 3-2 is a comparison of the debt ratios of leading East Asian companies, based on existing research on East Asia and developed countries. The comparison reveals that the debt ratio of East Asian companies tends to be lower in comparison to that of their peers in developed nations when the average value of the capital composition of East Asian nations' major listed companies (the composition of the liabilities and equity side on the balance sheet) was used.[27]

This fact means that external financing has played only a limited role as a fundraising source for major listed companies in East Asian economies in spite of the high proportion of financing intermediation in the total money flow, a feature that is frequently mentioned by experts. That, in turn, shows that leading East Asian companies are structurally heavily dependent on their own equity capital. Such structure is not a by-product of the Asian financial crisis. Rather, it is the traditional structure of companies in East Asia (in particular, South East Asia) that has existed even before the crisis.

Figure 3-1 Major companies' debt ratio (debt / total asset) in Asian countries referring from prior researches

	1989	1992	1995	1996	1997	1999	2000	2002	2004
Thailand									
Claessens et.al [1998]	65.6%	64.8%	69.0%	70.2%					
Mieno [2006], Mieno [2006-2]		57.1%	60.7%				59.9%	55.9%	53.3%
Mieno [2006], Mieno [2006-2] *Note1		45.1%	47.7%				24.7%	21.4%	20.1%
Malaysia									
Claessens et.al [1998]	44.8%	38.5%	52.4%	54.0%					
Sutou [2008]			21.7%	24.2%	26.7%	36.4%			
Mieno [2006-2]							47.9%	46.1%	49.2%
Mieno [2006-2] *Note1							11.9%	14.6%	15.8%
Korea									
Claessens et.al [1998]	72.6%	77.1%	79.1%	78.0%					
Lee et. al. [2000]	66.1%	69.0%			71.1%				
The Philippines									
Claessens et.al [1998] *Note2		54.3%	53.5%	56.2%					
Indonesia									
Claessens et.al [1998] *Note2		67.7%	67.9%	65.3%					

Note1: Bank Loan Ratio = Bank Loan / Total Asset
Note2: In Claessens et.al [1998], sample may contain financial institutes, regarding sample number. In Mieno [2006-2], sample contains only manufacturing industry.
Source: Claessens et.al [1998], Mieno [2006], Lee et al. [2000], Mieno [2006-2], Sutou [2008]

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[27] While the research by Rajan & Zingales (1995) is well-known among experts as comprehensive comparative research on the capital composition of companies in developed nations, it should be noted that, having been collected in 1991, the samples used in that research are rather old. Given the progress achieved by the securities market during the last two decades, the current debt ratios of such East Asian companies may be lower than those shown in the figure.

Figure 3-2 Major companies' debt ratio in developed countries (as of 1991)

	Booth et.al.(2001)		Classens et.al.(1998)	
	Debt ratio	Sample No.	Debt ratio	Sample No.
Japan	69.0%	514	67.0%	392
France	71.0%	225		
Italy	70.0%	118		
Germany	73.0%	191	61.4%	N.A.
US	58.0%	2,580	49.3%	N.A.
England	54.0%	608		
Canada	56.0%	318		

Source: Booth et al. [2001], Claessens et al. [1998], Rajan & Zingales [1995]

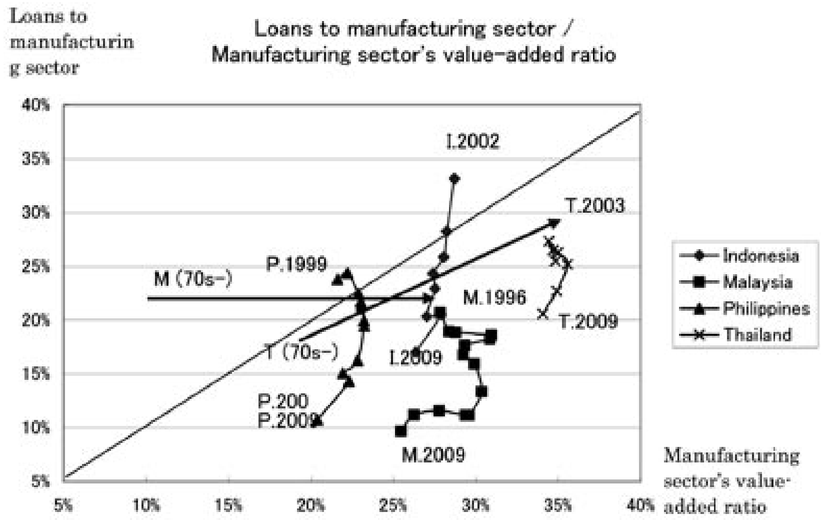
(2) Withdrawal of financial intermediation (commercial banking) from growth sectors

After the Asian financial crisis, a significant change occurred in commercial banks' lending activities. As is well-known, during the process of recovery from the non-performing loan turmoil in the early 2000s, the commercial banking sector in East Asia experienced downsizing in business and changes in corporate ownership structure, temporary nationalization by governments and corporate acquisition by foreign companies. With deposits and loans outstanding slowly recovering from 2002 or so, East Asian commercial banks' business operations on the whole recovered from the crisis while regaining stability. This recovery period coincided with a period when East Asian real economies attained a high growth rate driven by exports from the manufacturing sector. The issue here was the fact that the commercial banks' involvement in the recovery process of real economy sectors during that period is insignificant, while continuing to shift to domestic sectors such as real estate, financial services and personal consumption.

Figure 3-3 illustrates the total loans of commercial banks in four ASEAN countries to the manufacturing sector as a percentage of those banks' overall loans outstanding, compared with the manufacturing sector's value-added ratio. Plotted on the horizontal axis in the figure is the value-added ratio and the loan ratio shown on the vertical axis. The part below 45 degrees represents a state in which the commercial banks' lending activities are not involved with the manufacturing sector as much as the sector's proportion of the entire economy on a relative basis. The figure shows that, in each of the four nations, the manufacturing sector's value-added ratio experienced only a limited degree of change from the latter half of the 1990s or the very early part of the 2000s until recently. On the other hand, it reveals that the ratio of the commercial banks' lending to the manufacturing sector declined at a rapid pace.

This data suggests that manufacturing sector companies, acting as a driver of East Asian economic growth, have become less and less dependent on debt financing in what appears to be a "return" to self-financing.

Figure 3-3 Loans to manufacturing sector / Manufacturing sector's value-added ratio

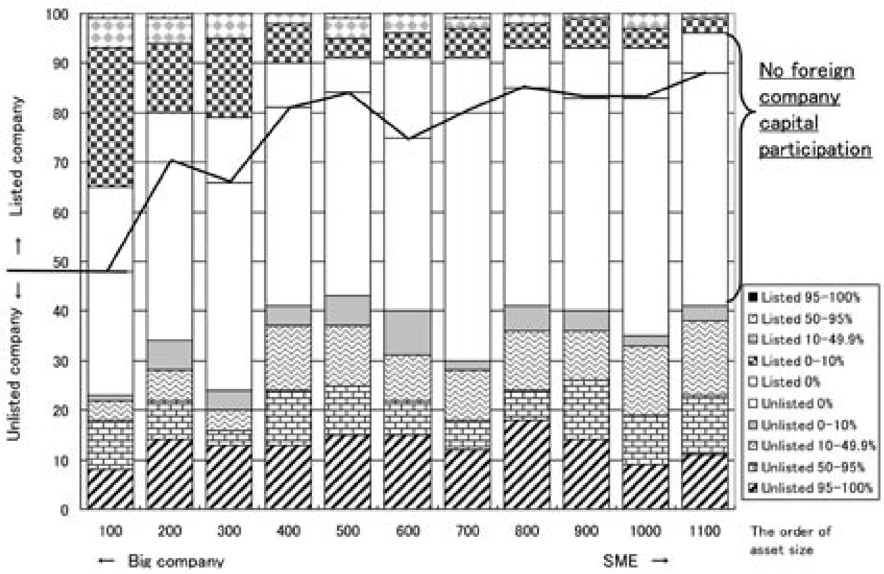


Source: Central banks in each country

(3) Limitation of the role of the securities market

Amid the occurrence of such trends with regard to debt financing, the securities market has largely failed to play a role as a substitute for debt financing. From sometime during 2004 to 2005, international fund inflow into East Asia recovered, with many nations in the region starting to receive a net inflow of portfolio investment funds. While the Lehman shock slow the flow temporarily, a recovery took place in the very early part of 2010, followed by an overheating that has been observed recently. There is no straightforward explanation to the relationship between these developments and the securities market's changing role in connection with corporate fundraising. To analyze this point, it will be important to consider the distribution of major companies by their relationship with the securities market. Figure 3-4 uses data on Thailand as a case example to illustrate the distribution of listed and unlisted major companies (based on total asset size as of 2005) alongside data on the ratio of capital participation by foreign companies.

Figure 3-4 Thailand's companies distribution for asset size and foreign company capital participation



Source: Mieno, Fuda [2010] and central banks in each country

The figures show different classes of companies by size of total assets. These classes are placed from left to right in the order of asset size, with the top 100 company-class at far left and the top 1,100 company-class at far right. The distribution of listed and unlisted companies as well as the ratio of foreign company equity participation for each class's bar are presented. On the upper side of the chart are listed companies, with unlisted companies shown on the lower side, with the two sides divided by a bold line. The farther a company is from the dividing line, the higher its foreign company capital participation ratio is (the segments neighboring the dividing line represent companies with no foreign company capital participation).

As can be seen from the chart, companies listed on a stock exchange and actively raising funds through the capital market account for a limited proportion of the total companies.[28] Most joint ventures and subsidiaries with a high foreign ownership ratio belong disproportionately to the unlisted company group and do not have any activities in the securities market. Presumably, many such foreign-owned companies constitute manufacturers acting as the driver for the high growth of the real economy market. Having no exposure to the domestic capital market financing (and to debt financing, either, as described above),

[28] When compared with other ASEAN nations, Malaysia shows a high proportion of listed companies in the total number of total asset size-based major companies (i.e. 445 companies out of the top 600, or 74.1% of the total). On the other hand, Indonesia shows a proportion even lower than that of Thailand (89 companies out of the top 500, or 17.8%), as does the Philippines (177 companies out of the top 500, or 35.4%). While the proportion of foreign-owned companies in Malaysia, 99 companies out of the top 600 (16.5%), is significantly lower than that of Thailand, both countries exhibit the common tendency that such locally-incorporated entities are unlisted companies. (Research by the Japan Bank for International Cooperation).

such companies have a strong tendency to rely on self-financing. Companies actively raising funds through capital market financing probably belong mainly to the segment with foreign ownership ratios of less than 10%, within the listed company category side. Put differently, the increasing portfolio fund inflow into the domestic market is not exerting any direct effect on the "core" part of the existing growth structure.

The above discussion highlights the characteristics of the fundamental structure of East Asian companies' fundraising activities, namely: (i) a generally low level of debt financing activities and a high dependence on own equity capital; (ii) a decade-long trend of bank lending practice unfocused on growth sectors; (iii) the underdevelopment of the securities market for corporate fundraising. Presumably, the current status of corporate fundraising described here does not directly imply that the fundraising entities are necessarily in a sluggish state. This is because the heavy dependence on self-financing could be largely attributable to: a) the lack of system enhancement relating to external financing vehicles commensurate with the quality of the funds needed; b) the current structure of the real economy. The "need" for the bond market should be studied in relation to these points, which are covered by the following sections one by one.

3.2.2 Significance of corporate bond financing – external financing vehicle commensurate with the quality of the funds needed

(1) Comparison of external financing and self-financing

The above-mentioned financial structure, from the perspective of corporate financing, has important implications for the identification of a desirable state of corporate bond-based funding needs. Put differently, focusing on the issue of the shift from bank loans to the securities market (i.e. the capital market or bond market) may not necessarily be the right approach. If the actual problem is an extremely infrequent use of external financing, including bank loans, in comparison to self-financing, bank loans (financial intermediation) and the securities market should be seen as mechanisms that have mutually complementary relationship with each other.

Given that a company's decision to use corporate bond financing as one form of external financing, the current task must explore the steps to help companies use external financing more actively on the whole, instead of seeing corporate bonds as a substitute for bank loans, and explore the factors causing impediment to both bank loan financing and corporate bond financing.

(2) Functional differences among financial intermediation, the bond market and the equity market

A focal point to develop the Asian corporate bond market is the term structure of funds based on the view that corporate bonds, unlike bank loans, are instruments for providing long-term funds that could provide a solution to the "term mismatch" issue. On the other hand, industry experts attaching importance to the roles of corporate governance and the capital market have identified the issue of minority shareholder rights protection as their focal point.

When external financing is broken down into financial intermediation, the corporate bond market and the capital market and subsequent examination of their respective roles and characteristics are made, it is clear that such focal points are extremely well focused, in consideration of the entire picture.

Figure 3-5 outlines the characteristics and roles of the three types of fundraising methods from four different perspectives.

Figure 3-5 Fundraising channels and suitable industry sector

		Financial intermediation	Bond market	Equity market
1 Information asymmetry and information generation		Concentric	Competetive	Competetive
	Information generation cost	Low	High	High
2 Right protection and contract compliance enforceability	Needs of investor's right protection	Low	High	High
	Difficulty of control in default	Middle	Middle	—
3 Term		Short term	Long term (mainly)	Long term
	Risk to be required to repay ahead of schedule	High	Low	Low
4 Risk tolerance		Low	Middle	High
Suitable industry sector	Industry feature	Mature industry	Middle business risk and long term capital needs	New industry
	At the developing stage of emarging Asian countries	Manifucturing	Infrastructure and consumer business (ex. financial sector)	High–value added industry (ex. IT) and R&D driven manifuctureing

Source: Okuda, Mieno, Ikushima [2007], Okuda [2007]

Firstly, the three fundraising methods differ from one another in information generation cost, which is generally low for financial intermediation and high for the securities market. The second difference among them involves with the necessity of contract compliance enforceability and equity interest holder rights protection. As a general rule, in comparison to financial intermediation, the two fundraising methods practiced in the securities market tend to incur costs relating to contract compliance enforcement, and the full functioning of these two methods requires a high level of protection for equity interest holders' right. The third difference involves fund term structure[29], with the fourth difference being associated with the investor's risk tolerance level.

In view of such an overall picture, it is possible to point out that past discussion on corporate governance and bond market development placed particular focus on the second and third perspectives. It is problematic that the third perspective identifies the demand for long-term funds to be challenging at a time when, as described above, overall demand for external financing is actually stagnant.

In addition, when analyzing demand for corporate bonds, it should be noted that, while the first and second perspectives involve problems in the overall economic structure, the third and fourth perspectives involve technological or industry structure-related problems. One potential approach would be to think that corporate bond financing requires (1) "long-term" funds, compared with financial intermediation and capital financing, and is (2) suitable for industrial sectors with a relatively low level of risk. While corporate bond financing has recently managed to achieve a degree of growth in the consumer financing (installment financing), infrastructure and general financial services sectors, such development can be explained by these perspectives.

3.2.3 Asian economic development and its bond market – the current structure of the real economy and its change

As described above, bond market development tends to be greatly influenced by the corporate funding needs by the industrial sectors in the real economy. Yet the above represents a short-term perspective-based discussion that is focused only on the current situation. The initiative to develop the Asian bond market is motivated not necessarily by considerations of the current economic situation alone. It is motivated also by a longer term perspective-based philosophy embracing the future of East Asia, which makes it important to pay due attention to the relationship between medium- to long-term change in East Asian economic structure and the growth of the region's bond market.

The low level of corporate bond financing activities (or external financing activities overall) in East Asia by private companies to date may be closely related to the region's economic growth structure, namely, its traditional pattern of economic growth. Put differently, when economic growth is driven by export-oriented manufacturers supported by direct investment, the production mainly relies on relatively well-known technologies (with a relatively low degree of information asymmetry). That allows financial intermediation to play a significant role in the area of external financing. Furthermore, actual business activities presumably involve unique funding vehicles[30] such as relay loans and capital increases, used in particular by foreign-owned companies, and those vehicles

[29] In the past, discussion on the Asian bond market often focused on corporate bonds' function in raising long-term funds, as can be seen from industry experts' awareness of the need to eliminate "term mismatch." Yet the current ongoing initiatives have witnessed a growing expectation that corporate bonds can serve as vehicles for short-term and medium-term fundraising as well, a function already performed by mid-term notes, whose issuance has been expanding.

[30] It should be possible to regard them as a single type of self-financing.

are probably performing better than financial intermediation. The low level of corporate bond financing activities seems to have as its fundamental background such growth structure of the real economy.

■ Short-term challenge: Financing for infrastructure investment

Under such circumstances, the Asian economy is now in the process of change. A very short-term challenge, perhaps, is the enormous potential demand for infrastructure investment. Fundraising relating to infrastructure is exactly where bond financing is expected to play a significant role due to the long-term nature of the funds raised and the medium level nature of the risk involved. Issuers of bonds for infrastructure investment will probably consist of both public and private sector entities. Given the development already achieved by public bonds, the next challenge should be corporate bonds.

■ Medium-term challenge: Steps to adapt to an increasingly consumer-oriented economy

One medium term challenge is the changing East Asia economic landscape in which there is a gradual shifting from excessive reliance on exports toward a consumer-oriented economy. Affluent consumer lifestyles are increasingly common in the urban areas of East Asian nations. While the relative proportion of the consumer spending and domestic demand segment to the export segment within the overall economy has yet to rise, the former segment is now continuing to grow in a steady manner. Corporate bond financing is likely to play a meaningful role in the consumer spending and consumer finance sectors.

■ Long-term challenge: Manufacturing sector sophistication and changing technologies for addressing environmental challenges

The longer-term outlook shows that the bond market's function (or the bond market's function as part of the whole securities market's function) will potentially become important when the current role of the East Asian manufacturing sector begins to change from the production base for companies based in developed countries, giving rise to large-scale investment in new technologies in East Asia. In particular, as is often claimed, South East Asian nations have potential comparative advantage globally in bio-resources and solar power generation. If such a shift in industrial structure toward new technologies occurs, it may constitute a major technological structure-based leap forward for the region, from a labor-intensive model to a capital-intensive model, likely requiring the overall securities market, including the bond market, to perform their functions.

From the viewpoint of Japanese companies, the export of environmental technologies will play an important role in the country's future growth strategy. The question of how the bond market should be used in relation to such environmental business should be discussed going forward in an earnest and prudent manner.

3.3 Corporate funding needs and the bond market – Current status observation[31]

3.3.1 Asian bond market: A bird's-eye view of the five nations

This section examines the current size of the Asian bond market by analyzing, the most basic data required for the propose initiatives to grow the market. The growing size of the Asian bond market has recently been examined in various research reports, including the ones published by the International Monetary Fund, the World Bank and the Bank for International Settlements. The Asian Development Bank has continued to provide information on the Asian bond market as a basic effort towards developing the market (AsianBondsOnline[32]), examining country-by-country bond market price and size data compiled in a macroeconomic manner, making it one of the most comprehensive databases now available given its extensive country coverage and timely updating of information. The available market size data consists of the total value of bonds outstanding and such value as a percentage of GDP, both which are presented separately for corporate and public bonds as well as local currency-denominated and foreign currency-denominated bonds.

Figure 3-6 shows the historical total bonds outstanding as a percentage of GDP for Korea, Thailand, Malaysia, Indonesia and the Philippines, compiled in accordance with the World Bank Financial Development and Structure Dataset.

It shows that, compared with the 1997 level and pre- and post-Asian financial crisis data, these nations' bond markets expanded significantly in the 2000s. While the last decade witnessed a continuous decline in the proportion of private sector financing, capital market growth varied from one country to another. Still, the value of total bonds outstanding has continued to rise noticeably in each of the five nations.

Meanwhile, Figure 3-6 indicates that two considerations regarding the growth of these bond markets need to be made. Firstly, the late 1990s was a period characterized by a rapid contraction of financial transactions in Asian nations in the midst of the region's financial crisis. Therefore, when reviewing the Asian bond market development, it is necessary to make a comparison with the status quo in 2002 at a time when the first attempt to undertake such bond market development-related initiative was launched. A comparison of 2002 and 2007 figures shows that bond market growth was fairly limited during the given period, with Indonesia posting negative growth and the other four Asian nations showing marginal growth over a five-year period. Yet in 2009, in the wake of the Lehman shock, the value of total bonds outstanding was increased in Korea, Thailand and Malaysia.

[31] In writing these subsections, assistance was given by Ms. Tran Van Anh, Kobe University Graduate School, with regard to data preparation and organization.
[32] http://asianbondsonline.adb.org/

Figure 3-6 Bond outstanding in each country (as a percentage of GDP)

Korea

	1997	2002	2007	2009
Bond outstanding	42.5%	89.4%	106.9%	117.5%
Private bond	33.0%	62.6%	58.8%	69.2%
Public bond	9.6%	26.8%	48.1%	48.3%
Private sector financing	54.1%	84.3%	100.9%	116.0%
Equity market size	18.0%	43.2%	101.5%	138.9%

Thailand

	1997	2002	2007	2009
Bond outstanding	9.6%	32.7%	50.7%	63.1%
Private bond	8.3%	12.0%	16.0%	18.1%
Public bond	1.2%	20.8%	34.7%	45.0%
Private sector financing	154.1%	97.1%	82.7%	73.3%
Equity market size	41.2%	32.7%	68.9%	78.6%

Malaysia

	1997	2002	2007	2009
Bond outstanding	65.3%	88.4%	90.4%	96.7%
Private bond	40.4%	53.4%	54.5%	60.8%
Public bond	24.9%	34.9%	35.9%	35.9%
Private sector financing	139.5%	119.5%	100.7%	92.9%
Equity market size	201.7%	128.9%	156.0%	210.6%

Indonesia

	1997	2002	2007	2009
Bond outstanding	2.6%	27.6%	18.9%	21.1%
Private bond	1.7%	1.1%	2.0%	1.9%
Public bond	0.8%	26.4%	17.0%	19.2%
Private sector financing	53.5%	17.9%	22.7%	23.0%
Equity market size	28.1%	13.6%	40.7%	74.1%

The Philippines

	1997	2002	2007	2009
Bond outstanding	27.2%	33.9%	34.6%	30.1%
Private bond	0.2%	0.5%	1.1%	1.2%
Public bond	27.0%	33.4%	33.5%	29.0%
Private sector financing	48.7%	32.8%	23.3%	20.9%
Equity market size	68.5%	52.8%	59.8%	98.6%

Source: World Bank, Financial Development and Structure Dataset

Secondly, from the perspective of the need to remedy "term mismatch," it is necessary to pay attention to historical changes in corporate bonds (private corporate bonds) instead of the overall bond market. Although they account for a high proportion of the total bonds outstanding in Korea and Malaysia, corporate bonds make up only a limited part of the entire bonds outstanding in Thailand, and represent a negligible portion of the total in the Philippines and Indonesia. A 2002-2007 comparison of historical corporate bond figures points to each country's figures remaining more or less flat during that period. By using the 2009 figures for comparison, it is possible to understand that it was after the Lehman shock that corporate bonds issued by private companies began to exhibit noticeable growth in each Asian country.

3.3.2 Scope of observation and source of information

In order to appreciate the significance of the bond market expansion described above from the perspective of the fund demand side, it will be essential to have more detailed data points on detailed types or category of bond issuers as the bond market function varies according to whether the bonds are public or corporate bonds, whether the public bonds are government bonds or central bank bonds and whether the corporate bonds are those issued by a private company or state-run company. The bird's-eye view-like information available here does not allow one to know such details.[33]

In addition, regarding corporate bonds, it will be important to have information on the industrial sector and type of business of the issuer. Firstly, the specification of whether the issuer is a financial institution or non-financial institution will be important for determining whether or not the bond market has been growing while playing its expected role of helping remedy "term mismatch." Secondly, with regard to issuances by non-financial sector entities, it will be necessary to find out industry details, such as whether an issuance represents fundraising by an issuer belonging to the manufacturing sector that has been driving East Asia's economic growth to date, or by an issuer belonging to the non-manufacturing sector, including infrastructure development and other domestic demand-related businesses. Thirdly, to understand the relationship between the foreign-owned companies (a unique feature of East Asia's economic growth) and the bond market should be important from the perspectives of manufacturing sector growth and potential use of the Asian bond market by Japanese companies operating in East Asia.

As a step towards examining such information, it will be necessary to rely on individual Asian nations' information sources. The most basic individual country information is contained in financial statistics published by the respective nations' central banks. While the level of the coverage varies from one country to another, such central banks' financial statistics allow one to partially identify whether the public bonds are issued by government or central bank and whether the corporate bonds are issued by a financial or non-financial institution. However, details beyond those data will need to be obtained by collecting raw data on individual issuer companies and bond issuances. One way of collecting such data would be to use the databases provided by financial information providers such as Thomson Reuters and Bloomberg, but their information coverage may prove insufficient, depending on the data source involved.[34]

Primary raw data can be obtained from data base held by the securities industry associations, bond dealer associations and credit rating agencies of the individual countries. Such raw data has been collected, to the extent possible, and compiled for the purpose of examination. Still, at times the information acquired by those institutions is limited to "public placement bonds" and includes public bonds and bonds issued by state-run companies, which may result in the omission of various kinds of information. Shown below is an examination of the collected information, which serves as basis for the information compiled from AsianBondsOnline and the statistics of the individual countries' central banks, while paying careful attention to the uniqueness of the individual.

The review was made on five Asian nations: Thailand, Korea, Malaysia, Indonesia and the Philippines. A relatively greater focus was placed on Thailand

[33] In particular, all too often information on bonds issued by a state-run company does not specify whether the specific issuance is categorized as a public bond or corporate bond.
[34] A drawback of such commercial databases is their high price and generally limited amount of information on the value of the bonds outstanding in comparison to bond issuance information. In addition, the extent of the data coverage is not necessarily clear.

for the observation as the country's available information is far more detailed than that of the other four nations. As for Korea, only the compiled information is shown as a reference, since information source for raw data was unobtainable.

3.3.3 Composition of bonds: A detailed classification of public bonds and corporate bonds

(1) Thailand

The following is an observation of historical changes based on a more detailed classification of public bonds and corporate bonds. Figure 3-7 is the historical value of the total bonds outstanding in Thailand as a percentage of GDP. The entire raw data from 1998 onward were available from Thailand, making it possible to compile all the relevant data points.

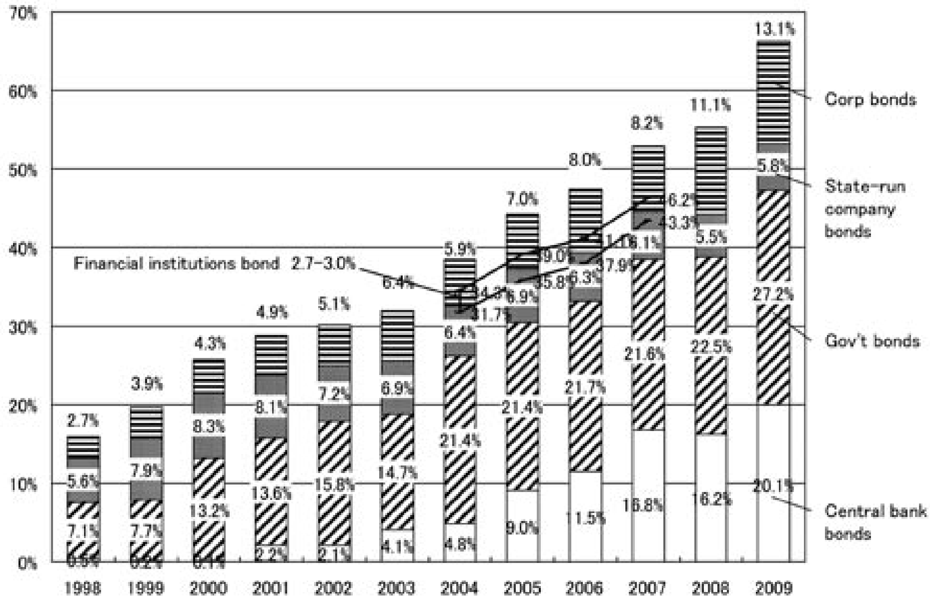
Based on this chart, several characteristics of the Thai bond market can be identified. Firstly, the overall Thai bond market has been growing in a continuous manner, yet certain reservations can be made in the interpretation of that trend. Among all the types of bonds, public bonds have grown significantly, but that growth was essentially due to the issuances of central bank bonds in the period from 2003 to 2007. Government bonds continued to grow marginally until 2004, followed by a flat period, before increasing rapidly during the recession in the wake of the Lehman shock. Secondly, it is possible to ascertain that approximately half of what were deemed to be corporate bonds in AsianBondsOnline of the Asian Development Bank and many of the reports issued by international institutions were actually bonds issued by state-run companies.[35] While the private sector's need for corporate bond issuance has been picking up marginally, it is apparent that the rate of growth remained extremely low until the Lehman shock. The market growth accelerated markedly in 2008 and 2009 in the wake of the Lehman shock. Thirdly, the proportion of financial institutions bonds to the total bonds outstanding has not been notably high, at 2.7% to 3.0% of the total in the 2004 to 2007 period. Nevertheless, fundraising through bond issuance was undertaken separately by three state-run banks (the Export-Import Bank of Thailand, the Government Housing Bank of Thailand, the Bank for Agriculture and Agricultural Cooperatives) in addition to private sector banks.

(2) Korea, Malaysia, Indonesia and the Philippines

Figure 3-8 is the historical data for Korea, Malaysia, Indonesia and the Philippines. In the absence of raw historical data, the charts were created by computing data obtained from AsianBondsOnline and other relevant data extracted from the statistics published by the individual countries' central banks. Corporate bonds are classified into bank debentures and other ordinary corporate

[35] Therefore, it is necessary to discuss the significance of corporate bonds for both private companies and state-run companies.

Figure 3-7 Bond outstanding in Thailand (as a percentage of GDP)



Source: Thai Bond Market Association "Thai Bond Market Directory"

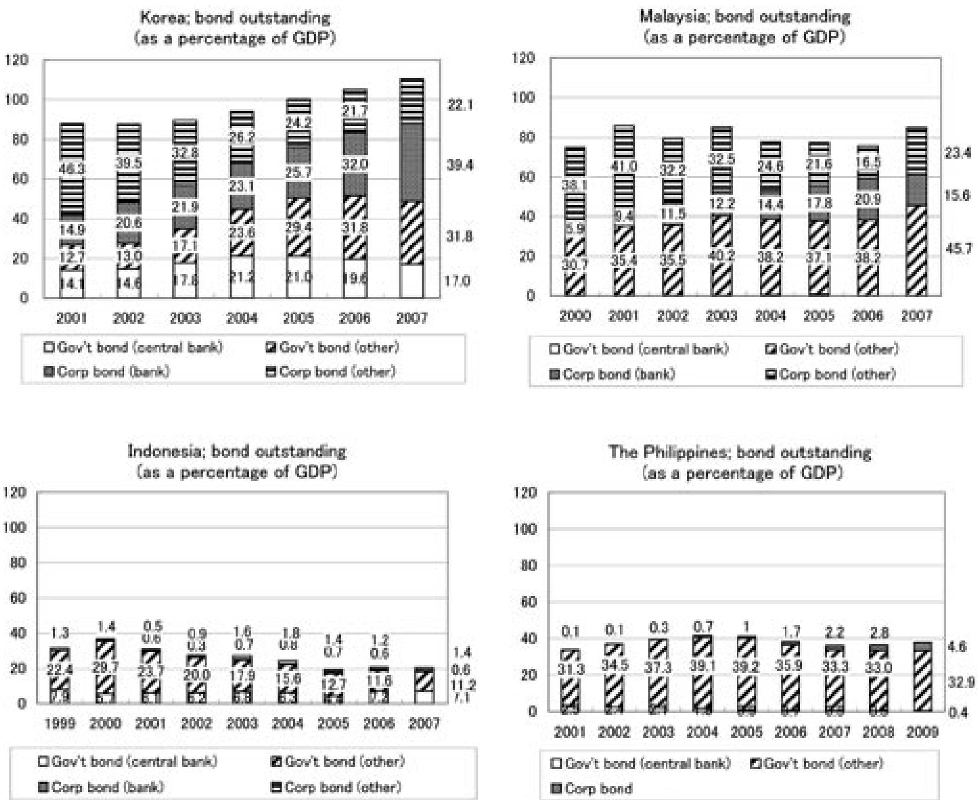
bonds, but bonds issued by state-run companies that are presumably included in such corporate bonds are not specified.

The historical data for these four nations also indicates a number of facts that are not observable from the bird's-eye view-like information shown in Figure 3-6. Firstly, throughout the 2000s, the value of the total bonds outstanding in those countries either gained marginally (Korea), remained flat (Malaysia) or declined (Indonesia and the Philippines).

Secondly, corporate bonds in Indonesia and the Philippines stood at a level almost negligible as a percentage of total bonds outstanding (similar to Figure 3-6). The figures for Korea and Malaysia, nations with a relatively large corporate bond market, were flat during the 2000s and did not exhibit any meaningful growth.

Thirdly, both Korea and Malaysia experienced a significant increase in the value of total financial institutions bonds outstanding and the decline in the total corporate bonds outstanding. This indicates that these two countries' bond markets continued to develop during the period under review in a manner that differed greatly from the expected development pattern, in which the bond market performs the function of helping non-financial companies shift from bank loans to corporate bond financing.

Figure 3-8 Bond outstanding in Korea, Malaysia, Indonesia, and Philippines (as a percentage of GDP)



Note: Bank debentures of Indonesia is derived from bond held in balance sheet of commercial banks. Therefore, they do not contain non-bank financial institutes.
Source: AsianBondsOnline (Local Source), Central banks of each country, commercial banks' balance sheet

3.3.4 Composition of corporate bonds issued by private companies: A classification by industrial sector and type of business

This section examines corporate bond issuers in detail for the period where the necessary data is available.

(1) Thailand

Figure 3-9 shows a table of the total corporate bonds outstanding in Thailand at the end of 2007 by (i) type of business and (ii) industrial sector of issuers, and points to several tendencies.

Firstly, it shows, once again, that almost half, or 43.2%, of the total corporate bonds outstanding were issued by state-run companies.

Secondly, most of the private company issuers were listed local Thai companies, with an only fraction being foreign-owned companies. This means that local Thai companies represented a disproportionate part of the total corporate bond issuers in Thailand, given that a significant number of foreign-owned companies were included in major Thailand-based companies, as seen in the preceding section (3.2).

Thirdly, by industrial sector, the non-manufacturing sector accounted for the highest proportion, followed by the financial services sector and a relatively low proportion represented by the manufacturing sector. That confirms the existence of a significant gap among different industrial sectors in view of the fact that the real economy's growth has been driven by the manufacturing sector. It also points to a notably high representation of the financial services sector in comparison to the proportion of the sector's added-value to the total.

Fourthly, a considerable proportion of the total corporate bond issuances by state-run companies were undertaken by financial services sector companies, a fact warranting attention.

Based upon a historical study of the raw data from Thailand, Figure 3-10 is the historical distribution of corporate bond issuing companies by industrial sector for the period from 2003 to 2009. The data shown in this table demonstrates that the trend identified in Figure 3-9 has been a relatively stable one, undergoing several minor changes in the last few years.

Firstly, while still accounting for a low proportion of the total, the manufacturing sector showed a meaningful pickup in the share of the total

Figure 3-9 Thailand; Corp bond outstanding in each industry type and company type (as of end-2007)

	State-run company	Private company				Total
			Listed	Unlisted (Local)	Unlisted (Foreign owned)	
Corp bond outstanding (mil Baht)						
Nonmanufacturing	356,448	318,802	297,418	20,585	800	675,251
Financial industry	163,260	159,765	121,967	24,700	13,099	323,025
Manufacturing	0	155,694	133,157	3,500	19,038	155,694
SPV	0	49,161	14,176	34,985	0	49,161
Total	519,708	683,423	566,717	83,769	32,936	1,203,131
Industry type of issuer (proportion of total corp bond)						
Nonmanufacturing	29.6%	26.5%	24.7%	1.7%	0.1%	57.6%
Financial industry	13.6%	13.3%	10.1%	2.1%	1.1%	26.3%
Manufacturing	0	12.9%	11.1%	0.3%	1.6%	12.7%
SPV	0	4.1%	1.2%	2.9%	0.0%	3.4%
Total	43.2%	56.8%	47.1%	7.0%	2.7%	
Industry type of issuer (proportion of total private company corp bond)						
Nonmanufacturing		46.6%	43.5%	3.0%	0.1%	
Financial industry		23.4%	17.8%	3.6%	1.9%	
Manufacturing		22.8%	19.5%	0.5%	2.8%	
SPV		7.2%	2.1%	5.1%	0.0%	
Total		100.0%	82.9%	12.3%	4.8%	

Note1: Industrial classification is categorized as follows. Nonmanufacturing: Commerce, Energy & Utilities, Information & Communication Technology, Media & Publishing, Property Development, Tourism & Leisure, Transportation & Logistics, Financial industry: Banking, Finance & Securities, Manufacturing: Agribusiness, Automotive, Construction.
Note2: Below two unlisted and foreign owned companies are categorized as "Listed company". Easy Buy Plc. 6,255 mil Baht, Aromatics (Thailand) Plc. 2,427.35 mil Baht.
Source: Thai Bond Market Association "Thai Bond Market 2008" p.364-p.373 (Appendix 1, List of ThaiBMA Registered Bonds)

Figure 3-10 Thailand; Corp bond outstanding in each industry type (historical data)

(1) Outstanding (mil Baht)

	2003	2004	2005	2006	2007	2008	2009
Total	377,259	385,279	487,621	577,590	678,668	795,386	1,048,957
Manufacturing	53,625	44,490	60,392	143,400	166,894	177,080	189,580
Nonmanufacturing	197,656	223,115	281,905	263,478	318,802	333,472	494,773
Infrastructure	168,066	196,919	260,053	242,722	305,142	314,367	470,158
Other	29,590	26,196	21,852	20,755	13,660	19,105	24,615
Financial industry	125,978	112,826	124,998	132,375	147,923	245,133	331,253
Bank	72,465	51,008	54,147	57,861	76,870	172,801	226,828
Other	53,513	61,818	70,852	74,514	71,053	72,333	104,425
SPV	0	4,849	20,325	38,338	45,048	39,701	33,351

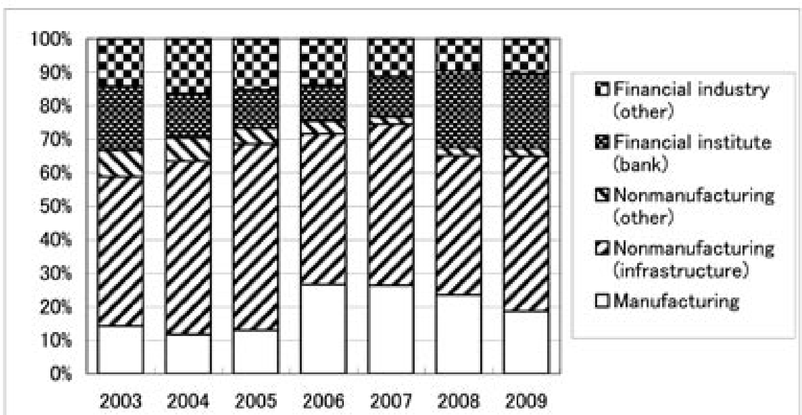
(2) Composition ratio

	2003	2004	2005	2006	2007	2008	2009
Manufacturing	14.2%	11.5%	12.4%	24.8%	24.6%	22.3%	18.1%
Nonmanufacturing	52.4%	57.9%	57.8%	45.6%	47.0%	41.9%	47.2%
Infrastructure	44.5%	51.1%	53.3%	42.0%	45.0%	39.5%	44.8%
Other	7.8%	6.8%	4.5%	3.6%	2.0%	2.4%	2.3%
Financial industry	33.4%	29.3%	25.6%	22.9%	21.8%	30.8%	31.6%
Bank	19.2%	13.2%	11.1%	10.0%	11.3%	21.7%	21.6%
Other	14.2%	16.0%	14.5%	12.9%	10.5%	9.1%	10.0%
SPV	0.0%	1.3%	4.2%	6.6%	6.6%	5.0%	3.2%

(3) Company number, issuing bonds

	2003	2004	2005	2006	2007	2008	2009
Total	145	168	218	265	292	72	78
Manufacturing	14	19	31	43	50	12	9
Nonmanufacturing	77	92	109	123	136	31	39
Infrastructure	61	75	89	102	121	26	32
Other	16	17	20	21	15	5	7
Financial industry	54	53	67	80	83	20	21
Bank	24	15	13	22	31	10	12
Other	30	38	54	58	52	10	9
SPV	0	4	11	19	23	9	9

(4) Composition ratio (graph)



Note: Nonmanufacturing (Infrastructure) contains SPV
Source: Thai Bond Market Association "Thai Bond Market 2008" p.364-p.373 (Appendix 1, List of ThaiBMA Registered Bonds)

corporate bonds outstanding in 2006 and 2007, before declining from 2008 onward in the wake of the Lehman shock. It may indicate that the extent of the corporate bond issuer base had grown to include more Thai manufacturing sector companies during the fast economic growth achieved by Thailand prior to the Lehman shock.

Secondly, although the proportion of non-manufacturing sector (i.e. infrastructure development sector) companies to the total corporate bonds outstanding had been extremely high in the past, their share started to decline after peaking in 2005, showing signs, albeit moderate, of further declines after the Lehman shock that occurred in autumn 2008.

Thirdly, the share by the financial services sector in the total corporate bonds outstanding continued to erode gradually until 2007, followed by a period of a significant pickup after the Lehman shock. Among the different subsectors of the financial services sector, such a trend was particularly notable for banks, which emerged as the principal corporate bond issuer category within that sector.

(2) Malaysia, Indonesia and the Philippines

While the amount of raw data on Malaysia, Indonesia and the Philippines are fairly limited, it is possible to capture certain trends by examining the available data. Figure 3-11 is a summary of the status of the three countries. Unlike the data for Thailand, the data for these nations covers only corporate bonds issued by private companies insufficient for specifying if the individual issuer is a listed or unlisted entity. As for the data for Malaysia, foreign-owned companies accounted for a relatively high proportion of the total, so the data was compiled for local Malaysian companies and foreign-owned companies separately.

The data for these nations points to the existence of a trend appeared in Thailand to a degree. Firstly, a high proportion of the issuers in all of these countries was represented by non-manufacturing sector companies involved in infrastructure development projects, and financial services sector companies. In comparison to Thailand, a large share of the total was accounted for by the financial services sector in these three nations. In Indonesia in particular, the financial services sector's share exceeded that of the non-manufacturing sector, including infrastructure development-related companies. In terms of the proportion of the manufacturing sector to the total, the Philippines and Indonesia were on par with Thailand, while Malaysia exhibited an extremely low proportion.

Secondly, in Malaysia, corporate bond issuances by foreign-owned companies constituted 18.9% of the total, showing a high level of activity. Another notable feature is the fact that the issuers' industries included both the non-manufacturing industry and the financial services industry. Given that in Indonesia and the Philippines foreign-owned companies accounted for a negligible portion of the total corporate bond issuances, the reasonably high share of foreign-owned companies in Malaysia should be noted as a feature unique to the nation. However, as distinguishing foreign-owned companies from local Malaysian companies is not easy, it will be necessary to scrutinize such a distinction more carefully. The corporate bond issuance share by foreign-owned companies in Malaysia in 2009 was due to an isolated large-sized bond issuance in that year by an infrastructure development-related company (a telecommunications carrier).

When comparing the Philippines and Indonesia, where corporate bond market size is relatively small, the number of issuers in the Philippines was extremely small at 25 companies. In contrast, the number of issuers in Indonesia stood at

105 companies, despite the low level of total corporate bonds outstanding . Such high number of issuers rank the country at the top of the four ASEAN nations in this respect, which implies that corporate bonds were issued by Indonesia-based entities for the purpose of relatively small scale fundraising.

Figure 3-11 Malaysia, Indonesia and The Philippines; Corp bond outstanding in each industry type (historical data)

Malaysia (as of end-2009) mil MYR

	Bond outstanding	Composition rate	Issue company No.
Total	137,720		92
Manufaturing	797	0.6%	5
Nonmanufacturing (Infrastructure)	79,203	57.5%	42
Nonmanufacturing (Other)	10,342	7.5%	14
Financial industry	45,533	33.1%	29
Bank	31,351	21.4%	18
Other	16,027	11.6%	13

	Local company			Foreign owned company		
	Bond outstanding	Composition rate	Issue company No.	Bond outstanding	Composition rate	Issue company No.
Total	111,663		92	26,057	18.9%	16
Manufaturing	365	0.3%	3	432	0.3%	2
Nonmanufacturing (Infrastructure)	67,960	14.4%	41	11,243	43.1%	1
Nonmanufacturing (Other)	8,917	2.0%	12	1,425	5.5%	2
Financial industry	34,176	24.8%	19	11,357	8.2%	10
Bank	19,660	14.1%	9	11,691	7.3%	9
Other	14,761	10.7%	11	1,266	0.9%	2

The Philippines (as of Jul. 2010) mil PHP

	Bond outstanding	Composition rate	Issue company No.
Total	234,221		25
Manufaturing	45,690	19.5%	2
Nonmanufacturing (Infrastructure)	64,800	27.7%	10
Nonmanufacturing (Other)	10,000	4.3%	1
Financial industry	75,631	32.3%	4
Bank	3,500	1.5%	4
Other	75,631	32.3%	4
Holding company	26,000	11.1%	2
SPV	600	0.3%	1

Indonesia (as of end-2006) bil IDR

	Bond outstanding	Composition rate	Issue company No.
Total	62,790		105
Manufaturing	11,750	18.7%	31
Nonmanufacturing (Infrastructure)	19,054	30.3%	23
Nonmanufacturing (Other)	5,633	9.0%	11
Financial industry	26,353	42.0%	40
Bank	13,886	22.1%	21
Other	12,467	19.9%	19

Note: Nonmanufacturing (Infrastructure) contains the following sector; Telecom, Electric power, Energy, Water channel, Public Utilities, Toll road, Real estate, Construction.
Source: Malaysia Corporate Bond Handbook 2010, The Philippines Domestic Credit Rating Report 2010, and Indonesian Bond Market Director 2006

3.3.5 Summary

While Asian countries' bond markets achieved a certain growth throughout the 2000s, observations made in this subsection reveal that their growth was not as stable as it appeared, making it necessary for the observer to keep certain reservations in mind.

One point to note is the fairly limited extent of the growth of the overall Asian bond market. While the Korean bond market had grown steadily in the years until 2007, market growth in Malaysia had remained flat until that year. The real growth achieved by Thailand was rather limited, excluding the effect of a sudden jump in the issuance of central bank bonds, which had presumably been undertaken as part of the Thai central bank's sterilization measure. Of note is that in the years until 2007 the bond markets in Indonesia and the Philippines had experienced contraction instead of growth. In the last few years since the Lehman shock, the bond markets of Korea, Thailand and Indonesia have achieved growth due to the increased issuance of government bonds resulting from the expansion of their fiscal spending. Still, it remains to be seen if such growth is a sustainable trend.

The extent of corporate bond market growth in the years until 2007 had been extremely limited in the five-nation group observed, with the exception of Thailand. As for the relatively large corporate bond markets in countries like Malaysia and Korea, they have been large since the very early part of the 2000s. That said, since the Lehman shock, Thailand, Malaysia and Korea have recorded a growing number of corporate bond issuances. Another new feature that has emerged in recent years is the rising proportion of financial institutions bonds to overall corporate bonds in Korea and Malaysia.

Also revealed by the observations of this subsection was the existence of distinct characteristics in the composition of corporate bond issuers' industrial sectors and types of business. One point worthy of attention here is the fact that it is not possible to fully understand whether bonds issued by state-run companies are categorized as public bonds or corporate bonds in many of the statistics. This subsection's examination, based on the example of Thailand, revealed that bonds issued by state-run companies have been classified in the past as corporate bonds in many sets of compiled information, including information from AsianBondsOnline, and that such state-run companies' bonds account for a fairly high proportion of the total corporate bonds (42% in 2007). With regard to this point, careful attention also needs to be paid to other nations' data.

Individual Asian countries share common characteristics in the distribution by corporate bond issuers among private companies. In each nation, a significant portion of the total corporate bond issuers is non-manufacturing sector companies involved in infrastructure development, which constitute the predominant issuer category in many Asian countries. Separately, financial services companies, including commercial banks, also are a major issuer category, with a high share of the total issuances. In contrast, manufacturing companies are not active in issuing corporate bonds.

Looking at the relationship between corporate bond issuers and ownership type, (either local Asian or foreign-owned), along with company's listing status (either listed or unlisted), it is possible to ascertain that listed local companies are the principal issuer base in Thailand and Malaysia, the two markets examinable in this subsection, with foreign-owned companies (typically not listed on local stock exchanges) remaining inactive corporate bond issuers.

As discussed above, while having grown steadily, the East Asian bond market has yet to reach a stage marked by stability or significant momentum towards faster growth. Also notable in the East Asian bond market's historical trajectory is the fairly high degree of disparity that has existed among individual countries' markets. In order to facilitate further growth of the Asian bond market, it will be necessary to enhance relevant systems while paying due attention to demand-side structure and seeking to maintain a fundraiser-friendly market environment.

4 Cross-border bond issuance and international bond investment

4.1 Current status of capital flows

4.1.1 Status of regional capital flow

This section examines the status of securities investment in East Asia, based on data from the Coordinated Portfolio Investment Survey (CPIS) conducted by the IMF. The end-2009 total East Asian cross-border securities investments outstanding (the total of long-term bonds and shares) by investors domiciled in eight East Asian countries/economies (Hong Kong, Indonesia, Japan, Korea, Malaysia, the Philippines, Singapore and Thailand) accounted for 15.9% of the total outstanding balance of global investments in East Asia. Long-term bond investments constituted 66.2% of such East Asian cross-border securities investments. By way of comparison, the end-2001 share of the total outstanding balance of global investments in East Asia was 9.1%, and long-term bond investments represented 76.2% of such East Asian cross border securities investments. Given that long-term bonds accounted for 55.3% of total global investments in 2001 and 59.8% in 2009, the above data points suggest the existence of a strong safety-oriented attitude among investors domiciled in East Asian nations.

The share of regional investments in the total long-term bond investments by investors domiciled in these eight East Asian countries/economies has been increasing, albeit gradually, accounting for 3.4% of the total in 2001, 2.8% in 2005, 3.8% in 2008 and 4.1% in 2009. This shows that while the East Asian bond market during the same period has grown rapidly in size, driven mainly by government bonds, it has been substantially outpaced by the expansion of regional cross-border investment. Given that investment in East Asia constituted 2.3% of the total global long-term bond investments outstanding in 2009, it is fair to say that investors domiciled in East Asian nations are slightly more oriented toward regional investment.

A country-by-country breakdown of total East Asian long-term bond investments outstanding at the end of 2009 shows US$40,100 million from Singapore-domiciled investors (accounting for 33.2% of their total investments outstanding), US$33,500 million from Hong Kong-domiciled investors (13.6% of the total), US$21,200 million from Japan-domiciled investors (1.0% of the total) and US$8,900 million from Thailand-domiciled investors (68.4% of the total). The high profile of Hong Kong and Singapore is presumably due to their strategic positions

Figure 4-1 East Asian cross-border securities investments outstanding (long-term bonds)

Investing country — end-2009 (provisional value), mil USD

Receiving country	Hong Kong	Indonesia	Japan	Korea	Malaysia	The Philippines	Singapore	Thailand	Total	England	US	Total receiving amount
China	8,231	····	521	144	····	c	1,514	····	10,410	2,102	670	15,985
Hong Kong	····	90	1,390	385	100	67	3,595	184	5,811	1,781	1,456	11,059
India	3,327	87	739	81	104	c	5,030	34	9,402	6,436	3,352	28,176
Indonesia	225	····	1,792	166	48	c	5,298	8	7,537	883	7,261	24,345
Japan	3,664	····	····	212	····	7	1,992	90	5,965	28,892	26,576	216,576
Korea	10,483	10	8,440	····	1,296	153	13,965	8,332	42,679	9,516	16,328	97,469
Malaysia	2,929	5	2,509	130	····	56	4,429	201	10,259	2,458	6,769	27,595
The Philippines	648	4	1,477	56	196	····	1,246	29	3,656	390	3,216	17,289
Singapore	2,770	298	3,595	102	605	c	····	10	7,380	2,466	6,649	25,970
Taiwan	957	····	11	··	1	c	1,632	··	2,601	246	227	5,569
Thailand	174	····	684	74	104	18	1,226	··	2,280	131	1,239	5,474
Vietnam	96	····	33	2	2	····	210	··	343	630	243	1,475
Total (A)	33,504	494	21,191	1,352	2,456	301	40,137	8,888	108,323	115,931	59,290	476,982
Total investment amount (B)	246,458	2,625	2,224,756	25,032	6,493	3,829	120,999	12,988	2,643,170	1,815,134	1,570,340	20,404,695
Ratio of Asia to total A/B (%)	13.6	18.9	1.0	5.4	37.8	7.9	33.2	68.4	4.1	6.4	3.8	2.3
England	30,549	342	131,469	1,396	237	253	10,296	277	174,819	····	240,252	1,624,695
US	67,189	458	681,610	12,881	728	1,413	24,188	1,480	789,947	532,626	····	4,526,378

Note1: " · · " means that outstanding is zero or less than 0.5 mil USD
Note2: " · · · · " means no data
Note3: "c" means that data is not disclosed
Source: IMF CPIS; compiled by DIR

as Asia's international financial centers and bases for local and US/European investors. In particular, in recent years as part of an effort to enhance its function as an international financial center the Singapore government has been actively seeking to attract foreign asset management companies to the country by relaxing its capital regulations.

A look at year-on-year growth rates in total investments outstanding shows 25.9% for the East Asian region as a whole, with Thailand at 121.0%, Singapore at 44.0% and Malaysia at 36.5%. As for Japan, its year-on-year growth rate was negligible at 0.8%. In the period from 2001 to 2009, the total regional cross-border long-term bond investments outstanding held by investors domiciled in East Asian countries increased by 176% from US$39,300 million in 2001 to US$108,300 million in 2009. In the same period, notable growth was recorded by investors in the region, with Hong Kong-domiciled investors expanding such regional investments from US$14,600 million in 2001 to US$33,500 million in 2009, Singapore-domiciled investors from US9,800 million to US$40,100 million, Japan-domiciled investors from US$13,100 million to US$21,200 million, Thailand-domiciled investors from US$60 million to US$8,900 million and Malaysia-domiciled investors fromUS$140 million to US$2,460 million. In particular, during

Figure 4-2 East Asian cross-border securities investments outstanding (equities)

Investing country — end-2009 (provisional value), mil USD

Receiving country	Hong Kong	Indonesia	Japan	Korea	Malaysia	The Philippines	Singapore	Thailand	Total	England	US	Total receiving amount
China	134,279	····	12600	12559	240	c	15,788	58	175,524	19,808	101616	382,138
Hong Kong	····	9	15,055	6791	2246	····	12,888	121	37,110	32,228	91,391	238,279
India	971	759	4432	3372	53	c	16,921	····	26,508	7,702	62,045	279,587
Indonesia	192	····	663	245	482	c	2,908	19	4,509	2993	15,467	44,738
Japan	5,763	1	····	2574	110	····	15,210	12	23,670	110,163	370,850	730,572
Korea	1,841	····	4,508	····	540	····	6,565	1	13,455	28,986	87,915	191,990
Malaysia	889	2	587	208	····	····	5,898	8	7,590	3,948	12,133	37,446
The Philippines	213	····	163	72	16	····	604	2	1,070	1195	6,110	11,592
Singapore	3,983	7	6,061	663	2251	c	····	244	13,209	10,164	45,424	103,316
Taiwan	3553	····	2900	469	778	····	3,375	····	11,075	19031	76631	150,112
Thailand	621	39	1054	181	230	2	3,026	····	5,153	4198	12,962	43,923
Vietnam	43	····	22	522	685	····	235	11	1518	374	176	2,563
Total (A)	152,348	817	48,045	27,656	7,631	2	83,418	476	320,393	240,790	882,720	2,216,256
Total investment amount (B)	498,880	852	594,069	76,889	20,150	26	153,639	3,323	1,347,828	1,109,924	3,995,298	13,683,551
Ratio of Asia to total A/B (%)	30.5	95.9	8.1	36.0	37.9	7.7	54.3	14.3	23.8	21.7	22.1	16.2
England	53,009	1	48,045	8,651	1439	··	13,181	13	124,339	····	561,670	1,323,776
US	18,501	12	230,339	19,738	4965	10	24,252	483	298,300	299,813	····	2,037,013

Note1: " ·· " means that outstanding is zero or less than 0.5 mil USD
Note2: " ···· " means no data
Note3: "c" means that data is not disclosed
Source: IMF CPIS; compiled by DIR

the same period, Thailand-domiciled investors started to actively invest in Korean bonds, and their total Korean investments outstanding grew to US$8,300 million at the end 2009, a gain achieved in the space of only two years, which represented 93% of their total regional investments outstanding due to the attraction of such bonds' high yields. The significant role played by intermediary institutions in providing an investment vehicle to middle income Thai populations offers a potentially useful lesson for Japan.

Looking at the destinations for regional investment made in the period from 2001 to end-2009, it is notable that China grew from US$3,100 million in 2001 to US$10,400 million in 2009, with Korea rising from US$9,800 million to US$42,700 million and India from US$500 million to US$9,400 million in the same period.

A look at the historical long-term bond investment in East Asia by investors domiciled in the US and the UK shows that the total investments outstanding held by US-domiciled investors stood at US$59,300 million at end-2009, or 3.8% of their total investments outstanding (US$77,200 million at end-2008, or 6.2% of the total). Excluding their investments in Japan, their total East Asian long-term bond investments outstanding amounted to US$32,700 million, or 2.1% of their total investments outstanding (US$37,500 million end-2008, or 3.0% of the total). Meanwhile, the total East Asian long-term bond investments outstanding held by UK-domiciled investors at end-2009 amounted to US$115,900 million (6.4% of their total investments outstanding), placing the country at the top of the league, above the US. In 2009, their total East Asian long-term bond investments outstanding grew by a remarkable 65% from the previous year. Presumably, this jump resulted from the 21% growth in UK-domiciled investors' total investments outstanding in 2009, rising bond prices due to Asian economies' recovery from the financial crisis, and such investors' fund allocation shift to Asia from bonds issued by entities in certain EU nations with growing sovereign risks. East Asia, excluding Japan, accounted for 4.8% of UK-domiciled investors' total investments outstanding at end-2009.

Shown next is an examination of equity investment in East Asia.

Figure 4-3 East Asian cross-border securities investments outstanding (equities)

as of end-2009 (provisional value)

	bil USD	Investment to Asia/ Total cross-border investment	Increasing from 2008	Increasing from 2001
Hong Kong	152.3	30.5%	+45%	×11.7
Singapore	83.4	54.3%	+44%	×5.4
Japan	48.0	8.1%	+62%	×5.8
Korea	27.7	36.0%	+30%	×72.9
Malaysia	7.6	37.9%	+105%	×11.3

Source: IMF CPIS; compiled by DIR

The total outstanding balance of equity investments in East Asia as a whole grew significantly from US$37,900 million at the end of 2001 to US$320,400 million at end-2009, an 8.5- fold increase. With regard to such investments held by investors domiciled in East Asian countries/economies, Asia accounted for 10.6% of the total at end-2001 and 23.8% at end-2009, pointing to such investors' increasing exposure to the region.

4.1.2 Investment from Japan

At the end of 2009, the total outstanding investments in East Asian long-term bonds held by Japan-domiciled investors stood at US$21,200 million, or 1.0% of their foreign long-term bond portfolios. The total outstanding investments in East Asian equities amounted to US$48,000 million, or 8.1% of their foreign equity portfolios. Given that the end-2001 total outstanding investments in East Asian long-term bonds stood at US$31,200 million, the gain in that period amounted to 60%. At end-2001, East Asia accounted for 1.3% of their foreign long-term bond portfolios, while their total outstanding investments in East Asian equities stood at US$8,300 million, or 3.2% of their foreign equity portfolios. On the other hand, at end-2009 investors domiciled in East Asian countries held a total of US$6,000 million in Japanese long-term bonds, or 2.8% of their foreign long-term bond portfolios. Their end-2009 Japanese equity holdings amounted to US$23,700 million, or 3.2% of their foreign equity portfolios. This shows that investors domiciled in East Asian countries have a relatively limited exposure to Japanese long-term bonds and equities in comparison to the size of the markets for these Japanese instruments.

The total outstanding cross-border investments in long-term bonds held by Japan-domiciled investors grew from US$1,004.9 billion at end-2001 to US$2,224.8 billion at end-2009, a gain of 121% for the period. The proportion of such investments in the US, Japan's biggest investment destination, declined slightly in the period from 34.6% to 30.6% of the total, while East Asia's share remained low at 1.3% at end-2001 and 1.0% at end-2009. Yet the total outstanding investments in East Asian equities grew from US$227.4 billion at end-2001 to US$594.1 billion at end-2009, an increase of 161%, with US equities showing a relative decline in proportion, in the same period in which the total outstanding investments rose from US$123.5 billion to US$230.3 billion. The share of East Asian equity investments grew from 3.2% at end-2001 to 8.1% at end-2009.

The total outstanding investments in Japanese long-term bonds held by global investors increased from US$169.3 billion at end-2001 to US$216.6 billion at end-2009, a mere 28.0% gain in the period. Global investors' holdings in Japanese equities also showed very limited growth of 16.7% in the same period, rising from US$626.1 billion at end-2001 to US$730.6 billion at end-2009. This was probably due to the fact that, during the eight-year period, long-term interest rates continued to remain at low levels in Japan due to the continued ultra-loose monetary policy pursued by the nation's central bank, while the Japanese equity market underperformed other major bourses across the globe offering little incentive to investors. The share of investment from East Asian nations in the total outstanding investments in Japanese long-term bonds declined from 5.1% (US$8.7 billion) at end-2001 to 2.8% (US$6.0 billion) at end-2009. Looking at regional investment by investors domiciled in East Asian countries, their investment in Korea showed a significant increase in the same period, accounting for a remarkable 44% of foreign investment in Korean long-term bonds. Notably, investment from East Asian countries coupled with investment from the US and UK represented as much as 70% of foreign investment in Korean long-term bonds in that period.

Figure 4-4 The total outstanding investments in securities held by Japan-domiciled investors (currency proportion) (as of end-2009, provisional value)

mil USD

Currency	Equity	Long-term bond
USD	289,442 (48.7%)	824,745 (37.1%)
EMU EUR	84,619 (14.7)	415,653 (18.7)
GBP	49,294 (8.3)	47,284 (2.1)
JPY	45,427 (7.6)	693,167 (31.2)
CHF	16,044 (2.7)	1,466 (0.1)
Others	109,201 (18.4)	242,440 (10.9)
Total	594,069 (100.0)	2,224,756 (100.0)

Source: IMF CPIS; compiled by DIR

Looking at the currency breakdown of the total outstanding investments in long-term bonds held by Japan-domiciled investors, the US dollar accounted for 37.1% of the total with the Japanese yen representing 31.2% and the Euro 18.7%, pointing to a high proportion of yen-denominated bonds in Japanese investors' portfolios. These top three currencies constituted 87% of the total.

Next, the distribution of long-term bond holders by investor type as of end of 2009, relating to the total outstanding cross-border securities investments, shows 31.3% by banks, 19.6% by insurance companies, 16.0% by mutual funds and 16.3% by non-financial companies and retail investors. While the total outstanding investments grew by 96% in the seven-year period from end-2002 to end-2009, mutual funds expanded by a staggering 6.44 times. Yet the breakdown of the total net asset value denominated in foreign currencies, published by the Investment Trust Association, Japan, shows that the total outstanding investments in East Asian bonds have not increased meaningfully, with funds investing mainly in bonds issued by entities in developed countries, including the US and European nations (Figure 4-7).

Figure 4-5 The total outstanding investments in securities held by Japan-domiciled investors (investors proportion)

(long-term bonds) (mil USD, %)

	end-2002	end-2006	end-2009 (previous value)
Banks	341,861 (30.1)	558,599 (30.8)	697,078 (31.3)
Insurance companies	228,212 (20.0)	356,280 (19.7)	436,748 (19.6)
Mutual funds	55,316 (4.9)	252,310 (13.9)	356,583 (16.0)
Other financial companies	217,790 (19.2)	325,315 (18.0)	366,087 (16.5)
Government	46,925 (4.1)	6,390 (0.4)	5,095 (0.2)
Non-financial companies	245,420 (21.6)	313,149 (17.3)	363,122 (16.3)
Total	1,135,519 (100.0)	1,811,986 (100.0)	2,224,756 (100.0)

Source: IMF CPIS; compiled by DIR

Figure 4-6 Japan's share of the total outstanding cross-border investments

(Year-end, %)

	Equity			Long-term bond		
	2001	2005	2009	2001	2005	2009
China	5.9	3.7	3.3	16.0	4.2	3.3
Hong Kong	6.1	6.3	6.3	8.0	8.7	12.6
India	0.2	2.6	1.6	9.3	2.7	2.6
Indonesia	1.4	1.0	1.5	6.6	5.5	7.4
Korea	0.7	1.0	2.3	24.1	12.7	8.7
Malaysia	2.6	0.8	1.6	23.7	5.3	9.1
The Philippines	6.2	0.7	1.4	15.3	10.6	8.5
Singapore	2.6	3.2	5.9	7.0	8.9	13.8
Taiwan	1.0	1.2	1.9	4.1	0.7	0.2
Thailand	3.7	1.9	2.4	20.7	4.5	12.5
Vietnam	1.2	NA	0.9	29.7	1.8	2.2
Total	1.4	1.9	2.2	5.2	3.2	4.4

Source: IMF CPIS; compiled by DIR

Figure 4-7 Total foreign currency denominated net assets of mutual funds (currency proportion)

Year-end, bil JPY

	Equity			Bond		
	2000	2007	2009	2000	2007	2009
Total	1,102	10,288	6,078	1,802	20,208	17,418
US	585	3,218	1,952	1,003	6,127	4,239
Canada	11	151	98	26	1,553	1,068
Australia	16	393	203	11	2,573	3,327
England	91	750	349	96	1,449	670
EU	160	1,419	606	579	6,105	4,447
New Zealand	1	17	4	12	543	382
Brazil	NA	346	508	NA	53	1,205
South Africa	NA	54	70	NA	52	149

(Asian countries)

Hong Kong	95	1,719	1,058	NA	20	5
Singapore	26	269	119	NA	36	21
Malaysia	3	92	32	NA	35	32
Thailand	12	76	39	NA	1	7
The Philippines	2	26	9	NA	7	5
Indonesia	1	61	44	NA	17	62
Korea	15	206	124	NA	16	14
China	NA	163	82	NA	NA	2
India	1	612	348	NA	NA	3
Taiwan	21	233	150	NA	1	1
Vietnam	NA	NA	5	NA	NA	1

Source: The Investment Trusts Association, Japan; compiled by DIR

Japan's share of the total outstanding cross-border investments in long-term bonds issued by individual East Asian nations, or Japan's contribution (Figure 4-6), shows a range from 0.2% to 13.8% at end-2009, including above-10% contributions to Hong Kong, Singapore and Thailand. Japan's contribution to the whole East Asian region in this respect stood at 4.4%, above the 2.2% for equities. The US and the UK constituted significant fund suppliers to East Asia, with a 12.4% share held by the former and a 24.3% share by the latter at end-2009. Excluding their investment in Japan, their shares were 6.9% and 18.2%, respectively.

4.1.3 Challenges

As discussed above, Japanese investors have steadily increased their investment in East Asian equities, in a move to seek to benefit from the fast growth of the economies in the region. On the other hand, Japan-domiciled investors' investment in long-term bonds has accounted for only a limited portion of their sizeable asset investment portfolio. Japanese pension funds continue to maintain their conservative investment stance, and many investors pursue a similar approach. Institutional investors also find it difficult to become active risk takers, as they are subject to stringent internal investment criteria and are obliged to obtain internal approval for higher-risk investment. While securities companies, expected to act as an intermediary between investors and the market, play an active role in providing intermediation services for East Asian equity investment, they are not fully performing their intermediation function for investments in East Asian bonds. Currently, securities companies' platform for obtaining investment information and doing research/analysis seems to be less than satisfactory. Institutional investors, with some exceptions, are not capable of obtaining the necessary information for investing in East Asian bonds. In the coming years, such circumstances are expected to change.

Notably, initial indications are appearing that Japanese pension funds, previously sticking to a conservative investment stance, will modify their investment stance. Japan's Government Pension Investment Fund (GPIF), overseeing the investment of public pension funds, will broaden the scope of foreign equity investment to include stocks listed on exchanges in emerging countries such as China and India by summer 2011 (the Nikkei newspaper, October 11, 2010). Currently, the GPIF's foreign equity investment is limited, as a rule, to stocks of companies in developed nations. As of end of June 2010, the GPIF has approximately US$1,400 billion (at \83 to the dollar) in assets under management out of the total public pension funds of Japan, consisting of 67% in domestic bonds, 11% in domestic equities, 8% in foreign bonds, 9% in foreign equities and 5% in short-term assets. Japan's total public pension benefit payouts are expected to increase substantially from 2012 onward, with a growing number of baby boomers starting to receive pension benefits. It appears that the GPIF acknowledged the need to improve its investment returns by expanding the scope of investment to include stocks of companies in fast-growing emerging economies, even at the expense of slightly higher risk. Eventually, such move should have some effect on their stance on bond investment. Given that phenomenally low interest rates are likely to continue in Japan for the foreseeable future, the GPIF would find it inevitable, despite foreign exchange risks, to widen the scope of foreign bond investment and include emerging country bonds that offer a relatively higher yield. While in recent years mutual funds investing in the bonds from Australia, Brazil, South Africa, Korea and Indonesia have become increasingly popular among retail investors, the Japanese securities industry has witnessed the launch of mutual funds dedicated to investment only in emerging country corporate bonds, pointing to a gradual rise in retail investors' risk tolerance level. It is expected that cross-border investment in East Asian bonds from Japan will grow in the coming years if, in addition to a change in pension funds' investment stance, the various existing impediments to cross-border investment in East Asia are gradually removed. Other factors that will help promote East Asian cross-border investment from Japan consist of the increased risk tolerance level by investors, the availability of diverse products to meet the needs of such investors (a case in point is Korean funds distributed among Thai retail investors), the enhanced service platform of securities companies expected to act as intermediaries, and improved information disclosure by bond issuers.

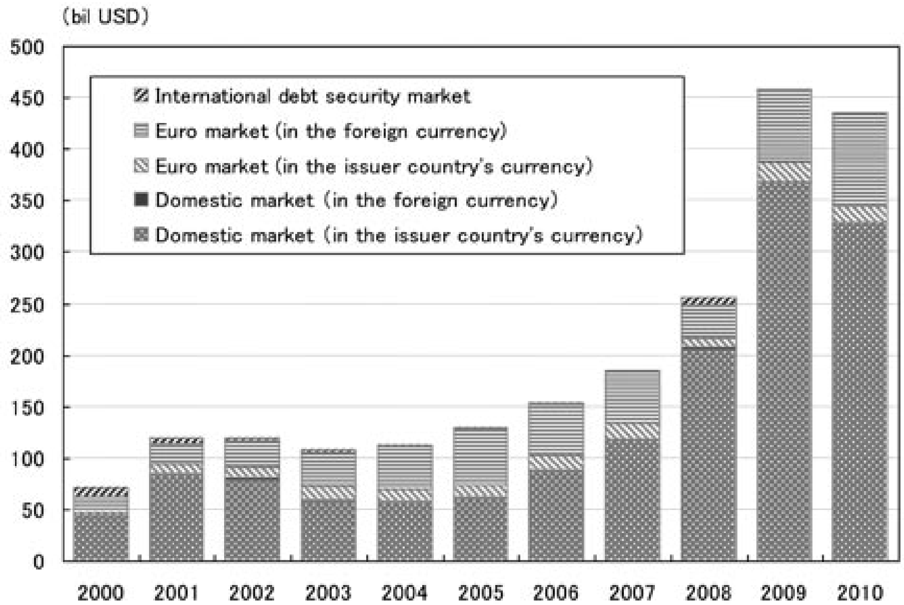
4.2 Current status of cross-border bond issuance

4.2.1 Characteristics of individual Asian nations and pattern classification

While the Asian bond market (excluding Japan) has grown significantly in recent years, the bulk of the growth has come from the increasing number of bond issuances denominated in local Asian currencies in individual domestic markets (Figure 4-8). The extent of growth has been particularly significant in China and India, with countries like Korea also showing notable gains (Figure 4-9). Yet, as shown in Figure 4-8, the issuance of cross-border bonds (bonds issued in the Euro market or bonds issued in a foreign currency) has still been limited.

Cross-border bonds are issued typically in a foreign currency in the Euro market (offshore bond market). In terms of value, a significant part of the primary market for foreign currency-denominated bonds within the Euro market has been made up of bonds issued by entities domiciled in countries like Korea, the Philippines and Hong Kong (Figure 4-10), while bonds issued in the issuer country's currency in the Euro market have been predominantly those by Hong Kong-domiciled entities (Figure 4-11).

Figure 4-8 Asian bond issuance markets (excluding Japan)



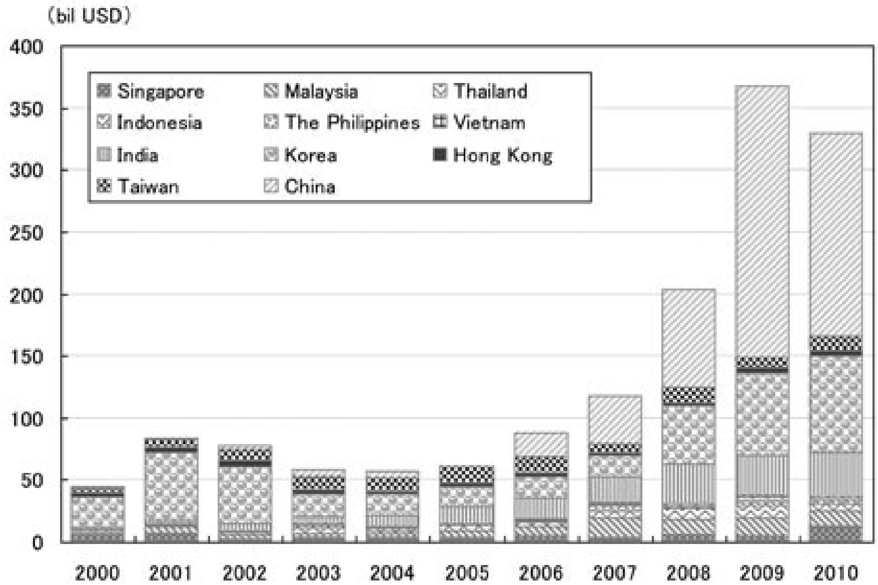
Note: International debt security market means the bonds issued by nonresident.

Source: Thomson Reuters; compiled by DIR

Bond issuances in the Asian primary bond market can be classified into three main types, namely: (1) issuance in the issuer country's currency in the country's market (non-cross-border issuance); (2) issuance in a foreign currency in the Euro market (cross-border issuance); (3) balanced issuance incorporating the features of both of these issuance types (cross-border issuance). Issuances in China and India fall under type (1), with those in the Philippines and Indonesia being type (2), and those in Hong Kong, Singapore and Japan, type (3).

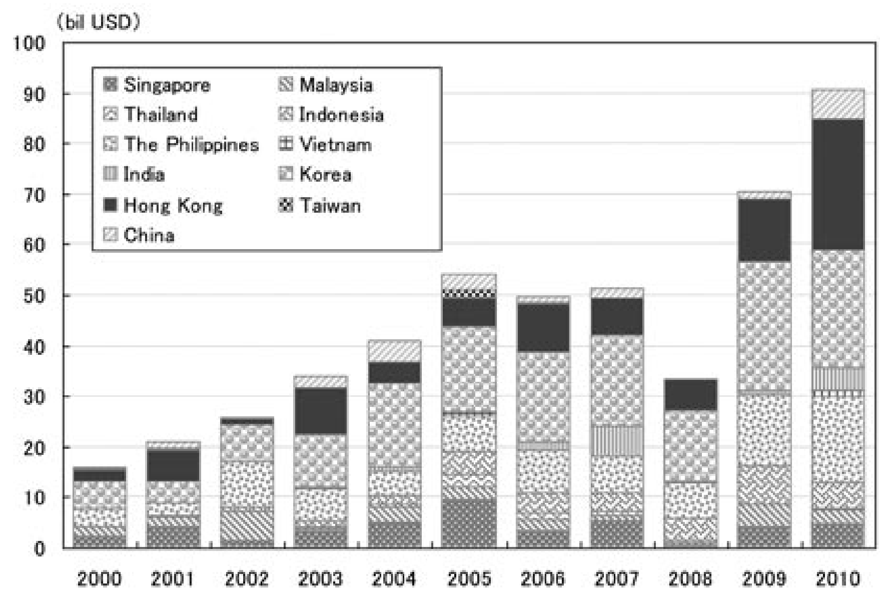
As will be explained in later sections, as a general rule, corporate bonds constitute, in value terms, a relatively large proportion of the bonds issued in the issuer country's currency in the country's market, while a significant portion of cross-border issuances is accounted for by quasi-sovereign bonds and financial institutions bonds. What both the cross-border type and the non-cross-border type have in common, as far as corporate bonds are concerned, is the large amount of bonds are issued by infrastructure development-related entities, including energy and power companies. On the other hand, the list of industrial sectors with active bond issuance varies from one nation to another, indicating that bonds are being issued in individual countries mainly by entities belonging to industrial sectors boasting relatively high competitiveness.

Figure 4-9 Asian domestic markets in the issuer country's currency (excluding Japan)



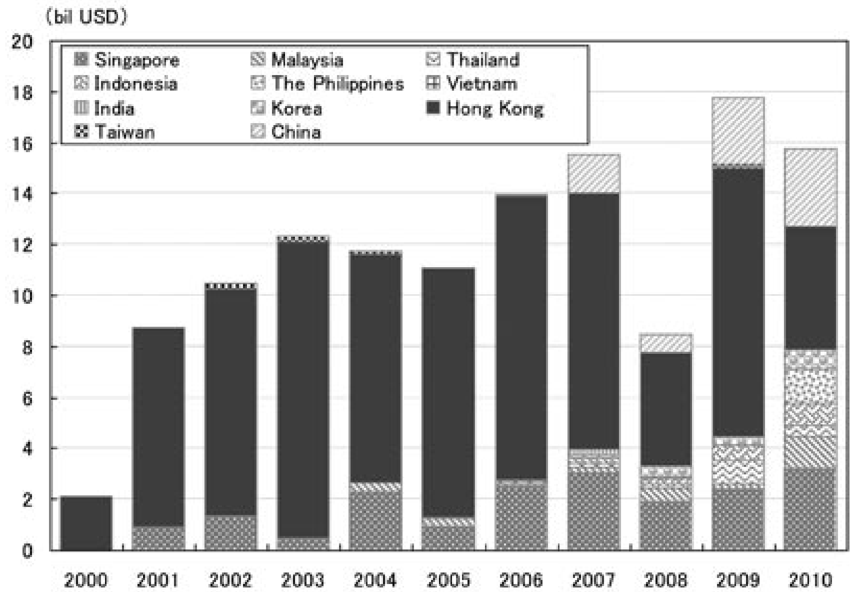
Note: Excluding international debt security market
Source: Thomson Reuters; compiled by DIR

Figure 4-10 Asian companies' bond issuance in the Euro market in foreign currency (excluding Japan)



Source: Thomson Reuters; compiled by DIR

Figure 4-11 Asian companies' bond issuance in the Euro market in the issuer country's currency (excluding Japan)



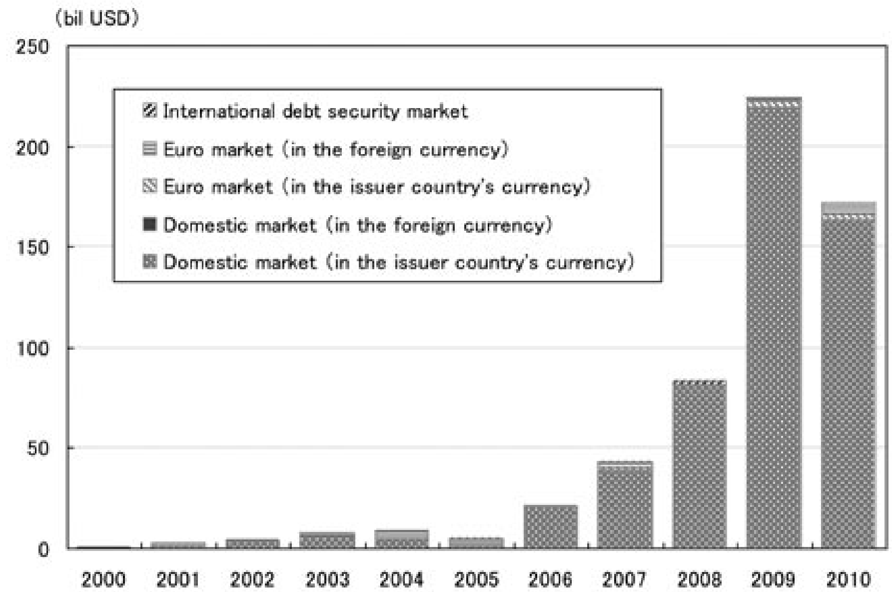
Source: Thomson Reuters; compiled by DIR

(1) Issuance in the issuer country's currency in the country's market

The primary bond markets in Asia are characterized by the existence of highly diverse sets of issuance practices in each nation's market resulting from the different development stages of the individual countries as well as their different historical backgrounds. Still, those markets can be broken down broadly into three categories, with China (Figure 4-12), India, Taiwan and Thailand belonging to the group mainly issuing bonds in the issuer country's currency in the issuer's market. While Thailand issues cross-border bonds occasionally, the other nations in this group are highly focused on issuance within their own domestic markets.

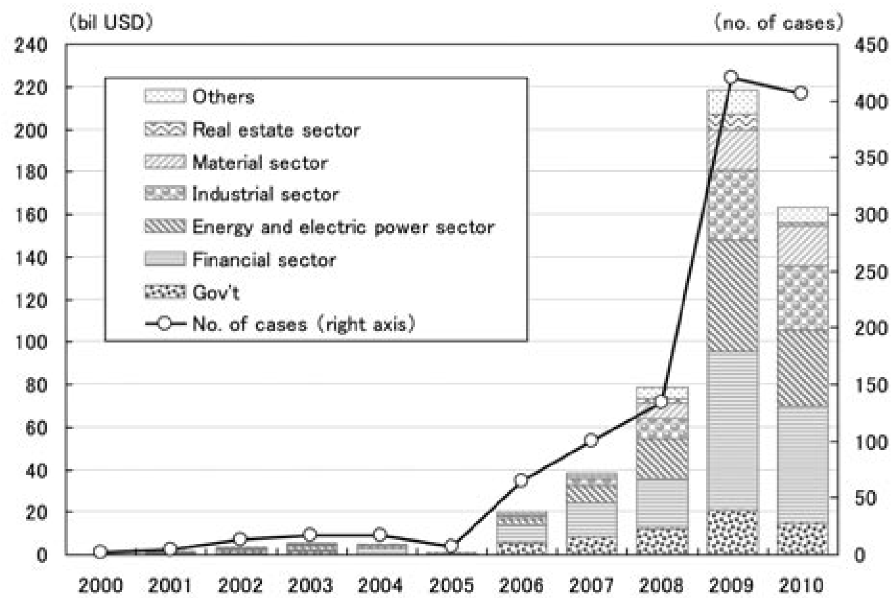
The sector-by-sector distribution of corporate bond issuances in China shows, in value terms, a high level of issuance by energy/power-related entities as well as of financial institutions bonds. However recently there has also been an increase in corporate bonds issuances by entities from the industrial sector (manufacturing sector) and basic materials sector (natural resources sector) (Figure 4-13). As for India, while financial institutions bonds account for the bulk of bond issuances in the domestic market, the nation has recently witnessed the first corporate bond issuances by energy, power and industrial sector entities. Looking at Taiwan, the country's bond issuance volume has been running at low levels in the past few years, despite the fact that during that period the proportion of financial institutions bonds (previously high) declined, while growing shares were instead represented by corporate bonds issued by entities in the energy/power, basic materials (chemicals and others) and technology sectors. Meanwhile, Thailand's primary bond market is marked by its low proportion of financial institutions bonds in comparison to other Asian nations' bond markets, with a notable number of corporate bonds having been issued from 2007 onward by entities belonging to the energy/power, telecommunications and industrial sectors.

Figure 4-12 Bond issuance market in China (market and currency proportion)



Note: International debt security market means the bonds issued by nonresident.
Source: Thomson Reuters; compiled by DIR

Figure 4-13 Chinese company's bond issuance in domestic market in the issuer country's currency (sector proportion)



Note: Excluding "Panda bond", which is issued by nonresidential company in Chinese market in RMB denominated

Source: Thomson Reuters; compiled by DIR

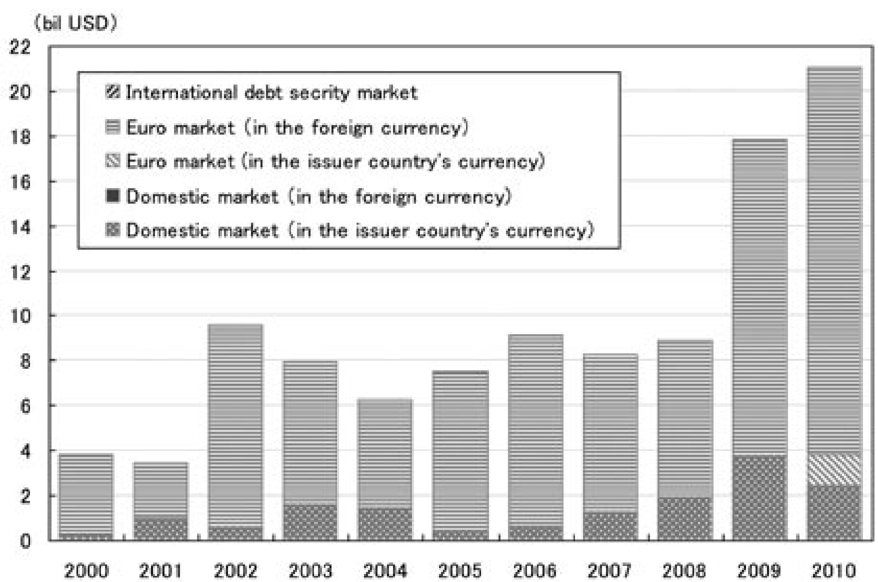
(2) Issuance in a foreign currency in the Euro market

The next group consists of bond issuers conducting issuance in a foreign currency in the Euro market. This group is composed of the Philippines, Indonesia and Vietnam.

Figure 4-14 shows, while the primary bond market in the Philippines is predominantly made up of issuances in a foreign currency in the Euro market, the bulk of such issuances are from the issuance of foreign currency-denominated quasi-sovereign bonds made by the ADB (Figure 4-15). This is also the case in Vietnam, but its primary market is rather small in size. As for Indonesia, issuances in the issuer country's currency in the country's market constitute a high proportion of the nation's total bond issuances, in comparison to the Philippines, but the bulk of them are accounted for by financial institutions bonds, with corporate bonds representing only a small portion of the total. Looking at Indonesia's cross-border bond issuances (in a foreign currency in the Euro market), they comprise corporate bonds issued by companies in the energy/ power and basic materials (natural resources-related) sectors.

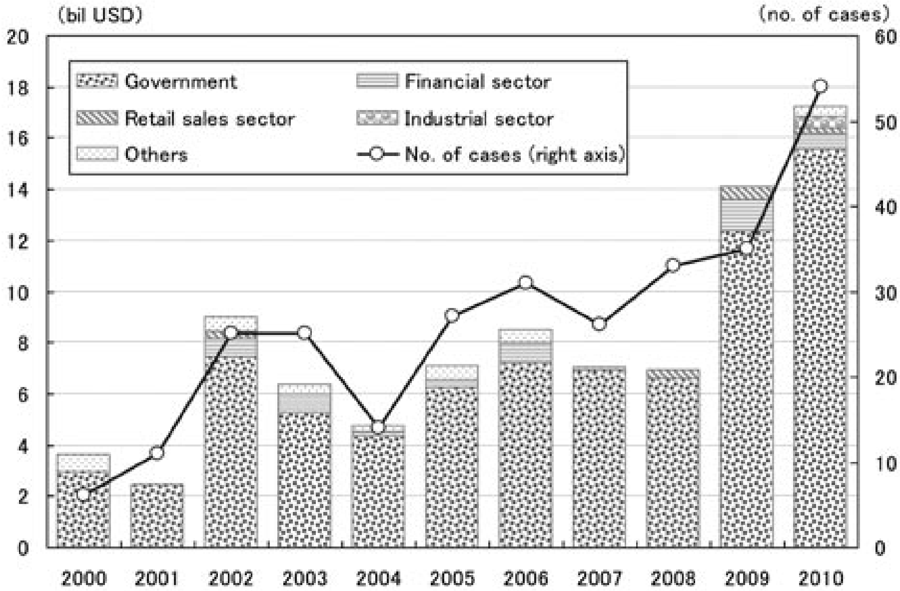
Another point to note regarding the Philippines' domestic market is the fact that, in addition to financial institutions bonds, corporate bonds are also issued by companies including foodstuff and daily necessities makers and real estate operators. The issuers of Indonesian corporate bonds also include food and daily necessities producers and telecommunication companies, indicating that, generally, companies with high competitiveness in each country are expanding their corporate bond issuances in their domestic markets.

Figure 4-14 Bond issuance market in the Philippines (market and currency proportion)



Note: International debt security market means the bonds issued by nonresident.
Source: Thomson Reuters; compiled by DIR

Figure 4-15 Philippines company's bond issuance in the Euro market in foreign currency (sector proportion)



Source: Thomson Reuters; compiled by DIR

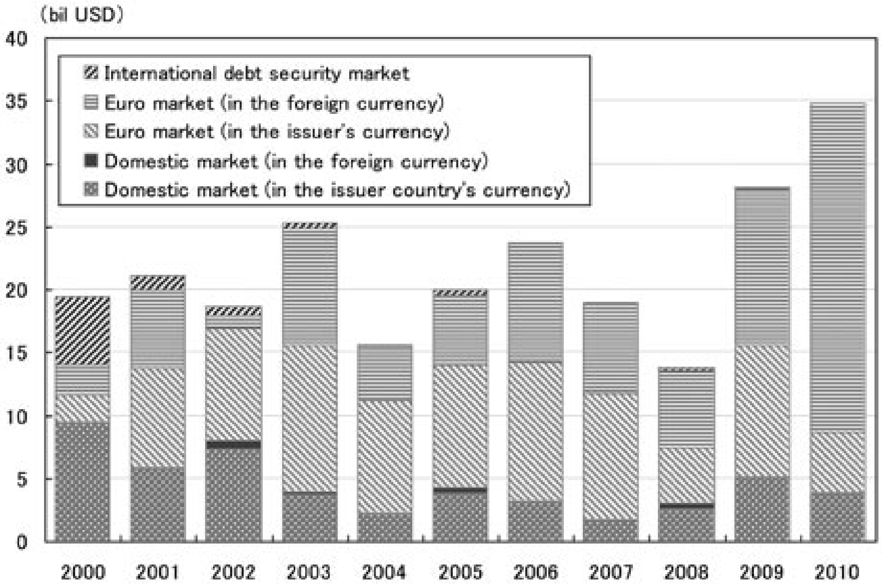
(3)Balanced issuance

The last group consists of issuers who issue bonds in the issuer country's currency or a foreign currency, and in the country's own market or in the Euro market in a relatively well-balanced manner. Included in this group are Hong Kong, Singapore, Japan, Malaysia and Korea. In particular, Hong Kong (Figure 4-16) and Singapore are characterized by their frequent issuances in the Euro market in value terms. On the other hand, Japanese, Malaysian and Korean issuers tend to issue bonds in their respective domestic markets.

It is only Hong Kong, Singapore and Japan who issue meaningful amounts of bonds denominated in the issuer country's currency in the Euro market. Meanwhile, issuance in the Euro market by Malaysian and Korean entities is undertaken disproportionately in foreign currencies. Such disparity among nations is presumably attributable to a difference that exists in the usability of each country's currencies for international transactions.

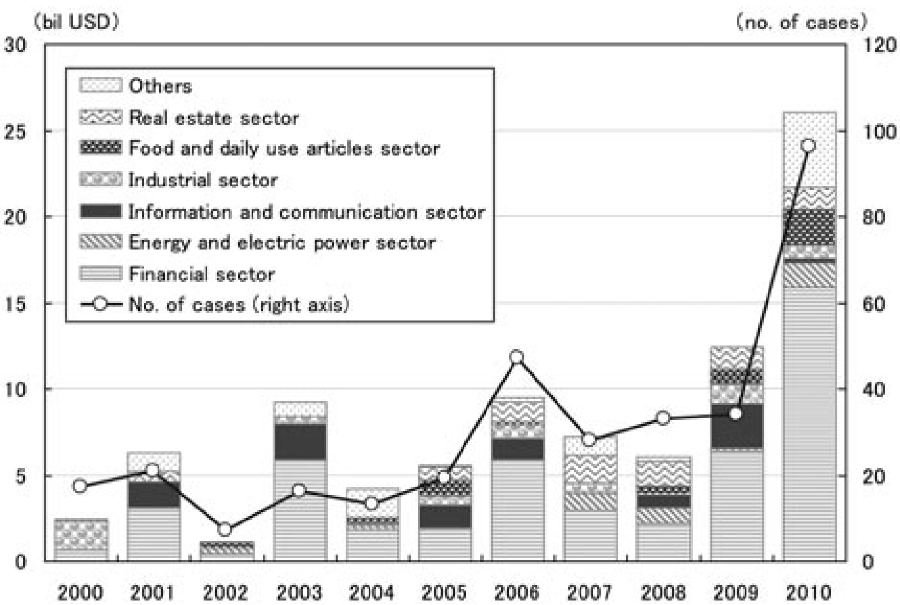
While Hong Kong-domiciled entities issue corporate bonds typically in a foreign currency in the Euro market (Figure 4-17), Singapore-domiciled entities, like Japanese ones, issue corporate bonds mostly in the issuer country's currency in the domestic market. Malaysia has been experiencing a decline in the amount of corporate bond issuance, while seeing an increase in the issuance of financial institutions bonds. In the case of Korea, mainly energy/power companies issue corporate bonds in the domestic market as well as the Euro market . On the other hand, industrial (manufacturing) companies also account for a relatively high proportion of the total corporate bond issuances in the domestic market.

Figure 4-16 Bond issusnce market in Hong Kong (market and currency proportion)



Note: International debt security market means the bonds issued by nonresident.
Source: Thomson Reuters; compiled by DIR

Figure 4-17 Hong Kong company's bond issuance in the Euro market in foreign currency (sector proportion)



Source: Thomson Reuters; compiled by DIR

4.2.2 Conclusion and insights

The current status shows that the Asian primary bond market has been growing significantly in recent years, with individual countries' domestic markets seeing an increasing number of corporate bond issuances, in particular. Yet, to date, cross-border bond issuances by East Asian entities have been fairly limited. Challenges surrounding cross-border bond issuance include the difficulty experienced by foreign investors in obtaining information on individual Asian issuer companies, a limited availability of public information on such companies and the generally small company size. It is perhaps for those reasons that cross-border bond issuances by East Asian entities mainly consist of quasi-sovereign bonds and financial institutions bonds instead of corporate bonds. Also underlying the situation is the seemingly established pattern of bond issuance, in which the issuer chooses overseas fundraising in the event of issuing quasi-sovereign bonds and financial institutions bonds for obtaining a large amount of funds, while opting for domestic fundraising in the case of issuing corporate bonds typically involving a smaller amount of funds. Such a pattern arises from the still limited presence of powerful domestic institutional investors in individual Asian markets.

That said, depending on the issuer's industrial sector and scale, the degree of information asymmetry between the issuer and investors may become less serious in time. For example, power and energy companies are the leading companies in each Asian nation, and the promise of stable cash flow generation on a long-term basis makes them entities with relatively high credit quality. Given this quality, such power and energy companies will not find it difficult to issue corporate bonds on a cross-border basis. As can be seen from the cases of Thai manufacturing (industrial) companies and technology companies based in Taiwan, entities belonging to sectors with high competitiveness in a given nation tend to be active bond issuers. Such entities may also be regarded as potential issuers of cross-border corporate bonds, given their solid footing.

One potential approach for promoting the issuance of cross-border corporate bonds would be to encourage the above-mentioned sectors with less severe information asymmetry to increase the issuance of corporate bonds, thereby facilitating the step-by-step expansion of the entire cross-border bond market. In addition, the further growth of Asian economies will be accompanied by the emergence of companies of global quality like Samsung, a factor that has the potential to gradually help mitigate the problem of information asymmetry, which should lead to increased issuances of corporate bonds by entities in various industrial sectors.

4.3 Current status of investors

In order to stimulate the Asian bond market, it will be important, with regard to investors, to: (1) expand investor base in different Asian countries, and (2) build a platform for attracting foreign funds to individual Asian nations. With (2) being covered by section 6.1, this section takes a bird's-eye view of the current status of investors in individual Asian countries, in relation to the effort mentioned in (1), while examining the challenges faced by such investors. The development of investor base in each nation should be the one of the prerequisites for attracting investment from foreign investors. Without expanding the investor base in each country's market, it will be hard to successfully attract funds from abroad.

In relations to institutional investors, here is a snapshot (albeit an old one, of end-2004 data) of country-by-country institutional investor portfolio size (Figure 4-18). Although the total value of institutional investor portfolios was high in Hong Kong and Korea, it was less than one tenth the total value of assets held by Japanese institutional investors. The combined total of the eight Asian countries' institutional assets was still less than one quarter of that of Japan, making it desirable to expand the scale of institutional investors in individual Asian nations. On the other hand, a look at institutional asset size as a percentage of GDP reveals a slightly different picture, featuring Hong Kong, Singapore and Malaysia as leaders by that measure. In particular, Hong Kong boasts institutional asset size eclipsing that of Japan. As rising international financial centers, Hong Kong and Singapore continue to attract an inflow of foreign funds into mutual funds there. In addition, Singapore and Malaysia now have large pension funds, as these nations introduced pension systems as early as 1951 under the colonial rule of the UK.

Figure 4-18 A snapshot of country-by-country institutional investor asset size (end-2004)

	Asset Size (bil USD)				as a percentage of GDP (%)			
	Pension fund	Life insur -ance	Mutual fund	Total	Pension fund	Life insur -ance	Mutual fund	Total
China	28.0	136.0	27.0	191.0	1.6	7.9	1.6	11.1
Hong Kong	38.0	9.0	465.6	512.6	22.9	5.4	280.3	308.6
Indonesia	5.4	10.5	11.1	27.0	2.2	4.2	4.5	10.9
Korea	161.0	133.0	186.0	480.0	21.4	17.7	24.7	63.8
Malaysia	70.0	21.0	23.0	114.0	59.2	17.8	19.4	96.4
The Philippines	7.9	2.7	1.4	12.0	9.2	3.2	1.6	14.0
Singapore	68.0	33.0	28.0	129.0	61.1	29.7	25.2	116.0
Thailand	20.0	17.0	19.0	56.0	12.0	10.2	11.4	33.6
Total	398.2	362.2	761.2	1,521.6	11.8	10.8	22.6	45.2
Japan	2,981.0	3,452.0	524.0	6,957.0	65.0	75.3	11.4	151.7

Source: Dalla Ismail [2006]

On the other hand, the institutional investor portfolio size as a percentage of GDP for China, Indonesia and the Philippines is small. For China and Indonesia, the current challenge is to help grow the portfolio size by pension funds operating in their domestic markets, a task that will need to be done by further developing their respective pension systems. Meanwhile, the Philippines is faced with the issue of its life insurance and mutual fund assets being small, making it necessary for the nation to invigorate those categories.

Figure 4-19 is the composition of investment in each individual country's government bonds, which serves to highlight the recent breakdown of each nation's institutional investors as well as the historical changes of their assets (albeit confined to government bonds).

What these countries have in common is that banks are acting as the main institutional investors in each nation. Asian banks are not only key players in corporate fundraising, as seen in Chapter 1 and Chapter 2, but have a high profile as key investment players as well.

That said, and bearing in mind the differences between one country and another, the historical changes from 2003 onward point to banks representing a smaller and smaller proportion of the total while pension funds, insurance companies and foreign investors are accounting for a growing portion of that total. This shows that there has been an increasing diversification in investor categories. A case in point is the apparent decline in banks' share of the total in Korea, Indonesia and Thailand. As for Malaysia, banks' proportion of the total has been increasing, suggesting the occurrence of a reversal of investor category diversification. However, this fact is due to the erosion of pension funds' share in government bond investment at a time when such pension funds have continued

Figure 4-19 The composition of investors with investment in each individual country's government bonds

		China		Korea		Indonesia		Thailand		Malaysia		Japan	
		03/12	10/9	03/12	10/9	03/12	10/9	03/12	10/9	03/12	10/9	03/12	10/9
Institutional investor	Bank	62%	62%	32%	19%	82%	37%	33%	26%	21%	44%	35%	38%
	Pension fund	3%	1%	22%	22%	1%	6%	28%	31%	64%	28%	21%	24%
	Insurance	2%	6%			4%	12%			9%	6%		
	Mutual fund	n.a.	n.a.	n.a.	n.a.	11%	8%	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Indivisual		0%	0%	5%	4%	n.a.	n.a.	26%	18%	n.a.	n.a.	2%	5%
Public	Government	0%	0%	21%	26%	n.a.	n.a.	4%	19%	7%	1%	8%	11%
	Central bank	0%	0%	2%	3%	0%	2%	8%	0%	0%	1%	15%	8%
Foreigner		n.a.	n.a.	0%	9%	2%	28%	1%	6%	0%	20%	3%	5%
Others		32%	32%	18%	17%	2%	7%	1%	0%	0%	0%	19%	9%

Source: AsianBondsOnline; compiled by DIR to shift its investment focus to equity and corporate bond investments as well as loans, all of which are instruments offering higher returns. Taking this into account, such a share increase exhibited by Malaysia-based banks does not necessarily represent a reversal of investor category diversification.

In the short time frame of the last two years or so, some banks presumably shifted their investment to safer assets such as government bonds while avoiding higher risk investment in consideration of the financial crisis. Still, given the long-term developments that have occurred from 2003 onward, it is reasonable to say that there is a general trend toward increased diversification in investor base, and this trend is expected to result in diverse investment behavior by different types of investors, thereby helping enhance market liquidity.

As for pension funds and insurance companies, their proportion of the total has been increasing, with the exception of Malaysia and China.[36] Presumably this is partly due to the growing portion of the productive age group (15 to 64 years) of the total population in every non-Japan Asian country (Figure 4-20). With the productive age group's proportion expected to increase more in coming years, such countries' pension assets should grow further, supported by the upgrading of their pension systems.

While the data available in each Asian nation is limited in scope, individuals' financial assets are likely to increase further, driven partly by the rising proportion of the productive age populations. From a perspective of diversification of investor base, attracting such growing individual assets to the bond market is of great significance. In the Philippines, it is a government policy to draw individual assets to the bond market, and, on the back of the launch of retail bonds in 2001, the policymakers have been promoting government bond investment to individuals. In addition to this Japanese government bonds (JGBs) designed for individual investors were introduced in Japan in 2003, in yet another move to focus on individual investors.

The next point to note is the relationship between investor category and investment period. Banks are unlikely to become investors with longer investment time horizons, given that the bulk of their liabilities consist of short-term deposits and their interest rate risk management policies based on ALM (Asset Liability Management). Actually, in interviews conducted by the author of this report, some officials of various Asian banks commented that, with ALM-based interest rate risk management gradually taking hold at their organizations, it will become harder to buy bonds with long maturities in the coming years. On the other hand,

[36] The significant decline in the pension funds' proportion of the total in Malaysia, a phenomenon specific to that nation, is attributable not to declining pension assets but to pension fund managers shifting pension assets from government bond investment to equity and corporate bond investments as well as loans, all of which are instruments with higher returns.

Figure 4-20 Demographics in Asia

Year	1997			2009		
Ages	0-14	15-64	65-	0-14	15-64	65-
China	27	67	6	20	72	8
Hong Kong	18	71	10	12	75	13
India	36	60	4	31	64	5
Indonesia	32	64	5	27	67	6
Korea	22	72	6	17	73	11
Malaysia	35	61	4	29	66	5
The Philippines	39	58	3	34	62	4
Singapore	22	71	7	16	74	10
Thailand	26	68	6	22	71	8
Vietnam	36	59	5	26	68	6
Japan	15	69	16	13	65	22

Note: Circles mean the items having increased by 5%pt since 1997.
Source: World bank; compiled by DIR

pension funds are expected to show a stronger need for investment in bonds with longer maturities, since their liabilities are considerably long-term (running several tens of years).

In coming years, the securities industry should witness an increasing need for investment in bonds with long maturities due to structural changes in investor composition — changes which involve the declining share of banks and the rising share of pension funds, as well as the adoption by banks of ALM-based interest rate risk management.

As seen in Chapter 2, Asian countries' bonds have, as a rule, rather limited liquidity, and bond investors generally employ a buy-and-hold strategy for bond investment. While the legitimacy of a buy-and-hold strategy itself is still undeniable, to improve investment efficiency going forward, money managers should increase the sophistication of their investment techniques by using a wide range of investment vehicles.

Investment product diversification is an effective step towards enhancing investment technique sophistication. Details of this are covered by Chapter 7, but in summary, there are now high hopes for the spread of new products such as an Asian corporate bond fund, a product composed of corporate bonds issued by different Asian countries, and MTNs. Furthermore, at a time when industry players are expected to meet investor needs for investment in bonds with long maturities, industry experts should seriously discuss a bond-based scheme for attracting funds to infrastructure development-related fundraisers. In particular, the importance of corporate bond funds was mentioned by bankers in various Asian nations during locally-conducted interviews. To sum up, their rationale was that individual bond investment is not an efficient approach due to the small size of individual bond issuance in comparison to institutional investors' fund size. It is for that reason that cross-border corporate bond funds resembling the ABF3 must be created and that even single-country corporate bond funds will serve the highly significant function of filling the gap between investors' investment size and individual corporate bonds' issuance size.

5 Current status of Asian financial cooperation

This chapter examines the current status of financial cooperation in the Asian region. The objective of this chapter is to identify the status quo of Asian regional cooperation to serve as the basis for the recommendations made in the following chapters.

This chapter outlines the regional financial cooperation currently underway among members of ASEAN+3, EMEAP, APEC and ASEAN. While the former three groups' cooperation mainly involves the bond market, initiatives by APEC are not necessarily linked with actual policy implementation, so the author will touch on them only briefly. As for ASEAN, the goal of its activity is to achieve the integration of its member countries' equity markets.

5.1 The ASEAN+3

5.1.1 The Chiang Mai Initiative

The regional financial cooperation by members of ASEAN+3 consists of: (1) domestic financial system enhancement; (2) the enhancement of the emergency liquidity assistance framework; and (3) policy dialogues and surveillance reinforcement. While the category relevant to bond market enhancement is (1), the discussion in this chapter refers to issues relating to (2) and (3) as well, since all three types of cooperation are important for promoting regional financial integration in East Asia. While foreign exchange policy coordination is an area where no progress has yet been made by nations in the region, it is also briefly covered by this chapter.

The Chiang Mai Initiative (CMI) signed in May 2000 constitutes a framework for providing emergency liquidity assistance. In May 2009, CMI members reached a specific agreement on the multilateralisation of the framework (CMIM: Chiang Mai Initiative Multilateralisation). Prior to the CMIM, in addition to a multilateral currency swap arrangement totaling US$2,000 million among ASEAN members, CMI had been a scheme allowing individual Asian member countries to sign bilateral swap and repo arrangements. As a result of the May 2009 agreement, funds totaling US$120 billion were contributed by respective members under a single contract, enabling each member country to receive assistance within a maximum amount based on "the member state's contribution multiplied by its respective borrowing multiplier” (Figure 5-1). While the initiative’s objective remained the same, namely, (1) the addressing of short-term liquidity challenges in the region and (2) the supplementing of the existing international framework, its fund, a total of US$81,000 million in real terms (as of April 2009), was increased by approximately 1.5 times. In addition, meaningful improvement was made with regard to the drawbacks of bilateral arrangements, namely, the potential difficulty in securing flexible enforcement and the diversity of maximum borrowing amounts in each arrangement.[37]

Figure 5-1 CMIM contributions and purchasing multiples

(bil USD)

Country	Financial contribution	Purchasing Multiple
China (*)	38.400	0.5
Japan	38.400	0.5
Korea	19.200	1.0
Indonesia	4.552	2.5
Malaysia	4.552	2.5
Singapore	4.552	2.5
Thailand	4.552	2.5
Philippines	4.552	2.5
Vietnam	1.000	5.0
Cambodia	0.120	5.0
Myanmar	0.060	5.0
Brunei	0.030	5.0
Lao PDR	0.030	5.0
Total	120.000	-

Note: China includes Hong Kong’s contribution (4.2 bil USD). Hong Kong’s purchasing is limited to IMF de-linked portion (4.2×2.5×20%), while it’s purchasing multiple is 2.5, because Hong Kong is not a member of the IMF, and has no IMF program-linked purchasing.
Source: The Joint Ministerial Statement of The 13th ASEAN+3 Finance Ministers’ Meeting, 2 May 2010

It is essential to have a surveillance mechanism for CMIM. Generally speaking, the occurrence of moral hazard is a serious challenge with regard to the provision of short-term liquidity assistance. If a developing nation is to be allowed to easily obtain assistance in the event of a liquidity crisis, such assistance recipient nation’s government may not implement an appropriate macroeconomic policy for averting such a crisis and overseas investors may make excessive investment in the country. In order to prevent such a scenario from occurring, it will be necessary to enhance the surveillance structure of the assistance system

[37] The CMIM went into effect on March 24, 2010. While the liquidity assistance period is essentially 90 days, up to seven extensions are allowed (approximately two years in total).

to monitor each member's economic and financial situation and provide advice when required. Preferably, such advice should have a certain degree of binding power and it will be crucial, when offering liquidity assistance, to ensure the appropriateness of the terms and conditions of such assistance.

At the ASEAN+3 Finance Ministers Meeting (AFMM+3) held in May 2006, it was agreed that regional economic surveillance should be integrated into the framework of the CMI for the purpose of strengthening it further. In addition, in May 2009 Asian nations agreed to establish an independent body designed to monitor and analyze the regional economy at an early date, with the aim of assisting the CMIM's decision-making process, along with an advisory group composed of experts charged with the task of preparing for the establishment of the independent body. The joint statement of the ASEAN+3 Finance Ministers Meeting held in May 2010 also announced a plan to set up an independent regional surveillance unit designed to assist the CMIM (AMRO: ASEAN+3 Macroeconomic Surveillance Office) in Singapore by early 2011.

Besides the CMIM, various currency swap arrangements have been signed by Asian nations. The accords concluded after the Lehman shock include: (1) the US$30 billion swap arrangement reached between Korea/Singapore and the US Federal Reserve Board; (2) the yen swap worth 6,000 billion yen proposed by Japan to other Asian countries; (3) the RMB swap worth RMB 650 billion signed between China and a group of countries consisting of Korea, Hong Kong, Malaysia, Belarus, Indonesia and Argentina. Under such circumstances, it is essential to improve the accessibility to the CMIM which allows member states to draw only up to 20% of the maximum borrowing amount without a program with the IMF. Such improvement will require the enhancement of surveillance based on member nations' increased willingness for cooperation.

5.1.2 Asian Bond Markets Initiative (ABMI)

The ABMI was established in 2003, initially consisting of six working groups, with the primary objective of expanding the bond issuer base, diversifying issuance currency and building a better market infrastructure. Outlined below are the main achievements made subsequently by each working group.

(1) Development of new types of collateralized debt obligation

Firstly, the issuance of asset-backed securities (ABS) was promoted in various Asian nations, while in Thailand bonds were issued by the local subsidiaries of multinational companies. Secondly, the Malaysian and Thai governments instituted the exemption of withholding taxes for foreign investors. Thirdly, the yen-denominated cross-border CBO (Collateralized Bond Obligation) was issued, using bonds issued by small- to medium-sized Korean companies as the underlying asset. Fourthly, the issuance of currency basket-denominated bonds was discussed, although that development has yet to materialize.

Challenges for the future include the expansion of the issuance of bonds related to infrastructure development and the promotion of MTN (Medium Term Note) issuance.

(2) Credit guarantee and investment mechanism

In May 2009, an agreement was reached on establishing the Credit Guarantee and Investment Facility (CGIF), an organization designed to provide guarantees to local currency-denominated corporate bonds issued in different Asian countries. The CGIF was set up with initial funds of US$700 million, representing the Asian Development Bank's trust funds, with potential increases envisaged to facilitate the future demand. Subsequently, a working-level discussion developed on subjects such as the specific scope of operations, the method of guarantee provision, and the maximum guarantee amount for each nation involved, culminating in the holding of the first general meeting on November 25, 2010 in Xi'an, China. Headquartered in Manila, the Philippines, the CGIF will provide guarantees on bonds with credit ratings of BBB or equivalent/better, assigned domestically in each country. The US$700 million pool of contributions comprise US$200 million each from China and Japan (the Japan Bank for International Cooperation), US$100 million from Korea, US$70 million from ASEAN and US$130 million from the ADB.

Given that Asia's challenge in expanding its bond markets is faced with low issuer credit quality, coupled with the virtual absence of a high yield or junk bond market, credit guarantees will serve as an effective approach for overcoming such hurdles. That said, due to the potential occurrence of moral hazard in the issuer, special consideration must be given to the implementation, including the policy of offering such credit guarantees essentially as a temporary relief. It is the CGIF's obligation to carefully examine its operations to maintain their soundness.

(3) Foreign exchange transaction and settlement system

With regard to a foreign exchange transaction and settlement system, a study has been underway on the regional linking of clearing and settlement systems across the East Asian region. One result of such efforts is the 2005 release of the report on barriers to cross-border bond transactions, thanks to Bank of Japan and Bank Negara Malaysia. In addition, in April 2010 another report was published on these subjects (covered by (2) of 5.1.3).

(4) Issuance of local currency-denominated bonds by international development financial institutions

From 2004 onward, an initial effort to issue a series of Asian currency-denominated bonds has been made by international institutions, including the Asian Development Bank, the World Bank and the International Finance Corporation (IFC). Among them was the Thai Baht-denominated bonds issued in

September 2005 by the Japan Bank for International Cooperation (3,000 million baht, initial maturity five years) whose proceeds were provided to a Thailand-based Japanese-owned companies in the form of two-step loans through Japanese banks' Bangkok branch.

The issuance of bonds by an international institution facilitates improved issuer category diversification and market liquidity as well as the provision of new products to investors, while potentially helping promote increased bond issuance by other non-residents.

The second development connected to the issuance of Asian currency-denominated bonds by international institutions was the Asian Development Bank's September 2006 announcement that it would introduce the Asian Currency Note Program, totaling US$10 billion, in the Singapore, Hong Kong, Malaysia and Thailand markets. This program was designed to enable each country's issuer to issue bonds flexibly, in a market-timely manner, under a framework compliant with UK laws. The Asian Currency Note Program is anticipated to help promote increased regulation harmonization among different Asian nations.

While Thailand has not participated in the program, the list of program members was expanded to include the Philippines and Taiwan in April 2009, resulting in the current membership totaling five countries. However, to date, only Singapore dollar-denominated and Hong Kong dollar-denominated bonds have been issued under the program, making it necessary to conduct issuance in other nations as soon as possible.

(5) Development of regional credit rating agencies and information dissemination

Firstly, industry experts have been providing training designed to help Asian nations' credit rating agencies improve their skills, while conducting research on the enhancement of credit rating harmonization. In December 2008 the Handbook on International Best Practices in Credit Rating was published, a document outlining standards that should be applied in the credit rating business.

In order to grow cross-border bond transactions, it will be essential to ensure the development of local credit rating agencies, and also to standardize credit rating methodologies. Based on such a philosophy, the Association of Credit Rating Agencies in Asia (ACRAA) was established in 2001 with the objective of strengthening the cooperation framework among various East Asian credit rating agencies (details have been covered earlier in Chapter 2).

The ACRAA has been making increasing efforts to help improve the quality of credit rating in the region, through the hosting of seminars and workshops. Although it is quite challenging to enhance regional credit rating harmonization, experts are trying to lay the groundwork towards this goal.

While international credit rating agencies assign global scale credit ratings based on a rating universe composed of companies around the world, ratings by Asian credit rating agencies assign based on the basis of a national scale that limits the scope of the credit rating universe to companies within the agency's domestic country. Under the global scale-based method (that factors in each nation's sovereign risk), the credit rating of an issuer domiciled in a developing country with low sovereign credit rating is lower than that assigned under the national scale-based method.

Credit rating methodology standardization should be implemented by establishing a regional scale that will replace such a national scale. Yet for that to materialize, industry experts must enhance the harmonization of individual Asian countries' accounting and auditing standards and information disclosure standards, which constitute the basis for credit rating — a task not achievable in a short period of time.

One alternative step would be to set up a regional credit rating agency that will assess risk under the regional scale-based method. Still, that will involve solving the question of how to define the segregation of duties between such a new credit rating agency and other existing agencies.

Secondly, in May 2004 the Asian Bonds Online website was started as a vehicle for disseminating information. Providing a wide range of information and data relating to the Asian bond market, the website's content has been improving steadily. Moreover, the Asia Bond Monitor is being published on a quarterly basis, allowing industry professionals to identify the general condition of each Asian country's bond market and the development of government policies in each nation.

(6) Technical assistance

Since its launch, the ABMI has continued to host various events, including technical assistance programs and seminars, designed to help develop each Asian country's bond market.

(7) Historical changes in the operational platform

In May 2005, the ABMI roadmap was created, and based on the roadmap, working groups were reorganized and the following new challenges were specified: (1) the issuance of currency basket-denominated bonds; (2) self-assessment on each member state's market development measures; and (3) discussion of the Asian Bond Standards.

In addition, for the purpose of making the ABMI's efforts more far-reaching, a new roadmap was established in May 2008, consolidating operational challenges into four categories (the increased bond supply, the growing demand for bonds, regulatory framework improvement, and relevant market infrastructure development) (Figure 5-2). Included in the new roadmap were the following important future challenges: (1) the issuance of currency basket-denominated bonds; (2) the increased issuance of infrastructure development-related bonds; (3) the promotion of MTN issuance; (4) the linking of clearing and settlement systems across the East Asian region and the elimination of impediments for cross-border transactions; (5) the enhanced implementation of the Asian Currency Note Program; and (6) the Asian Bond Standards. Out of these items, points (3) and (5) have already been carried out, but it will be necessary to continue to follow this roadmap in promoting bond market development in coming years.

Figure 5-2 ASEAN+3 NEW ABMI Roadmap

Task Force 1: Promoting the Issuance of Local Currency-Denominated Bonds (supply-side)

1) Credit guarantee and investment mechanism (i)
2) Promotion of Asian Currency Note Programme (i)
3) Promoting issuance of structured finance instruments
    a) Debt instruments for infrastructure financing (i)
    b) Securitized instruments (ii)
    c) Regional basket currency bonds (iii)
4) Development of derivatives and swap markets (ii)
5) Promotion of Underwriters in the Region (ii)

Task Force 2: Facilitating the demand for Local Currency-Denominated Bonds (demand-side)

1) Development of an investment environment for institutional investors (i)
2) Development of an investment environment for individual investors (ii)
3) Development of repo and securities borrowing and lending (SBL) markets (ii)
4) Enhancing cross-border transactions
    a) Regulations on capital movement and foreign exchange transactions (iii)
    b) Taxation system for nonresidents (iii)
5) Disseminating the efforts under the ABMI to institutional investors in the ASEAN+3 countries (i)

Task Force 3: Improving the Regulatory Framework

1) Strengthening the regulatory and supervisory framework for bond markets
    a) Promoting application of the IOSCO principles for securities regulations (i)
    b) Promoting a transparent and conducive legal and regulatory framework for bond issuance, listing and disclosure rules (ii)
    c) Capacity building for regulators/supervisors (i)
2) Facilitating collaboration among securities dealers associations and self-regulatory organizations
    a) Promoting cooperation among regulatory/supervisory authorities as well as securities dealers associations and self-regulatory organizations in the region (i)

b) Promoting conducive standards and practices related to the present study "Asian Bond Standards" (ii)
3) Improving bankruptcy procedures related to bond transactions (iii)
4) Promoting application of accounting and auditing standards consistent with international standards (ii)

Task Force 4: Improving the Related Infrastructure for the Bond Markets
1) Infrastructure for securities settlement
   a) Promoting application of the CPSS/IOSCO recommendations (i)
   b) Facilitating discussion by private sector participants (i)
2) Increasing liquidity of bond markets
   a) Disseminating and enhancing a primary dealer system for the government bonds (i)
   b) Developing and maintaining a benchmark yield curve (i)
   c) Improving trading platform (ii)
   d) Developing/Enhancing information dissemination system for secondary bond markets (iii)
3) Fostering credit culture
   a) Assessing and developing the existing data related to local currency-denominated bond markets (ii)
   b) Development of a credit risk database (ii)
   c) Enhancing the credibility and visibility of local credit rating agencies (ii)
4) Developing professional services such as financial analysts (ii)

Note: (i), (ii), (iii) mean priority order to work on.
Source: ASEAN+3 NEW ABMI Roadmap

5.1.3 The ABMI's promotion of cross-border bond transactions

(1)Discussion on the Asian Bond Standards

The basic concept of the Asian Bond Standards proposed at the ABMI in 2005 is as follows. "Bond issuers in East Asia may potentially issue bonds in: (1) the issuer country's bond market; (2) the bond market of another Asian country (that permits issuance by non-residents); (3) the Euro bond market. The ideal approach would be to create a regional bond market by achieving a high level of development of each country's market that is opened to foreign issuers and investors, and then ensure regulatory harmonization among different Asian nations. However, as the degree of market development varies from one nation to another, this approach is time-consuming. Subsequently, we should seek to build a new international bond market in the region, coupled with bottom-up approach with developing each country's bond market."

While the progress towards this initiative is slow, the promotion of cross-border transactions has been identified as the significant task on many occasions, with the joint statement of the May 2010 ASEAN+3 Finance Ministers

Meeting saying "From the perspective of channeling regional savings to regional investment, it is necessary to promote cross-border transactions, and discussion on methods for doing so will be conducted in a systematic manner."

In the ABMI Task Force 3 (strengthening the regulatory framework), a proposal was made to discuss methods for ensuring harmonization among different bond markets in the region, the integration of those markets, and the establishment of a private placement bond market designed for institutional investors in the form of an international bond market (offshore market). The proposal was made after establishing an organization named the ASEAN+3 Bond Market Forum (ABMF) , which is comprised of regulatory/supervisory authorities and self-regulatory organizations in the region. The ideas behind this proposal is the same as those of the Asian Bond Standards, namely, that a top-down approach is easier than a bottom-up approach, and that standardization is easier than harmonization.

That said, controversy remains as to whether the building and expanding of a private placement bond market for institutional investors now is a priority agenda in Asia, where the institutional investor base is still underdeveloped and the market has yet to reach an advanced stage of growth. While the removal of impediments to cross-border transactions is a prerequisite for creating an international bond market, further progress needs to be made in the liberalization of capital flow and foreign exchange restrictions, particularly at a time when many Asian currencies have not yet been internationalized. Therefore, the first step would be to issue, in a country with a fully developed market, bonds denominated in a currency with a reasonable level of usability for international transactions.

(2) Efforts to address barriers to cross-border investment and settlement

In the Task Force 4 of the ABMI (improvement of bond market infrastructure), private sector experts (GOE: Group of Experts) conducted a study on ways to establish the Regional Settlement Intermediary (RSI) and on barriers to cross-border bond investment and settlement, which resulted in the release of a final report in April 2010. The report consists of three chapters, with the first chapter titled "Cost Estimation for Regional Cross-Border Bond Transactions," the second chapter "Feasibility Study on the Establishing of a Regional Settlement Intermediary" and the third chapter "Analysis and Recommendations on Barriers to Cross-Border Bond Investment and Settlement."

The first chapter provided a survey of transaction and custody fees paid to global custodians associated with regional cross-border bond transactions, and concluded that such fees were more expensive compared to Europe or in the US, with a significant disparity being shown among individual Asian nations. According to the chapter, these were attributable to the levels of custodian services, the general efficiency levels of individual markets, and the existence of regulations that differ from one country to another.

Figure 5-3 Barriers to cross-border investment and settlement

(Regulatory barriers) 1 Foreign investor quota 2 Foreign investor registration 3 Currency exchange controls 4 Cash controls-credit balances, overdrafts 5 Tax 6 Omnibus accounts 7 Regulatory framework 8 Legal framework
(Settlement barriers) 1 Messaging standards 2 Securities numbering 3 Settlement cycle 4 Trade and settlement matching 5 Physical certificates

Source: Asian Development Bank [2010]

Meanwhile, the second chapter examined options consisting of: (1) the Asian ICSD (Asian-version Euroclear); (2) the CSD Linkage (the linking of different countries' settlement institutions; and (3) status quo maintenance (use of global custodians' services). However, given the cost-related challenges involved in options (1) and (2), the report concluded that a continued feasibility studies were necessary[38]. The feasibility studies conducted were an Operational FS (the study of the scope of service provision and the resultant benefits), a Legal FS (the identification of obstacles relating to laws and regulations) and a Business FS (the study of cost factors).

[38] Settlement methods for cross-border bond transactions can be broken down into the following: (1) settlement through individual countries' local custodians; (2) settlement through an international commercial bank called a global custodian (and individual countries' local custodians); (3) settlement through an ICSD (International Central Securities Depository) such as Euroclear or Clearstream; and (4) settlement using an NCSD that is linked with another country's NCSD and/or ICSD.

For bond transactions in East Asia, usually method (2) is employed. Global custodian services are user-friendly for investors, enabling the settlement of bond transactions involving multiple countries. Method (1) is too complicated to be realistic, and method (3) can only be employed in certain Asian nations due to obstacles posed by each country's various trading regulations. Even in nations where an ICSD can be used, transactions are sometimes not completed until the next business day because of time zone differences. Method (4) is desirable if only such linking is achievable, but currently there exists virtually no linkage among individual NCSDs in each country. While linking different settlement systems in different development stages is technically challenging, it will be also essential to ensure harmonization of individual nations' laws and regulations.

Acting as an independent organization (a type of commercial bank), the ICSD will provide short-term credit as well as foreign exchange services, thus enjoying a reduction in various risks. However, inevitably there will be an overlap of operations with existing NCSDs. In addition, it is time-consuming to decide on the location and the establishment cost of an ICSD will be greater than that of NCSD connection. As for NCSD connection, it will be necessary to ensure harmonization among different NCSDs with regard to technical infrastructure and the scope of service provision.

Either way, it will be essential to eliminate obstacles relating to laws and regulations (e.g. restrictions on the opening of omnibus accounts [joint accounts by multiple market participants]), without which the integration of settlement systems will not materialize. In addition, cost factors will be heavily dependent on the actual growth of the bond market and cross-border transactions.

The second chapter stated that future feasibility studies would be conducted by members of the ABMI's task force who had an actual interest in the integration of settlement systems.

The third chapter focused its attention mainly on laws and regulations that can be considered as barriers to cross-border investment, and presented eight regulation-related items as well as five settlement-related items (Figure 5-3). The chapter said that it would be necessary to enable smooth settlement (STP: Straight-through Processing) by having international standards adopted by East Asian countries within a period of five years, based on the understanding that regulatory barriers need to be addressed mainly by the governments, with settlement barriers tackled mainly by the private sector.

As part of its investigation on the barriers shown above, the GOE has surveyed market participants (market surveys and market interviews) while conducting internal studies (market profile), and, following an assessment of the findings obtained (market assessment), the group has issued recommendations for eliminating such barriers.

The GOE's specific recommendations included: (1) the setting up of a new organization charged with the task of eliminating such barriers and ensuring collaboration between regulatory/supervisory authorities and market participants; (2) the need for regulatory/supervisory authorities to devise a barrier elimination roadmap while continuing their market assessment activities; (3) the need for the Asian Development Bank, regulatory/supervisory authorities and securities industry associations to fulfill their responsibilities for addressing perception gap (i.e. the failure to fully communicate to market participants the relaxation of a regulation).

As for the GOE's recommendations concerning regulatory barriers, the following were presented. (1) (2) Investment amount allocation and mandatory registration for foreign investors: while investment amount allocation is not common for bond investment, mandatory registration is currently in force in China, Korea and Vietnam. It will be necessary to speed up the registration process while defining registration-related regulations and ensuring increased transparency for such regulations. (3) Foreign exchange regulations: with regard to numerous regulations currently in force, it will be necessary to ensure increased regulatory transparency, reduce the burden for investors subject to regulations, and develop hedging vehicles. (4) Regulations on cash surplus/shortfall adjustment: while restrictions are in force in different countries, it will be essential to ensure increased regulatory transparency while relaxing the regulations. (5) Tax system: in addition to the burden of withholding taxes negatively affecting investment returns, the complicated tax system is adding to the burden on investors. Enhancement of the transparency level of the tax system is necessary to make the system less complicated and help reduce the relevant administrative burden on investors. The dematerialization of tax procedures is also desirable, and the abolition of withholding taxes for non-residents should be discussed. (6) Omnibus accounts: as the current restrictions in China and Korea concerning the use of omnibus accounts by non-residents are causing high level of settlement processing costs in those countries, it will be necessary to relax the restrictions and increase the transparency level of the regulations. (7) Regulatory framework: since the risk of regulations being changed in an undesirable manner constitutes an obstacle, any change in regulations must be made after ensuring increased regulatory transparency, defining long-term policy and paying utmost care to the effects of such change. (8) Legal framework: it will be essential to secure settlement finality (transaction irreversibility) and improve bankruptcy laws.

Stressed in the above is the need to ensure increased regulatory transparency, fully communicate to overseas investors, simplify procedures as much as possible for the sake of trade participant’s convenience, and define long-term policy objectives. While the concept of harmonization is not mentioned in the above recommendations, if each member country moves in the direction desired, increased harmonization should naturally result.

The following additional recommendations were made by the GOE with regard to obstacles to settlement. (1) Messaging standards: within the next five years (by end-March 2015), the individual countries of the ASEAN+3 should adopt the ISO format, since the failure to use international standard formats such as ISO 20022 will result in increased translation burden and risk. (2) Securities numbering: it will be desirable to ensure that the ISIN Code, the international standard, is being used as the general standard in each Asian nation’s domestic market. (3) Settlement cycle: the standard settlement cycle is T plus one business day for government bonds, and T plus two or three business days for corporate bonds and equities. It will be necessary to enable settlement at least on a T plus two or T plus three business day-basis. (4) Trade matching (post-trade matching between counterparties and pre-settlement matching between custodians): it will be essential to introduce automation and dematerialization to the extent possible, for the purpose of shortening the settlement cycle and reducing errors. (5) Physical certificates: it will be desirable to abolish physical certificates within the next three years.

(3) Establishment of the ASEAN+3 Bond Market Forum (ABMF)

Based on the achievements described above, the launch of the technical working group relating to regional settlement intermediary was affirmed by the joint statement of the May 2010 ASEAN+3 Finance Ministers Meeting, which also approved the establishment of the ABMF, a move undertaken perhaps also in consideration of the report by Task Force 4 that had stated that a coordinating body should be set up to promote the elimination of barriers to cross-border transactions.

It was decided to set up two sub-forums for the time being. Sub-Forum 1 was designed to help reduce barriers to cross-border investment by filling the information-related perception gap, and the members agreed to gather and compile information relating to individual Asian countries' regulations, market structure and accepted market practices, while posting the outline of such information on the Asian Bonds Online website. On the other hand, Sub-Forum 2 was intended to help lower cross-border transaction costs by facilitating increased levels of settlement efficiency. Accordingly, Sub-Forum 2 decided to seek enhanced messaging standardization following a detailed examination of the current status of the settlement process in each Asian nation.

In coming years, active discussion is expected to take place among many private sector market participants. If private sector opinions come to be fully reflected in the initiative to develop the bond market, which has previously been a more or less a public sector-driven effort, they should contribute to an accelerated market expansion.

5.2 Executives' Meeting of East Asia Pacific Central Banks (EMEAP)

The EMEAP's initiative to set up the Asian Bond Fund (ABF) was comparable to the ABMI in significance. The ABF is a bond fund allowing the central banks of eleven member countries/economies (Australia, China, Hong Kong, Indonesia, Japan, Korea, Malaysia, New Zealand, the Philippines, Singapore and Thailand) to invest part of their foreign reserves in Asian bonds. Consisting of ABF1 (announced in June 2003) and ABF2 (announced in December 2004), the ABF is a passive bond mutual fund that invests in government bonds (sovereign bonds) and government agency bonds (quasi-sovereign bonds) issued by eight of the member nations/economies, excluding Australia, Japan and New Zealand.

The size of the fund is approximately US$1,000 million and it is expected to invest in US dollar-denominated bonds issued by Asian countries' governments and government agencies in the international bond markets, the ABF1's primary objective was to accumulate investment experience.

On the other hand, the ABF2 is a fund that invests in local Asian currency-denominated bonds with the objective of actively contributing to the development of the Asian bond market. The ABF2 is composed of the Pan Asia Index Fund (PAIF, denominated in US dollars, initial issuance size approx. US$1,000 million), that invests in bonds issued by eight countries/territories in the cross-border market, and the funds in individual member countries (total initial issuance size of US$1,000 million). A special feature of the ABF2 is the fact that, unlike the ABF1, it has opened the door to private sector fund manager to while allowing private sector entities to invest in the fund and decide on its benchmark index.

The ABF2 is a passive open-ended exchange-listed fund type was chosen because of the benefits such as low fund administrative cost, the wide scope of investors to which the fund can be marketed, and superior fund liquidity. Singapore was selected as the domicile for the PAIF's launch due to its tax treaties with the individual nations involved, while Hong Kong was chosen as the listing location due to the high liquidity of its bond market.

The EMEAP has set out the ABF's specific objectives as the promotion of investor awareness of Asian bonds and the acceleration of market/regulatory reforms in the region and individual nations. These objectives have been achieved to a certain extent, as can been seen from the fact that the index introduced by the ABF has come to the market as an Asian bond investment benchmark. Also, progress towards the launch of the ABF2 has resulted in legal/tax system reform and infrastructure development in individual Asian countries. In deciding the country weightings in the Pan Asia Index tracked by the PAIF , four factors were taken into consideration, namely: total bonds outstanding, trade turnover, local currency sovereign credit rating and market access (evaluation based on laws, regulations and market infrastructure) — thereby incentivizing individual nations to accelerate market reform and raise their own weighting scale.

All in all, as a result of launching these funds, the ABF2 was able to identify and reduce obstacles to bond transactions. In particular, , the existence of obstacles to cross-border transactions was identified as a challenge from the PAIF.

The EMEAP notes a number of specific achievements that have been accomplished by the ABF2. Firstly, the launch of the ABF2 has resulted in the liberalization of capital transaction regulations in Asian countries, including China, where the PAIF is the first-ever foreign fund permitted to participate in the nation's interbank bond market. Regulatory liberalization has also taken place in Malaysia, where hedging transactions by non-residents have been deregulated by the government. Meanwhile, in Thailand, various measures have been taken, including the easing of the regulations on institutional investors' overseas investment. Secondly, the establishment of the ABF2 has led Malaysia and Thailand to abolish withholding taxes on inward investment by non-residents. Thirdly, as bond index tracker exchange-traded funds (ETFs) have not previously existed in Malaysia and Thailand, both countries have gone on to introduce new guidelines on ETFs. In addition, the EMEAP has provided recommendations to regulators in different nations with regard to fund investor protection, a move that is expected to help promote further regulatory harmonization. Fourthly, contract documents for the PAIF have been prepared in accordance with international standards, thus facilitating the adoption of such international standards in each country. Fifthly, the introduction of the ABF2 has resulted in each nation strengthening its securities settlement system as well as the network involved. The fund, being an ETF, has additionally led increased market price transparency.

Also important to note is the fact that the ABF has directly facilitated improved investment returns and an expanded inflow of each country's foreign reserves to the Asian region. As described here, the ABF has fulfilled the crucial function of providing new investment products to help expand the bond investor base and promote market infrastructure development.

The development of regional products led a significant step towards promoting cross-border transactions, a concept that has been echoed by ASEAN in relation to its below-mentioned efforts towards integrating its member nations' equity markets, and the ABF has been identified as a pioneer product contributing to those kinds of efforts.

5.3 The Asia-Pacific Economic Cooperation (APEC)

The APEC Business Advisory Council (ABAC) was set up in 1996 as APEC's official advisory body, with membership consisting of business people. A variety of discussions are being held among ABAC members regarding financial system development in the region at a venue called the Advisory Group on APEC Financial System Capacity Building.[39]

The ABAC's "Recommendations for APEC Leaders (2009)" consists of 19 items, including two relating to finance: the "Strengthening and Deepening the Region's Capital Markets," and "Promotion of Capacity-Building for Strengthening the Financial

[39] Relevant materials can be obtained at: https://www.abaconline.org/v4/content.php?ContentID=1304

Figure 5-4 Recommendations to APEC Leaders 2010 for strengthening and deepening the region's capital markets

1. Promoting stronger growth (1) Promoting regional integration through sub-regional financial integration ・Advancing CMIM as a platform to enhance financial stability in the APEC region. (2) Encouraging Islamic finance (3) Promoting infrastructure public-private partnership (4) Developing bond and equity markets ・Developing wholesale securities markets. ・Reducing barriers to cross-border settlement. ・Promoting cross-border collateral markets. ・Introducing a funds passport scheme.
2. Ensuring more sustainable growth (1) Advancing regulatory reform (2) Adopting International Financial Reporting Standards (3) Financing the environment
3. Achieving more balanced growth (1) Expanding SMME access to finance ・Developing properly structured credit information systems and legal frameworks ・Offering some credit enhancement in the form of credit guarantees, and introducing better regulatory framework ・Implement the collateral law to secure the loan (2) Enhancing social safety nets (3) Promoting financial inclusion ・Launch an APEC Financial Inclusion Initiative

Source: ABAC recommendations to APEC Leaders (2010), "Strengthening and deepening the region's capital markets"

System." Included are specific recommendations to: build a financial system infrastructure to facilitate SME finance; address impediments to bond market development; and promote public-private partnerships.

In fiscal year 2010, the ABAC made recommendations on, among others, the coexistence of Islamic finance and conventional finance, the establishment of Asia Pacific regional partnerships for promoting public-private infrastructure collaboration, the creation of a securities market dedicated to institutional investors, the introduction of the fund passporting scheme, the adoption of

International Financial Reporting Standards (IFRSs), and the promotion of environmental finance and SME finance (Figure 5-4).

5.4 Equity market integration by ASEAN

5.4.1 Integration of the ASEAN capital markets

Next, this report examines ASEAN's initiative toward achieving the integration of its member nations' equity markets. In November 2007, agreement was reached among ASEAN countries on the plan (Blueprint) for transforming the ASEAN Economic Community (AEC) into a single market and production base by 2015. The Blueprint envisaged an ASEAN economic region in which there is a free flow of goods, services, investment, skilled workers, and capital, while aiming to achieve the integration of capital markets.[40]

Based on the Blueprint, efforts have been made in many areas toward market integration. In 2004, the ASEAN Capital Markets Forum (ACMF) was set up as a venue for securities market regulators to discuss the development of regional capital markets. The ACMF's initial discussion focused on system harmonization concerning: (1) professional market participants' qualification and training; (2) accounting and auditing systems; (3) information disclosure for equity-related products; and (4) retail business-related rules. This was later followed by the addition of: (5) information disclosure for bond-related products.

During the period from April 2008 to April 2009, the Implementation Plan for ASEAN Capital Markets Integration was studied with the assistance from the Asian Development Bank, before being approved at the ASEAN Finance Ministers' Meeting (AFMM) (ASEAN Capital Markets Forum [2009][41]). A plan based on the above-mentioned Blueprint, the Implementation Plan, has its objective of integrating the regional capital markets by 2015. At a time when some stock exchanges in the region are seeking partnership with other exchanges on an individual basis, the Implementation Plan aims to achieve integration on a regional basis.

The Plan is based on the six principles, namely: (1) adoption of international standards to the maximum extent possible; (2) inherent stress on market liberalization; (3) sequencing of regional integration initiatives; (4) engagement of the ASEAN Secretariat as the main coordinator; (5) implementation of country-level policies in a manner consistent with the objective of regional integration;

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[40] However, according to the Blueprint, the actual stance on capital transaction liberalization will be decided according to each country's particular circumstances.
[41] For details, refer to the following: http://www.theacmf.org/ACMF/report/ImplementationPlan.pdf

and (6) a strong communications plan and consultative processes to build consensus and set priorities for integration initiatives.

The aim of the Implementation Plan is to achieve increased market infrastructure harmonization in an effort to grow regional cross-border transactions through each nations' stock exchanges, given that each ASEAN nation's capital market alone is too small in size. The Plan involves specific initiatives to: (1) create a fundamental environment enabling regional integration ([i] the framework for harmonization and mutual recognition); (2) create a market infrastructure and regionally-focused products and intermediaries ([ii] ASEAN exchange alliance and governance framework, [iii] promote new products and build ASEAN as an asset class, [iv] strengthen the bond markets); and (3) strengthen the implementation process ([v] align domestic capital market development plans to support regional integration, [vi] reinforce ASEAN working processes). In short, these initiatives are designed to promote regional integration on three fronts, i.e. regulation harmonization, market infrastructure development, and product development.

The Implementation Plan also specifies three phases (Phase I: 2009-2010, Phase II: 2011-2012 and Phase III: 2013-2015). The core strategy in the Plan is a harmonization and mutual recognition process to expand scope/country coverage. This process is closely associated with stock exchange alliance. Mutual recognition means that, for example, approval is given to country B's issuer to issue bonds in country A pursuant to country B's regulations, and vice versa.

The regional integration the AEC Blueprint aims to achieve : (1) free capital flow in the region; (2) the issuer's freedom to issue bonds anywhere in the region; and (3) the investor's freedom to invest anywhere in the region. In other words, such regional integration will enable investors to trade in any country of the region and any products of any country in the region while allowing intermediaries to provide services in any country of the region once approval is obtained in the country of the intermediary's domicile.

In order to achieve such market environment, it will be essential to reduce the burden on market participants by promoting harmonization and mutual recognition. Two approaches are possible. The first approach will be to fully harmonize laws and regulations, mainly in accordance with international standards. Under this approach, only small unharmonized parts will be addressed through mutual recognition, and capital transaction regulations will be totally liberalized. That is the approach previously taken by the EU.

The second approach will be to achieve general harmonization, coupled with mutual recognition given for complementary purposes, while attaining increased levels of capital flows within the region. This represents the vision and approach under the AEC Blueprint.

Of special note here is that it will be difficult to achieve mutual recognition unless the two countries involved have similar regulations. From the perspective of diverse financial system risk management, a nation with a system relatively superior to that of another nation is unlikely to agree to mutual recognition. Therefore, it is reasonable to say that mutual recognition essentially constitutes a process in which individual countries will be expected to contribute to increased harmonization through a migration to a more superior system. In other words, it will be essential to reduce the market development gap that exists among different nations.

While ASEAN mutual recognition guidelines will be formulated with the aim of promoting harmonization and mutual recognition, the ultimate purpose of the framework's introduction is to grow cross-border transactions, not regulatory change itself. Therefore, it will be vitally important to prioritize initiative implementation. Based on the abovementioned guidelines, the following goals have been stated: (1) facilitate mutual recognition by ensuring conformity to IOSCO principles to the extent possible; (2) expand mutual recognition to the maximum extent by preserving domestic market soundness while securing investor protection and ensuring proper management of systemic risk; and (3) strengthen cooperation and information exchange among different regulatory authorities in order to facilitate mutual recognition.

Specific transaction types to which the framework of harmonization and mutual recognition should be applied are: (1) assistance for cross-border fundraising; (2) assistance for cross-border product marketing; (3) assistance for cross-border investment; and (4) assistance to intermediaries for market access.

The actual initiative implementation will start with the promotion of bilateral integration, eventually moving on to a multilateral arrangement. Given the different levels of market development in each country, an opt-in approach will be used while allowing each nation to choose whether to participate in such integration within its capability. Under the plan, priority will be given to institutional investors over retail investors. In addition, capital account liberalization and tax system harmonization, outside of the scope of the plan, will be a prerequisite for the promotion of the framework for regulatory harmonization and mutual recognition. The ASEAN Secretariat must seek to fulfill such prerequisite by working closely with relevant authorities, while paying due attention to the fact that the growth in cross-border transactions makes risk management indispensable, and technical assistance must be provided to less-developed countries.

According to the ASEAN Secretariat's website, the current ongoing initiatives under the capital market integration plan include: harmonization concerning equity-related information disclosure and marketing rules, harmonization in accounting/auditing standards, mutual recognition between market professionals, and the cross-border issuance of bonds and CISs (Collective Investment Schemes). In particular, as a bond market reinforcement measure, score cards for assessing the level of market growth achieved are currently being devised by experts.

5.4.2 Harmonization in information disclosure standards (ASEAN and Plus Standards Scheme)

One specific achievement of the market integration initiative is the ASEAN and Plus Standards Scheme, the framework devised by the ACMF for information disclosure standards that apply to regional cross-border securities issuance (equity and bonds). The objective of this scheme is to facilitate cross-border issuance and promote increased transparency levels for securities in the region, thereby helping build ASEAN as an asset class.

The ASEAN Standards are common to all ASEAN member countries and conform to IOSCO International standards, while the adopted accounting and auditing standards are fully identical with international standards. On the other hand, Plus Standards represent an additional set of standards required by the accepted practices, laws and regulations of individual countries. Besides adopting these standards, experts are currently in the process of studying how to significantly shorten and standardize the time required for securities registration in each nation.

In June 2009, the decision to adopt the above framework was announced by the securities market regulators in Malaysia, Singapore and Thailand. Other countries are planning to join in the adoption once preparations are completed, but have not yet specified any dates.

5.4.3 Interconnection of regional stock exchanges

ASEAN has two bodies which play roles parallel to that of the ACMF: a task force for regional securities market partnership, and the ASEAN 100 Task Force. While the ACMF is composed of securities market supervisory authorities, the two task forces of ASEAN include stock exchanges. Following an agreement reached by the ASEAN Financial Ministers' Meeting held in April 2005, the regional securities market partnership task force set as its goal to interlink the transaction and settlement systems of different stock exchanges in the region (interlinked ASEAN securities market) by 2010. Although Singapore, Malaysia, Thailand, the Philippines, Indonesia and Vietnam had made public their decision to become

[42] As for the establishment of the regional cross-border trading system (electronic trading network), Singapore, Malaysia and Thailand will participate in the system from the second half of 2011, with the Philippines expected to join in the first half of 2012. Indonesia and Vietnam are still undecided. (The Nikkei newspaper, December 5, 2010 edition.)

initial members in the task force, in December 2009 Indonesia announced a postponement of its participation due to the delay in preparation, resulting in launch slightly behind the original schedule.[42]

Meanwhile, the ASEAN 100 Task Force has its goal to build ASEAN as an asset class by developing ASEAN equity indices and ASEAN ETFs. In September 2005, the FTSE/ASEAN 180 Index and FTSE/ASEAN 40 Index were introduced by the stock exchanges of Singapore, Malaysia, Thailand, the Philippines and Indonesia jointly with the FTSE Group of the UK, accompanied by the development of relevant ETFs. In addition, the ASEAN Boards, which will be set up in the future within each stock exchange are expected to provide real time price information on major individual stocks of the region.

These initiatives are faced with impediments resulting from the different capital transaction regulations in the region. In addition, the following issues can be cited.[43]: (1) it is not certain to what extent each country will be able to conform to the standards adopted by Singapore, a nation with a superior system infrastructure, given the different levels of market development in individual countries; (2) currently, there exists limited demand for trading system interconnection (while large-sized institutional investors are able to place orders via separate routes, cross-border transactions by retail investors are still limited); (3) it is challenging to raise the profile of ASEAN through market partnerships, making it essentially necessary to develop and expand each nation's market; and (4) given that equity transactions, unlike bond transactions, are conducted through a stock exchange, harmonization among different stock exchange-related systems will be essential to promote increased cross-border transactions. However, with many Asian stock exchanges being owned and managed by their national governments, the future integration of Asia may take a form very different from that achieved in Europe and the US.

5.4.4 Need for collaboration between the ABMI and ASEAN equity market integration

In coming years, as part of its Asian bond market development initiative, the ABMI should collaborate with ASEAN's equity market integration initiative as much as possible, in order to reduce impediments to cross-border transactions and to ensure harmonization in laws and regulations. Both initiatives seem to have a great deal in common with regard to the securities related legal system, for example. Given that the implementation plan for the ASEAN capital market integration initiative has as one of its policies "collaboration with other initiatives", set forth in "(4) Strengthen the bond market," it will be desirable to have such collaboration undertaken by experts involved in both initiatives.

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[43] From Urade [2007]

6 Challenges for new Asian financial cooperation initiatives

The regional financial cooperation initiatives outlined in the preceding chapter mainly consisted of initiatives implemented based on a critical review of the Asian financial crisis. Yet the situation has changed with the passage of time, and Asian economies are now in the midst of dynamic growth, making it necessary to bring about a paradigm shift in the framework for regional financial cooperation. This chapter discusses the challenges faced by new financial cooperation initiatives, with a focus on: (1) promotion of regional cross-border transactions; (2) expansion of individual countries' corporate bond markets; and (3) enhancement of private sector cooperation.

In particular, (1) promotion of regional cross-border transactions and (2) expansion of individual countries' corporate bond markets are in a mutually developmental relationship with each other. Promotion of cross-border transactions should lead to increased liquidity in each nation's bond market, while the expansion of individual countries' bond markets should result in better confidence in such markets, thus helping promote cross-border transactions.

6.1 Promotion of regional cross-border transactions

6.1.1 Objective of promoting regional cross-border transactions

First of all, real economic factors such as the changing economic conditions following the global financial crisis seem to be the motivation for expanding regional cross-border transactions and promoting regional financial integration. At a time when developed economies continue to struggle, Asian nations must grow their regional demand while modifying their growth strategy based on exports to Europe and the US. Under such circumstances, financial system development is becoming increasingly important as a stepping stone for effecting such change. Efforts towards developing the financial system may potentially bring changes in each country's savings and investment balance and growing domestic demand will lead to increased regional real economic integration. This in turn will make it even more necessary to promote regional financial integration.

The second set of factors is associated with capital transactions. The need for addressing the issue of capital flows from developed countries to Asia has been identified by Asian nations as a persistent challenge. In the wake of the 1997

Asian financial crisis, particular importance was attached to efforts towards reducing borrowings from non-Asian countries, mainly developed economies, by developing the regional financial system and “channeling Asian savings to investment in Asia ,.” With an aim to mitigate the “double mismatching” problem, which involves the use of short-term foreign currency borrowings to fund long-term domestic investment.

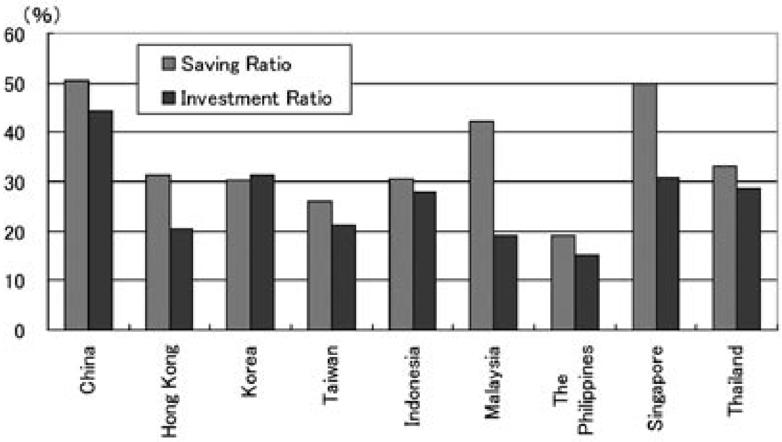
In the years since the Asian financial crisis, Asian nations, mainly ASEAN member states, have been experiencing a net savings surplus due to the declining investment (Figure 6-1). Under such circumstances, some experts have often expressed the following opinion: “Asian savings first flow out of the region to non-Asian destinations before returning to Asia via developed nations. If Asian financial/capital market were developed, such outward investment from Asia would be directed to regional investment destinations, making it unnecessary for Asians to invest in developed markets such as the US and Europe.” In addition, industry experts have taken issue with the fact that while outward investment from Asia is composed mainly of investments with relatively low returns, such as bond investments funded by Asian nations’ foreign reserves, inward investment into Asia comprises mainly investments with relatively high returns such as foreign direct investments and equity investments.

Recently, on the back of developed nations’ monetary easing and Asia’s high growth potential, a capital inflows into Asia have greatly expanded. It is becoming increasingly important for Asian countries to reduce their reliance on capital flow from developed nations by growing regional cross-border transactions.

Without doubt, there are positive as well as negative effects from Asian savings flowing out of the region and developed nations’ capital flowing into Asia. In particular, inward direct investment into Asia serves the function of supporting Asian economic growth. Furthermore, the current savings and investment and capital flows situation are being affected by non-financial system factors such as foreign exchange policies. Another point to note is that a system focused on regionally-funded money, with potentially limited information asymmetry, offers no guarantee that the money will not flee the Asian region in times of crisis.

That said, the development of a regional financial system involving institutional investors and the provision of an increased amount of funds with higher risk tolerance levels is of great significance. To sum up what is discussed above, the primary significance of strengthening regional financial integration lies in the reinforcing of the regional financial/capital market and financial institutions, thus (1) helping raise regional economic growth rates on the back of increased investments and promoting real economic integration, while (2) securing the financial stability that will result from change in capital flows.

Figure 6-1 Saving ratio and investment ratio (as percentage of GDP, in 2008)



Source: ADB, Key Indicators

The goal of regional cross-border transaction promotion can be summarized into the following four items.

Firstly, growth in cross-border transactions will stimulate competition, resulting in the reinforcing of the regional financial/capital market and financial institutions. As for the bond market, the arrival of investors with diverse investment methodologies will lead to increased investor base diversification and higher secondary market liquidity levels. In addition, the expected introduction of new financial products and risk management methodologies, along with international standards on corporate information disclosure and governance, will have the benefit of improving the market maturity and reliability as well.

Secondly, increased cross-border transactions will enable individuals and companies in the region to receive new and superior financial services. Expanded inward investment from foreign countries should allow domestic fundraisers to enjoy lower funding costs as well as access to increased amounts of funds. In addition, the anticipated progress in capital account liberalization in each country would make it possible to raise funds in regional currencies. At the same time, investors will be able to achieve more diversified portfolios and reduced investment risk thanks to international investment diversification. Also, increased issuance by non-residents should present new investment opportunities to domestic investors.

Thirdly, while many Asian countries are showing a net savings surplus, the move to “use Asian savings for investment in Asia” may result in improved efficiency for regional fund allocation. As seen in the objective of “building ASEAN as an asset class,” the expected progress in market integration will bring about economy of scale, making it feasible to achieve reduced funding costs by attracting new investment.

Fourthly, there exists the need for cross-border transactions from a perspective of fund supply/demand. In addition to developed nations being quite keen to invest in emerging countries in Asia with high growth potential, Asian countries have strong funding needs pertaining to infrastructure investment. Although the lenders and the borrowers share identical needs, both sides face impediments, such as laws, regulations, and foreign exchange and it will be necessary to remove such impediments to achieve the smooth flowing of funds.

6.1.2 Desirable development of individual nations' markets: A bottom-up approach

Figure 6-2 is a list of steps that will need to be taken for promoting increased cross-border transactions, some of which are outlined in this section 6.1.2 through section 6.1.5. The first point to note is that it is quite challenging to integrate different markets and harmonize different regulations. Such integration and harmonization cannot make substantial progress without understanding that such goals follow great significance. Also important fact is that, as a prerequisite for promoting such integration, it will be essential to narrow the development gap that exists among individual countries by enhancing each nation's market (i.e. increased issuer scale, better credit quality, improved secondary market liquidity as well as enhanced risk hedging vehicles and settlement systems).

For nations in the region whose domestic markets are relatively more developed, it will be indispensable for them to provide support to relatively less developed national markets through enhanced technical assistance in an effort to grow cross-border transactions. Put differently, promotion of cross-border transactions is intended to contribute to the development of each country's market. Therefore, promotion of cross-border transactions and development of each nation's market should be carried out simultaneously, with the bottom-up approach.

Figure 6-2 Requirements for the promotion of cross-border trading

1. Reduction of the difference of market development among Asian nations by improving bond markets in each country (expansion of issuers, improvement of creditworthiness, improvement of secondary market liquidity, risk hedging tools, settlement systems, etc.)
2. Modification and harmonization of institutions and market infrastructure (capital account regulations, tax systems, market-related legal systems and regulations, credit risk data, including credit ratings, accounting and auditing standards, and settlement systems, etc.)

3. Development of new products focused on the region as a whole (ex. Asian Corporate Bond Funds)
4. Credit enhancement for bond issuers through credit guarantees and securitization
5. Development of institutional investors within the region and dissemination of all information required for investment (PR activities)
6. Changes of foreign exchange policies (capital account liberalization, internationalization of regional currencies, etc.)
7. Progress of discussion about economic and financial integration (cost and benefit of financial integration) , coordination of standpoint and opinions of each country

Source: Shimizu [2010]

In order to make individual country market development efforts conducive to increased cross-border transactions, it will be particularly important to: (1) grow the secondary market for the purpose of facilitating investor trading activities (i.e. increased liquidity) ; (2) broaden the range of hedging instruments available in order to reduce trading costs (in particular, foreign exchange derivatives and currency swaps); and (3) help increase the market size and promote regulatory liberalization so that the markets will become constituents of the benchmark indices used by investors. This should be coupled with the establishing of market indices that will better incentivize investment.

In addition, each country in the region must constantly keep in mind the perspective of the cross-border transaction participants — developing issuers and investors.

6.1.3 Expansion of the framework for harmonization and mutual recognition

The introduction and expansion of the framework for harmonization and mutual recognition constitute key steps of the bottom-up approach.

The areas targeted for harmonization and mutual recognition can be broken down broadly into: (1) direct infrastructure areas (trading platforms, clearing/settlement systems); (2) indirect infrastructure areas (laws and regulations, credit rating agencies, accounting/auditing standards, tax systems); and (3) foreign exchange regulations. In particular, harmonization of financial regulation and supervision, albeit challenging, seems to be important from a risk management perspective. One option to consider for achieving such harmonization will be for each country to adopt global standards and best practices.

Takeuchi [2005] and the Asian Development Bank [2010] (GOE Report of Task Force 4) describe the significant results of research on these issues accumulated by the ABMI.

The former research was performed as a joint project between the Bank of Japan and Bank Negara Malaysia, and highlights findings from a survey from market participants while examining impediments to inward investment by non-residents, outward investment by residents and issuance in domestic markets by non-residents. Included in such examination were: (1) capital transaction regulations; (2) tax systems; (3) regulatory transparency; (4) the potential availability of hedging instruments; (5) clearing/settlement systems; (6) market price transparency; and (7) investor protection and information disclosure. On the whole, it is a comprehensive report on those impediments.

As for the latter report (the GOE report), the details are outlined earlier in Chapter 5. This report can also be recognized as a fairly comprehensive one, except for the fact that it does not discuss credit rating agencies and accounting/auditing standards in detail.

Other relevant efforts being made include the following: (1) credit rating agency-related activities performed by the ACRAA, which (as described in Chapter 5) provides training designed to assist individual nations' credit rating agencies in improving their skills, and conducts research on credit rating harmonization; (2) initiatives by the ABF2, whose launch resulted in tax system change and increased relaxation of capital transaction regulations, while contributing to an improvement in market-related laws and regulations, securities settlement systems and market price transparency, among other effects.

As shown above, a broad range of outcomes have already been accomplished with regard to the expansion of cross-border transactions, and the ABMF should be viewed as a group that can fulfill the objectives contained in the recommendations by the GOE report.

Shown below is a summary of thoughts for the future based on the background highlighted above.

Firstly, the ABMF in coming years must conduct investigations that maintain continuity mentioned in the GOE report. As its title indicates, the GOE report goes only as far as to present "barriers to investment and settlement," without covering detailed review on law and regulation. Consequently, it will be essential to carefully examine any legal and regulatory changes necessary for the growth of diverse cross-border transactions in the future and seek for changing and harmonizing rules.

Secondly, impediments other than legal and regulatory ones must be addressed on an individual basis. One potential approach would be to expand the ABMF's sub-forums further, from the current two. For example, with regard to the issue of credit rating, it will be important to explore the possibility of harmonization by collaborating with the ACRAA and leveraging, to the extent possible, the past research previously made on the subject (in particular, the creation of a regional scale). Another option to be considered is for a country other than Japan to act as leader for a new sub-forum (not confined to credit rating-related issues) in order to reflect diverse values.

Thirdly, in implementing these initiatives, it will be essential to pursue the possibility of building a mutual recognition framework, which is thought to be a relatively easier task when compared to harmonization. Challenges of particular importance will be to facilitate cross-border issuance by non-residents and introduce the fund passporting system.[44]

It will be necessary to collaborate with ASEAN's initiative as much as possible to introduce a harmonization and mutual recognition framework, and to capitalize on ASEAN's knowhow. One potential step to be considered, among others, is to use the ASEAN and Plus Standards Scheme that has already materialized.

In building a strategy for introducing a harmonization and mutual recognition framework, it is also important to draw on the experience of European peers.

Fourthly, the gap exists among different countries in terms of the level of settlement system development in particular. This gap is a significant cause of cross-border transaction-related settlement costs and risks remaining high, which is hindering the growth of such transactions. A first step towards solving this problem will be to develop individual nations' settlement systems and achieve STP (Straight Through Processing) as early as possible. In addition, it will be necessary to promote settlement system integration among different countries through continuous discussion at the ABMF's Sub-Forum 2, while working hard toward establishing a regional settlement intermediary (RSI) — a long-term challenge.

Fifthly, in view of the ABF2's track record, it would be helpful to create and launch the ABF3 to reduce impediments to the growth of cross-border transactions.

[44] For details of the fund passporting, see the column below.

Column:

Fund passporting (regional mutual recognition system for mutual funds)

As a financial intermediary, a mutual fund management company (investment management company) acts as a middleman between the capital market and investors. These entities seek risk diversification by allocating funds based on investment diversification, undertaken through an investment decision-making process. Such a service by mutual fund management companies contributes to the improved functioning of capital markets.

In recent years, emerging countries have witnessed a remarkable growth in their mutual fund systems. According to the IOSCO (International Organization of Securities Commissions), the total mutual funds outstanding of emerging nations (31 nations surveyed) stood at US$1,940 billion (approx. 160,000 billion yen) as of 2007, 2.7 times that of the Japanese mutual fund market at the time. The pace of mutual fund growth has been particularly significant in emerging Asian economies in the midst of dynamic growth. While the Asian mutual fund market is still small in size in comparison to that of the US and Europe, the outstanding balance of its assets has been rising steadily, driven by the expanding investor base in the region.

While mutual funds are a global investment vehicle for investment, their marketing and distribution are performed essentially within the regulatory framework of the country of domicile, under the principle of investor protection. As a result, the Asian mutual fund market is fragmented under different legal structures. With scale being a crucial factor in the mutual fund business, this point is critical.

A type of mutual fund called UCITS fund has become freely marketable to customers throughout the European region thanks to an economy of scale, achieved by conforming to the region’s standardized regulations and preserving the product quality related to investor protection and compliance (or using the superior quality to enhance the brand appeal). It has also contributed significantly to the growth of the European mutual fund market.

UCITS funds are created in compliance with the Undertaking for a Collective Investment in Transferable Securities. With common requirements having been defined with regard to investor protection and disclosure, a UCITS fund may be marketed in any EU member country. UCITS standards have become global standards, resulting in increased sales outside of the EU as well.

The Australian government, in its capital market enhancement plan (Australia as a Financial Center: Building on our strengths, November 2009), recommends “mutual recognition of mutual funds,” pointing to growing support for the introduction of a fund passporting in Asia (see Proposal 7 in Chapter 7).

6.1.4 Increased issuance by non-residents

An important step towards growing the issuer base is to allow non-residents to issue bonds. In Hong Kong and Singapore, issuance by non-residents is conducted freely, and China, Malaysia and Thailand are gradually starting to deregulate such issuance.

However, such issuances are still subject to restrictions in each country, and in most cases the local currency-denominated funds raised in each market are not allowed to be transferred out of the country. For that reason, in the Philippines and Indonesia, there are very few cases of issuance by non-residents. Although Malaysia has come to deregulate issuance by non-residents under its stated goal of becoming an international financial center for Islamic finance, non-resident fundraising accounts for only a few percent of the total corporate bonds issued, and any change in the nation's domestic liquidity would potentially make such issuances difficult to undertake.

In consideration of these circumstances, a general approach towards the limited deregulation of non-resident issuance is recommended for the foreseeable future.

Shown below is our basic idea based on the background outlined above.

First of all, each country should examine a strategy for capital account liberalization and currency internationalization, with the cross-border issuance expansion policy devised within the framework of such strategy. At the same time, it will be important to reduce cross-border issuance costs through efforts to develop hedging instruments such as currency swaps.

Next, it will be helpful for international institutions to continue to issue Asian currency-denominated bonds in a timely manner, using such bonds as a catalyst for market expansion. In particular, it will be desirable to effectively use the Asian Currency Note Program operated by the Asian Development Bank. That scheme will potentially contribute to increased system harmonization as well as a further spread of the MTN system.

6.1.5 Need for capital account liberalization and currency internationalization

Currently, in East Asian countries other than Japan, Hong Kong and Singapore, their residual capital transaction regulations continue to be an impediment to the growth of cross-border transactions. In order to promote increased cross-border transactions, capital account liberalization and currency internationalization are indispensable. Currency internationalization refers to when a nation's currency has come to be used for foreign trade transactions and capital transactions (i.e. bank loans and bond issuances conducted in an overseas location), based on the situation that the currency will be allowed to be exchanged freely with other currencies.

While non-internationalization of a country's currency poses significant constraints on cross-border transactions involving each nation's domestic bond market (namely, inward investments and bond issuance by non-residents), internationalization is not itself a prerequisite for such transactions. However, for Asian currency-denominated bonds to be issued in the offshore market by a resident or non-resident, the currency must be internationalized. In a highly internationalized state, both the issuers and the investors may be non-resident.

Taking as an example the case of Australia, a country with a high level of bond transaction internationalization, the following can be cited as the background to increased internationalization: (1) a high level of domestic bond market development; (2) the existence of many issuers with superior credit quality; (3) a level of currency swap market development; and (4) existence of relatively high long-term interest rates. As shown above, the development of domestic financial/capital and foreign exchange markets is a prerequisite for currency internationalization.

In addition, it will be necessary to liberalize foreign exchange and capital transactions and build confidence in the currency value. In moving forward toward capital account liberalization, it is essential to implement sound macroeconomic policy (including a policy to allow increased foreign exchange rate flexibility) and develop the domestic financial system. Since the frequent changes in regulations are highly likely to compromise investor confidence, such liberalization must be pursued discreetly over a long period of time.

In particular, with capital inflows into Asia rising now, an increasing number of Asian nations are strengthening their capital inflow regulation and reintroducing taxation on bond transactions.[45] Investors believe that capital transaction regulation and taxation represent the biggest impediments to increased cross-border transactions.

Based on the above-mentioned background, the following outline the issue of capital account liberalization and currency internationalization.

Firstly, each Asian country must address the issue of balancing its capital

[45] In July 2010, Indonesia introduced a measure mandating that any central bank bond investor must hold the bonds for a period of at least one month. The Korean government tightened its regulations in June and November 2010 through a reduction of position limit for banks' foreign exchange futures transactions for example, while deciding on the reintroduction of withholding taxes on foreign investors' investments in Korean government bonds — a tax previously abolished in 2009. Thailand also revived the practice of withholding taxes of 15% on local bond investment by non-resident investors in October 2010.

flow management and liberalization by: (1) developing its domestic financial/capital and foreign exchange markets (in particular, by developing a diverse foreign exchange derivatives market); (2) ensuring sound macroeconomic policy implementation; and (3) formulating strategy on capital account liberalization.

Secondly, it will be essential to deepen discussion on the issue of capital account liberalization and currency internationalization at regional financial cooperation initiatives. Capital account liberalization is a very important challenge for expanding cross-border transactions and creating an offshore market, making the discussion on the issue among industry experts in the region of prime importance.

Thirdly, capital account liberalization is expected to increase the importance of emergency liquidity assistance, making the strengthening of the CMIM imperative. In addition to an increased fund size, this will involve reducing the CMIM's IMF linkage, through strengthened surveillance of the regional economies, thereby improving its flexibility. The first step to be taken will be to launch the AMRO (ASEAN+3 Macroeconomic Research Office) as early as possible.

Fourthly, regarding the development of domestic financial/capital markets, emphasis must be put on the development of government bond markets, with the aim of establishing a risk-free yield curve — a must for expanding the corporate bond market. In addition, it will be important to open the government bond market to foreign investors for the purpose of making it a major investment vehicle for East Asian countries' foreign reserves. Nations imposing restrictions on inward investment into the domestic bond markets must seriously consider relaxing such restrictions.

Column:

Global peso bond

In September 2010, the Philippines government issued a global peso bond totaling US$1,000 million (initial maturity of 10 years). Although the face value currency is the Philippine peso, settlement is made in the US dollar in the offshore market. At the time of issuance, an intermediary enters into foreign exchange transactions, selling US dollars and buying pesos, before delivering the peso-denominated proceeds to the issuer. All interest rate and foreign exchange risks are borne by the investors.

With no peso transaction taking place within the Philippines, it is allowed to issue bonds regardless of the existence of the capital transaction regulation. In addition, the investor is not subject to withholding taxes of 20%, payable when investing in domestic bonds.

For the issuer, issuance in such a manner will be more desirable than US dollar-denominated issuance because foreign exchange risk will be borne by the investors. Still, any economic effects to the investor will be the same as those from a settlement in peso. Likewise, any effect of the investor's sale of the bond in the Philippines' foreign exchange and interest rate markets will be the same as that from a sale conducted in pesos.

Although the issuance of global peso bonds was without doubt phenomenal from the perspective of foreign exchange control, such bonds are also exposed to risks resembling those from a liberalization of capital transaction, presumably making it difficult to sanction issuance without limit for the foreseeable future.

On the other hand, given investors' strong need to invest in Asia, issuance of bonds in the form of global peso bonds represents a helpful approach, that is not subject to any capital transaction regulation.

6.2 Expansion of individual economies' corporate bond markets

It will be important to further grow each economy's corporate bond market while paying special attention to the expansion of the issuer base and the development of investors. Figure 6-3 provides a snapshot of challenges relating to the expansion of individual economies' corporate bond markets, some of which are elaborated on in later sections, 6.2.1 through 6.2.6.

Figure 6-3 Issues relating to corporate bond market development and financial integration

(1) Premises

- The issuer mix is weighted toward financial institutions and the infrastructure and energy sectors.
- The expansion of corporate bond issues is linked to other means of finance (bank loans, stock issues, internal financing).
- It is possible that markets are unattractive to investors from a risk-return perspective.

(2) Expansion of issuer base(It is necessary to provide wide and good selection of product.)

- Use of credit guarantee mechanisms to bring SMEs into the issuer base.
- Development of new products
  → Mutual funds, bonds for individuals, Islamic financial products, MTNs
  → Use of securitization (e.g., securitization of overseas remittances)
  → Products to facilitate use of bond markets for infrastructure development
  → Bonds denominated in currency baskets

(3) Investor diversification

- Development of institutional investors (including PR targeted toward institutional investors)
- Investor education for individual investors

(4) Other market participants: securities companies, securities exchanges, regulatory authorities

- Development of securities companies
- Information sharing between securities companies and exchanges
- Reinforcement of market supervision, capacity-building for regulatory authorities

(5) Direct infrastructure: improvement of liquidity

- Establishment of benchmark yields (in government bond markets)
- Establishment of market makers in corporate bond markets
- Development of derivative and REPO markets
- Development of settlement systems
- Development of market information systems (bond pricing agencies)

(6) Indirect infrastructure: reinforcement of investor protection

- Reinforcement of laws and regulations, regional standardization, adoption of international standards
  → Regulatory transparency, guarantees of equality and legal protection for participants
- Bankruptcy laws (creditor protection)
- Establishment of corporate information disclosure and accounting and auditing standards, corporate governance rules, credit rating agencies and credit risk data bases
- Tax systems (withholding taxes)
- Development of analysts, etc.

(7) Promotion of cross-border trading within the region

- Capital transaction regulations (issuance and investment by non-residents)
- Selection of foreign exchange policies, promotion of currency internationalization

(8) Others: basic research (especially corporate fund-raising structures), development of basic data, development of Japanese financial and capital markets

Source: Shimizu [2010]

The expansion of the corporate bond market has lagged behind that of the government bond market on a relative basis. With public companies accounting for a significant portion of the overall corporate bond issuances, issuance by private sector companies shows potential for growth. In addition, the corporate bond market currently lacks diversity; that is, the majority of bonds are issued by companies in the energy/infrastructure-related sectors and banks, and a very few bonds are issued by companies with low credit ratings. A challenge of particular importance will be how to help increase issuance by non-financial companies in the private sector.

While issuer category diversification must be pursued, there is no doubt that corporate bond issuance is a fundraising method suitable for companies in the energy and infrastructure-related sectors. In that respect, it is important to promote the growth of corporate bond issuance by them as well.

6.2.1 Increase in the use of the bond market by entities in domestic demand expansion-related sectors

As Asian countries are now faced with the challenge of reviewing their economic growth strategies (based mainly on exports to the US and Europe) and of expanding regional demand, they have to take into consideration of corporate bond market .

Growing domestic demand in individual Asian countries will potentially result in increased total fundraising. Assuming that bond market development also progresses further, corporate bond issuance should grow, supported by changes in fundraising method selection. While growth in corporate bond issuance is expected to be driven by manufacturing sector companies, the key to market expansion will be to focus on industrial sectors with already high levels of bond issuance. Sectors that fall under that category (such as the financial services and energy/infrastructure-related sectors) are heavily involved in domestic demand growth.

Infrastructure development constitutes a crucial part of investment designed to help grow domestic demand and accelerate economic growth. Among the various potential bond issuance types that could be used for such purposes is the project bond (a bond issued by a business entity engaged in infrastructure development that is characterized by the fact that repayment is funded solely by income earned in the development project).

It will be essential to emphasize the use of the corporate bond market in pursuing financial system development initiatives aimed at expanding domestic demand. Such efforts should facilitate the growth of the corporate bond market, resulting in the synergistic progression of both domestic demand growth and corporate bond market expansion.

Shown below is our basic idea based on the background discussed above.

Firstly, as a specific approach for using the corporate bond market, each Asian country should put emphasis on the increased use of the market for the purpose of infrastructure development-related fundraising. In order to support such an effort, it will be necessary for credit rating agencies to provide risk assessment of the relevant project, as well as a credit enhancement structure, securitization methodologies and risk hedging vehicles.

Secondly, each nation must consider devising more efficient ways of bond issuance, based on securitization and other methods, to help the fundraising efforts by small- to medium-size companies — the key players in domestic demand growth. In addition, it will be essential to study the promotion of increased issuance of bonds by entities in the domestic demand-related and services sectors, in the form of securitized mortgages and credit card receivables, and to consider how to increase corporate bond investment by institutional investors.

Thirdly, an increasing number of Japanese companies are likely to issue bonds in non-Japan Asian locations because of the growing need for local currency fundraising while focusing on Asian countries' domestic demand-related businesses. It will be important for the Japanese government to boost its assistance to such bond issues.

6.2.2 Market infrastructure and legal/regulatory developments designed to better incentivize issuers

The average issuance cost of corporate bonds is high in Asian countries. Issues related to such issuance cost include: (1) complicated issuance rules; (2) fees to bond underwriters; and (3) changes in issuance conditions that are reliant on market efficiency levels.

Firstly, the time period required for issuance approval and the distinction of public offering and private placement are both cited as issuance rule issues. For example, according to experts, in the Philippines it takes about three months to obtain issuance approval for publicly-offered bonds whereas in the case of private placement bonds (placement with qualified institutional investors totaling 19 or less), the time required is one month or less. While such regulation helps secure flexibility in issuing private placement bonds, it is an impediment to the increased issuance of publicly-offered bonds. Besides, being subject to fewer disclosure obligations, private placement bonds may potentially cause issuer transparency problems.

Secondly, issuance-related fees and expenses consist of: (1) management fees including underwriting fees; (2) expenses required for registration with regulatory authorities and listing (including lawyer's fees); (3) credit rating fees; (4) expenses for marketing to investors (including presentations); and (5) taxes. These fees and expenses differ from one country to another, with some expenses being larger at the time of initial issuance. The larger the issuance amount, the less the burden, due to the fixed cost nature of the fees. A high issuance cost discourages issuance by small- to medium-sized companies and companies with low credit ratings.

Thirdly, the market efficiency issue points to a potential for market development, which will naturally cause the market participant base to expand. In particular, in a market with an extensive investor base, issuance conditions are likely to be relatively favorable to issuers, helping increase the number of issuances. As for issues involving investors, the following can be cited: (1) institutional investors frequently face investment restrictions arising from credit rating levels and the distinction of listed and unlisted names, particularly in the event of a corporate bond investment by pension funds that have a public nature; (2) retail investors are typically equity investment-centric without a good understanding of how bonds work as instruments and are provided with a limited range of products suitable for retail investment. With Asian countries' domestic demand expected to grow in the future, coupled with rising income levels, there should be a substantial potential upside to the total size of investment by retail investors. Notable in this respect is a platform built by the Singapore Stock Exchange that allows retail investors to invest in corporate bonds in small quantities through the exchange listing of such bonds; and (3) for foreign investors, withholding taxes involved in bond investment quite often represents a significant impediment to investment.

Shown below is our basic idea based on the background outlined above.

Firstly, each Asian country must seek to further relax and simplify its bond issuance regulations, with a particular focus on reducing approval and registration time, preferably making approval acquisition ultimately unnecessary, as it is in the Hong Kong market.

Nevertheless, it will also be indispensable to ensure high levels of issuer transparency and reduce investment risk. For instance, while an exemption from obtaining credit ratings will lower the issuance cost, such exemption should be limited to cases in which investors are able to fully identify the issuer's credit quality.

The way to change public offering and private placement rules probably differs from one nation to another, yet it will be necessary to create incentives for the increased issuance of publicly-offered bonds.

Secondly, it will be advisable for each country to help enhance competition among bond underwriters. While lowering various fees and commissions may counter much resistance, it will be an important challenge to develop securities dealers and ensure that the industry environment remains competitive.

Thirdly, each Asian nation must help develop investors through the following measures:

(1) Step up current efforts to develop institutional investors. If investors are able to invest in bonds with low credit ratings through improved investment management capability and risk control skills, it will have the same effect as enhancing the issuer's credit and the expansion of the bond issuer base;

(2) Attract retail investors to the corporate bond market through initiatives such as the development of products designed for retail investors and the strengthening of investor education;

(3) Promote increased inward bond investment from abroad by abolishing the withholding taxes involved in bond investment.

6.2.3 Credit enhancement for improving the issuer's ability to participate in the market

Key factors that prevents companies from participating in the primary corporate bond market as issuers include small company size and low credit quality. Therefore, an important step for expanding the bond issuer base will be to help potential bond issuers' market participation by means of credit enhancement based on the use of credit guarantees and securitization.

One approach to securitization for the purpose of enhancing the credit of a company, not readily capable of issuing corporate bonds on its own, would be to issue collateralized bond obligations (CBO) that use a pool of bonds as the underlying asset. By combining various bonds into a single asset class, it is possible to diversify risks and create a single bond that meets investor needs. Besides, if a senior-and-subordination structure and/or third party-provided credit enhancement are used, the issuer will be able to acquire credit ratings superior to those that can be acquired by the individual bonds. On the other hand, the securitization of mortgages and credit card receivables is mainly aimed at improving underlying asset liquidity.

While securitization transactions had been growing in the Asian region as well prior to the global financial crisis, the crisis led to an erosion of confidence in securitization and credit rating, resulting in a sharp decline in such securitization transactions. However, given that such turmoil did not originate from Asia , it should be possible to revitalize securitization transactions in the future, while paying attention to the relevant measures being taken globally, such as the tightening of regulations and the enhancement of information disclosure.

Barriers to the growth of securitization transactions in Asia include the lack of investors with high risk tolerance levels and the limited development of the infrastructure that is required for transactions. This limited development involves laws, regulations, tax systems, accounting standards and credit ratings. Specific issues include constraints on the transfer of financial assets, recognition and taxation arising from the potential profit when assets are transferred, and legal/accounting rules on special purpose company activities (e.g. true transfer and bankruptcy remoteness).

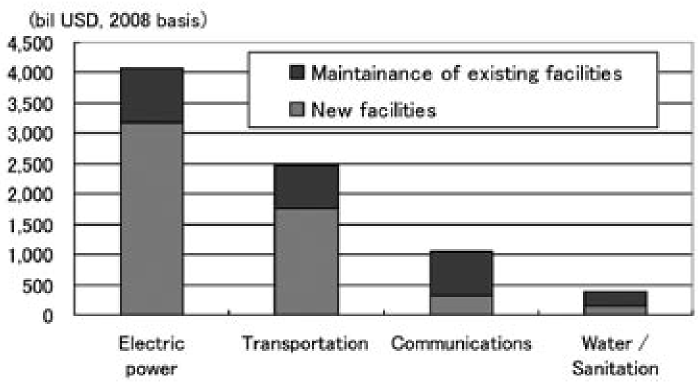
For example, Indonesia has the issue of double taxation on asset transfer, making securitization transaction virtually impossible to structure. As for the Philippines, the building of securitization-friendly system has made little progress due to the deadlocked discussions between industry experts and the country's tax authority regarding a change in the taxation system on asset transfer.

The following illustrates our basic idea based on the background shown above.

Firstly, the newly-established CGIF should provide guarantees that will be helpful to the development of the corporate bond markets in individual nations in the region. At the same time, it should maintain its organizational soundness as well as its own credit rating levels by fully leveraging private sector know-hows. It will also be important to consider raising, in the medium term, the level of equity participation in the CGIF by its stakeholders and increasing its leverage (guarantee amount divided by equity participation amount).

In deciding on the scope of the guarantee, infrastructure development-related bonds and bonds issued by small- to medium-sized companies should be top priorities. Infrastructure-related bonds would be appropriate targets for the CGIF's guarantee program, in view of the potentially significant need for infrastructure development in Asia going forward (Figure 6-4), as well as the anticipated knock-on effects of such infrastructure development on domestic demand expansion and regional growth promotion. In addition, at a time when investors in both developed countries and the Asian region are highly interested in Asian investment, and even companies with relatively low credit ratings are able to issue bonds, it will be advisable to offer focused fundraising assistance to small- to medium-sized companies (the category with a limited capacity to issue bonds). While the hurdle of BBB or equivalent/higher may present some challenge, one approach, for example, would be to use securitization and credit guarantee simultaneously. In coming years, it would also be worthwhile to reassess the minimum credit rating level requirements.

Figure 6-4 Capital needs for infrastructure development in Asia going forward (from 2010 to 2020)



Source: ADB and ADBI [2009]

Secondly, there is currently a sufficient level of liquidity in Asia and the expansion of securitization is not an urgent task. However, it will be essential for nations in the region to explore the possibility of growing diverse securitization products with the aim of expanding the bond markets and developing fundraising vehicles from a medium-term perspective. One approach worth studying is to have the role of originator (or organizer) played by a governmental body in an effort to help increase securitization transactions. Also, given the fast pace of progress in securitization techniques, the ABMI's various forums, such as the ABMF, must further deepen relevant research and discussion.

Thirdly, each involved country should help improve company and market transparency levels — an effort that will have an effect resembling that of credit enhancement. In order to raise the levels of transparency in corporate bond credit quality, it will be necessary to: (1) develop securities and exchange laws, company laws and bankruptcy laws, thus improving the levels of transparency in investor rights; and (2) enhance the levels of corporate information disclosure by developing accounting/auditing standards, a credit rating system, and a credit risk database. If information asymmetry is mitigated through these steps, companies with relatively high levels of credit risk may potentially be able to issue bonds.

Of particular importance for expanding the corporate bond market will be the development of the credit rating system. Technical proficiency relating to credit rating methodologies varies from one country to another, making it necessary to help raise the levels of less-developed nations. If such efforts enable industry experts to achieve credit rating harmonization (the establishment of a regional scale), cross-border transactions will be significantly enhanced.

The development of credit risk-related data will also be important for promoting increased securitization transactions, as it will have the benefit of raising underlying asset cash flow forecastability.

6.2.4 The securitization market in Asia: current status and challenges

From the beginning of the 2000s, the securitization market in Asia began to show increased activity. In particular, in countries like Hong Kong, Japan, Korea and Malaysia, there were significant securitization activities backed by residential mortgages and commercial real estate as the underlying assets, whereas in Korea the progress was made in securitization to facilitate banks' bad loan disposals. On the other hand, Asian nations other than the above-mentioned ones did not see any meaningful securitization activity due to the bank-centric financial systems of each country and to the lack of securitization-friendly legal system development.

Securitization refers to a process by which assets with similar characteristics are pooled together and cash flows generated by the pool are divided into different parts (tranche) according to the risk involved before selling such individual parts to diversified investors in the market. This process enables the sale of the assets, and by providing the investor with customized risk-return levels requirements while also providing significant risk diversification.

For securitized products, credit rating plays a significant role. In a securitization transaction, the securing of bankruptcy remoteness from the originator enables the special purpose company to raise funds based on its independent credit quality. In addition, the result of the assessment of the cash flow to be generated by the securitized assets constitutes a major decision making factor in credit rating. As part of the overall analysis, a scenario analysis is undertaken to assign a credit rating that takes future forecasts into consideration.

Figure 6-5 Status of key elements needed for securitization in East Asia

	Legal framework for creating, transferring and perfecting ownership interests	Restrictions on types or terms of financial assets that can be transferred	Taxation and gain recognition issues	Default and foreclosure and/or repossession at level of individual assets	Legal and regulatory impediments e.g. bankruptcy remoteness	Taxation or licensing requirements	Restrictions on securitization vehicles to issue multiple tranches with varying characteristics
China	1-2	1	1	1	1	1	1
Indonesia	2-3	2	2	2	2	2	2
Korea	5	4	3-4	5	5	5	4
Malaysia	5	4	4	3-4	4	4	5
Philippines	2-3	2-3	1-2	2-3	2-3	2-3	2-3
Thailand	3-4	3	3-4	3-4	2-3	4-5	2-3
Hong Kong	5	5	4	5	5	5	5
Singapore	5	5	5	4	5	5	5

Note: Score 1 (lowest) to 5 (highest). Scores such as 2-3 represent an intermediate appraisal between two given levels.
These split scores are intended to reflect degrees of uncertainty as to commercial outcomes.
Source: World Bank

Asset securitization is a financial process that requires advanced financial techniques (including legal system development), and further market development will be required in Asia to utilize such techniques (with the exception of certain countries). Hence individual Asian nations are now engaged in the following development initiatives related to laws and regulations.

Figure 6-6 Enabling legislation and regulation

China	Major bank sector securitization legislation under preparation 2007–08. (Limited trial deals permitted in 2006–07)
Indonesia	Pre-1997 securitization decrees 2002–03 securities regulator guidelines
The Philippines	2002 Special Purpose Vehicle Act 2004 Securitization Act 2005 Implementing Rules and Regulations over credit rating requirements and the use of SPVs.
Thailand	1997 securitization decree 2003 Asset-backed Securitization Act 2004 Special Purpose Vehicle Act

Source: Lejot [2008]

Securitization in Asia constitutes a promising market, and the growing Asian economies may potentially bring about an increased variety and volume of assets for securitization. To keep up with their increasingly sophisticated risk management, financial institutions are expected to step up their initiatives to develop securitization techniques. In addition, investors are likely to use securitized products as part of their efforts to diversify their investment vehicles.

Under such circumstances, one significant challenge will be to develop laws related to securitization. In addition, it will be necessary to strengthen credit rating agencies' skills in securitized product credit rating. When addressing these challenges, industry experts should actively leverage the regional cooperation framework, thereby expanding the market in the process.

6.2.5 Fundamental research conducive to the increased number of issuers

Increasingly elaborate research has been conducted on Asian companies' fundraising activities, particularly after the Asian financial crisis, part of which is highlighted in Chapter 3.

Firstly, such research has included an agency cost theory-based analysis of fundraising structure, performed by using corporate financial statement data. The results of this analysis concluded that fundraising methods have different characteristics according to degree of ownership concentration and company type (listed company, foreign-owned company or conglomerate company).

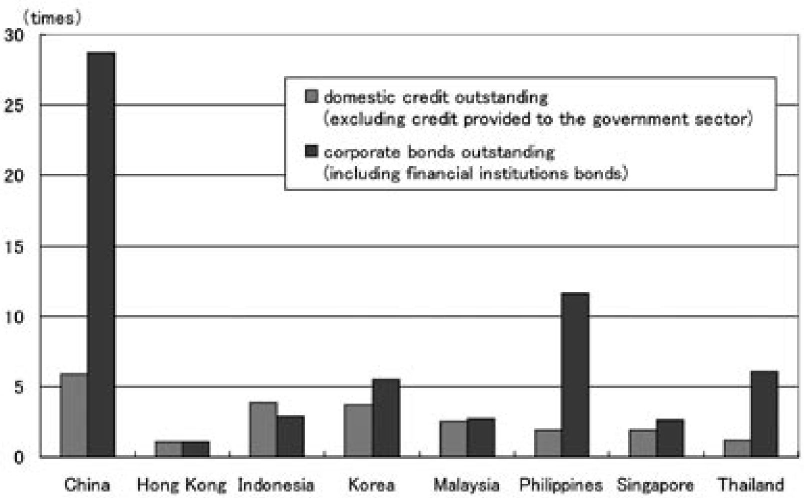
Secondly, an examination has been undertaken on the relationship among different fundraising mechanisms (the banking sector, bonds, equity and international financial markets) from theoretical and policy perspectives. The objective of bond market development in the years since the 1997 Asian financial crisis has been to help reduce Asian economies' reliance on short-term capital flows from abroad, while changing the region's overly bank-dependant financial systems.

In this way, bank loans and corporate bond issuances are often regarded as mechanisms that compete with each other and can thus substitute for each other. This idea, however, is predicated on the assumption of a stable and regular economic environment. In the event of a financial crisis, the two mechanisms occasionally become identified as complementary to each other.

In its Global Financial Stability Report, October 2010 edition, the IMF argued that, during the global financial crisis, the bond market had served as a "spare tire", complementing the banking sector. In Asian countries, large companies increased their corporate bond issuance during the recession to compensate for the reduced bank loans. Since 2009, India and Korea, in particular, have experienced the phenomena of the banks' prime lending rates not easily declining, at a time when corporate bond issuance coupon rates have been falling significantly, despite the widening credit spreads.

Of course, this does not mean that the Asian bond market development initiative has been completed. Future challenges to the corporate bond market cited by the IMF include the challenge of becoming a viable and deep source of funding for ordinary times, and enabling the issuance of corporate bonds by small- to medium-sized companies in particular. Taking the example of the ASEAN+3 nations, a comparison of the growth rates from end-1997 to end-2009 of domestic credit outstanding (excluding credit provided to the government sector) to corporate bonds outstanding (including financial institutions bonds), shows that the latter greatly exceeded the former only in China, the Philippines and Thailand (Figure 6-7).

Figure 6-7 Expansion of financial and capital markets



Note: The graph compares increases (times) in outstanding between the end of 1997 and the end of 2009.
Source: IMF, BIS

The following is our basic idea based on the background discussed above.

Firstly, each Asian country should further accumulate research on the Asian financial system, including research from the standpoint of an issuer company as well as research on institutional investors and intermediaries in particular.

Also important is an examination of the role played by the banking sector, a major force in the Asian financial system. Such examination must be conducted from multiple perspectives, and include the banking sector's lending behavior coupled with the direction of regulations affecting such behavior, as well as developments in the interest rate structure. Given that the banks are significant issuers, investors and intermediaries in the Asian bond market, it will be interesting to know how such significance is related to the expansion of corporate bond issuance.

Secondly, a comparison with the financial systems of developed countries, such as the US and those in Europe, will also be important. Such comparison may allow industry experts to know what shape the Asian corporate bond market and the Asian financial system should aim to take.

6.2.6 Moves to help expand the Japanese market

Highlighted below is a review of recent developments in the expansion of the Japanese market itself, conducted to facilitate the contemplation of bond market expansion in other Asian nations.

Firstly, in view of the contraction of international bond issuances caused by the onset of the global financial crisis, the Japanese government announced a program under which the Japan Bank for International Cooperation (JBIC) would provide guarantees up to500 billion yen for Samurai bond issuance by other Asian nations' governments. That program is referred to as the MASF (Market Access Support Facility) (Figure 6-8). Although the JBIC had initially set the guarantee application deadline at the end of fiscal year 2009, it was later rescinded by the bank, which led to its decision to continue the provision of guarantees beyond March 2010. The JBIC also announced a plan to purchase a portion of Samurai bonds in addition to the provision of partial guarantees for the issuance of Samurai bonds (GATE: Guarantee and Acquisition toward Tokyo market Enhancement).

Figure 6-8 Guarantees for samurai bond by JBIC

Issuer	Contract date	Guarantee provided	Issuance date	Issue amount
Indonesia gov't	Apr. 2009	1.5 bil USD	Jul. 2009	35 bil Yen
Colombia gov't	Nov. 2009	0.8 bil USD	Nov. 2009	45 bil Yen
Mexico gov't	Dec. 2009	150 bil Yen	Dec. 2009	150 bil Yen
The Philippines gov't	Feb. 2010	100 bil Yen	Mar. 2010	100 bil Yen

Note: These are achievements by the MASF, which is predecessor of GATE
Source: JBIC

Secondly, industry experts are now considering creating a TOKYO AIM-based corporate bond market designed for professional investors. It was the December 2008 enforcement of the revised Financial Instruments and Exchange Act that enabled the launch of that market creation initiative, whose principal objective is to remedy many systemic issues persisting in the Japanese corporate bond market.

The new market-related action plans include information disclosure in English, the adoption of international accounting standards, and the simplification of disclosure review procedures. The potential issuer company categories consist of those intending to issue domestic publicly-offered bonds, Euro bonds and Samurai bonds. The launch of the professional investor corporate bond market is likely to help expand cross-border transactions by non-Japanese Asian issuers and investors, aided by the June 2010 abolition of corporate bond interest taxation for foreign investors.

Thirdly, a Study Group to Vitalize the Corporate Bond Market has been set up within the Japan Securities Dealers Association, leading to the holding of discussions on issues facing the publicly-offered bond market. The study group published a report titled “Toward Vitalizing the Corporate Bond Market” on June 22, 2010.

Included in the corporate bond market challenges cited by the Japan Securities Dealers Association, which are related to the establishment of the above mentioned corporate bond market for professional investors, were the following issues: (1) promote increased diversification in the types of bonds issued, including MTN and professional investor market corporate bonds, and simplify issuance procedures; (2) develop a primary bond market allowing the issuance of bonds with low credit ratings; (3) increase the number of bond issuable days from the current 100 business days or so a year, by reducing information disclosure burdens; and (4) help expand investment from abroad by initiating English language information disclosure and stepping up investor relations activities.

Fourthly, efforts have been made towards developing Islamic finance products. The growth of Islamic bonds, usable for various types of fundraising such as infrastructure development financing, will be crucial for the Asian bond market. While Islamic finance plays an important role in the government bond and corporate bond markets of Malaysia (the nation boasting the most advanced levels of such finance), other Asian countries such as Singapore, Indonesia and Hong Kong are also seeing increased Islamic finance initiatives.

As for Japan, there is an ongoing initiative to build a framework for enabling the issuance of Islamic bonds in the country (based on the special purpose trust system under the Asset Liquidation Act). A tax system measure is likely to be taken as part of the fiscal 2011 tax system reform, with experts expected to start discussion on the revision of relevant laws needed to build that framework.

6.3 Promotion of private sector cooperation

The private sector should become increasingly important in giving impetus to the expansion of the Asian bond market. Growing domestic demand in Asian countries has presumably given rise to an incentive for proactive private sector involvement. Shown in Figure 6-9 is a summary of the roles to be played by the private sector in the development of the Asian bond market, and these roles should be specified further going forward.

Figure 6-9 The role of the private sector in Asian bond market development

1. Drivers of market development initiatives

(1) Governments, international agencies, international forums
(2) Market participants
 (i) General private sector companies
 (ii) Market entities (financial institutions, securities exchanges, credit rating agencies, accountants, analysts, etc.)
(3) Consultants, scholars, researchers (think-tanks, universities)

2. The role of the private sector

(1) Market expansion...Participation as players (issuers, investors, brokers, exchanges, etc.), provision and sharing of views, etc.
(2) Technical assistance...Creation of systems, provision of financial technologies
 (i) Technical assistance from financial institutions, securities analysts, credit rating agencies, credit guarantee institutions, accountants, tax accountants, attorneys, etc.
 (ii) Formation of catalyst deals and new types of transactions
 (iii) Education...Development of market professionals, investor education
(3) Debate on long-term objectives of financial cooperation, PR activities concerning Asian financial and capital markets, cooperation with various government-private sector initiatives, such as ABMI, ABAC, Nippon Keidanren, etc.
(4) Improvement of basic bond data, basic research (think-tanks, universities, etc.)
(5) Development of bond markets in Japan (financial institutions, etc.)

Source: Shimizu [2010]

Proactive private sector activities include the Nippon Keidanren's proposal of "Regional Monetary and Currency Cooperation" contained in the March 15, 2010 Asian Business Summit Joint Statement, as well as the specific initiatives outlined in the proposal entitled "Promoting Financial Cooperation for a Prosperous Asia: Supporting Asian Growth Through Regional Bond Markets (March 16, 2010).[46] In addition, on December 14, 2010, the Keidanren announced another proposal, "Seeking to Accelerate Asian Bond Market Development," a result of the continued regional financial cooperation efforts, in which the business group recommended the following six activities: (1) the development of institutional investors; (2) the development of members at financial regulatory authorities and exchanges; (3) the provision of assistance to the development of Asian credit rating agencies strong in the provision of credit ratings for Asian companies; (4) the promotion of the ABMI; (5) the enhanced use of the Japanese bond market; and (6) the utilization of private sector funds for the purpose of area-wide infrastructure development.

[46] Being consistent with the objective of expanding domestic demand in countries in the region and promoting regional financial integration, the proposal recommends: (1) the development of bond and stock markets in each country (development of market infrastructure and deregulation and fostering of market actors); (2) the utilization of private-sector funds for the development of regional infrastructure; (3) promotion of the active use of the Japanese bond markets (making use of the Samurai bond markets and boosting investment of Asian assets in Japan); (4) currency stability; and (5) medium- to long-term financial cooperation issues in the East Asian economic community (creation and harmonization of legal systems for bond trading, harmonization of accounting and other disclosure-related systems, creation and enhancement of credit guarantee functions, preparation of intraregional settlement systems, enhancement of regional credit rating functions, and expansion of the information-sharing systems).

7 Proposals on Asian financial cooperation

As mentioned earlier in Chapter 1, this study project has conducted research and discussion on how the “private sector” can promote financial cooperation. This chapter summarizes the results in the form of proposals. They focus on the following five points:

(1) Step up financial cooperation in the Asian region from the perspective of the private sector;
(2) Facilitate the development of the emerging Asian market infrastructure and seek to enable regional financial integration;
(3) Vitalize cross-border bond transactions in the region;
(4) Promote private sector cooperation;
(5) Improve the international competitiveness of the Tokyo market.

Proposals (1) through (3) involve the wider Asian region, including Japan. These proposals will require public and private sector entities to work closely with one another to achieve the underlying goals. Proposal (4) aims to help expand mutual collaboration within the Asian private sector. The last proposal, (5), only concerns Japan.

7.1 Proposal contents

Private sector-driven initiatives

Proposal 1: Establish an Asian Credit Rating Agency (tentative name; to be abbreviated as ACRA)

Harmonize credit rating services and standards throughout Asia by establishing an ACRA

Proposal 2: Launch a private-sector version of a peer review for each economy's bond market and establish a framework for handling suggested improvements

At the private-sector level, collate matters related to bond issues and bond investments by non-residents so as to help establish a framework that promotes institutional reform in each economy

Proposal 3: Promote the development of cross-border products utilizing the Credit Guarantee and Investment Facility (CGIF)

Work to promote the development and issuing of securitization bonds by helping CGIF with cross-border issues

Proposal 4: Develop Asian corporate bond indices

Develop, publish, and use indices that reflect fluctuations in Asian corporate bond markets so that index-based financial products can be provided

Proposal 5: Provide information on cross-border bond investments

Create a system that enables investors to use information on bonds in the region when making investment decisions

Approach for public sector (international organizations, governments, and public institutions)

Proposal 6: Create an Asian Corporate Bond Fund (a public–private partnership offering)

Launch as a public–private collaborative fund for Asia that invests in Asian corporate bonds (including those for public infrastructure companies and energy companies)

Proposal 7: Introduce an Asian mutual recognition system (fund passporting) for investment trusts

Introduce an Asian mutual certification system for mutual funds, thereby promoting the integration of mutual fund markets in Asia

Proposal 8: Establish pan-Asian rules for the issuing of medium-term notes (MTNs)

Draw up a draft proposal for the establishment of pan-Asian rules for the issuing of MTNs based on the findings of a study group made up of experts and private enterprise representatives

Proposal 9: Issue bonds denominated in a basket of Asian currencies

Strive to further develop bond markets by issuing bonds denominated in a basket of Asian currencies (starting as a joint initiative with international institutions)

Proposal 10: Enhance the competitiveness of the Japanese bond market

Approach the Financial Services Agency, the Ministry of Finance, the Bank of Japan, and other public organizations to cooperate more closely on promoting the formulation and implementation of a policy to improve the functioning of Tokyo as an international financial center and the Japanese bond market

“Private sector-driven initiatives”

7.1.1 Establish an Asian Credit Rating Agency (tentative name; to be abbreviated as ACRA)

(Proposal) Harmonize credit rating services and standards throughout Asia by establishing an ACRA

It is becoming increasingly important to provide “comparable” credit rating information in Asia to assist cross-border transactions. One potential approach would be to reorganize the ACRAA or set up another Asian credit rating agency (provisionally named ACRA) with the cooperation of multiple credit rating agencies. The new agency would provide credit rating information designed to assess the credit risk (default risk) of bonds issued in Asia. This approach requires three steps, the first of which will be the accumulation of historical data for quantitative analysis. Reliable forecasting of the cumulative default rates that may actually occur (including the accuracy and reliability of those rates) will be necessary. This can be done by accumulating the past three to five years of corporate financial data together with chronological quantitative and event data on earnings deterioration/improvement. This process will also involve the modeling of relationship between the main data and defaults, according to country, industrial sector, issuer scale and economic environment category. Also essential will be the accumulation of data required for estimating the rate of loss (loss rate for the bondholders) in the event of a default (the advanced methodology used under the Basel II accord is recommended). The second necessary step will be to foster specialized analysts. Qualitative analysis alone is not sufficient for credit rating, and an analyst’s own qualitative judgment is required to maintain accuracy and reliability in forecasted cumulative default rates. Such judgment is also required to alter a credit rating in an efficient manner. It will therefore be essential to foster analysts with specialized knowledge on the capital markets, the business environment, and corporate behavior in Asia. The third step in this approach will be to solidify the credit rating agency’s financial position, so that the organization can be run in a sound manner. A credit rating agency overly focused on generating credit rating fee revenues tends to lose focus on providing accurate and timely credit ratings. When a cross-border bond is issued, the use of the local currency of another regional nation as the issuance currency may result in a lowering of the credit rating due to the effects of foreign exchange risk. Each Asian country’s financial regulatory authority should devise measures to overcome such a challenge. One possibility may be the introduction of a common currency unit (the Asian Currency Unit, or ACU) for large-sized cross-border bonds.

When setting up the new credit rating agency (the ACRA) for cross-border transactions, it would be helpful to draw on Japan's experience. The two leading credit rating agencies in Japan[47], which both engage in global-scale credit rating, have developed credit rating methodologies that take into account Japanese companies' financial characteristics and unique business culture (which bear some similarity to those in other Asian countries). Both Japanese agencies have acquired techniques for ensuring accuracy and reliability in cumulative default rates under the Basel II accord, and their wealth of experience can be of great value in establishing the new credit rating agency. Cooperation among Japanese credit rating professionals and these two agencies is essential to save both money and time in the reorganization of the ACRAA / creation of a new Asian credit rating agency (the ACRA).

[47] Japan Credit Rating Agency (JCR) and Rating and Investment Information (R&I).

7.1.2 Launch a private-sector version of a peer review for each economy's bond market and establish a framework for handling suggested improvements

(Proposal) At the private-sector level, collate matters related to bond issues and bond investments by non-residents so as to help establish a framework that promotes institutional reform in each economy

Bond market development in Asia should involve the cultivation of a growing issuer base and the fostering of investors, to the degree required by each county's current market development. A comprehensive identification of challenges faced by Japanese-owned companies setting up operations in individual Asian nations' markets, as well as those faced by Japanese investors contemplating investing in such markets, would be helpful when assessing the development levels of emerging Asian nations' bond markets. Such research would also facilitate the crafting of a proposal aimed at enhancing market efficiency and usability.

Already, the ABMI has been attempting to address these challenges through the encouragement of awareness sharing among the government officials of each nation. As part of such information sharing efforts, the ABMI has been providing technical assistance to individual ASEAN countries' bond markets, in an effort to help enhance their development, (TACT of ABMI) while publishing country-by-country bond market reports (reviews). In addition, the ABMI has been using AMBF meetings as information sharing venues. The AMBF is a group set up for the purpose of standardizing accepted market practices and harmonizing regulations relating to cross-border bond transactions in the region.

One potential approach to promoting such efforts would be to comprehensively identify, on a private company level, challenges for non-resident bond issuance and bond investment, and to make recommendations on regional cooperation initiatives performed by the ABMI and other groups. Such an approach will also involve the communicating of a comprehensive summary of the challenges to local policymakers. This could be done through business groups in each nation, and would not only promote system reform but provide technical assistance to those nations as well.

Example: The above approach could involve the comprehensive and regular identification of the current status of, and challenges relating to, the following points. (The items shown below are from Nomura Research Institute, "Research on the Identification of Barriers to Investment in the EMEAP8 Markets," 2008 — research commissioned by the Bank of Japan)

(1) Various regulations

- Foreign exchange regulation: Regulation of foreign exchange transactions
- Capital regulation: Regulation of the acquisition of securities and principal/ income remittance
- Credit provision regulation: Regulation of credit provision by domestic banks at the time of investing
- Other

(2) Status of legal system development

- Accounting standards: Degree of application of international best practices
- Scope and timeliness of information disclosure: Degree of application of international best practices
- Corporate governance: Degree of application of international best practices
- Credit rating: Scope of credit rating acquisition and confidence in credit rating

(3) Tax and financial conditions

- Tax system: Withholding taxes on interest and transaction taxes for foreign investors
- Procedure: Simplicity of tax application procedures

(4) Status of infrastructure development

- Price information: Status of price information provision by the private sector (e.g. Bloomberg), self-regulatory organizations (e.g. stock exchanges) and the public sector (e.g. central banks)
- Derivatives market: Status of development of hedging vehicles such as foreign exchange derivatives
- Clearing & settlement: Degree of application of international best practices, including dematerialization, DVP (Delivery Versus Payment) and settlement cycle shortening

(5) Other

- Accepted trading practices
- Language barriers
- Regulation transparency

7.1.3 Promote the development of cross-border products utilizing the Credit Guarantee and Investment Facility (CGIF)

(Proposal) Work to promote the development and issuing of securitization bonds by helping CGIF with cross-border issues

Provision of credit guarantees by the CGIF is expected to help increase the number of new corporate bond issuances. This has the potential to result in increased fundraising in the form of new types of bonds, including asset securitized products.

Asset securitization in Asia, still underdeveloped, seems to be a highly promising area. Future economic growth in the region is likely to bring about increased securitizable assets.

In recent years, rising income levels in Asian countries have led to increased home purchases, resulting in growing receivables on mortgages that use a home as collateral. The continuous growth in consumer spending has been accompanied by increasing spending on credit, resulting in growing credit card receivables held by banks. Such receivables constitute securitizable assets. A securitized product is created by packaging those assets into a pool and using cash flows from the pool as collateral for the payment of principal and interest on a bond.

The CGIF's credit guarantee program is expected to serve the following three purposes.

Firstly, the program should help to develop securitization-related systems in Asia. Still underdeveloped, the Asian securitization market has yet to be supported by well-developed legal and regulatory systems relating to securitization, such as bankruptcy law and commercial law. In addition, due to the small size of the securitized product market, investors have not invested actively in that market, and credit rating is also challenging due to the lack of accumulated data needed for investment decision-making.

Secondly, the CGIF's credit guarantee program is expected to help promote cross-border transactions in Asia. An increasingly mutually-dependent relationship among the region's real economies will stimulate cross-border transactions on assets (the potential underlying assets of securitized products). This will be accompanied by growing cross-border transactions involving fundraising with securitized products.

Thirdly, at the same time as it helps to foster the regional bond market, the guarantee program will also encourage the provision of assistance to small- to medium-sized companies and development projects in developing nations. To date, the credit guarantee system in Europe and the US has served as a tool for bond market development and economic policy implementation. Among the examples of their guarantee-based financial assistance to small- to medium-sized companies are the guarantee programs undertaken by the European Investment Fund and the U.S. Small Business Administration (SBA). Vehicles used in the past for assisting the economic development of developing countries include bonds issued using expatriate workers' remittances as collateral (the securitization of worker remittances). Already, the issuance of such type of bonds has totaled more than US$15 billion in countries like Brazil, Jamaica, Kazakhstan, Mexico, Peru and Turkey, with Asian nations also discussing potential issuances.

7.1.4 Develop Asian corporate bond indices

(Proposal)
Develop, publish, and use indices that reflect fluctuations in Asian corporate bond markets so that index-based financial products can be provided

Bond indices have already been used to create a number of investment products. For example, the Asian Bond Fund (ABF) uses the Asian Bond Index as its benchmark. The ABF is an exchange-traded bond mutual fund investing in local currency-denominated bonds issued by the governments and quasi-governmental agencies of China, Hong Kong, Korea, Thailand, Malaysia, Singapore, Indonesia and the Philippines. This index is benchmarked to the iBoxx ABF Pan Asia Index formed and published by the International Index Company Limited (IIC).

The Asia Corporate Bond Index has the following advantages: (1) the index allows the investor to monitor the movement of the Asian corporate bond markets; (2) the investor is able to compare the bond index's returns with investment returns on its own holdings of Asian bond-related financial products; and (3) by using such bond index, fund management companies and other financial institutions are able to develop financial products for investing in Asian bonds.

At the same time, given the differing levels of development of Asian nations' bond markets, it is not possible to allocate investment simply on the basis of total bond market capitalization. That is why the iBoxx ABF Pan Asia Index formulates a tradable index through a modification performed by "taking into account regulations, legal and financial conditions as well as the trading/settlement infrastructures of individual markets in consideration of not only market capitalization but also market liquidity, sovereign credit ratings and market openness" (quoted from http://www.abf-paif.com/).

The formation of an index like this will help to deepen mutual understanding of the Asian bond market and will represent a step forward in promoting the regional market integration initiative.

7.1.5 Provide information on cross-border bond investments

(Proposal)
Create a system that enables investors to use information on bonds in the region when making investment decisions

In recent years, due in particular to the persistently low interest rates across the globe, not only institutional investors but also retail investors have been increasingly shifting their investments to bonds. Since the start of 2009, Asia has experienced a significant pickup in corporate bond issuance, reflecting a shift from indirect financing to direct financing. This phenomenon has been observed since the global financial crisis.

Against this background, some Asian stock exchanges have been developing their own systems for providing bond trading information. The enhancement of bond market information is recognized as a significant challenge by the Thai Bond Market Association, Singapore Stock Exchange, Indonesia Stock Exchange and Philippines Stock Exchange, and a certain amount of progress has been achieved in this area. As for the ADB, the bank has already been providing data on different Asian nations' bond markets through the Asian Bonds Online website.

Under such circumstances, latent investment demand could be tapped into if the bond market information of each nation is combined before it is provided as investment information. It will be particularly important to send out investment information conducive to vitalizing cross-border transactions.

First of all, we would like to recommend the introduction of the broker-to-broker system for providing intermediary services for regional cross-border transactions. Such a system will help promote cross-border transactions with high levels of transparency by serving intermediation functions for bond transactions between different dealers based in the region. This should be accompanied by the offering of bond information and trading price information, a service that will be provided in collaboration with individual exchanges.

Going forward, industry experts should seek to build a bond market with high levels of transparency. This will involve the publishing of price information based on an integrated consolidation of Asian bond market information.

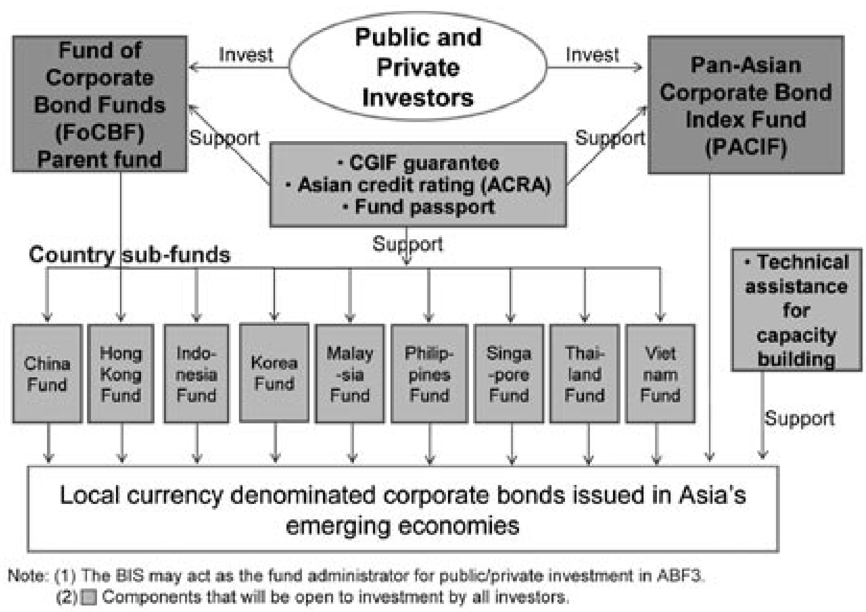
“Approach for public sector (international organizations, governments, and public institutions)”

7.1.6 Create an Asian Corporate Bond Fund (a public–private partnership offering)

(Proposal)
Launch as a public–private collaborative fund for Asia that invests in Asian corporate bonds (including those for public infrastructure companies and energy companies)

The establishment of the Asia Corporate Bond Fund, an advanced version of the Asia Bond Fund (ABF2), will promote the vitalization of cross-border corporate bond transactions while allowing industry experts to develop new investment outlets.

Figure 7-1 ABF3 (Corporate Bond Fund: a public–private partnership offering)



As shown by its name, the Asia Corporate Bond Fund is a fund for investing in corporate bonds issued by companies in the Asian region (including public enterprises). In making investment, the fund will take into consideration such factors as the advantages, liquidity and safety of the targeted securities. In doing so, the fund will seek to broaden the bond investor base and foster the growth of the market through increased market liquidity. In addition, the Asia Corporate Bond Fund is likely to help improve the quality of various intermediary institutions by using the services of Asia-based investment management companies, index creators and regional credit ratings. Shown below are the characteristics of the Asia Corporate Bond Fund.

Firstly, the Asia Corporate Bond Fund represents a private-sector initiative that will be undertaken jointly with different Asian nations' state governments and central banks as well as international institutions. It will be launched as a regional public-private sector joint project. Unlike the ABF2, which was created as a public sector-driven project, the Asian Corporate Bond Fund will be able to help further enhance mutual understanding among different market participants and improve access for regional investors in an efficient manner.

Secondly, regional scales will be employed for credit ratings used in fund management and index formation. Since the scope of investment outlets and investors is assumed to be mainly confined to those in Asia, regional scale-based credit rating standards will be applied by the credit rating agencies involved.

Thirdly, the fund will introduce a system in which securities registrations made in the country of fund creation are mutually recognized in the region (commonly referred to as a "Fund Passporting" system). Under the region's mutual fund registration system, such mutual recognition will be promoted with the aim of soliciting participation by a broad range of investors, enhancing local investors' investment capability and helping establish cooperation amongst regional investors.

Fourthly, the Asia Corporate Bond Fund will actively use the CGIF program to enhance its investability (investors and investment outlets). By utilizing the CGIF program, scheduled to be launched in 2011, it will become possible to tap into diverse issuer demand and encourage investors to actively invest in corporate bonds of companies with low name recognition in the region. An accumulation of information on such issuers will lead to improved credit rating quality.

Fifthly, with the aim of fostering the corporate bond market, technical assistance will be provided through international institutions. With regard to the fostering of the corporate bond markets in Asia, focus is placed on implementing technical assistance programs from a private sector perspective. International institutions will be requested to shoulder part of the burden of technical assistance.

The inclusion of public-private sector cooperation-type ABF3 in the investment universe for central banks' foreign reserves and sovereign wealth funds should help accelerate the development of the Asian corporate bond market. At the same time, such inclusion will contribute to the financial system stabilization policy efforts.

7.1.7 Introduce an Asian mutual recognition system (fund passporting[48]) for investment trusts[49]

(Proposal)
Introduce an Asian mutual certification system for mutual funds, thereby promoting the integration of mutual fund markets in Asia

We recommend the introduction of the Fund Passporting in Asia. The Fund Passporting concept consists of three significant components: (1) the Fund Passporting system will enable industry experts to foster and enhance the financial/securities markets through the creation of a domestic and cross-border fund industry (industry involved with fund business, including fund management company operation); (2) the system will facilitate the channeling of regional personal savings to regional investment; and (3) it will help enhance the specialized skills of intermediary institutions based in the region.

When specifically promoting the Fund Passporting system, it must be noted that the system is not meant to be a final framework or the end product of continuous efforts towards regulatory harmonization between two countries. Instead, the system must be identified as a process for integrating Asia's fragmented mutual fund markets by stages. To do so, it will be necessary to promote the Fund Passporting system while ensuring that the same future vision is shared among different nations during the process of multilateral discussion. At the same time, consideration must be given to the different levels of mutual fund market development in the individual countries in the region, as well as to their different levels of securities regulation. Also required will be agreements on securities registration, disclosure, product suitability and investor protection, among others, involving working level officials and ensure collaboration among different regulatory authorities.

[48] For the detail of fund passporting, see the column in section 6.1.3.
[49] This proposal was prepared by drawing on the presentation given at the APEC Bond Market Development Forum (May 2010)

7.1.8 Establish pan-Asian rules for the issuing of medium-term notes (MTNs)

(Proposal)
Draw up a draft proposal for the establishment of pan-Asian rules for the issuing of MTNs based on the findings of a study group made up of experts and private enterprise representatives

Currently, any prospective MTN issuer in Asia is subject to supervision by regulatory authorities in each country's bond market. This is because such issuance will represent an issuance of a local currency-denominated bond in each nation. However, for the purpose of achieving the consistent development of cross-border bond transactions in Asia overall, it will be necessary to prescribe independent issuance rules at the pan-Asian level. This will need to be accompanied by the reassessment of each country's regulations in the light of such rules.

While one approach currently available is to standardize different systems and harmonize regulations through the ABMF's activities, it will be helpful to set up a study group composed of industry experts and private sector company officials of a country that has experience in issuing MTNs. The setting up of such a group should be followed by discussion concerning the promotion of regulatory harmonization, the desirable state of standardization, and self-imposed regulation.

7.1.9 Issue bonds denominated in a basket of Asian currencies

(Proposal)
Strive to further develop bond markets by issuing bonds denominated in a basket of Asian currencies (starting as a joint initiative with international institutions)

The increase in assets held by the ABF2 after its listing on the Tokyo Stock Exchange has pointed to a need for products with diversified currency risk. Taking this account, we recommend issuing ACU-denominated bonds as a product with increased liquidity.

It must be noted, however, that the issuance of ACU-denominated bonds poses many challenges.

Firstly, as the issuance will be undertaken in the form of an ACU-denominated bond in the offshore market, the lack of currency internationalization will present significant obstacles. Yet as seen in the action taken for RMB-denominated bonds involved with the ABF2, sanctioning cross-border transactions based on the special treatment granted to such currency is an option. Such sanctioning will potentially prompt a move toward full-fledged capital account liberalization.

Secondly, while the underlying assets to be used consist of Asian nations' government bonds, governmental agency bonds and corporate bonds, among others, it will also be possible to include loan receivables held by financial institutions based in the region and asset-backed securities (ABSs). It will be desirable to unify legal requirements and standards for the assessment of the credit quality of underlying assets. In other words, as part of the preparation for creating ACU-denominated bonds, it will be necessary to develop and harmonize the market infrastructures of the individual nations involved, while securing the price transparency of their underlying assets.

Presumably, these challenges will be overcome with the private sector's creative efforts and its cooperation with the public sector. One initial step for laying the groundwork for addressing such challenges would be to create funds based on securities of multiple Asian currencies. The Public-Private Sector Cooperation-type ABF3 mentioned in Proposals 6 is a good example of such an initiative.

That said, as it will take time for the ACU to gain the confidence of investors after its composition, international institutions, among others, should take a leadership role in issuing ACU-denominated bonds. In addition, any discussion on currency basket-denominated bonds should be accompanied by discussion on the foreign exchange system, because it constitutes one of the key factors that need to be taken into account when formulating an outlook on the future of the Asian bond market.

7.1.10 Enhance the competitiveness of the Japanese bond market

(Proposal)
Approach the Financial Services Agency, the Ministry of Finance, the Bank of Japan, and other public organizations to cooperate more closely on promoting the formulation and implementation of a policy to improve the functioning of Tokyo as an international financial center and the Japanese bond market

In addition to the important role it plays in regional financial cooperation, Japan is faced with the significant challenge of developing its domestic bond market and encouraging non-Japanese Asian issuers and investors to use that market more actively.

Such efforts currently underway include: (1) the granting of guarantees by the Japan Bank for International Cooperation concerning the issuance of Samurai bonds by Asian nations' governments; (2) the setting up of the Study Group to Vitalize the Corporate Bond Market by the Japan Securities Dealers' Association; and (3) discussion on the establishment of a TOKYO AIM-based corporate bond market designed for professional investors.

Such efforts must be accompanied by further development of the corporate bond market. Given that bond issuers and investors choose markets based on such factors as issuance cost, investment returns and convenience (market infrastructure and regulation), further development will make Japanese market more attractive to encourage overseas issuers and investors.

Firstly, the steady progress achieved in financial system development in the Asian region has resulted in increasing competition among different markets. Under such circumstances, it is necessary for the relevant ministries and agencies of Japan (i.e. the Financial Services Agency, the Ministry of Finance, and the Bank of Japan) to promote, via strong policy decision, the development of a market which is friendly for overseas issuers and investors, through enhanced collaboration among such governmental organizations. Other important actions include: the enhancement of public relations activities pertaining to the Japanese market; the initiative to encourage non-Japanese Asian companies to issue bonds in Japan and list their shares on the Japanese stock exchanges; and the provision of preferential treatment to overseas investors.

Secondly, it is imperative that the Japanese economy and market gain unrivaled appeal for overseas market participants. It will be important to leverage Japanese market size superiority (the extensive base of companies and retail investors). The most crucial issue is that of "Japanese investors (in particular, institutional investors) being conservative," an issue often cited by market participants. Japanese retail investors, in particular, have total financial asset holdings of approximately 1,450 trillion yen, but their holdings in corporate bonds amount to a mere 2 trillion yen or so. This alone should constitute a compelling reason to promote corporate bonds and related products designed for retail investors, including bonds issued by non-Japanese Asian entities. In order to increase demand for the Japanese yen and promote increased cross-border transactions, it will be essential to enhance regional real economic integration. Japan must create an environment in which Asian issuers need to raise funds in Japanese yen in connection with their real economic activities.

Thirdly, in the medium term, it will be desirable to have Asian currency-denominated bonds issued in the Japanese market. For that to materialize, increased efforts must be made toward currency internationalization and improved market infrastructure, a prerequisite for such situation.

Fourthly, during the process of making the above-mentioned efforts, it will be essential to maintain consistency with regional financial cooperation initiatives. Currently, progress is being made in the regional initiative for promoting increased cross-border transactions. That initiative is taking a bottom-up approach designed to harmonize individual countries' markets with due regard to each market's specific features. Japan, for its part, must seek to develop its own market as a member of the Asian community and offer as much cooperation as possible to the ABMF's initiative, in good recognition of its progress. In other words, what Japan needs to do is strike a balance between competition and cooperation with other Asian nations.

Specifically, it will be important to use the Japanese market for promoting Asian regional financial integration. The goal of such an initiative is to build a market that is receptive to the introduction of a framework for harmonization and mutual recognition. Japan will need to solve the various issues facing the Japanese market itself, mentioned earlier, and bring about the necessary change and harmonization in laws, regulation and market infrastructure (in particular, relaxation of cross-border transaction-related regulation and improvement in its effectiveness, efficiency and transparency).

As industry experts seek to establish "Asian standards," the Japanese market is expected to offer a role model for other Asian markets. However, the assumption of such a role will only become possible after thorough investigation of the circumstances of individual nations' markets in the region and the setting of a desirable direction. In this sense, it is worthwhile to monitor the progress of the ABMF Sub-Forum 1's ongoing investigation into the systems of each country.

7.2 Future outlook

As emerging Asian economies continue to grow, rapid progress is being made in the development of the regional financial/capital markets, which would set these economies apart from the rest of the world. First, emerging Asia is the only region where financial markets in the region are experiencing a rapid real economy-driven expansion and development. Financial markets are intermediating between strong demand for funds, fueled by the fast-growing economy, and a massive supply of funds—including the pool of personal savings in the region—that also fuels the demand for more investment products. Second, increasing use of regional currencies in regional flows of funds reflects the increasingly interconnected economies in the region. This makes it necessary to promote financial cooperation from a private-sector perspective in order to develop local-currency bond markets and deepen regional financial integration.

While a wide range of proposals are made by this study report, the key issue will be how to translate such proposals into action in a timely manner. Some positive, but limited results have already been achieved by public sector initiatives, such as those undertaken by the ABMI of the ASEAN+3, the ABF of the EMEAP, and APEC. In addition, private sector entities actively participating in those initiatives will likely help accelerate the speed of Asian bond market development and integration.

A particular issue that came to light during this study was the fact that the circumstances of Asian nations are not taken into account by global credit rating agencies. These agencies do not take account of the differences between western and Asian markets when crafting their ratings criteria benchmarks. This is an issue that will need to be tackled by, importantly, introducing credit rating standards of the Asian region. While credit rating has a direct effect on bond issuance cost and is used as an important standard for investment decision-making, it also plays a significant role in financial product development and financial institutions' risk management. Credit rating is expected to serve the function of helping to price risk through estimating the probability of default. In the interviews conducted during this study, many Asian working-level experts echoed the belief that the standardization of credit rating benchmarks in the Asian region will constitute a key element of Asian bond market development and integration.

One other issue revealed as important by this study was the fact that rising private sector funding demand, driven by fast-growing Asian economies, is resulting in a substantial increase in new corporate bond issuances, in value terms, within the Asian region. Such issuances grew by 5.7 percent in the third quarter of 2010 compared with a year earlier. As for the issuer breakdown, a significant proportion is made up by the financial services sector, the infrastructure development sector, and the consumer goods sector, pointing to the strong fundraising needs of firms in these sectors. In particular, Indonesian and Singaporean corporate bond markets are characterized by growing levels of investment by overseas investment funds. This is a phenomenon worthy of note, given that such increased market participation by overseas investors, coupled with improved market liquidity, has resulted from market opening initiatives undertaken by the governments in these countries.

Looking toward the future of Asian bond markets, the development of corporate bonds will represent a serious challenge. The CGIF was set up as part of the effort to further improve the market infrastructure that facilitates corporate bond issuance. Toward the same goal, the ASEAN+3 Bond Market Forum (ABMF) has been using increasingly sophisticated strategies aimed at developing the market through public-private collaboration. In order to assist such efforts further, it will be important to conduct "market development assistance by the market" on the back of enhanced public-private collaboration.

Based on the needs of both Asian issuers and investors, this study recommends the establishment of an Asian Corporate Bond Fund as a public-private collaborative project. Without translating many of the proposals of this report into action, the establishment of the new corporate bond fund will not be possible. Its creation is thus of great significance.

The Asian Corporate Bond Fund has as its objective to build Asia into a more significant investment destination and develop Asian bond markets. Such a task will involve a multitude of efforts, including the introduction of Asian region credit rating standards, the creation of Asian corporate bond indices, and the introduction of the fund passport system. Through the use of the credit guarantee function of the CGIF, the Asian Corporate Bond Fund will enable industry players to identify and serve new issuance needs that exist in the region—by avoiding potential moral hazards—and to accumulate credit data in the process. This corporate bond program will also facilitate the issuance of corporate bonds by Japanese-owned companies with operations in emerging Asian /economies. Furthermore, it will provide Japanese investors with increased investment opportunities. Finally, this program can contribute to developing countries with underdeveloped markets through the provision of technical assistance.

The Inaugural Asia Business Summit, held in March 2010 with the wide participation of top Asian business leaders, discussed the importance of bond market development with a particular focus on the issue of credit ratings. In order to further raise the awareness of such issues in Asia, industry experts should actively make proposals, based on this study report, to the 2nd Asia Business Summit to be held in 2011. The Asian business community must take concerted and early action to promote the development of Asian bond markets and regional financial integration.

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Reference: List of visited destinations in Asian countries

As part of this study project, the author visited eight non-Japanese Asian countries (Thailand, Hong Kong, Korea, Singapore, India, Indonesia, Malaysia and the Philippines) over the period from October 18 to November 9, 2010. The author hereby wishes to express his deep gratitude to those persons visited during the tour who contributed insights and ideas to this report through discussion with the author.

Shown below is a list of the places visit.

■ Thailand
10/19 Thai Rating & Information Service
10/19 JSCCID (Joint Standing Committee on Commerce, Industry and Banking)
10/19 Bangkok Bank
10/20 Thai Bond Market Association
10/20 Bank of Ayudhya PCL

■ Hong Kong
10/21 Hong Kong Monetary Authority
10/22 Hong Kong Exchanges and Clearing Limited

■ Korea
10/25 Korea Capital Market Institute
10/25 Daiwa Capital Markets (Seoul Branch)
10/26 Federation of Korea Industry
10/26 Korea Rations Corporation
10/26 Shinhan Financial Group

■ Singapore
10/28 Oversea-Chinese Banking Corp Ltd
10/28 State Street Global Advisors
10/29 PSA Corp Ltd
10/29 Daiwa Capital Markets Singapore Limited
10/29 United Overseas Bank
10/29 Singapore Exchange Limited

■ India
10/28 Bank of India
10/28 National Stock Exchange
10/29 ICRA Limited
10/29 Daiwa Capital Markets India Private Limited
10/29 Religare Asset Management

■ Indonesia
11/1 PT. Bank Permata Tbk
11/1 PEFINDO(PT Pemeringkat Efek Indonesia)
11/2 KADIN (The Indonesian Chamber of Commerce and Industry)
11/2 Indonesia Stock Exchange

■ Malaysia
11/3 Rating Agency Malaysia Berhard
11/3 AMMB Holdings Bhd
11/3 CIMB

■ The Philippines
11/5 Rizal Commercial Banking Corporation
11/5 Japan-Philippines Economic Cooperation Committee (PEX, Trust Office Association, the Fund Managers Association of the Philippines, Philrating, Bankers Association, ALCANTRA Group)
11/5 Asian Development Bank
11/5 San Miguel Corporation
11/8 Bank of the Philippine Islands

Asian Bond Markets Development and Regional Financial Cooperation

Study Group Report
(Project Leader: Masahiro Kawai)

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