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# Introduction

Developing Asian Bond Markets: Challenges and Strategies

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## Developing Asian Bond Markets: Challenges and Strategies<sup>\*</sup>

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### Developing Asian Bond Markets: Challenges and Strategies

### Introduction

Takatoshi Ito and Yung Chul Park

### **Introduction**

This volume is a collection of the papers submitted to the Second annual conference of the Finance Forum of the Pacific Economic Cooperation Council (PECC-FF). We have edited the papers after the conference, so that the papers collectively complement each other in providing important information and message on the theme of the Asian bonds.

### 1. Background

There is no definite definition of Asian bonds. Asian bonds are in a broad term defined by the residence of issuer. They are interest bearing obligations of Asian governments, corporations, or financial institutions, wherever they are marketed or in whatever currency of denomination. But, many advocates and policy makers presume that Asian bonds will be denominated in the Asian currencies. A regional bond market in Asia would then be defined primarily as bringing together issuers and investors from Asia. The ASEAN+3 Finance Ministers process has six working groups to tackle issues that are considered to be obstacles in promoting the Asian bond market under the banner of the Asian Bond Market Initiative.

One of the lessons from the Asian currency crisis was that too much borrowing in the U.S. dollar increased the vulnerability of a country. When capital flows reverse the direction, a country may find itself in the dollar-liquidity crisis, although the country is solvent. Massive capital outflows were possible because capital that had come in earlier was in short term flows. The so-called double mismatch—currency mismatch and maturity mismatch—characterized the problem of financial institutions and corporations in Asia. In order to avoid another crisis in the future, Asian financial institutions and corporations have to develop a funding source that are denominated in the own local

currency and long-term to match investment needs. Local currency denominated bond financing solves the double-mismatch problem. There is little doubt that deep and liquid domestic bond markets will help reduce the severity of the double mismatch. However Asian bond proponents argue that Asian regional bond markets could also mitigate the problem.

Although importance of the bond market in the region has been recognized and emphasized by policy makers in the region, no concrete actions had been taken. The topic rose to a central stage of policy discussion, when it became a part of regional policy initiatives of Prime Minister Thaksin of Thailand in the fall of 2002. After his call for Asian bonds, several actions were taken both in the central bank forum and the ministry of finance process. One of such efforts has already been materialized as the Asian Bond Fund, ABF, established in June 2003 by eleven central banks in the region (the EMEAP group). The fund was set up by contributions of foreign reserves and it invested in the dollar-denominated bonds issued by governments and government agencies in Asia. Since foreign reserves are used for this fund, riskier bonds are not included in the investment portfolio. Some skeptics point out that substitution of dollar denominated US bonds by dollar denominated Asian bonds may not have a strong impact to help issue Asian bonds in the local currency. In response, it has been proposed that the central banks should purchase local-currency denominated government bonds, in the next round of creating a similar fund.

Other initiatives include several private sector and official sector proposals, encouraging issues of Asian local currency denominated corporate bonds, and asset-backed securities. Proposals include the following aspects. In order to invite participation of investors from the countries in the region, domestic bond markets should be open to foreigners. Credit rating companies in Asian countries should be encouraged to cover bonds of other countries in the region, either by research or by affiliation. Another idea is to bundle together some of the local-currency-denominated bonds, so that currency and credit risks are diversified for investors.

Before the 1997-98 Asian crisis, government bond markets were very small and illiquid largely because of Asian countries were prudent in managing their government finances. The government bonds were simply not issued because they were not needed, in Korea, Malaysia, Singapore, and Thailand. In Malaysia and Singapore, large surpluses were recorded in public pension fund account. Including these public pension funds, the governments were running large surpluses. In Indonesia, the regular budget was largely balanced, while another budget for development projects existed, and official lending of multilateral institutions and bilateral sources financed the budget.

When the Asian currency crisis occurred in the summer and autumn of 1997, it quickly became the Asian financial crisis, as many banks with double-mismatch became insolvent. Foreign investors refused rollovers of short-term lending in US dollars, so that banks in the emerging market economies, most typically in Korea, had to come up with US dollars. Foreign reserves were quickly depleted and the crisis was deepened. Even the IMF program did not calm the investors. This episode was pointed out as prima facie evidence of desirability of bond financing in local currencies. Had borrowing of corporations and banks been denominated in the local currencies, the US dollar liquidity crisis could have been averted. Had borrowings of corporations and banks been in long-term bonds, even if they were denominated in the US dollars, it is often argued that the acute dollar liquidity crisis might not have happened. Importance of having the domestic bond market was pointed out immediately after the Asian financial crisis.

The scenery has changed dramatically in the wake of the financial crises of 1997-98. Several governments in the region were forced to issue a large amount of government bonds to finance fiscal deficits and bank recapitalization. Even after increased bond financing, the bond markets in East Asia, both domestic and regional, remain relatively small, inactive, and illiquid. An inefficient market is not attractive to global bond investors.

Since the domestic bond market was not emphasized as an important channel of government and industrial financing, the market infrastructure is not well developed. The legal and regulatory aspect of the bond market in the Asian countries has remained rather opaque. Generally speaking, the protection of minority investors is questionable, and trading and settlement is costly. This together with the low standard of accounting, auditing, and disclosure has hampered the supply of high quality corporate bonds. Weak corporate governance has also discouraged investors to hold corporate bonds in their portfolios. Most of all, a myriad of regulations on issuance and transactions of bonds has in effect closed the markets to foreign investors and borrowers has left not much room for bond markets to flourish in Asian financial systems.

There are several regional bond markets where in theory Asian borrowers can issue bonds denominated in their domestic as well as in major currencies, such as the Samurai and Shogun markets in Japan. In Hong Kong and Singapore offshore markets, issuance and transactions of bonds can be carried out more efficiently than many of domestic markets.

In Singapore, there exist an offshore Asian dollar market, where Asian bonds denominated in the U.S dollar are issued and traded. However, these markets were rather dormant, compared to vibrant bond market in the United States or in Europe. Potential needs for bond financing of Asian governments and corporations were never materialized in these markets even after the Asian financial crises.

In sum, the current scope for the Asian bond market development, if no actions are taken, is rather limited. However, many consider that, with careful preparation for the market infrastructure at the national and regional levels, the issuance and trading of bonds by Asian governments and corporations will increase. Below details of various aspects will be discussed.

### 2. Overviews of the issues; pros and cons

In Chapter 2, Park and Park propose a market-oriented approach to development of the Asian bond market. According to the authors, domestic bond market deregulation and opening will facilitate and increase cross border financial transactions in Asia. As domestic residents are allowed to hold foreign bonds and foreign borrowers to issue bonds in the domestic markets, some of these domestic bond markets will then develop features of full-fledged international bond markets. Competition among these markets will follow and lead to emergence of regional financial centers. The role of the official sector in this approach is in essence to develop regional bond market infrastructure.

ASEAN+3 has taken leadership of developing regional bond markets in Asia. The Finance Ministers' process has established six working groups to devise plans for creating the institutions requisite and policy cooperation among the member countries for the development of efficient Asian bond markets. According to Park and Park, the member countries do not address, not as much as they should, an important issue critical to the bond market development: domestic financial reform. Unless regulations on cross border lending and borrowing are eased and removed, it is not clear whether deep and

liquid bond markets will come into existence. If domestic bond markets are fortified by domestic financial infrastructure and are deregulated and opened to foreign borrowers and investors, many of the Asian countries will also be able to mitigate the maturity and currency mismatch problems. However, it is also true that these markets will not gain competitive strength vis-à-vis global bond markets unless the countries in the region join forces to construct regional financial infrastructure. Nevertheless, Asian bond market development should begin with domestic financial reform.

In Chapter 3, Ito defines objectives of Asian bonds as overcoming the double mismatch, providing channels for regional saving to be directed to regional investment, and reducing the over-reliance to the banking system. The secondary bond market should be encouraged as well as bond issues themselves. Ito proposes the Asian basket currency bonds as a means to promote bond markets in the region. Ito points out that Asian Bond Fund (ABF) established by eleven central banks in June 2003 does not achieve the objectives. The ABF invests in dollar-denominated bonds issued by Asian governments and institutions, so that the double mismatch would not be resolved. It also takes a buy and hold strategy so that the secondary market will not be stimulated. Central banks, using foreign reserves, would have a problem in investing in corporate bonds. Therefore, channeling funds to corporations would not be achieved. The Asian basket currency bonds issued against underlying a collection of individual local-currency denominated bonds may be attractive to regional investors by overcoming informational asymmetry between issuers and investors.

The two papers by Ito and Park and Park have different views on some of the issues related to the development of Asian bond markets. One such issue is significance of regional bias in portfolio preferences of Asian investors. Ito argues that there must be natural preference among the investors that they purchase familiar products with less perceived risk. The home bias—the US investors hold too much American, dollar-based securities compared to theoretically calculated weight of the portfolio—is a well-known concept in the finance literature. Ito thinks that Asians may prefer regional securities next to domestic securities, considering the increased familiarity of the regional affairs and economic integration.

On the other hand Park and Park argue that given non-transparency of corporate governance, unreliable accounting and auditing, and unreliability of corporate and even banking data, Asian investors in this Internet age may not have any informational advantage in buying Asian bonds. They focus instead on portfolio diversification of investors. Several empirical studies have shown that most of the East Asian countries have displayed similar patterns of business cycles and share similar structural characteristics, which have in turn resulted in a high correlation of country risks in East Asia. As such Asian investors cannot sensibly diversify by buying only Asian bonds. Capital account liberalization has also increased the opportunities to Asian investors to acquire more non-Asian bonds than before.

This argument is supported by the available data. Financial industry people believe that a substantial portion of U.S dollar denominated Asian bonds are bought and held by the investors of the issuing countries; cross-border holdings of these bonds in Asia are relatively small; there is home bias. However the home bias does not mean the existence of regional bias. Park and Park present as evidence of weak regional bias that the share of Asian bonds in the Japanese investors' portfolio decreased from 2.8% in 1996 to 1.4% in 2002. During the same period the share of Latin American issues more than doubled from 8.2% to 20.3%.

One of the little evidence for regional bias in the literature is that McCauley et al. (2002). They found that 46% (or 44% in weighted average) of new issues of Asian securities between 1999 and 2001 (71 bonds) have been initially allocated to Asia. Park and Park point out that even when buyers at the initial offering of bonds are mostly Asians, the final buyers may be non-Asians. Eichengreen and Park (2004) also question whether there is anything more to the Asian bid than home-country investors buying dollar bonds. So, the evidence of McCauley et al. cannot be regarded as evidence of the existence of regional bias, according to Park and Park.

Regional bias, in the spirit of home bias, is still a theoretical concept. To those promoting market development, Asian bonds, the apparent lack of evidence (the low number of ratio of Asian bonds in Asian investors) in the portfolio of investors suggests the potential opportunity of Asian bonds and importance of whatever the regulatory obstacles. However, the same number suggests the weakness of theoretical concept, regional bias, itself. This explains the difference of the two views.

The two papers also differ on the role of the official sector in fostering Asian bond markets. Many advocates of Asian bonds, including Ito, think that the role of government in promoting Asian bonds is important. For example, it is important for the market development that the government issues local-currency-denominated bonds that are foreign-investor-friendly may be important to create a benchmark, so that corporate bonds can be issued. Cooperation among the government is important to harmonize the regulatory and taxation regimes. In order to jump from a bad equilibrium (no investors causes no incentives to issue them; no issues causes a lack of interest among investors) to a good equilibrium (a deep regional markets, where issuers and investors meet), the role of the governments is enormous.

Park and Park propose that the role of the government be limited. They contrast a market-led strategy and a government-led strategy, and argued for the former. They also think that the governments in the region would not be able to cooperate among themselves. However, market-led and government-led approaches in Park and Park are rather complementary. Making the domestic markets deep and efficient is obviously very important. It is true that the government cannot do what the market will not go along and the government cannot make the market swallow government papers that investors are not attracted. The government should not push bonds that cannot be sold in the domestic market to foreigners. The wider the investor base, the market becomes deeper.

The current difficulty in cooperation among the governments may not mean that the government-led strategy is bound to fail or inherently undesirable. Advocates of Asian bonds think that cooperation will come in the future. For the possibility of cooperation of the governments, some of proponents have more optimistic assessments, precisely because they see benefits from success. In contrast Park and Park point to the lack of cooperation for the expansion of the Chiang Mai Initiative (CMI) among the ASEAN+3 members for the past four years as evidence for their assessment. The difference between the Park and park paper and the Ito paper on this front reflects the difference in judgment.

A third issue on which the two papers have different views related to the questions of whether Asian bond markets will help prevent future crises and whether they can change the current pattern of capital flows.

Ito supports the widespread view that a large share of long-term bonds denominated in local currencies in a country's foreign debt could reduce its vulnerability to financial crises. For instance, countries with deep and liquid bond markets open to foreign investors could ward off financial crises better than those without. The main reason for the benefits is two-fold: having a long-term financing as opposed to short-term financing; and having the local currency liability rather than foreign-currency liability. When a crisis hits one company/sector/region in one country, it is less likely to trigger a liquidity crisis to other companies/sectors/regions/countries. Namely, it is less likely to have a crisis contagion and a crisis spiral: A crisis (sharp depreciation/a burst of a bubble) causes a panic, and a panic causes a liquidity crisis, and then the liquidity crisis becomes deeper and broader. It should be stressed that this reasoning does not depend on the behavior of investors. Investors, Asians as well as others, may dump securities anyway, but the maturities are long and rollovers are less often, so that issuers will not be subject to acute liquidity shortage.

In contrast, Park and Park argue that proponents' reasoning for the less probability of panic rests on "misunderstanding" and "misconception" of the proponents' idea:

"There is a widespread presumption that the existence of well-developed regional bond markets in Asia would tend to reduce the share of foreign assets denominated either in the U.S. dollar or Euro in East Asian foreign reserve portfolios and hence Asian savings will remain in Asia to finance investment in the region. This presumption reflects the misunderstanding of the determinants of inter-regional capital flows between Asia and the rest of the world. There is also the misconception that well-developed Asian bond markets will be less susceptible to external shocks as the majority of market participants are Asian investors and borrowers."

"Knowing that their withdrawal could set off a crisis and victimize themselves, Asian investors, unlike investors from outside of the region, will be more calculating in pulling their investments out of the region. The proponents of the Asian bond initiative suggest that this prudence in risk management and possibly the regional altruism will help stabilize inter- as well as intra-regional capital movements, thereby setting up a sturdy shield against financial crisis and speculative currency attacks."

What Park and Park argue in the above quote is that the altruism argument is wrong and that it is inconceivable that individual investors think of a result of collective actions and collude, explicitly and implicitly, among themselves. Ito agrees with Park and Park in that collusive behavior or regional altruism should not be a base for promoting Asian

bonds.

But, Ito claims that the proponents do not use the argument of "regional altruism" as a base of their argument. Instead, according to Ito, the advocates of Asian bonds promote Asian bond markets because they will reduce the probabilities of a crisis as they help overcome the double mismatch and reduce the reliance on banking.

Park and Park question whether deep and liquid Asian local currency bond markets help reduce vulnerability of East Asian countries to financial crises. First of all susceptibility to crises depends more on economic fundamentals and efficient macroeconomic management, not so much on the availability of long-term finance. When a financial crisis breaks out, it is reasonable to assume that the reserves held in short-term assets such as Treasury bills would evaporate very soon; no new international financing including trade credits from either the short or long-term end of financial markets would be available; and long-term bonds outstanding would be degraded to a junk bond status. The country in question faces a foreign exchange liquidity crisis. Foreign creditors know that foreign reserves will be depleted soon as they are used to pay for imports. These developments then force creditors to demand repayment as soon as their foreign currency denominated obligations mature.

Park and Park also point out that Asian bond markets as a buffer against financial crises is yet to be proved. If the currency mismatch in financing is as serious a problem as it is claimed, then Park and Park argue Asian countries should develop and open their domestic bond markets before creating regional bond markets in Asia. There are also empirical studies showing that bank-based financial systems are no more likely to be susceptible to crises than market based financial systems.

To substantiate their point, Park and Park consider the case where regional bond markets are as competitive as global bond markets are. As a matter of fact, they should be to be viable. Then a question arises as to why those Asian borrowers who cannot issue local currency bonds in global bond markets will be able to do so in regional markets. What are then the characteristics of Asian regional bond markets that can accommodate regional currency financing? The existence of regional bias, which is not evident, cannot be the answer.

Furthermore, the investor base of regional bond markets will be global. This means that

substantial amounts of Asian currency bonds issued in Asian bond markets are likely to be held by non-Asian investors. Many exotic currency bonds (many central and East European) are issued and traded in the Euro bond market including South African Rand issues, whereas few of Asian currency bonds are issued. Why Asian issuers do not issue local currency bonds in global bond markets? The part of the answer lies in government regulation.

Park and Park think that having Asian bonds will not change the basic patterns of global flows of capital:

"In fact, the construction of regional bond markets will not change to any great degree the pattern of inter-regional capital flows in East Asia in which East Asian countries import mostly safe capital from and export risky capital to the U.S. and Europe. ...The increase in the diversity and depth of Asian bond markets will not necessarily increase the share of Asian bonds in the aggregate East Asian asset portfolio as long as East Asia remains a capital exporting region."

Theoretically speaking, the argument in terms of "net" flows, the Park and Park argument is correct. However, the argument has to be a little bit different when we consider "gross" flows. It is true that East Asia, given their current account surpluses, will remain capital exporters. However, Ito argues that what matters in vulnerability to a crisis are "gross" capital flows and its currency denomination and maturity structure.

Ito provides, as an example, the following difference between "net" and "gross" capital flows. For the illustration purpose, let us consider the two cases: (I) Asians export USD 2 trillion capital and receive USD 1 trillion capital; and (II) Asians export USD 1 trillion capital and receive no gross capital. In both cases, "net" exports amount is the same, namely USD 1 trillion. In case (I), the following crisis scenario is possible. Suppose that non-Asian investors hold short-term dollar securities of, or loans to, Asian corporations. Moreover, suppose that gross capital exports from Asia were in terms of long-term investment, while gross capital imports from the rest of the world were in terms of short-term investment (dollar denominated short-term bank loans).

Then a withdrawal of capital by non-Asians means that refusing rollovers, which causes the severe dollar liquidity shortage, which spilled over from corporations to banks to central banks. This is a mechanism in which even "net" capital exporters may fall into a currency crisis. In the extreme case, Asian may not have to accept "gross" capital inflows at all, like case (II). Then, Asians may not have to be subject to a sudden change in mood of non-Asian investors.

Park and Park agree that countries can run surpluses in both the current and capital account, and these surpluses have been added to East Asia's foreign exchange reserves, although such surpluses cannot be sustained for a long period. However, they disagree with the argument that Asian bond markets will reduce Asian borrowers' short-term capital imports from abroad. Even if Asian borrowers were able to issue Asian currency bonds in Asian bond markets, it is quite possible that non-Asians could hold substantial amounts of these Asian bonds. Furthermore, these is no evidence suggesting that Asian borrowers will be able to raise long-term fund in Asian bond markets whereas they cannot in global bond markets. Park and Park also emphasize that even Ito's extreme case of zero capital import does not shield the economy from the crisis. It is quite possible that domestic investors may start fleeing the countries when they see an impending crisis, causing a foreign exchange liquidity crisis.

At present Asian central banks "import" large amounts of safe U.S. assets as they are liquid and mostly risk free. U.S. and European investors also buy substantial amounts of risky Asian securities, whereas cross-border holdings of Asian securities in Asia are small. Why are Asians not buying Asian securities that American and European investors are willing to buy? That Asian bond markets will change the current pattern of Asian investors' portfolio behavior will have to be proved.

Moreover, practically all of East Asia's holdings of short-term Treasury bills are part of their reserves. And given the need to diversify country risk, it is unlikely that Asian central banks can increase substantially the share of their holdings of Asian domestic currency bonds. Well-developed domestic bond markets could reduce the amount of imported capital, but regional bond markets may not to the extent that they have the market structure and operations similar to those of global bond markets

The investor base of Asian bond markets will be global. It will not make much difference whether Asians or non-Asians hold Asian long-term bonds. If a country fails to manage its economy properly so that it runs a large budget and current account deficit, thereby exposing itself as a target of speculative attack, then a large share of long-term financing will provide not much comfort.

Ito does not use the gross capital flow argument for his promoting Asian bonds. He acknowledges that these arguments are frequently heard, but the priority of this argument is not so high.

On currency basket bonds, Park and Park point out there are some practical problems that could make ABC bonds less attractive to investors. The following are the reasons by Park and Park and Ito's rebuttal.

ABC bonds are basically mutual funds with fixed portfolio weights investing in bonds with different currency denominations. As such it has the rigidity that investors cannot adjust their portfolio weights even when the prospects of currency returns change. Even if investors prefer fixed portfolio weights, the optimal portfolio weight may differ with the base currency of the investor. It is impossible to create an ABC bond with weights that satisfy investors with different base currencies. Ito thinks that ABC bonds may still serves as a benchmark for a basket of Asian bonds, although it may not precisely match optimal basket of many investors. Individual investors add or subtract particular Asian bonds in addition to a base holding of ABC bonds.

Park and Park argue that if a particular currency bond included in the ABC bond pool becomes a suspect (in terms of currency return or credit risk), one has to dispose of the whole holdings of ABC bonds, while in mutual funds it suffices to dispose of the suspect bond alone, saving the transaction cost. Ito thinks that this is a valid criticism as investors' concern, and possible unattractiveness of ABC bonds. According to Ito, this is why the basket should consist of bonds with the same, high credit rating. Park and Park think that in this case, it would not matter whether one holds ABC bonds or individual Asian bonds.

Park and Park argues that as far as diversification of currency and credit risks are concerned, the benefits of holding ABC bonds are not likely to be higher than those of holding a portfolio of individual country bonds. This is because Asian currencies are highly correlated to one another and because credit risks of Asian bonds also show high degrees of correlation due to synchronization of business cycles of Asian countries. If indeed, Asian bonds are highly correlated in terms of currency and credit risks, it will not make much difference whether one invests in ABC or any single Asian country bonds. Ito points out that correlations among the Asian currencies tend to vary period

to period; and even if currency risk were highly correlated, investors would like to diversify for the reason of credit and political risk. Mutual funds in the United States invest in various State and municipal bonds, although the "currencies" of the States or municipality are perfectly correlated with the federal currency, the U.S. dollar.

Park and Park makes an observation that ABC bonds are like structured notes, which require financial engineering techniques to calculate the theoretical value, which makes them unattractive to even institutional investors. The calculation becomes more complicated as the number of currencies increases. This is why ecu bonds were not very successful. ABC bonds are even worse. Unlike ecu bonds, each ABC bond has a different currency and credit composition, making investors calculate their value one by one. In senior/subordinated tranching in ABC-ABS bonds, rating the senior bonds where credit and currency risks must be a nightmare for credit rating agencies, let alone credit enhancement agencies. However, Ito thinks that in this age of information and technology, theoretical values of multi-currency bonds is easily calculated, and at least in the currency risk can be understood easily. Park and Park argue that no currency basket bond has ever been successful in history.

Ito acknowledges that if full diversification is optimal for the investors and if that is what investors practice, then highly correlated currencies will not be demanded. However, the home bias proves that the real world investors are not full-diversifiers.

Park and Park believe that the idea of ABC bonds or currency basket bonds have some potential benefits especially when the structure is simple. For example, ABC bonds with government bonds from two countries with the same or similar credit rating. Ito thinks that the prospects are wider that bonds of several countries can be put into the basket. The difference between the two views is again judgmental. The proof will come with time.

### 3. Various Issues surrounding Asian Bonds

The papers in the rest of the volume deal with credit enhancement and securitization in order to help develop the Asian bonds. In order for the Asian bond market to flourish, issuers have to find it less costly to issue bonds than alternative means of financing, while investors have to find bonds worth investing. First, if credit rating is not available, investors become skeptical. The regional credit rating company, or a network

of credit rating companies, will be desirable for regional investors. Second, even when credit rating is available, if ratings are low, investors are not attracted to bonds. This is the view that Wong and Ho take in Chapter 4. They consider credit enhancement is a key for Asian bond developments. This view is also confirmed by Rhee in Chapter 5, Rhee and Stone in Chapter 7, and Tran and Roldos in Chapter 6. Securitization is emphasized in Chapter 4 and Tran and Roldos in Chapter 6.

In Chapter 4, the Wong and Ho paper discusses challenges of promoting corporate bond issues in Asia. They focus on the credit rating issue. Authors argue, after examining recent issues, that corporate bonds in the region are typically rated below investment grade, and are not attractive to potential issuers as well as to global investors.

For example, at the current credit rating, Asian corporations will be required to pay 8% spread over the US Treasury bonds. This would make the borrowing costs much higher than the interest rate of bank loans. Therefore, it is important to upgraded credit rating of Asian corporations.

Taking the US municipal bonds as an example, the authors argue that a AAA-rated insurer can enhance credit of corporate bonds in Asia. The authors argue that credit insurers can reduce or spread risk by "overcapitalization, diversification, reinsurance, securitization and other techniques. ... A top-ranked bank can guarantee an Asian corporate bond by requesting collateral from the bond issuer for the guarantee provided." The authors list benefits of such arrangement as follows: Bond issuers can raise funds directly from the capital market; they can build reputation over time; insured bonds are marketable; insured bonds help development of the market; and banks can diversify risk of concentration of bank lending to a small number of sectors/companies.

Securitization is a good way to increase the variety and quantity of high-quality bonds. Collateralized loan obligation (CLO) and collateralized bond obligation (CBO) are identified as a good source of increasing volume of high-quality securities. Korea has introduced the Primary CBO guarantee program, with the Korea Credit Guarantee Fund. The Mortgage Corporation in Hong Kong is another example. In the United States, residential mortgage loans are securitiezed through government-sponsored mortgage corporations. The authors propose to set up the ABS Corporations with support of Asian governments to deal with bond and loan securitization. On the investors' side, the authors propose that the government set up mutual funds to invest in the portfolio of Asian corporate debts. A model is the Hong Kong Monetary Authority purchase of equities in 1998 to avert a financial crisis in Hong Kong.

The authors identify steps to promote more corporate issues: credit rating should be enhanced; securitization should be promote; and Asian bond funds should be encouraged. They argue that promoting credit insurers is a key to build an industry of credit enhancement. They refer to credit insurer in the United States, that is, the private-sector actions. In order to spread those credit risk, developing institutions in re-insurance and the credit derivative market is a key. Credit insurers with related financial products, the author argue, will make corporate bonds in the region investment Anther way to transform Asian corporate bonds is asset securitization. grade. Establishing corporations to securitize assets-called ABS Corporations-is proposed. The ABS corporations standardize the contracts and procedure to acquiring assets into asset pools. Then the transparent, investment-grade ABS market will be born. The third way to promote corporate bonds is an action on investors' part. The first step is for the government to set up an Asian bond fund for Asian corporate bonds, and the second step is to securitize the government bond fund and create a mutual fund that are sold to individuals and institutional investors. The Asian corporate bond fund will invest in investment grade bonds-credit enhanced bonds, so that investors will not bear excessive risk.

In Chapter 5, Rhee describes the structure of bond markets in East Asia, and describes recent movements toward building regional bond markets. Several bond markets in the region, such as Samurai bonds, Shogun bonds, and Dragon bonds, are reviewed. Rhee first argue that Asians are increasingly issuing and purchasing debts in the Singaporean market, citing the evidence of McCauley—see the preceding section on this—and pointing out numbers of issues in on-shore Singaporean dollar denominated bonds and off-shore Asian Dollar Market in Singapore. For the Singaporean dollar market, a total of 27% of the issuers were from the Asia-Pacific region, and the majority of foreign borrowers were from the United States. Most of the Singaporean dollar denominated debts were purchased by onshore Singaporean investors. In the off-shore ADM market, at least 40% of the borrowers were financial institutions and corporations from the Asia-Pacific region.

Rhee goes on to argue that using only a portion of foreign reserves might help

development of corporate bonds in the region—namely the recycling of funds. Rhee views the importance of regional bond comes from the two aspects: credit enhancement and the Asian common currency. Rhee points out that the New Miyazawa Initiative, which was introduced by Japan to help Asian countries in the midst of credit crunch, had an element of credit enhancement, that is, the guarantee of Asian sovereign and quasi-sovereign bonds by the Japanese government. Rhee has a vision that a common currency in Asia would increase the regional bond market, just like the introduction of euro integrated the European bond markets with reduction in the spread.

In Chapter 6, Tran and Roldos discusses the issues related to Asian Bond Markets, with emphasis on securitization and credit guarantees. They also summarize measure that would be needed to lay foundations for market infrastructure and legal framework. The authors review the history of legal change to enhance securitization: Korea passed the Asset Backed Security Law in1998; Thailand passed Securitization Law in 1997; Malaysia created National Mortgage Corporation in 1986. Credit enhancement is also identified as a good way to broaden investor bases.

According to Tran and Roldos, improving corporate governance and transparency, including accounting and auditing standard is identified as a high-priority measure for market infrastructure. Also establishing common financial disclosure and registration rules for bond issuers is important. Standardization of bond contracts, underwriting standards, clearing and settlement procedure are steps toward regional bond markets.

Tran and Roldos identified six areas of potential policy actions and reforms in order to strengthen the bond market. First, market infrastructure has to be laid out. Improving corporate governance and transparency belongs to this category. Second, legal framework has to be established, and this is most important for securitization. It is also important to establish bankruptcy law and foreclosure practices. Third, the repo markets should be developed to add liquidity to the secondary market. Fourth, derivative markets should be developed. Fifth, Investor bases should be broadened by allowing mutual funds and pension funds to invest in corporate bonds, and inviting foreign investors by gradually dismantling capital controls. Sixth, protection of creditors' rights and rating requirement will enhance transparency. The authors take lessons from the pension reform and establishing a local credit rating agency in Chile that contributed the development of the bond market.

In Chapter 7, Rhee and Stone propose region-wide credit enhancement programs. They review studies on municipal bond banks (MBBs) in the United States. The MBBs first appeared in Canada in 1956, and in the United States in 1970. The MBBs can do credit enhancing by pooling multiple municipalities issues into a single bond bank debt issuance. By pooling bonds, credit rating associated with the debt is changed. Municipal bond banks must have strong credit rating to benefit from pooling bonds. MBBs can issue a large lot so that issues can be competitive. MBBs have helped municipalities without imposing financial burdens upon taxpayers. By reviewing how MBBs operate in the United States, an applicability to Asia is also examined.

Based on their research on the MBBs in the United States and other western countries, Rhee and Stone believe that an application of MBBs to Asia will greatly help development of Asian bonds by reducing costs for the issuers and by making it more attractive to investors.

This book is the first in collecting papers on Asian bonds. By examining the issue from various aspects in different chapters, the book provides a comprehensive view on Asian bond. Chapters may be slightly overlapped, but collectively they provide a comprehensive picture on the issue. If all the recommendations scattered in these chapters are taken, the Asia certainly becomes a region with robust financial markets.