



# KOREA'S ROLE IN ASIAN INTEGRATION

## FINANCIAL INTEGRATION IN ASIA: DEVELOPMENT AND KOREA'S ROLE

*By Park Young-Joon*

### **Abstract**

Since the Asian financial crisis in 1997-98, financial integration in Asia has been induced by collective intra-regional initiatives. It has manifested in various aspects, including gradual financial liberalization, increasing cross-border capital flows, establishing regional financial safety nets, and developing local currency bond markets. While financial deregulation and capital account liberalization has made progress, Asian countries have experienced sudden stops or sharp capital reversals due to external shocks and currency instability. The CMIM, a regional financial safety net, plays its role as a central platform for managing regional financial arrangements. In addition to its crisis resolution function, the CMIM can also be expanded by augmenting a crisis prevention function. Moreover, the ABMI and the ABFs were intended to achieve a more efficient recycling of Asian savings into investment in the region by developing regional bond markets. Gathering regional momentum, Korea's role as an honest broker for further financial institutional integration is important especially in 2012 as a co-chair country of ASEAN+3.

The process of Asian financial integration has been induced by the coordinated regional initiatives of financial cooperation along with real economic integration through the intra-regional free trade agreements. Unlike in Europe, economic integration in Asia emerged with the need for creating regional financial self-help measures after the Asian financial crisis in 1997-98. Since then, financial integration has manifested in various aspects: gradual financial liberalization, increasing cross-border capital flows, establishing regional financial safety nets, and developing local currency bond markets.

Asian economic regionalism has been driven by market-based forces, rather than by a grand blueprint of economic integration. In fact the Asian crisis triggered regional collective initiatives to promote financial integration in East Asia. The crisis revealed what Asia has been lagging behind in terms of its financial system and development compared with real sector integration. Poor performance in the financial sector was caused by several factors, such as: high risk vulnerability to external shocks, heavy dependence on bank financing, insufficient long-term credits and underdevelopment of regional bond markets, weakness of a financial surveillance mechanism, and the lack of competition in financial sectors and premature capital markets. This process of regional financial integration has been supported by the rationale that it achieves better allocation of financial resources and better risk sharing, as well as ultimately promoting regional economic growth.

Intra-regional initiatives have started playing a significant role in fostering financial integration. Asian policymakers realized the absence of regional mechanisms which could have helped avoid the crisis and be used to prevent future crises. They also understood the intrinsic weakness of Asian financial systems and their poor development of both regional and domestic financial markets. As a result of extensive dialogue among ASEAN+3<sup>1</sup> countries, they were able to push forward several initiatives for regional cooperation as part of financial integration.

The subsequent sections focus on financial institutional integration in the region. East Asia's initiatives in support of regional financial integration can be classified into four pillars: (1) the Chiang Mai Initiative (CMI) and its multilateralization (CMIM) as a commitment to provide U.S. dollar liquidity support to member countries through currency swaps in response to urgent short-term liquidity shortages and balance of payment difficulties in crisis; (2) the establishment of the ASEAN+3 Macroeconomic Research Office (AMRO) as an independent regional economic surveillance mechanism; (3) new introduction of regional crisis prevention scheme; and (4) the Asian Bond Market Initiative (ABMI) and the Asian Bond Funds (ABFs) to develop local bond markets for recycling regional capital and to mitigate the double mismatch problem.

## Extent of Financial Integration in East Asia

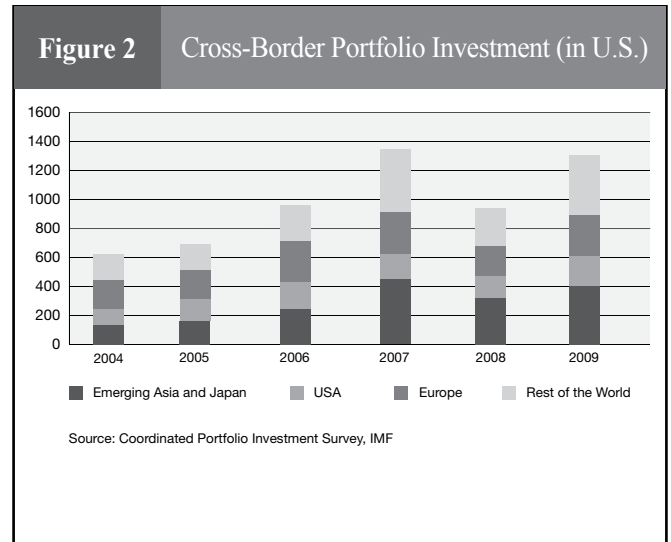
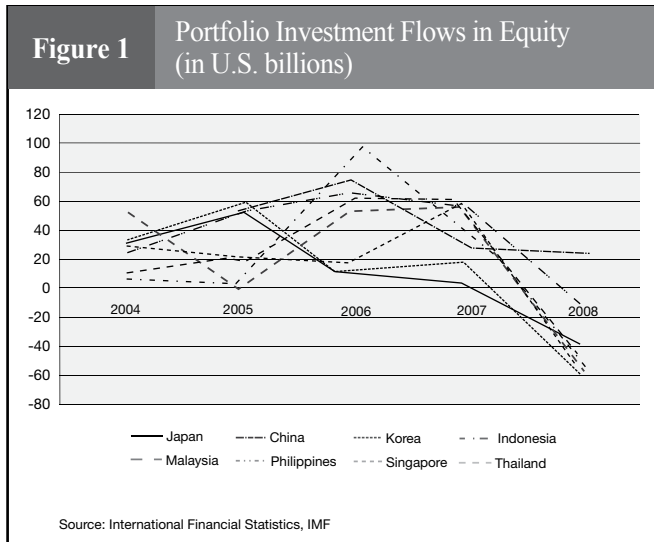
Existing literature points out Asian financial integration lags behind its trade and real-side economic integration. Asia's intra-regional financial linkage is also weaker than the global link. This might be attributed to the lack of well-functioning regional financial institutions and underdevelopment of regional and domestic financial markets. Since the Asian currency crisis, financial market integration and cross-border financial transactions have begun to increase but do not yet reflect convergence for regional integration.

While East Asia has focused on real economic integration through regional trade agreements, the region has also begun working towards financial integration. The 1997-98 Asian crisis raised awareness on two points: (1) Asian countries need to strengthen their domestic financial sectors for managing the efficient absorption of capital inflows and the financial intermediation needs, and (2) the region needs to develop the institutional capacity to resolve cross-country contagion of common financial problems.

Increasing the degree of financial deregulation and capital account liberalization since the 1990s has led to a significant rise in capital inflows towards emerging Asian economies. This surge in capital flows consists mainly of foreign direct investment (FDI) flows, portfolio investments, and short-term banking flows. Even though China is a dominant recipient of FDI inflow in Asia, the general pattern of FDI flows is relatively stable. However, portfolio investment flows and short-term banking flows are regarded as potential sources of systematic risk to Asian economies. In fact, Asian countries experienced the risk of sudden stops or sharp capital reversals due to external economic shocks, currency instability and the double mismatch problem.

Recently the ADB warned that government authorities of emerging Asian economies should be ready to respond when volatile capital flows threaten to destabilize their financial markets. Surges in short-term capital inflows could potentially leave countries vulnerable to sudden reversals in portfolio investment and to currency instability. The huge investment from overseas has put significant pressure on the currencies of emerging economies. Recent surges in capital flows during a global financial crisis have been driven by portfolio equity flows, shown in Figure 1, as investors take advantage of earnings differential between emerging Asian markets and mature markets.

Financial integration implies an increase in capital flows and a convergence tendency for prices and returns on traded financial assets across countries. Since the 1980s, many East Asian countries have been gradually deregulating their financial markets, opening financial services to foreign investors, and



liberalizing capital accounts to improve the efficiency of their financial markets and attract foreign capital. Figure 2 depicts the recent trend of the cross-border portfolio investments of eight emerging Asian countries.<sup>2</sup> Emerging Asia's foreign portfolio investments are increasingly being invested in the region, with intra-regional portfolio holdings rising from 17.8 percent of the region's total foreign asset holdings in 2004 to 27.6 percent in 2009. This implies a higher share of financial assets has been traded within the region and held by regional investors, which is evidence of ongoing financial integration in the regional financial market. In addition, the combined share of the United States and Europe in Asian emerging economies' total foreign portfolio has declined from 47.3 percent in 2004 to 36.9 percent in 2009. These patterns in emerging Asia's portfolio investments imply a higher degree of regional financial integration and cross-border openness.

## Regional Financial Safety Nets

### Overview of CMI and CMIM

After experiencing the severe contagion of the financial crisis in the region, ASEAN+3 realized the need for a regional self-help measure against the recurrence of a similar crisis in the future. The CMI was designed to address short-term liquidity difficulties as a network of bilateral swap arrangements and to supplement existing international financial arrangements. The CMI expanded the existing ASEAN Swap Arrangement (ASA), which was initially established by the five ASEAN countries (Indonesia, Malaysia, the Philippines, Singapore, and Thailand) in 1977. However, its size of \$0.2 billion was insufficient to provide emergency liquidity in crisis.

ASEAN+3 has extended ASA to the other five ASEAN members and the Plus Three countries by increasing its size to \$1 billion. CMI was agreed to in May 2000 in Chiang Mai, Thailand, with the objective of establishing a network of bilateral swap arrangements to address short-term liquid-

ity difficulties in the region and to supplement existing international financial arrangements. The ASEAN+3 finance ministers took the framework of the existing CMI and moved toward its multilateralization in May 2009, and the CMIM was finally made effective on March 24, 2010. The multilateralized CMI provides emergency liquidity support from the total fund of \$120 billion under a single agreement.<sup>3</sup> Since the CMIM is financed in the form of promissory notes, there is no direct and immediate impact on the member country's international reserves.

The CMIM represents a highly significant institutional development for regional financial integration as it not only plays the role of financial safety nets in times of crisis, but also provides a central platform for managing regional financial arrangements. In particular, it enhances ASEAN+3 inter-governmental dialogue for further financial cooperation in related areas by using CMIM governance, including financial surveillance and the development of local bond markets. Future progress on its institutional setup will also serve to facilitate financial integration in the region and contribute to the development of both regional and domestic financial markets.

### CMIM and ESM

In early May 2010, the European sovereign debt crisis and its contagion in the region led European Union policymakers to approve three lending facilities for euro area member states in serious financial distress. The first facility is a 110 billion euro support package for Greece, approved on May 3rd and provided jointly with the IMF. The second facility is the European Financial Stabilization Mechanism (EFSM)<sup>4</sup> with 60 billion euros. The third facility is the European Financial Stability Facility (EFSF)<sup>5</sup> with an amount of 440 billion euros, supplemented with a 250 billion euro IMF commitment.

Comparing the CMIM with the European Stabilization Mechanism (ESM), which consists of the EFSM and EFSF,

Table 1

## CMIM Contributions and Purchasing Multiple

	Contributions			Purchasing Multiple	Voting Power (%)	
	USD (Bil.)		Share (%)			
China	38.4	Exc. HK 34.2	32.0	28.5	0.5	25.43
		HK 4.2		3.5	2.5	2.98
Japan	38.4		32.0		0.5	28.41
Korea	19.2		16.0		1.0	14.77
Plus Three	<b>96.0</b>		<b>80.0</b>		-	<b>71.59</b>
Indonesia	4.552		3.793		2.5	4.369
Thailand	4.552		3.793		2.5	4.369
Malaysia	4.552		3.793		2.5	4.369
Singapore	4.552		3.793		2.5	4.369
Philippines	4.552		3.793		2.5	4.369
Vietnam	1.00		0.833		5.0	1.847
Cambodia	0.12		0.100		5.0	1.222
Myanmar	0.06		0.050		5.0	1.179
Brunei	0.03		0.025		5.0	1.158
Lao PDR	0.03		0.025		5.0	1.158
ASEAN	<b>24.0</b>		<b>20.00</b>		-	<b>28.41</b>
Total	120.0		100.0		-	100.0

Source: The Joint Ministerial Statement of the 13th ASEAN+3 Finance Ministers' Meeting

the ESM is the facility to cope with difficulties caused by exceptional circumstances beyond the member state's control such as its fiscal crisis. The ESM plays its role as a crisis resolution mechanism, much like the CMIM. However, while the purpose of the CMIM is to resolve short-term foreign exchange liquidity crisis by providing US dollars, the ESM aims to overcome a solvency crisis by providing euros. Accordingly, the CMIM conditionality requires no capital control, participation in the Economic Review and Policy Dialogue (ERPD), and maintenance of an appropriate level of international reserve, while the ESM conditionality focuses on fiscal and economic policies. In addition, CMIM supports short-term liquidity via currency swap arrangements, while EFSF is a special purpose vehicle (SPV) setup to make loans to euro area countries.

#### New ASEAN+3 Economic Surveillance Mechanism

In terms of regional macroeconomic and financial surveillance, innovation was introduced within the CMIM framework by establishing the new surveillance unit AMRO. Its mandate includes monitoring potential risk vulnerabilities and

keeping track of key macroeconomic and financial condition trends, as well as minimizing the moral hazard problem arising from the crisis resolution function of the CMIM through short-term liquidity support. It is also important to ensure that potential recipient members of ASEAN+3 maintain proper conditions to repay loans from the CMIM. Established in Singapore in April 2011 by ASEAN+3 countries, AMRO is expected to perform regional macroeconomic surveillance activities, supplementing the global surveillance activities through the IMF mission of Article IV consultations.

AMRO's first director, a Chinese national, was appointed in May 2011 and leads the organization for one year of a three-year term. After his tenure, a second director, a Japanese national, will serve the remaining two years. The first director was expected to represent China's position and to focus on the IMF link. For example, China proposed that the CMIM's IMF-delink portion increase to 30-40 percent of its funds from the current 20 percent.<sup>6</sup> As AMRO becomes effectively operational, the level of the IMF-linked portion will be reduced.



AMRO may not be a perfect substitute for the IMF, but its role in regional surveillance will complement the work being done by the IMF. As part of becoming a solid and well-functioning institution, AMRO is expected to introduce regional policy conditionality in support of the CMIM, contribute to a membership enlargement, and introduce crisis prevention function in the region.

### **Introducing Regional Crisis Prevention Function**

During the global financial crisis, capital flows have shown volatile behavior especially in emerging markets. However, despite their relatively sound economic fundamentals, Asian financial markets are vulnerable to external shocks due to increasing capital flows from and to the region. Therefore, it is natural to consider a regional crisis prevention function to serve as the first firewall against financial risks.<sup>7</sup>

In order to design an effective crisis prevention program, the following key elements should be considered. First, a crisis prevention function needs to be equipped with ex-ante qualifications. In making the decision to provide liquidity, we need to evaluate a country's economic status and the symptoms of the financial crisis, and to minimize potential moral hazard. However, if the ex-ante qualifications were excessively strict, it would lower the chances of using the crisis prevention facility (CPF), therefore making its effectiveness uncertain and eventually eliminating the demand. Considering the trade-off between reducing moral hazard and creating potential demand for the CPF, the regional CPF should strike a balance between ex-ante qualifications and ex-post conditionality. Second, once a swap-requesting country qualifies for the ex-ante conditions, its drawing rights should be guaranteed by an agreement. This automaticity of drawing is critical for the CPF to ensure its credible activation. Third, a regional surveillance unit should properly function to support the two elements mentioned above. To screen ex-ante qualifications and guarantee automaticity of drawing, a surveillance unit should provide appropriate analyses on regional economic conditions.

ASEAN+3 can consider a two-track operation of the current CMIM as a basic framework for the CPF. Its two-track mechanism can be operated as the crisis resolution and crisis prevention functions.<sup>8</sup> That is, the crisis prevention function can be augmented to the current crisis resolution function of the CMIM. If this is the case, a country, showing symptoms of a financial crisis but qualifying ex-ante conditions, may request liquidity support and its drawing rights are granted for a designated period of time. According to de las Casas and Serra (2008), the use of IMF lending with the actual duration of six months or less was only for three cases out of 290 programs between 1990 and 2006.<sup>9</sup> In this regard, the six-month arrangement period of the regional CPF would be

reasonable because the ASEAN+3 CPF is able to meet the corresponding demand for short-term precautionary lending. In designing the details of the ASEAN+3 CPF, members can refer to the IMF lending facilities for crisis prevention, such as flexible Credit Line, Precautionary and Liquidity Line, and the High-Access Precautionary Arrangements program under the Stand-By Arrangement.

In addition, regional policy conditionality by the CMIM framework can be imposed with the aid of AMRO or ASEAN+3 ERPD. In order for this scheme to be effective some prerequisites should be satisfied. For example, the surveillance function will have to be enhanced first before reducing the IMF linked portion, and it might be difficult to ensure market credibility with a limited amount of resources and a lack of reserve pooling.

Another important thing that ASEAN+3 CPF should consider is to characterize exit strategies from the crisis prevention function. If a country still requires additional liquidity support after exhausting the CPF's arrangement period, the CPF-requesting country could be deemed to have structural economic problems, rather than showing crisis symptoms. If this is the case, the crisis prevention function can be switched to the CMIM's crisis resolution track or be linked with the IMF lending facility.

## **Institutional Integration in Asian Bond Markets**

### **Overview of ABMI and ABFs**

After the Asian financial crisis, East Asian countries paid attention to reforming domestic financial markets and developing regional bond markets. It was widely acknowledged that excessive financial dependence on the bank-based system in the region was a cause of the crisis in 1997. The ABMI was established in 2003 to develop the Asian bond markets under the ASEAN+3 framework, and became fully operational that same year. The ABMI aims to develop efficient and liquid local currency bond markets in Asia through recycling savings and international reserves of East Asian countries. It emphasizes the creation of regional bond markets where bonds are denominated in regional currencies. It was also expected to mitigate the chronic double-mismatch problem in East Asia: currency and maturity mismatch. In this regard, developing local currency bond markets constitutes another aspect of ASEAN+3 financial integration.

The main reason behind the establishment of the ABMI and ABFs was the intention to achieve a more efficient recycling of Asian savings into investment in the region by developing local currency bond markets. The 1997-98 crisis was indeed made more severe by the absence of well-developed bond markets, which made Asian companies rely on bank loans and borrow

foreign ones. International reserves and savings in Asia have been largely invested in the U.S. and Europe, and they are then re-invested in Asia. It is known that about 80 percent of Asia's portfolio investment tilts toward assets in the U.S. and Europe. As of March 2009, ASEAN+3 foreign reserves amount to 52 percent of the total reserve in the world, but most of them are still invested in assets outside of East Asia.

As regional financial authorities realized such weakness in their domestic systems, they promoted regional initiatives of the ABMI and ABFs to develop local bond markets. In fact, the size of bond markets increased from about one-fifth of total financial intermediation in East Asian countries in 1995 to approximately one-third in 2010. During the same period, the share of total outstanding local currency bonds issued in East Asia in relation to the world's total increased from about 2.5% to more than 8%.<sup>10</sup>

After the ASEAN+3 endorsement of the ABMI, specific actions have been taken on particular issues of the initiative. In particular, bonds were issued in local currencies by multi-lateral development banks. For example, the ADB issued several local currency bonds; in 2004 the ADB undertook five market-opening transactions in the region's local currency bonds in Malaysia, China, the Philippines, Thailand, and India. As well as issuing bonds, the ADB has launched a new and publicly accessible website, Asian Bonds Online, in 2004 to share information on regional markets, economies, and companies. It provides a wide range of information such as taxation, regulations, bond indices, credit ratings, settlement systems and secondary market trading.

While ASEAN+3 has been involved in developing local currency bond markets along with the ABMI, the Executive Meetings of East Asia and Pacific Central Banks (EMEAP) launched the first Asian Bond Fund (ABF 1) with a capitalization of \$1 billion in 2003. ABF 1 was mandated to invest in dollar-denominated sovereign bonds issued by eight EMEAP countries.<sup>11</sup> However, due to its small size, ABF 1 was expected to have little effect on the market for dollar-denominated sovereign bonds in East Asia.

ABF 2, introduced in 2004 with a capital of \$2 billion, was implemented to purchase local currency bonds from Asian countries. It consists of both a Pan-Asian Bond Index Fund (PAIF) and a Fund of Bond Funds (FoBF). PAIF is a single bond fund index investing in local currency sovereign bonds issued in eight EMEAP countries. FoBF has a two-layered investment structure in eight single-market funds, each of which invests in local currency bonds issued in their own markets.

The ABMI and ABFs have helped the development of bond markets in East Asia and have reduced the currency and maturity mismatch problem. Accordingly, East Asian

economies were able to withstand the global financial crisis showing relatively stronger resilience than the U.S. and Europe. A lot still remains to be done, however, to harmonize rules across the region, strengthen market infrastructure, overcome remaining market impediments, and tighten legal and regulatory frameworks. While Asian authorities need to promote their growth to attract more investment in the region, domestic reforms and regional cooperation initiatives are especially needed to improve accounting standards, market infrastructure, and legal systems.

### **Credit Guarantee Investment Facility**

To develop local currency bond markets in Asia, it is essential to facilitate issuers' access to Asian bond markets. This might require guaranteed credit ratings for local currency bond investments. Moreover, local capital in Asia is required to be invested in medium- and long-term infrastructure projects that lead to Asian economic growth.<sup>12</sup> Therefore, Asia needs to use a large amount of savings and international reserves to fill the financial gaps and to overcome constraints in local currency financing due to the lack of investor's confidence in Asian bond markets.

Strengthening and deepening local currency bond markets can develop domestic financial markets and ultimately enhance regional financial integration and economic growth. Based upon this rationale, in 2008 ASEAN+3 agreed to establish a Credit Guarantee and Investment Mechanism (CGIM), renamed as Credit Guarantee Investment Facility (CGIF) in 2009, to provide credit guarantees to local currency bonds issued in the region and to enable them to raise medium- and long-term financing instruments by improving the conditions for issuing bonds. It is expected to facilitate capital market development and to make the regional financial system less vulnerable to external shocks. The objective of CGIF is to support the issuance of local currency denominated bonds in Asia, so as to contribute to Asian economic development and prosperity through credit guarantee schemes. It is currently in the process of finalizing its operational policies and business plan, and is expected to start its operations before the end of 2012. The CGIF will be established as an ADB trust fund with an initial capital of \$700 million.<sup>13</sup> Major issues regarding the establishment of CGIF, such as business scope, leverage ratio and country limit, were discussed at the ASEAN+3 Finance and Central Bank Deputies Meeting in May 2011.

The CGIF is expected to have the following effects. First, high-rated issuers can seek to lengthen the maturity of their debt issuance and lower-rated issuers can also issue bonds with the aid of the credit guarantee scheme. Second, member countries' external borrowing costs can be reduced. Third, credit guarantees for local currency bonds would help reverse capital outflows and make the regional financial system

sound and resilient. Fourth, supports for infrastructure bonds can serve to provide regional public goods and ultimately lead to regional economic growth.<sup>14</sup> In addition to credit guarantees via the CGIF, some issues are currently part of ASEAN+3 dialogue, including establishing a Regional Settlement Intermediary and Asian Bond Standards among others.

### **Asian Bond Markets Forum**

At the fourteenth ASEAN+3 Finance Ministers meeting in Hanoi in May 2011, ASEAN+3 welcomed the progress of the Asian Bond Markets Forum with the aim of standardizing market practices and harmonizing cross-border regulations of financial transactions. It is a common platform to foster standardization of market practices and harmonization of regulations relating to cross-border bond transactions in the region.

Since its onset, it has become an important forum for bond market experts from both public and private sectors in the region. There also has been progress in the technical working group on legal and regulatory feasibility assessment of the Regional Settlement Intermediary (RSI). Another possible development relates to the enhancement of domestic rating agencies through capacity building programs, as credit rating agencies of East Asian countries are often relatively small and tend to use non-comparable methodologies and benchmarks in their rating process, needing therefore some form of standardization and harmonization across the region.<sup>15</sup>

### **Challenges of Financial Integration and Korea's Role**

To promote Asian financial integration, a key priority would be laid on regional financial cooperation. Earlier discussion on progress toward financial integration was assessed in terms of regional institutional measures. An even stronger degree of financial market integration is possible if significant efforts are made toward regional institutional integration. Since it is not easy to integrate cross-border markets and harmonize regulations in the region, regional institutional development is necessary to generate benefits from economic integration.

The recent global financial crisis accelerated ASEAN+3 financial cooperation. With this momentum, Korea's role for further regional institutional integration is important, especially in 2012 as a co-chair country of the ASEAN+3 framework. In fact, Korea has been deeply involved in regional financial cooperation and also shown strong leadership in initiating detailed proposals and cooperative actions. Many important issues are currently being discussed among ASEAN+3 members, including increasing the size of CMIM, increasing the IMF-delinked portion of CMIM, operational issues of AMRO and surveillance activities, members opening bank accounts of CMIM in the central bank, introducing new regional crisis prevention facility,

various issues of Asian bond markets, and regional-global cooperation with the IMF among others.

The ASEAN+3 ERPD aims to identify potential macro-economic and financial risks, prevent crises, monitor regional capital flows and currency markets, and enhance self-help support mechanisms in the region. While the ERPD was not sufficient for regional surveillance, a new surveillance unit, AMRO, is expected to play an important role towards regional financial integration. Even though the ERPD became an information exchange mechanism on economic conditions and policies, its non-interference principle was an impediment to make effective surveillance activities. In general, three components of economic surveillance are suggested: information sharing, peer review/peer pressure, and due diligence. Currently ASEAN+3 surveillance is in transition from the information sharing stage to the next stage of a more rigorous scrutiny stage, which must involve due diligence in the future. The EU's reform of financial supervisory institutions includes the Comply-or-Explain principle for policy recommendations which makes it a more binding peer review/peer pressure. In the long-run AMRO should focus on providing the regional equivalent of IMF multilateral surveillance by moving forward to the effective peer review and pressure stage and due diligence. This would make AMRO a well-resourced professional surveillance unit, and introduce a more effective macro-prudential supervisory framework for financial supervision and integration.

Korea has taken the lead in dialogue within the ASEAN+3 framework: for example, it proposed the ABMI in 2002. Korea is also expected to exhibit its intellectual leadership in the process of establishing a regional crisis prevention mechanism. It is particularly important to introduce the regional CPF because, given the stigma from the IMF lending facilities, it would be politically difficult for any government in the region to seek an IMF program. Moreover, Korea's efforts to coordinate member opinion on the current issues mentioned earlier will significantly contribute to the outcome of regional financial integration and to continuing its momentum in the future. In doing so, Korea's role as the honest broker in the ASEAN+3 framework is emphasized. For example, the ASEAN+3 negotiation on CMIM contribution shares was a fierce diplomatic battle among member countries. In the process, Korea proposed the mediated settlement on the member's CMIM contribution shares that became the agreement's final outcome. It also has an important role with regional decision-making between China and Japan. For instance, the selection process of the first director of AMRO was indeed a fierce diplomatic battle, especially between China and Japan. While Japan pioneered the institution's development, selecting a Chinese national as the first director may imply that China takes the initiative in both establishing AMRO as an

international institution and setting up its tone and mandate for future institutional developments. In this regard, Korea's role in regional cooperation is important for the development of financial integration.

An important factor with Asian financial integration is the fact that Asian emerging economies have experienced financial instability when domestic markets were opened to foreign participation. The global financial crisis affected Asian financial systems in various ways, including a massive decline in capital inflows, currency values and asset prices. Deepening regional financial integration will provide more benefits to the Asian economy through efficient allocation of financial resources and risk diversification. Therefore, ASEAN+3 member countries have to keep their balance between the net benefits derived from financial integration, and the potential cost of risk vulnerability and crisis contagion in designing a regional financial institutional mechanism.

*Dr. Park is assistant professor of Economics, College of Social Sciences at Ajou University.*

ture: Modes of development and integration of Asian financial markets," ADBI Working Paper No. 229, Asian Development Bank Institute).

<sup>13</sup> Japan and China are to contribute \$200 million, Korea \$100 million, and the ADB \$130 million. Five members of ASEAN including Malaysia, Thailand, Indonesia, the Philippines and Singapore, are to contribute US\$12.6 million each; Brunei pledged to contribute \$5.6 million, Vietnam \$1.1 million, and three remaining countries of Laos, Cambodia and Myanmar each contributing \$100,000.

<sup>14</sup> Park and Rhee (2011) conduct a quantitative analysis on the macroeconomic effects of credit guarantees in Asian bond markets by simulating a five-block version of the IMF Global Integrated Monetary and Fiscal model. The simulation scenarios reveal that (1) even though East Asian financial cooperation upgrades some of ASEAN+3 member countries' credit fundamentals, it helps increase both the corresponding countries' real GDP and regional real GDP, and (2) this effect is amplified as more member countries' credit ratings are upgraded. (Source: Park Y.-J. and D.-E. Rhee, 2011, "A quantitative assessment of regional credit guarantee scheme in Asian bond markets," KIEP Working Paper 11-07, Korea Institute for International Economic Policy).

<sup>15</sup> ADB (2010) Institutions for Regional Integration: Toward an Asian Economic Community. Manila: Asian Development Bank.

---

<sup>1</sup> The ten ASEAN (Association of South East Asian Nations) member countries are Thailand, Malaysia, Singapore, Indonesia, the Philippines, Brunei Darussalam, Burma, Laos, Vietnam, and Cambodia. The Plus Three countries are the Republic of Korea, Japan, and the People's Republic of China.

<sup>2</sup> Singapore, the Philippines, Malaysia, Korea, Indonesia, India, Hong Kong, and Thailand.

<sup>3</sup> ASEAN+3 has agreed to double the CMIM reserve pool from \$120 billion to \$240 billion in May 2012. (Source: The Joint Statement of the 15th ASEAN+3 Finance Ministers and Central Bank Governors' Meeting).

<sup>4</sup> The European Commission is empowered to contract borrowings on behalf of the EU for the purpose of funding loans made under EFSM. EFSM is a treaty-based mechanism, covering all EU Member States. Under the EFSM, the EU can borrow up to 60 billion euros to lend to any EU Member State. Under the Balance of Payments facility, support is available only to Member States which have not yet adopted the euro. (<http://www.efsf.europa.eu>).

<sup>5</sup> In order to reach its objective, EFSF can issue bonds or other debt instruments on the market to raise the funds needed to provide loans to countries which submit a request. Issues are backed by guarantees given by euro area Member States of up to 440 billion euros. EFSF is part of a wider safety net. Its funds are combined with loans of up to 60 billion euros coming from the EFSM, and up to 250 billion euros from the IMF for an overall rescue package worth up to 750 billion euros. (<http://www.efsf.europa.eu>).

<sup>6</sup> ASEAN+3 has agreed to increase the IMF-delink portion to 30% in May 2012. (Source: The Joint Statement of the 15th ASEAN+3 Finance Ministers and Central Bank Governors' Meeting).

<sup>7</sup> The current CMIM is an arrangement of the regional crisis resolution facility in the sense that it is associated with ex-post treatment after the trigger event of a crisis that macroeconomic fundamentals have already been deteriorated.

<sup>8</sup> ASEAN+3 adopted "CMIM Stability Facility (CMIM-SF)" as the name for crisis resolution mechanism and "CMIM Precautionary Line (CMIM-PL)" for crisis prevention function. (Source: The Joint Statement of the 15th ASEAN+3 Finance Ministers and Central Bank Governors' Meeting)

<sup>9</sup> de las Casas M. and X. Serra, 2008, "Simplification of IMF lending – Why not just one flexible credit facility?" Banco de Espana.

<sup>10</sup> Capannelli G., 2011, "Institutions for economic and financial integration in Asia: Trends and prospects," ADBI Working Paper No. 308, Asian Development Bank Institute.

<sup>11</sup> China, Hong Kong, Korea, Singapore, Indonesia, the Philippines, Malaysia, and Thailand.

<sup>12</sup> Bhattacharyay (2010) estimates the financing needs for Asia's infrastructure at around \$750 billion per year in energy, water, transport, telecommunications, and sanitation between 2010 and 2020. (Source: Bhattacharyay B., 2010, "Financing Asia's infrastruc-