Draft Report

The Role of Regional Financial Safety Nets in Global Architecture

2012. 3.

KOREA INSTITUTE OF FINANCE

kif

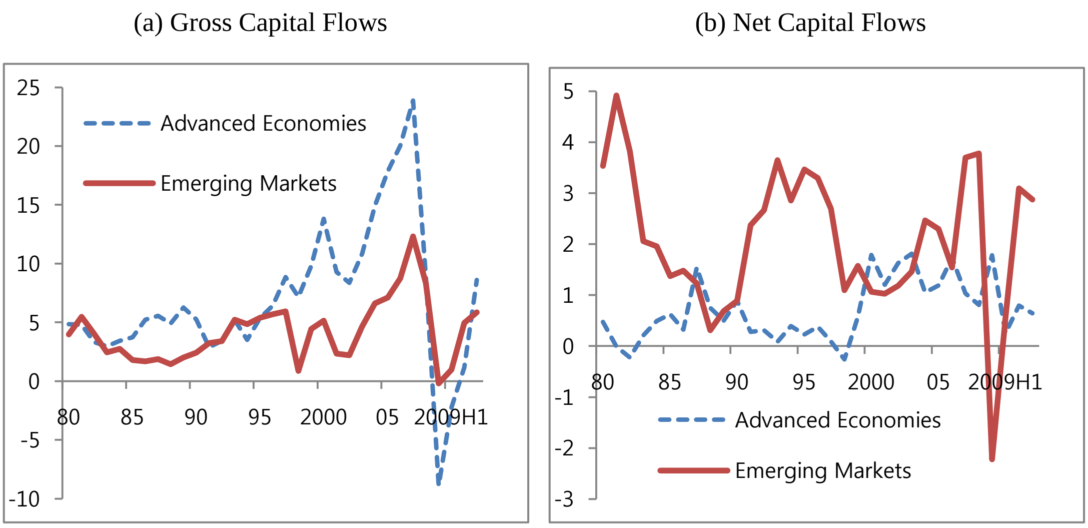
Contents

I. Capital Mobility and Global Financial Safety Nets

1. Financial Globalization and its Risks

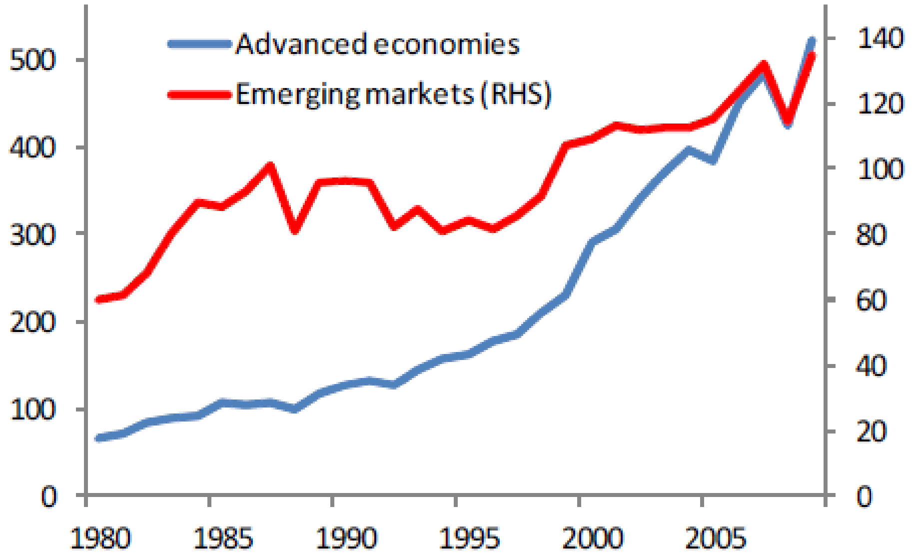
Cross-border capital flows in the global financial market have increased rapidly in the last 20 years. Gross capital inflows had reached an unprecedented level during the run-up to the recent global financial crisis not only in nominal term but also in percent of GDP, surpassing 20% of GDP in advanced economies and 10% of GDP in emerging economies(see figure 1). Such a rapid growth of capital flows in both advanced and emerging economies far exceeds the growth of real economic activities. Among various reasons, financial openness is associated with the sharp increase in international capital transactions. Financial openness can be measured in a number of ways. IMF (2011c) measures financial openness as the sum of external assets and liabilities as a share of GDP. Figure 2 shows how fast financial openness has progressed in advanced and emerging economies during the last 20 years.

<Figure 1>　　　　Cross-border Capital Flows (percent of GDP)



Source : IMF, 2011b, “International Capital Flows: Reliable or Fickle,”

<Figure 2 > **Financial Openness**

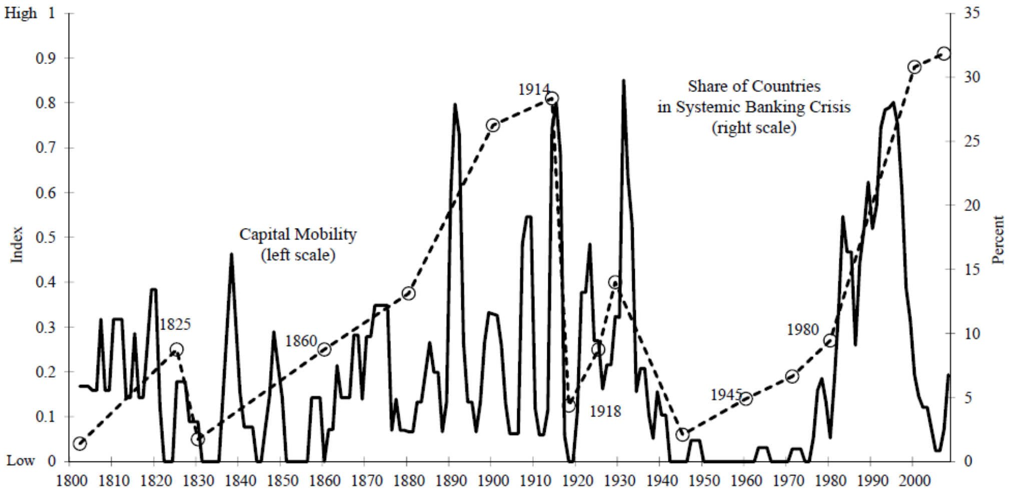


Source : IMF, 2011c, “Mapping Cross-Border Financial Linkages: A Supporting Case for Global Financial Safety Nets.”

Note : Financial Openness is the sum of external assets and liabilities as a share of GDP

Reinhart and Rogoff (2009) point out that periods of high international capital mobility have repeatedly produced international banking crises. Figure 3 shows that episodes of higher capital mobility have historically been associated with greater incidences of financial crises. Coupled with the fact that capital mobility has increased rapidly over time, it implies that the current global financial system is more vulnerable to a financial crisis than ever.

<Figure 3> **Capital Mobility and Financial Fragility**

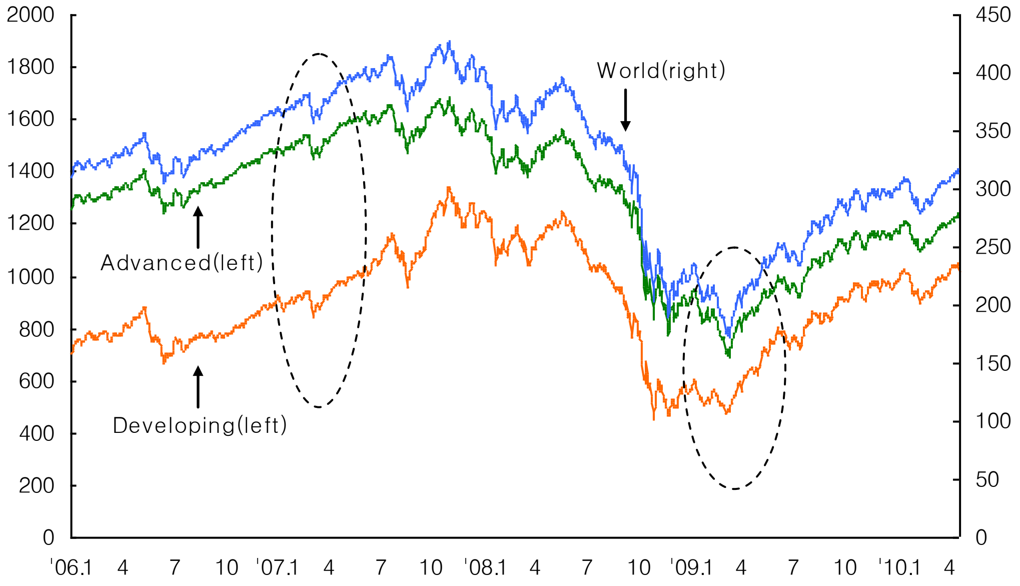


Note : Episodes of high capital mobility (dashed line) have historically been associated with a greater incidence of financial crises (solid line)

Source : Reinhart and Rogoff (2009)

By examining the relationship between financial openness and stock market performance during the recent global financial crisis, further evidence can be found for how closely financial opening is related to vulnerability of financial crises. Figure 4 depicts the MSCI indices for both advanced and emerging economies. We choose the global financial crisis period to begin at March 2007 and end in March 2009. March 2007 is chosen for the beginning period since the first default of U.S. financial institutions, associated with the subprime mortgage loans, occurred in that month. March 2009 is selected as the ending period of global financial crisis because MSCI indices started to rebound strongly from that month. Across 74 countries, stock prices dropped by an average of 44% during the sample period. Also, emerging market stock prices fell by 36% on average whereas advanced market stock prices fell more with 49% on average (see table 1)

<Figure 4> **MSCI Indices**



Source : Bloomberg

<Table 1> Stock Price Changes during the Global Financial Crisis

(Unit : %)

Developing Countries	Advanced Countries	All Countries	
-35.9	-48.8	-43.7	
East Asia	Latin America	Western Europe	Eastern Europe
-36.0	-26.0	-54.3	-56.2

Source : Bloomberg

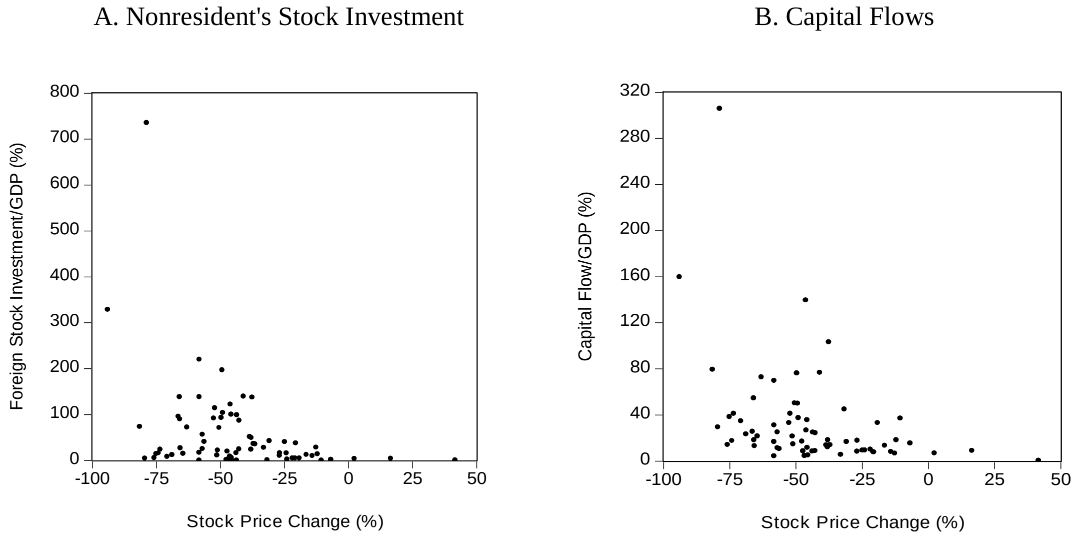
Note :1) The sample period spans from February 2007 to March 2009

2) The countries in the sample are classified as advanced and developing economies according to the IMF's rules.

3) The sample includes 28 advanced and 46 developing economies.

During the global financial crisis, the scatter diagram between financial openness of countries in the sample and their stock price changes are drawn in figure 5. In figure 5, financial openness is proxied by outstanding foreigners' stock market investment in terms of GDP as well as the sum of capital inflows and outflows in an absolute value term. Higher values of these two proxy variables are treated as having higher financial linkages with overseas financial markets. Figure 5 shows that higher values of the two variables tend to be associated with higher drops of stock prices. It follows that the extent to which domestic stock markets were affected by the global financial crisis vary with the degree of financial linkage with overseas markets.

<Figure 5> Financial Linkages and Stock Market Performances



Source : 1) Bloomberg 2) IMF, International Financial Statistics

Note : 1) Stock price changes are percentage changes from February 2007 to March 2009

2) Nonresident's stock investment = ratio of nonresident's portfolio investment balance to GDP (%), Capital flows = (|foreign net capital inflows| + |resident's net capital outflows|)/GDP (%). All these variables are those observed in 2006.

To investigate why high capital mobility tends to be associated with outbreak of financial crises, especially in emerging market economies, it is important to understand more about main characteristics of international capital flows to emerging markets. The recent IMF paper[1] analyzes the push/pull factors of capital flows to 48 emerging market economies between 1990 Q1 and 2010 Q2. The push factors of capital inflows to emerging market economies typically refer to global factors that influence all emerging markets, such as world interest rates and global risk appetite. Pull factors typically refer to the relative attractiveness of different destinations for investment opportunities such as market size, the quality of institutions, economic stability, trade openness, and growth potential.

<Table 2> Examples of Factors Affecting Capital Inflows to Emerging Markets

	Cyclical	Structural
Push	- Low US interest rates - Low global risk aversion - Strained AE balance sheets	- International portfolio diversification - Low AE potential growth
Pull	- High commodity prices - High domestic interest rates - Low domestic inflation	- Improving EM balance sheets - High EM potential growth - Trade openness

Source : IMF (2011d)

[1] IMF, 2011d, "Recent Experiences in Managing Capital Inflows – Cross-cutting Themes and Possible Policy Framework."

<Table 3> Determinants of Capital Inflows

	Total Inflows to Ems (Log million US $)
US 10 yr Treasury bond yield (%)	-0.26 *** (0.038)
VIX index (Log)	-0.23 *** (0.066)
Trade openness (Trade/GDP)	0.70 ** (0.307)
Growth (%)	0.04 *** (0.008)
Avg. Size (log avg. GDP)	0.46 *** (0.644)

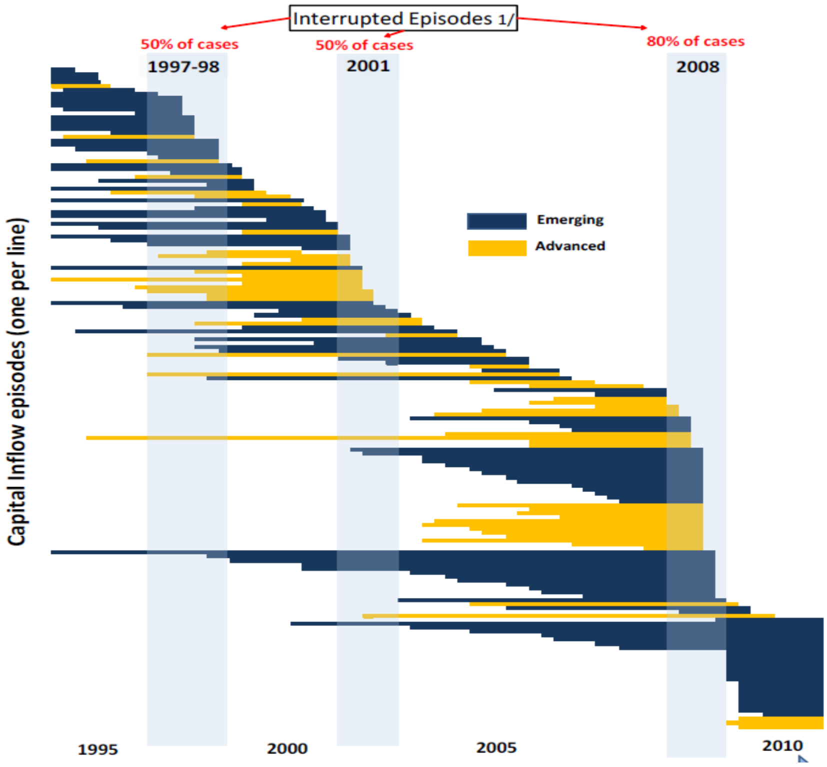
Note : Standard errors in ( ). *** & ** denote 1% and 5% statistical significance.

Source : IMF (2011d)

The main results of the IMF analysis on the push and pull factors of capital inflows are stated in table 2. First, temporary tides in capital flows to emerging markets appear to be strongly correlated with changes in global financing conditions, with net flows to emerging markets rising sharply around periods with relatively low global interest rates and relatively high tolerance for risk[2]. A yield shock of 100 basis points to the U.S. 10-year Treasury bond is estimated to be associated with, on average, 26% reduction of total inflows to emerging markets while 10 percent increase in VIX index is associated with 2.3% drop of total inflows to emerging markets. Second, emerging markets' economic growth is the most significant pull factor. One percentage point increase in emerging markets' growth is estimated to be associated with, on average, 4 percent increase in total inflows. Third, inflow episodes start at different times for different countries, but often end together. Different start times likely reflect country-specific pull factors, while similar endpoints suggest that the reversal of push factors is dominant in ending periods of large capital inflows. For instance, 50% to 80% of surge episodes ended around the same time in 1997-98 Asian crises, September-11 incident, and 2008 global financial crises as shown in Figure 4.

[2] IMF (2011a)

< Figure 6>　　Capital Inflows –Gradual Buildups but Synchronized Stops



Source : IMF, 2011e, "Mapping Cross-Border Financial Linkages: A Supporting Case for Global Financial Safety Nets

Given that capital inflows to emerging markets are strongly affected by exogenous factors, such as international risk perception and global interest rates, fiscal discipline and monetary policy focused on controlling inflation, aiming at attaining economic stability, may not be sufficient to prevent financial crises in emerging markets[3] In order to prevent and contain the costs of financial crises, various policy options have to be considered. First of all, capital flow management measures (CFMs) are gradually gaining legitimacy in the international discussion as policy tools to dampen the possible side effects of excessive capital flows and enhance the stability of relevant economies. Recently, several economists from the IMF find capital flow management measures are associated with a less risky external liability structure. They also find that reasonably strong association between pre-crisis prudential and capital policies and the extent of

[3] IMF, 2010, "IMF, Regional Financial Safety Nets to Create Stronger Links," IMF Survey Magazine.

economic resilience during the period of sudden stop.[4] Their findings imply that capital management measures can be an important part of policy instruments to reduce the likelihood of financial instability arising from inflow surges while capital controls may be of limited or only temporary use in affecting the aggregate volume of flows. In this context, the G20 leaders, in November 2011, endorsed "G20 Coherent Conclusions for the Management of Capital Flows Drawing on Country Experiences", which cautiously support the increasing use of capital controls and other capital account management policies.

Box 1: G20 Coherent Conclusions
for the Management of Capital Flows Drawing on Country Experiences

as endorsed by G20 Heads of State and Government

November 3-4, 2011

Capital flows are a central feature of the international monetary system. A key challenge facing policy makers worldwide, and especially among G20 countries, is how to reap the benefits from financial globalization, while preventing and managing risks that could undermine financial stability and sustainable growth at the national and global level. In order to help address the challenges posed by large and volatile capital flows, G20 members, drawing on countries' experiences, have come to the following conclusions, which should be seen as a non-binding contribution to their decision making process regarding capital flow management measures, and not as a limitation of national policy choices.

1. Precise classifications of different policy measures are hard to draw in some instances; in particular there is an overlap between capital flow management measures and macro-prudential policies. For the purposes of these conclusions, capital flow management measures are those designed to influence capital flows and comprise residency-based capital flow management measures, often referred

4 Qureshi et al., 2011, "Managing Capital Inflows: the Role of Capital Controls and Prudential Policies," *NBER WP* 17363

to as capital controls, and other capital flow management measures that do not discriminate on the base of residency but are nonetheless designed to influence flows. The latter category would typically include (a) measures that differentiate transactions on the basis of currency, including a subset of prudential measures, and (b) other measures (e.g. taxes on certain investments) that are typically applied in the non-financial sector.

2. Capital flow management measures may constitute part of a broader approach to protect economies from shocks. In circumstances of high and volatile capital flows, capital flow management measures can complement and be employed alongside, rather than substitute for, appropriate monetary, exchange rate, foreign reserve management and prudential policies.

3. The decision about whether and how to use capital flow management measures should be approached from a practical economic and financial risk management perspective, taking into account that the coordinated use of different policy tools is key for an effective and coherent approach. Sound macroeconomic policies bear the prime responsibility for ensuring overall economic health, and an appropriate structural environment, including effective financial regulation and supervision, is important for financial stability.

4. Capital flow management measures should not be used to avoid or unduly delay necessary adjustments in the economy. In particular, we will move towards more market-determined exchange rate systems, enhancing exchange rate flexibility to reflect underlying economic fundamentals and refraining from competitive devaluation of currencies.

5. There is no one-size-fits-all approach or rigid definition of conditions for the use of capital flow management measures. Country-specific circumstances have to be taken into account when choosing the overall policy approach to deal with capital flows.

6. The size, depth, and level of development of the local financial sector, as well as the institutional and regulatory strength of a country, play a key role in assessing the appropriateness and relative strengths and drawbacks of different policy measures.

7. Recognizing that sudden stops and reversals can undermine financial stability, capital flow management measures should operate in a countercyclical fashion, according to the specific global and domestic macroeconomic and financial stability situation. Capital flow management measures should be transparent, properly communicated, and be targeted to specific risks identified. In order to respond properly to the specific risks identified, capital flow management measures should be regularly reviewed by national or regional authorities as appropriate. In particular, capital controls should be adapted or reversed as destabilizing pressures abate. Capital flow management frameworks need to maintain sufficient flexibility in order to be effective under varying circumstances and challenges, including in order to help prevent circumvention efforts.

8. It is important to further strengthen domestic financial sectors. The development and deepening of local capital and bond markets can help absorb capital flows and deal with their volatility, direct them to productive activities in the real sector, promote growth and development of the local economy, and maintain a financing base in case of international financial turmoil. As a more sophisticated financial market tends to attract capital flows and, thus, can give rise to sudden outflows, it is important that adequate regulation and prudential practices are set up commensurate with financial sector development and a prudent balance with the real sector economy is maintained. An appropriate macro-prudential framework should also be considered.

Although capital flow management measures may help reduce the risk associated with volatile capital flow, stringent government regulations cannot fully insulate emerging market economies from the risks of sudden stop of capital flows. Large swing of cross-border capital flows over time have made it more likely that problems in a particular region spread to the rest of the world very quickly and affect those countries which have maintained sound macroeconomic policies and have no solvency problem. Unlike a closed economy where its central bank has a power to provide unlimited supply of domestic currency, there exists no international lender of last resort when an emerging market economy suffers from liquidity shortage of internationally accepted hard currency. This drawback is an incentive for markets to bet against a country at the first sign of liquidity pressure. In this regard, it is important to enhance the global financial safety nets which allow countries in need to have access to potentially substantial resources to prevent and reduce the costs of financial crises.

2. Recent Discussions on Global Financial Safety Nets

According to the IMF website[5], the global financial safety net refers to a set of crisis prevention and resolution instruments, encompassing self-insurance (reserves); bilateral arrangements (e.g. swap lines between central banks during periods of stress); regional arrangements such as those in Asia, Europe and Latin America; and multilateral arrangements with the IMF at their center.

The 2008 global financial crisis has made academics and policy makers to wonder if the advance in financial globalization in the past might have not only helped to enhance the efficiency of distribution of global recourses but built more instability in the global financial system. Such awareness reignited a live international discussion on the causes of the instabilities in the international monetary system and measures to prevent and

[5] http://www.imsreform.org/safety.html

cope with financial crises. In its recent paper on the reform of the international monetary system, the IMF (2011a) identifies four root causes of the problems in the current "post-Bretton Woods" monetary system: inadequate global adjustment mechanisms to prevent inconsistent or imprudent policies among systemic countries; lack of a comprehensive oversight framework for growing cross-border capital flows; inadequate systemic liquidity provision mechanisms; and structural challenges in the supply of safe assets.

Especially, inadequate systemic liquidity provision mechanism should be fixed because a systemic liquidity crisis requires the potential availability of very large resources, and there is no global mechanism currently to ensure this function in a predictable manner. That is, there is no international lender of last resort to deal with the risks from increased exchange rate flexibility and financial globalization. In this context, the G20 leaders agreed in Seoul in 2010 to work further to strengthen global financial safety nets, which help countries to cope with financial volatility by providing them with practical tools to overcome sudden reversals of international capital flows[6].

Regional financing arrangements is positioned as a building block of global financial safety nets through which international cooperation is pursued to provide adequate liquidity for more stable global financial markets. There has been a rising emphasis on strengthening the role of regional financial arrangements and enhancing the cooperation between the international financial institutions such as the IMF and regional financing arrangements in surveillance and financing. For instance, in the Cannes Summit in 2011, the G20 leaders endorsed "G20 Principles for Cooperation between the IMF and Regional Financing Arrangements.

[6] The G20 Seoul Summit Leaders' Declaration November 11-12, 2010

II. Regional Reserve Pooling Arrangement and Its Examples

1. Emergence of Regional Reserve Pooling Arrangements

The 2008 global financial crisis once again proved the importance of accumulating foreign exchange reserves served as balance-of-payments insurance against the crisis. Although the crisis highlighted the need for large foreign exchange reserves, accumulating a large amount of foreign exchange reserves accompanies high costs in the following respects: assets held by foreign exchange reserves tend to yield low returns; countries holding a large amount of foreign exchange reserves are exposed to risk of making accounting losses arising from appreciation of domestic currencies against reserve currencies; and foreign exchange reserve accumulation through running current account surpluses may feed global imbalances which can cause financial fragility worldwide.

Due to these shortcomings of foreign exchange reserves accumulation, discussions on alternatives to reserve accumulation have emerged. Thus far, five alternatives were proposed: regular issuance of Special Drawing Rights (SDRs) by a global financial institute; extended usage of Flexible Credit Line (FCL) by the IMF; institutionalization of currency swaps between central banks; creation of a global network of currency swap lines between central banks, so-called a "global safety net"; and lastly, regional reserve pooling arrangements. Among these five alternatives, it is claimed that the regional reserve pooling arrangement is the most feasible option as the other four alternatives have certain limitations[7].

Firstly, regular issuance of SDRs cannot be a feasible option because SDRs are not used in private transactions. Governments cannot use SDRs to intervene in the foreign exchange market as long as SDRs do not have their own private market. Since SDRs are

[7] Eichengreen, Barry, "The International Financial Architecture and the Role of Regional Funds," Papers and Proceedings – The International Financial Architecture, FLAR, Mar 2011

not traded in the market, governments and corporations do not have any incentive to issue SDR-dominated debts and institutional investors do not have demand for SDR-dominated bonds either. Also, they do not have any reason to prefer the SDR's fixed weights because if they want basket-based assets or liabilities, they can construct currency baskets of their own rather than accepting the SDR's fixed weights. Moreover, assets should have liquidity in order to be part of official foreign exchange reserves. Yet, the lack of private demand for SDR-dominated debts, and the resulting shortage of liquidity, makes the SDR-dominated debts inappropriate to compose a large proportion of foreign exchange reserves. Although it is possible for governments to exchange SDRs for such internationally freely usable currencies as U.S. dollars with IMF, this possibility still has a limitation; expansion on IMF fund does not seem to be feasible as long as member countries oppose to the expansion due to the risk of inflation, moral hazard and the lack of political responsibility.

Secondly, IMF proposed the extended operation of FCL, but this proposal also has limitation: stigma effect. Although FCL was intended to enable countries with strong fundamentals to borrow reserves without having to satisfy onerous conditions before an actual crisis hurts them[8], countries are still reluctant to apply to FCL since applying to FCL stigmatizes them as starting to be economically collapsed. In order to reduce the stigma effect of FCL and to encourage countries with strong fundamentals to ask for assistance before a crisis, IMF reformed FCL, but the reform was not so effective because IMF will exclude a country from FCL once the country becomes unable to satisfy the suggested standards of IMF. The exclusion can stigmatize the country as economically collapsed, and this stigmatization eventually can aggravate the country's small crisis to a serious one. Thus, FCL, even after IMF's efforts to reform, is not as feasible as expected.

[8] International Monetary Fund, "Factsheet: The IMF's Flexible Credit Line (FCL)" (15 September 2011), at http://www.imf.org/external/np/exr/facts/fcl.htm

Thirdly, the institutionalization of currency swaps between central banks was proposed as well. Although Korea was a good example of contriving the bilateral dollar swap arrangement negotiated with the Federal Reserve System at the peak of the recent global financial crisis, the dollar swap arrangement of Korea was only temporary. Moreover, when Indonesia tried to negotiate the bilateral dollar swap arrangement with the Fed during the crisis in 2008, the Fed rejected Indonesia's request. It demonstrates that the bilateral dollar swap arrangements between central banks are very selective and dependent on the political decision of countries providing dollars.

The fourth idea of a "global safety net" also contains the limitation of political obstacle similar to the institutionalization of currency swaps between central banks. In order to establish a true "global safety net," the key-currency issuers, such as the Fed and the ECB, should agree to provide full liquidity within the safety net when needed. Yet, due to the political obstacles, this agreement is very hard to be reached. The four US $ 30 billion swaps extended by the Fed to Brazil, Mexico, Singapore and Korea during the global financial crisis exemplify the problem inherent in a "global safety net": The U.S. Congress criticized those four extended bilateral swaps as giveaways. The recent case of EU negotiation with IMF also shows the political obstacle in a "global safety net." Germany's agreement to extend the amount of Greece rescue package was required when EU tried to help Greece overcoming the crisis. Germany, however, was reluctant to agree with extension so that EU needed to negotiate with IMF rather than helping Greece by itself. These two examples clearly elaborate the limitation of operating a "global safety net."

With the increasing importance of regional reserve pooling system, global tendency arose to cooperate with the existing regional system. For instance, IMF started to establish connection with the existing regional monetary cooperation systems. In October 2010, IMF held a conference with regional financial organizations in Asia, Europe, Latin

America, and Middle East to discuss mutual cooperation. Moreover, as the result of G20 Summit in Seoul in November 2010, G20 and IMF proposed “G20 Principles for Cooperation between the IMF and Regional Financing Arrangements” during the G20 Summit in France in November 2011(Box 2).

Box 2: G20 Principles for Cooperation between the IMF and Regional Financing Arrangements

as endorsed by G20 Heads of State and Government

November 3-4, 2011

In November 2010, G20 Leaders also tasked G20 Finance Ministers and Central Bank Governors to explore “ways to improve collaboration between RFAs and the IMF across all possible areas”. Based on contributions by the EU and by ASEAN+3 countries members of the G20, the following non-binding broad principles for cooperation have been agreed. Also, collaboration with the IMF should be tailored to each RFA in a flexible manner in order to take account of region-specific circumstances and the characteristics of RFAs.

1. An enhanced cooperation between RFAs and the IMF would be a step forward towards better crisis prevention, more effective crisis resolution and would reduce moral hazard. Cooperation between RFAs and the IMF should foster rigorous and even-handed surveillance and promote the common goals of regional and global financial and monetary stability.

2. Cooperation should respect the roles, independence and decision-making processes of each institution, taking into account regional specificities in a flexible manner.

3. While cooperation between RFAs and the IMF may be triggered by a crisis, ongoing collaboration should be promoted as a way to build regional capacity for crisis prevention.

4. Cooperation should commence as early as possible and include open sharing of information and joint missions where necessary. It is clear that each institution has comparative advantages and would benefit from the expertise of the other. Specifically, RFAs have better understanding of regional circumstances and the IMF has a greater global surveillance capacity.

5. Consistency of lending conditions should be sought to the extent possible, in order to prevent arbitrage and facility shopping, in particular as concerns policy conditions and facility pricing. However, some flexibility would be needed as regards adjustments to conditionality, if necessary, and on the timing of the reviews. In addition, definitive decisions about financial assistance within a joint programme should be taken by the respective institutions participating in the programme.

6. RFAs must respect the preferred creditor status of the IMF.

During the 2008 global financial crisis, regional monetary cooperation played critical roles to mitigate adverse effects of the crisis. Europe currently has three regional monetary cooperation systems and will establish another one: Medium Term Financial Assistance Mechanism (MTFA, also known as Balance-of-Payments Assistance), European Financial Stabilization Mechanism (EFSM) and European Financial Stability Facility (EFSF) are currently in operation; European Stability Mechanism (ESM) will be utilized in 2012. Middle East has the Arab Monetary Fund (AMF), and Latin America has “Fondo Latinoamericano de Reservas” (FLAR, also known as Latin American Reserve Fund). East Asia recently established Chiang Mai Initiative Multilateralization (CMIM). These regional monetary cooperation systems are supposed to support countries experiencing a financial crisis of the region. The rest of this chapter introduces in details about these regional monetary cooperation systems.

<Figure 7> IMF and Regional Financing Arrangements Members

Source : IMF

2. Europe

MFTA was established in 1971 with the aim of providing a rescue packages to EU Member States under the balance-of-payments crisis. After some of EU Member States adopted euro currency in 1999, MTFA was amended to support EU Member States that do not use euro currency only. The current size of MTFA is EUR 50 billion: before the 2008 financial crisis, it was a total of EUR 12 billion; in December 2008, it was raised to EUR 25 billion and finally to EUR 50 billion in May 2009. Before applying to rescue packages of IMF or other international financial institutions, EU Member States are required to check the loan availability from MTFA.

MTFA is financed by issuing debts on behalf of the EU on international financial markets and on-lending the proceeds to the countries in need. When the European Commission and EU on-lend the proceeds to the countries in need, 'AAA' loan rates obtained by the EU on international financial markets at the moment of fund-raising are passed on to the countries in need without adding any additional margin so that the countries in need can take the advantage of the most favorable rates available globally[9] without any additional costs. By principle, loans should be provided solely by the EU. In recent practice, however, the assistance has usually been extended in cooperation with IMF and other international institutions or countries.

In order to achieve loans through MTFA, a country in need is required to go through three steps. First of all, a Member State which needs a rescue loan from MTFA should submit a request to the Commission and other Member States. The request package consists of an application and a draft of adjustment program designed to achieve a sustainable balance of payments position. The request package will be discussed within the relevant EU bodies and, if applicable, with other creditors as well. If it is proven that the country applied does have any balance-of-payments problems, the Council takes a decision whether to grant mutual assistance (MTFA) based on a recommendation by the Commission. If the Council approves that the country applied needs supports through MTFA, the Council continues to decide:

- whether to grant a loan or appropriate financing facility, its amount and average duration (normally about 5 years) as well as technicalities for disbursing the loan or financing facility; and
- the economic policy conditions attached to the medium-term assistance

After everything is determined, the country in need and the Council will sign on MoU and Loan Agreement. MoU specifies economic policy conditions that the Commission, in collaboration with the Economic and Financial Committee and other program partners, in particular the IMF, shall verify prior to a decision on the release of any further installments. Economic policy conditions include:

[9] Comparison between EU's rate and other rates available globally: IMF's market-related interest rate, known as the "rate of charge," is based on the SDR interest rate and includes a margin; additional surcharges are applied on high, in relation to the country's quota, levels of outstanding credit

- an agreed path of fiscal consolidation;
- governance measures (e.g. reform of taxation and tighter spending controls at all levels of government);
- financial sector stabilization measures (e.g. additional banking regulatory requirements);
- structural reform measures to improve business environment and support growth (e.g. increasing administrative capacity to absorb EU funds more effectively); and
- safeguards against fraud.

Among these, safeguards against fraud are especially important because other Member States will ultimately bear the default risk of these loans. On the Loan Agreement, the technicalities of the borrowing process and the detailed financial conditions of the loan will be indicated. As a request for disbursement by the national authorities is submitted and MoU and Loan Agreement are signed, fund-raising on international markets will occur and first payment tranche will be released. Further installments of the loan will be released once the EU institutions have assessed the country's compliance with the program conditions. A review on the country's fulfillment of the program conditions will regularly take place in order to ensure that the economic policies of the beneficiary country comply with the adjustment program and the previously agreed conditions. If the economic environment is changed, adequate modifications and amendments can be applied to previously adopted documents.

The last loan offered through MTFA before the 2008 financial crisis was the loan to Italy in 1993. Yet, during the 2008 crisis, Hungary, Latvia and Romania received the rescue loans through MTFA[10].

[10] For more details on MTFA, see "Balance of Payments" (22 November 2011) at http://ec.europa.eu/economy_finance/eu_borrower/balance_of_payments/index_en.htm

<Table 4> **Overview of Ongoing MTFA Programs**

Country	Total international financial assistance / of which EU financial assistance	Disbursements made by EU (until June 2011)	Period covered by EU assistance	Status of the program (as of June 2011)	Main areas of policy conditionality
Hungary	EUR 20.0 bn / EUR 6.5 bn	EUR 5.5 bn	Until November 2010	Post program surveillance Availability of the unclaimed EU financial assistance (EUR 1 bn) expired in November 2010	· Fiscal consolidation · Fiscal governance reform · Financial sector regulation and supervision reform · Other structural reforms (mainly related to transport sector)
Latvia	EUR 7.5 bn / EUR 3.1 bn	EUR 2.9 bn	Until January 2012	Active Part of bilateral funding will be treated as credit lines	· Fiscal consolidation · Fiscal governance reform · Financial sector regulation and supervision reform · Structural reforms, business environment · Absorption of EU funds
Romania I	EUR 20.0 bln / EUR 5.0 bn	EUR 5.0 bn	Until June 2011	Completed Disbursements completed – last EU installment paid out on 22	· Fiscal consolidation · Fiscal governance reform · Reform of public wage system · Pension

				June 2011	reform · Financial sector regulation and supervision reform · Absorption of EU funds
Romania II	EUR 5.0 bn / EUR 1.4 bn		Until March 2013	Precautionary (not activated)	· Continued fiscal consolidation · Fiscal governance reform · Financial setor regulation and supervision reform · Product market reform with a focus on energy and transport sectors · Labor market reform · Absorption of EU funds

Source : European Commission (2011)

Along with MTFA, Europe also brings European Stabilization Mechanism which consists of EFSM, EFSF and funding from IMF. ECB contributes to the mechanism as well by purchasing sovereign debt in the debt markets. The total amount of European Stabilization Mechanism is EUR 750 billion. In order to receive aids through the mechanism, fiscal and economic measures should be implemented: a comprehensive strategy to ensure fiscal coordination, surveillance and consolidation, and economic reforms aimed at reducing the differences in competitiveness among EMU Member States through improvement of economic policy coordination and legislation on measures to improve financial oversight. Improvement of economic policy coordination includes the heads of government of the EAMS established the Van Rompuy Task Force, strengthening the stability and growth pact, strengthening surveillance of macroeconomic imbalances, and developing a permanent crisis resolution mechanism. Legislation on measures to improve financial oversight implies that a “European Systemic Risk Board” will be set up to monitor high-level risks to the EU’s financial system and three supervisory authorities will be created to oversee banking, insurance and securities markets[11].

EFSM was established in May 2010. EFSM is allowed to borrow up to a total of EUR 60 billion in the financial markets. Although EFSM operates through the same method as MTFA, EFSM is considered as an extended version of MTFA because the entire EU Member States including not only non-euro countries but also euro zone countries can apply to EFSM. As a way of financing the program, the Commission is allowed to borrow up to a total of EUR 60 billion in financial markets on behalf of the Union under an implicit EU budget guarantee. Under EFSM, the borrower is the EU which enjoys an AAA credit rating from the major rating agencies. It should be noted that the Commission is merely managing the borrowing on behalf of the EU. The Commission then on-lends the proceeds to the beneficiary Member State. This particular lending arrangement implies that there is no debt-servicing cost for the EU. It is the beneficiary country that is responsible for repaying all interest and loan principal; the Commission’s role is merely a window for the beneficiary to repay the interest and loan principal. The EU budget guarantees the repayment of the bonds through a p.m. line in case of default by the borrower. The Commission is also authorized to borrow on the capital markets or from financial institutions in order to finance the loans granted to member countries.

The procedure of offering a loan consists of four steps: a request from a Member State in need of the assistance; the Council’s decision on whether to grant financial assistance to the country in need and how to grant it; MoU between the country in need

[11] For more details on the European Stabilization Mechanism, see “European Stabilisation Actions – the EU’s response to the crisis” (27 June 2011) at http://ec.europa.eu/economy_finance/eu_borrower/european_stabilisation_actions/index_en.htm

and the Commission which contains the general economic policy conditions; and lastly, disbursement of loans or the opening of credit lines granted to Member States. First of all, the Member State which needs supports from EFSM should submit an assessment of its financial needs and an economic and financial adjustment program describing various measures to be taken to restore financial stability. Once the request is submitted, the Council will decide whether to grant financial assistance to the country. It shall act by a qualified majority on a proposal from the Commission. If granting is approved, the Council will determine three things: the procedures for the financial assistance such as the amount, the number of payments, the availability period of the financial assistance, et cetera; the general economic policy conditions set by the Commission; and the economic and financial adjustment program of the country in need. Among these, the general economic policy conditions will be attached to the EU financial assistance with a view to re-establishing a sound economic situation in the Member State concerned and to restoring its capacity to finance itself on the financial markets. After these things are determined, MoU between the Member State and the Commission, which contains the general economic policy conditions, will be signed. The Commission re-examines the country's compliance with the general economic policy conditions regularly in collaboration with the ECB. If any changes are made to these conditions, the economic and financial adjustment program of the beneficiary country might be adjusted. After MoU is signed, the Commission will manage to disburse the loans or open credit lines granted to the Member States. The Commission will regularly verify whether the economic policy of the beneficiary Member State accords with its adjustment program.

EFSM does not exclude recourse to finance outside the EU, in particular by the IMF. In that case, the Commission examines whether the EFSM is compatible with the outside financing. Furthermore, an overall evaluation on EFSM is supposed to be conducted every six months to decide whether the exceptional circumstances which justified the establishment of the EFSM remain. The recent evaluation published on

November 30, 2010 proves that the exceptional circumstances justifying EFSM still remained, so EFSM should be maintained. As of now, Ireland has received loans up to EUR 22.5 billion and Portugal has received loans up to EUR 26 billion (total up to EUR 48.5 billion); both loans will be disbursed over 3 years[12].

Another component of the European financial safety net, EFSF is a company which was agreed by the countries that share the euro on May 9, 2010 and incorporated in Luxembourg under Luxembourgish law on June 7, 2010. It is aimed to preserve financial stability of Europe's monetary union by providing temporary financial assistance to euro area Member States if needed. As of November 2011, the current amount of fund is total EUR 780 billion of which EUR 440 billion is the actual lending capacity. The roles of EFSF are:

- to issue bonds or other debt instruments on the market to raise the funds needed to provide loans to countries in financial difficulties;
- to intervene in the debt primary market;
- to intervene in the debt secondary markets;
- to act on the basis of a precautionary program; and
- to finance recapitalizations of financial institutions through loans to governments including in non-program countries.

EFSF issues are backed by guarantees given by the 17 euro area Member States for up to EUR 780 billion in accordance with their share in the paid-up capital of the ECB, and all financial assistance to Member States is linked to appropriate conditionality. All the funds financed under EFSF will be used to issue bonds, purchase sovereign debt in the debt markets and expand capital of financial institutions by lending loans to beneficiary governments.

---

[12] For more details on EFSM, see "European Financial Stabilisation Mechanism (EFSM)" (10 October 2011) at http://ec.europa.eu/economy_finance/eu_borrower/efsm/index_en.htm

EFSF mainly has two financing methods: issuing bonds or other debt instruments and leveraging. In respect of the first method, EFSF is the issuer although the German Debt Management Office has acted as Issuance Agent and has been responsible for the placement up until now. The funding strategy through issuing debts can be summarized as SSA type which stands for "Sovereign, Supranational, Agency" through benchmark issuance with focus on a high standard of liquidity. The second method, leveraging, is aimed to maximize the EFSF's lending capacity as EFSF resources are limited compared to the size of the debt markets. Two approaches are perceived as efficient: giving credit enhancement to sovereign bonds issued by Member States and setting up one or several Co-Investment Funds (CIFs) to finance the EFSF operations. As a way of the first approach, EFSF will provide partial risk insurance for new issuance of Member States under market pressure. Purchasing this risk insurance would be offered to private investors as an option when buying bonds in the primary market. This approach is expected to reduce the borrowing rates of a Member State. The second approach is similar with combining resources which can eventually raise funds in capital markets to support Member States in need: CIF's capital would come from EFSF and private as well as public investors; EFSF capital would be subordinated and thereby provide the reassurance other investors need to join the scheme. The amount possible to be earned through leveraging is varied on the exact structure of the new instrument, market conditions, investor response to the new measures and the soundness of the countries benefitting from EFSF support facilities: it will be approximately up to EUR 1 trillion under some assumptions about the varying factors.

EFSF will only occur when the country submitting a request is unable to borrow on markets at acceptable rates. When a euro area Member State in need submits a support request, a country program should be negotiated with the European Commission and the IMF as well. Then, the euro area finance ministers need to accept the program and sign on the MoU between them and the country in need. If everything is approved, the first disbursement will take place. If the country in difficulty fails to meet the conditions, the loan disbursements and the country program would be interrupted until the review of the country program and the MoU is renegotiated; in such cases, the conditionality still remains[13].

The last component of the European financial safety net is ESM which is a developed version of EFSF and was originally scheduled to be effective from 2013 onwards. However, the launching date has been advanced to July 2012. It was expected that ESM would assume the role of the EFSF and the EFSM after EFSF is expired in providing external financial assistance to euro area Member States after June 2013 although acceleration of this timing is currently under discussion. However, the EFSF will remain in place even after June 2013 so as to administer the outstanding bonds. It will remain operational until it has received full payment of the financing granted to Member States and it has repaid its liabilities. To ensure the smooth transition from the EFSF to the ESM, the CEO of the EFSF has been tasked with the practical preparation of setting up the ESM. The lending capacity of ESM will be EUR 500 billion. The functions of ESM will be the same as the amended EFSF, which includes:

- to issue bonds or other debt instruments on the market to raise the funds needed to provide loans to countries in financial difficulties;
- to intervene in the debt primary market;
- to intervene in the debt secondary markets;
- to act on the basis of a precautionary program; and
- to finance recapitalizations of financial institutions through loans to governments including in non-program countries.

[13] For more details on EFSF, see “European Financial Stability Facility (EFSF)” by the European Commission (9 November 2011)

The ESM will be focused on debt sustainability, more effective enforcement measures, prevention of possible influence from crisis and reduction of the probability of a crisis emerging in the future. The ESM will cooperate very closely with the IMF in providing financial assistance on a technical and financial level, and the debt sustainability analysis will be jointly conducted by the Commission and the IMF, in liaison with the ECB. An overall evaluation on ESM will be performed by the Commission, in liaison with the ECB, in 2016[14].

Overall, European regional reserve pooling system does not rely on the IMF when making a decision: European Commission and ECB take the leading roles in the decision making process. Also, the European system collects money through global financial markets when a loan needs to be offered, rather than accumulating money in peace time. This is possible because euro is a convertible currency.

<Table 5> Comparison between European Financial Safety Net and CMIM

	Europe			East Asia
	EFSM	EFSF	ESM	CMIM
Lending capacity	EUR 60 bn	EUR 440 bn	EUR 500 bn	USD 120 bn
Amount of funds available	None (Raising funds by issuing debts backed by the EU once a request in submitted)	EUR 28 mn (Issuing debts backed by guarantees of EUR 780 bn from euro zone countries)	EUR 700 bn · Paid-in capital: EUR 80 bn · Capital on demand: EUR 620 bn	None
Method of supporting	Loan	① Loan ② Purchase of sovereign debts in primary market ③ Purchase of sovereign	① Loans ② Purchase of sovereign debts in primary market	Currency swaps

[14] For more details on ESM, see "European Stabilisation Actions – the EU's response to the crisis" (26 June 2011) at http://ec.europa.eu/economy_finance/eu_borrower/european_stabilisation_actions/index_en.htm

		debts in secondary markets ④ Guarantee on national debts		
Ranks of creditors	① IMF ② EFSM	① IMF ② EFSF and private investors	① IMF ② ESM ③ Private investors	Same ranks as other liabilities
Possible beneficiaries	Member States of EU	Member States of EU that adopt euro currency	Member States of EU that adopt euro currency	ASEAN+3 Members
Operating periods	May 2010 – June 2013	June 2010 – June 2013	July 2013 onwards	March 2010 onwards
Establishment basis	EU Agreement	Euro Area Summit (9 May 2010)	Euro Area Summit (25 March 2011) and EU Agreement	CMIM Agreement

Source : KIF (2011)

3. Middle East

Middle East also has its own regional reserve pooling system called AMF. It was established in 1976 with 22 members: Algeria, Bahrain, Comoros, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, United Arab Emirates and Yemen. The lending capacity is USD 28 billion as of 2009, and the role of AMF is to provide complementary measures to resolve balance-of-payments crisis. AMF raises funds through contributions by the member countries: major oil-exporting countries such as Saudi Arabia, Algeria and Iraq provide most of funds to support oil-importing countries in the region.

The loans through AMF have two purposes: to alleviate the influence of balance-of-payments deficit and to support economic reform of countries in difficulties. The loans to alleviate the influence of balance-of-payments deficit can be categorized to four different types: automatic loan, ordinary loan, extended loan and compensatory loan.

<Table 6 > **Four Types of AMF BoP Loans**

Loan Type	Purpose	Conditions	Maximum Size[1)]	Maturity
Ordinary Loan	To finance the overall deficit in the BoPs	N.A.	75%	3 years
Extended Loan	To finance the overall deficit in the BoPs	The reserve tranche of the country from the IMF or other financial institutions to be withdrawn first before application; A stabilization program at least for 1 year	100%	5 years
Extended Loan	A sizeable and chronical BoP deficit	The reserve tranche of the country from the IMF or other financial institutions to be withdrawn first before application; A stabilization program at least for 2 years	175%	7 years
Compensatory Loan	Unexpected external BoP shocks	N.A.	100%	3 years

Note : 1) Percentage of the country's subscription in the Fund's capital paid in convertible currencies

Source : AMF Annual Report 2010

The automatic loan is extended to assist in financing the overall deficit in the balance of payments in an amount not exceeding 75% of the member country's subscription in the Fund's capital paid in convertible currencies. There is no conditionality attached to this loan and the duration will be 3 years. Through ordinary loan, a country can receive up to 100% of its paid subscription in convertible currencies with two conditions: 1) the country should withdraw reserve tranche from the IMF or other financial institutions before receiving this loan from AMF; 2) the country should implement a stabilization program at least for 1 year. The ordinary loan will remain effective for 5 years. A country experiencing a large chronic balance-of-payments deficit can apply to extended loan with a certain condition: the country should implement a stabilization program at least for 2 years. The loan will be expired after 7 years, and for the first 3.5 years, the country is required to repay only the interests. The last type of loans is compensatory loan through which a country can receive 100% of its contribution. This loan will be offered only when the balance-of-payments deficit is caused by an unexpected external shock such as sudden increase in crop-importing prices. The duration of this loan is 3 years. For any loan of more than 75% of a country's contribution, AMF has its own condition to offer loans but does not have any connectivity to the IMF. In 2009, two loans were offered by AMF, total amount of USD 140 million, which is the biggest size after 2001[15].

4. Latin America

Latin America has its own regional reserve pooling system as well, called FLAR. FLAR was established in 1978 with 7 members: Bolivia, Colombia, Costa Rica, Ecuador, Peru, Uruguay and Venezuela. The fund of FLAR is consisted of contributions by the members and other liabilities. As of June 2011, the total asset of FLAR is USD 4.4 billion with the paid-in capitals of USD 2.0 billion. Liabilities are mostly deposits of central banks and public institutions in the region. Although the size of the fund is not that large, the credit limits for small countries like Bolivia and Ecuador amount to about 30% of their international reserves, which may play a significant role in resolving BoP problems in the countries. The credit rating of FLAR is Aa2 from Moody's and AA from S&P which are higher than Chile, the highest credit rating country (Aa3 and A+) in the Latin America region.

[15] For more details on the AMF, see "Arab Monetary Fund Annual Report 2010" by the Arab Monetary Fund, April 2011

<Table 7> **Capital Structure of FLAR**

Member Countries	Subscribed Capital		Paid-in Capital (As of August 2011)	
	USD Million	% of total	USD Million	% of total
Bolivia	234.4	10.0	195.7	9.8
Colombia	468.8	20.0	391.3	19.6
Costa Rica	234.4	10.0	195.7	9.8
Ecuador	234.4	10.0	195.7	9.8
Peru	468.8	20.0	391.3	19.6
Uruguay	234.4	10.0	234.4	11.7
Venezuela	468.8	20.0	391.3	19.6
Total paid-in capital	**2,344.0**	**100.0**	**1,995.4**	**100.0**
Prudent reserves			**199.5**	

Source : FLAR (2011)

FLAR offers credits to alleviate the economic influences of balance-of-payments shocks, lack of liquidity, et cetera. Durations and amount limits are varied based on the usage of the loans. Based on the type of loans, there are two decision making methods: 1) for the loans for balance-of-payments and central bank foreign external debt restructuring, presidents of each central bank in the region vote and more than 5/7 should approve the decision; 2) for other short-term loans, the CEO of the FLAR will decide. Each member country has different limits on the amount available for them: for example, loan for balance of payments cannot exceed 250% of a country’s contribution; considering the degree of economic development, Bolivia and Ecuador can receive up to 350% of their contributions.

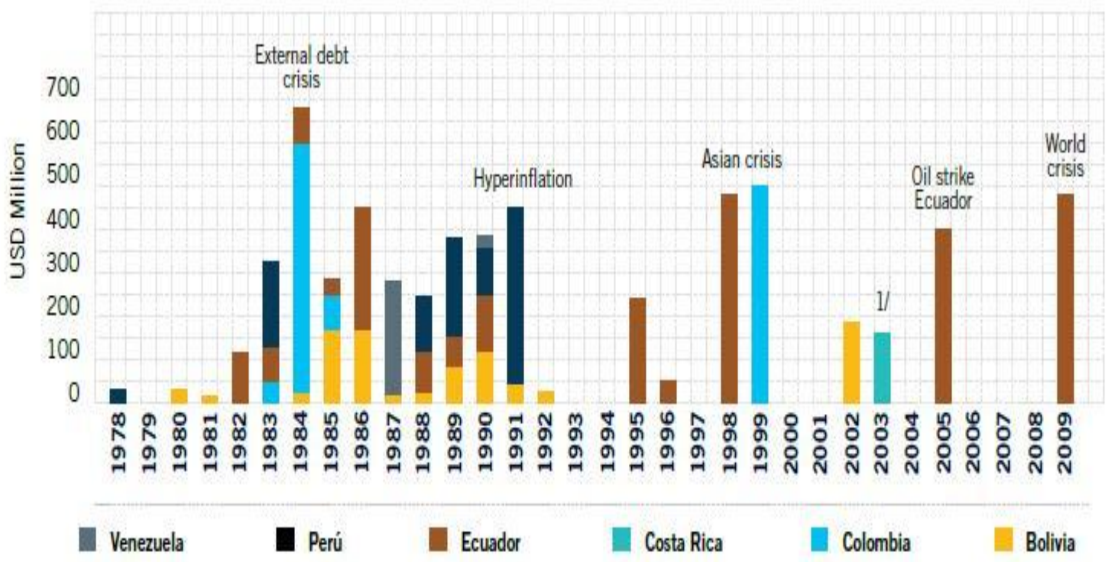
<Table 8> **Lines of Credit**

Type of Credit	Maturity	Access Limits*	Attribution for Approval
Balance of Payments	3 years with 1 year grace period for capital amortization	2.5 times paid-in capital	Directors
Central bank foreign external debt restructuring	3 years with 1 year grace period for capital amortization	1.5 times paid-in capital	Directors
Liquidity	Up to 1 year	Paid-in capital	Executive President
Contingency	6 months, renewable	2 times paid-in capital	Executive President
Treasury	1 – 30 days	2 times paid-in capital	Executive President

* In the case of credits for balance of payments, central bank external public debt restructuring, liquidity and contingency, the central banks of Bolivia and Ecuador have additional access of 0.1 in relation to other members

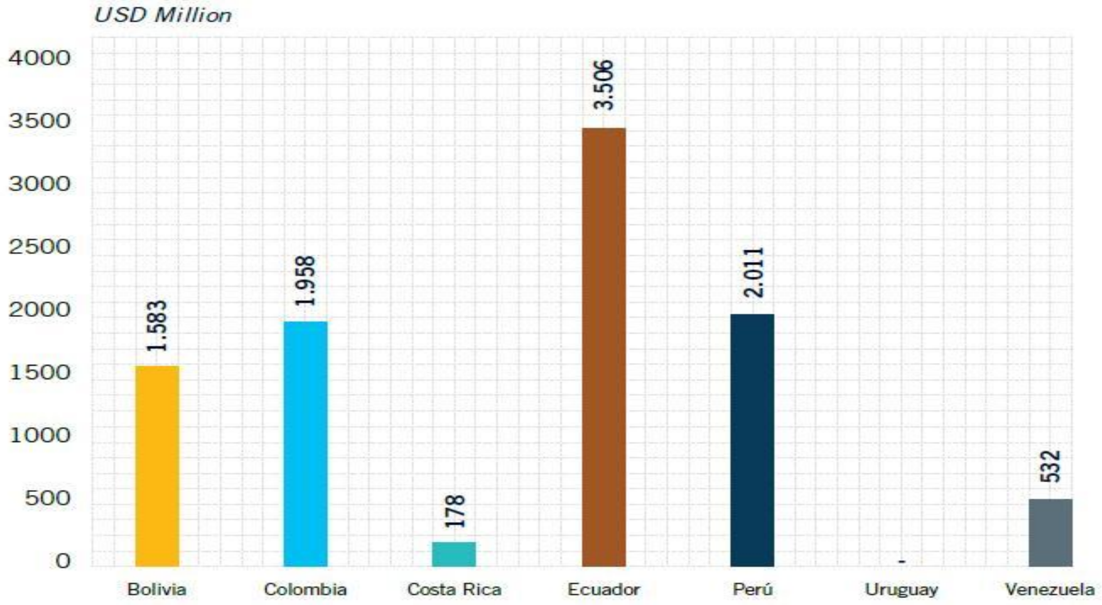
Source : FLAR (2011)

<Figure 8> **Historically Approved Credits**



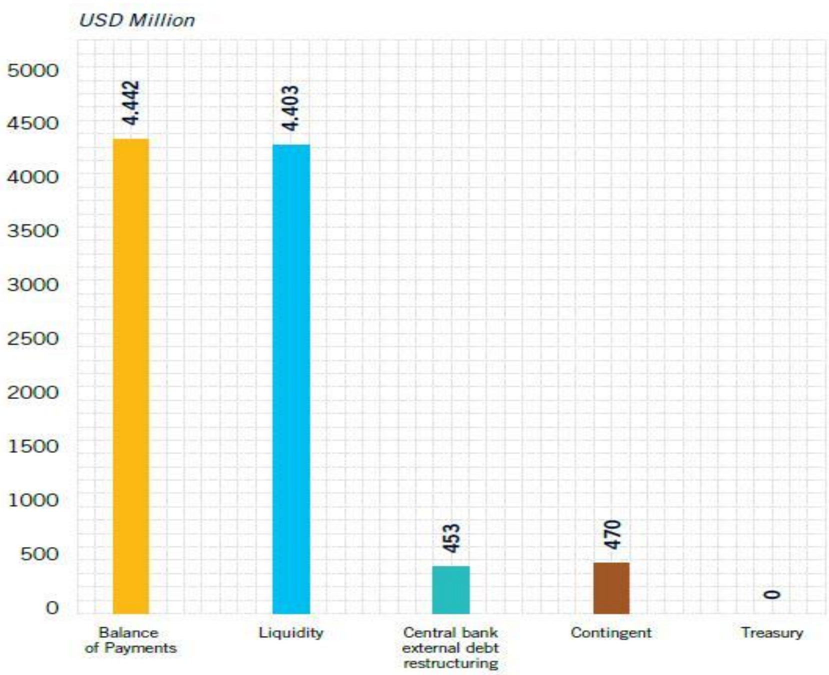
Source : FLAR (2011)

<Figure 9> Amount of Credits Approved by Member Country 1978-2011



Source : FLAR (2011)

<Figure 10> Amount of Credits Approved by Type of Credits 1978-2011



Source : FLAR (2011)

<Table 9> **Credit Ratings**

Long Term External Public Debt Rating in M/E

Moody's		S&P		Fitch	
Aaa		AAA		AAA	
Aa1		AA+		AA+	
Aa2	FLAR	AA	FLAR	AA	
Aa3	Chile	AA-		AA-	
A1	CAF	A+	CAF Chile	A+	CAF Chile
A2	BCIE	A		A	
A3		A-	BCIE	A-	BCIE
Baa1	Mexico	BBB+	Mexico	BBB+	
Baa2	Brazil	BBB	Brazil Peru	BBB	Mexico Brazil
Baa3	Peru Costa Rica Colombia	BBB-	Colombia	BBB-	Colombia Peru

Source : FLAR (2011)

Although FLAR does not have any official connectivity with the IMF, it is recognized that unofficial information sharing with the IMF and advisory from the IMF affect FLAR's decision on loan offer. FLAR offered loans frequently in the 1980s, since that 1980s loans were rarely provided. The most recent example of loan offered by FLAR is the loan of USD 480 million to Ecuador[16].

[16] Fondo Latinoamericano de Reservas, "History and Performance in Perspective," FLAR, September 2011

III. CMIM and Comparison with Other Regional Arrangements

1. AMF and CMI

The history of Chiang Mai Initiative Multilateralization (CMIM) is traced up to the 1997-1998 financial crisis in East Asia. The crisis clearly demonstrated the dependence of East Asian economies on global economy and the incompetence of existing global institutions in resolving currency and financial crises. IMF rescue packages provided to East Asian countries during the 97-98 crisis was criticized after the crisis was resolved in five aspects[17]: 1) the conditionality of IMF program was harsh and tight without adequate consideration of social and political consequences in the beneficiary countries, 2) the conditionality had little variance thus failing to modify methods and policies for different social and political environments, 3) the program only allowed market-based interventions, 4) the program required financial institutions to provide full guarantees for creditors, and 5) the program required the beneficiary countries to utilize relatively rapid structural reform measures, which caused abrupt corporate restructuring, excessive privatization of state owned enterprises and asset sales at undervaluation.

Thus, a need for regional monetary cooperation arose in East Asia. Japan proposed Asian Monetary Fund (AMF). Although none of the details of the proposal were unveiled, the general outline was recognized[18]: total US$ 100 billion would be provided to the countries under crises without any special conditions. Yet, the proposal was eventually dismissed mainly due to the opposition from IMF, U.S, and China. IMF and U.S. on the surface insisted that the proposal had a risk of moral hazard, yet what they

---

[17] Sussangkarn, Shalongphob, "The Chiang Mai Initiative Multilateralization: Origin, Development and Outlook," ADBI Working Paper Series, ADB Institute, July 2010

[18] Grimes, W. William, "The Asian Monetary Fund Reborn? Implications of Chiang Mai Initiative Multilateralization," Asia Policy, Number 11, The National Bureau of Asian Research, January 2011

really concerned was the reduction in their influence over East Asia. China also opposed to the Japan's idea because it worried about the expansion of Japan's influence over the region.

Receiving rescue loans from the IMF became a huge political risk to East Asian countries as many of East Asian countries which had taken the loans from the IMF had a stigma attached to those IMF programs due to unfavorable experiences from the aftermath of the crisis[19]. Thus, the need for regional financial safety net had risen again. At the Meeting of Asian Finance and Central Bank Deputies in Manila, Philippines on 18-19 November 1997, "A New Framework for Enhanced Asian Regional Cooperation to Promote Financial Stability," so-called "Manila Framework," was proposed. This time, the proposal could be further discussed because the U.S. and IMF were involved in the discussion as well, but the participation of the U.S. and IMF caused certain shortcomings of the proposal: the framework was not only superficial but also overemphasizing the role of IMF. Although the framework clearly had its own defects, the finance ministers from ASEAN, Australia, People's Republic of China (PRC), Hong Kong, Japan, Korea and the U.S. continued to discuss the framework at the meeting in Kuala Lumpur, Malaysia on 2 December 1997. Finally at the ASEAN+3 Finance Ministers' Meeting in Chiang Mai in 2000, the participants reached the agreement on Chiang Mai Initiative (CMI), which was composed of the ASEAN Swap Arrangements (ASA, total amount of US$ 2 billion as of 2005) and a set of bilateral swap arrangements (BSA).

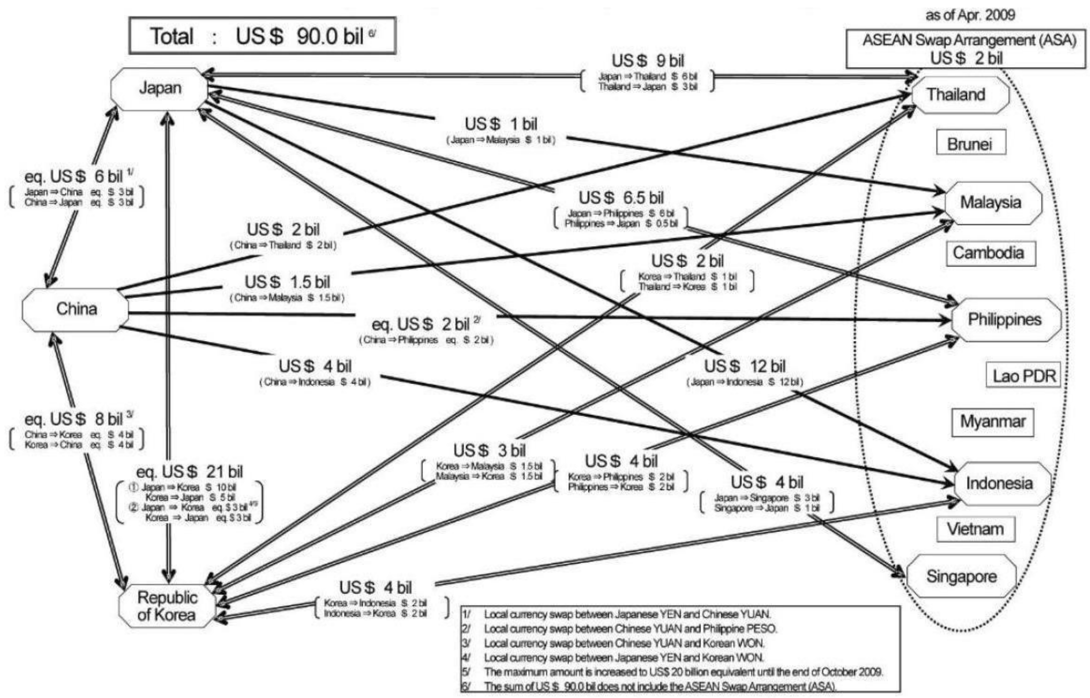
CMI captured the idea of regional monetary cooperation from the AMF. It is, however, fundamentally different from the AMF in two aspects.[20] First, CMI had a set of BSA, which allows two different countries to swap U.S. dollars with their domestic

[19] Sussangkarn, Shalongphob, "Institution Building for Macroeconomic and Financial Cooperation in East Asia," Thailand Development Research Institute, 2011

[20] Grimes, W. William, "The Asian Monetary Fund Reborn? Implications of Chiang Mai Initiative Multilateralization"

currencies. With BSA, the participating countries can resolve their liquidity issues by selling/buying back U.S. treasury notes or bills with a remaining life of no more than 5 years and government securities of the counterparty country. As of October 2003, there were 13 BSAs with a combined total size of US$ 35 billion approximately. Second, CMI had so-called “IMF link” in its conditionality. Only 10% of the agreed amount could be utilized without any linkage to an IMF program for 180 days, and to receive the rest of the agreed amount, a country should be already under the IMF program or should have a plan to be so in the near future (Later, the 10% conditionality was increased to 20%). The linkage to an IMF program was necessary to relieve the concerns about potential conflicts with IMF conditionality and moral hazard problems. Yet, potential borrower countries in Southeast Asia criticized this linkage as undermining all the past efforts to frame a regional cooperation system by overemphasizing the role of IMF, which exacerbated the 97-98 crisis in their opinion. In their eyes, CMI was more likely to supplement IMF than to hold IMF in check.

<Figure 11> Network of BSAs under the CMI



Source : Ministry of Finance, Japan (2009), ADBI Working Paper (2010)

2. CMIM and AMRO

Even after several discussions and all the ground efforts, CMI was still insufficient to satisfy the need for regional monetary cooperation system due to two limitations[21]. First, CMI was inappropriate to rescue countries from possible type of crisis in Asia. As shown in the 97-98 financial crisis, the possible type of crisis in Asia is closer to capital account crisis than a sovereign debt crisis. Since sudden reversals in net capital flows often cause capital account crisis, in order to rescue countries from that type of crisis, it is crucial to provide those countries with large volume of liquidity. But CMI, which is a set of BSAs, is too small to generate enough liquidity to help countries experiencing the crisis. Thus, ASEAN+3 countries needed multilateral regional cooperation which can generate larger amount of liquidity than bilateral one. Moreover, when dealing with the capital account crisis, the swap arrangements should be readily available to allow timely disbursement. Under BSA, a country needed to get confirmation from every single country with which it had swap arrangement. This might cause unexpected delays in swap arrangements disbursement. Under a multilateralized swap arrangement, however, a country could receive the swap arrangements more quickly because multilateralization could simplify multiple steps of confirmation to a simple, one-step process. For this reason, the evolution of CMI towards a multilateralized form was inevitable. Thus, at the 10th ASEAN+3 Finance Ministers' Meeting in Kyoto, Japan on May 2007, CMI started to be transformed.

At the 11th ASEAN+3 Finance Ministers' Meeting in Madrid, Spain on May 2008, the participating countries agreed on the idea of CMIM in order to correct the shortcomings of CMI. They concluded that the total amount of CMIM should be US$ 80 billion at least, of which 80% should be contributed by +3 countries (PRC, Korea and Japan) and

---

21 Tadahiro, Asami, "Chiang Mai Initiative as the Foundation of Financial Stability in East Asia," Institute for International Monetary Affairs, March 1, 2005

20% by the ASEAN countries. Four details on CMIM operation were discussed at the 12^{th} ASEAN+3 Finance Ministers' Meeting in Bali, Indonesia on 3 May 2009. First of all, the participants set up two main goals of CMIM: 1) to relieve short-term liquidity difficulties in the region and 2) to supplement the existing international financial arrangements. Secondly, they determined different decision making methods based on the two types of issues. Any decision relevant to fundamental issues such as size, contributions, purchasing multipliers, readmission, membership and terms of lending will be determined through consensus of the members of ASEAN+3, and decisions on lending issues such as lending, renewal and default will be made through majority vote. Thirdly, the participating countries representatives increased the total size of CMIM to US$ 120 billion from the previous amount of US$ 80 billion and the contribution of individual countries remained the same as before (80% from +3 countries and 20% from the ASEAN countries). At this meeting on 3 May 2009, the participating countries also agreed on the method of calculating borrowing accessibility as Borrowing Quota = Contribution * Purchasing Multiplier. Lastly, they concluded that in order to grant more independence to CMIM, they need a surveillance mechanism. Thus, they agreed on establishing an independent surveillance unit (ISU) called the ASEAN+3 Macroeconomic Research Office (AMRO), which was due to start operation in May 2011.

<Table 10> Contributions and Purchasing Multipliers of CMIM participants

<table>
<tr><th>Country</th><th colspan="2">2010 Nominal GDP (billions of US$) *</th><th colspan="2">Foreign Reserves (billions of US$) *</th><th colspan="2">Financial Contribution (billions of US$) **</th><th>Purchasing Multiplier **</th></tr>
<tr><td rowspan="2">People's Republic of China and Hong Kong</td><td rowspan="2">6,103.09</td><td>PRC 5,878.63</td><td rowspan="2">3,483.38</td><td>3,201.68</td><td rowspan="2">38.40</td><td>34.20</td><td>0.5</td></tr>
<tr><td>Hong Kong 224.46</td><td>281.70</td><td>4.20</td><td>2.5</td></tr>
<tr><td>Japan</td><td colspan="2">5,497.81</td><td colspan="2">1,129.11</td><td colspan="2">38.40</td><td>0.5</td></tr>
<tr><td>South Korea</td><td colspan="2">1,014.48</td><td colspan="2">310.98</td><td colspan="2">19.20</td><td>1.0</td></tr>
<tr><td>Indonesia</td><td colspan="2">706.56</td><td colspan="2">114.50</td><td colspan="2">4.77</td><td>2.5</td></tr>
<tr><td>Thailand</td><td colspan="2">318.85</td><td colspan="2">171.32</td><td colspan="2">4.77</td><td>2.5</td></tr>
<tr><td>Malaysia</td><td colspan="2">237.80</td><td colspan="2">126.27</td><td colspan="2">4.77</td><td>2.5</td></tr>
<tr><td>Singapore</td><td colspan="2">222.70</td><td colspan="2">245.42</td><td colspan="2">4.77</td><td>2.5</td></tr>
<tr><td>Philippines</td><td colspan="2">199.59</td><td colspan="2">75.83</td><td colspan="2">3.68</td><td>2.5</td></tr>
<tr><td>Vietnam</td><td colspan="2">103.57</td><td colspan="2">10.00</td><td colspan="2">1.00</td><td>5.0</td></tr>
<tr><td>Cambodia</td><td colspan="2">10.87 ***</td><td colspan="2">3.36</td><td colspan="2">0.12</td><td>5.0</td></tr>
<tr><td>Myanmar</td><td colspan="2">35.23 ***</td><td colspan="2">1.78</td><td colspan="2">0.06</td><td>5.0</td></tr>
<tr><td>Brunei</td><td colspan="2">10.73 ***</td><td colspan="2">1.21 ****</td><td colspan="2">0.03</td><td>5.0</td></tr>
<tr><td>Lao PDR</td><td colspan="2">5.60 ***</td><td colspan="2">0.62</td><td colspan="2">0.03</td><td>5.0</td></tr>
</table>

Source : * Bloomberg (2010), ** Ministry of Finance, Japan (2009), *** IMF (2009), **** IMF (2010)

CMIM was finally signed on 24 December 2009 and became effective on 24 March 2010. Compared to CMI which only accepted +3 countries (PRC, Japan, Korea) and ASEAN 5 countries (Thailand, Malaysia, Indonesia, Singapore, Philippines) as its members, CMIM expanded its scope of membership to the entire ASEAN+3 members (including Vietnam, Cambodia, Lao PDR, Brunei and Myanmar) and Hong Kong. Since CMIM is a multilateralized form of CMI, it replaces all the BSAs under CMI and operates as a single contractual agreement. Yet, if necessary, CMIM participants can conclude a new BSA separate from CMIM. Along with this, ASA has remained effective as well. Under CMIM, the central banks of each members exchange contracts guaranteeing swap transactions during financial crises, and when a crisis actually occurs, they should implement swap disbursement based on the individual financial contribution. Since swap transaction will be carried out only when an actual crisis happens, the effectuation of CMIM does not necessarily refer to the decrease in the amount of foreign reserves.

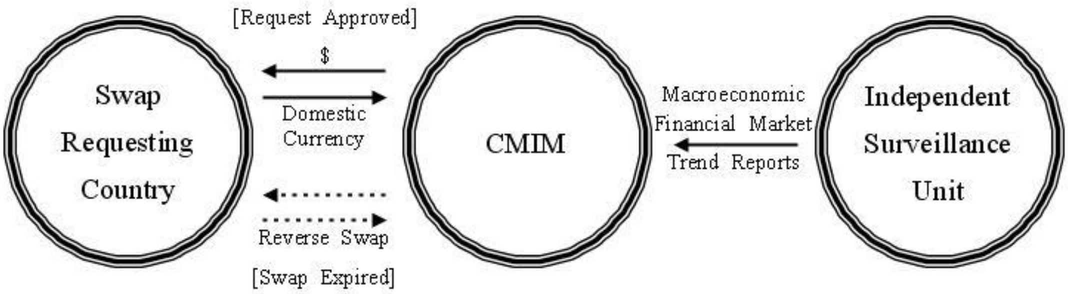
Any CMIM members can activate swap transactions under CMIM by submitting a request for the purchase of U.S. dollars under CMIM arrangement with its local currency to CMIM Coordinating Countries (the two Chairs of the ASEAN+3 Finance and Central Bank Deputies' Meeting). Once the submission is completed, the Coordinating Countries will bring the swap request notice with other relevant information to the Executive Level Decision Making Body (ELDMB, which is consisted of the Deputy-level representatives of the ASEAN+3 Finance Ministers and Central Banks and the Hong Kong Monetary Authority) and call a meeting to vote on the swap request. With no exception, decisions required in response to a swap request should be completed within two weeks after ELDMB receives the swap request notice and relevant information. If the request is approved, CMIM participants will utilize bilateral swap transactions between each of the swap providing parties and the relevant swap requesting party based on the CMIM Agreement. The elementary currency used in swap deal is U.S. dollars, and the interest rate equals to Libor + additional rates. The swap transaction will be expired after 90 days and can be extended up to 7 times (Note: The portion of swap which is not linked to IMF can be extended only up to 3 times)[22].

As mentioned earlier, during the 12th ASEAN+3 Finance Ministers' Meeting, CMIM members agreed to establish an independent regional surveillance unit called AMRO.

[22] For more details on CMIM, see "Chiang Mai Initiative Multilateralization," (November 2011) by International Relations Department of Republic of the Phillippines at http://www.bsp.gov.ph/downloads/Publications/FAQs/CMIM.pdf

The establishment of AMRO can assure prompt monitoring and analysis of the ASEAN+3 economies and can enable the early detection of risks, immediate implementation of alleviative measures, and effective decision-making of CMIM. If there is no crisis broken out, AMRO will carry out annual consultations with individual member economies and will quarterly report the macroeconomic assessment of the ASEAN+3 region and individual member countries based on the results from the annual consultations. Once a crisis occurs, AMRO will make suggestions on a swap request based on its macroeconomic analysis of the swap requesting country and monitor the use and influence of funds after the approval of the swap request[23].

<Figure 12> **CMIM Operational Structure**



Source : KIF (2011)

Most recently, at the 44th Asian Development Bank Annual Conference in Hanoi, Vietnam on May 2011, the participants discussed and agreed to expand the role of CMIM to crisis prevention function as well as crisis resolution function. They also proposed the need for complementary measures because, considering the sizes of the members' economies, US$ 120 billion of current CMIM is still insufficient and the conditionality and methods of CMIM are also deficient to resolve the liquidity shortage.

[23] For more details on AMRO, see "Chiang Mai Initiative Multilateralization," (November 2011) by International Relations Department of Republic of the Phillippines at http://www.bsp.gov.ph/downloads/Publications/FAQs/CMIM.pdf

Since 1997, when the 97-98 financial crisis gave rise to a need for regional monetary cooperation system in East Asia, ASEAN+3 countries have put great amount of efforts to perfect the mechanism of the system and maximize the utility of the system. They first came up with the idea of CMI, which was a set of BSAs. Although CMI was certainly a step closer to regional monetary cooperation system, it possessed limitations, such as delays in swap disbursement due to multiple times of confirmation process. Thus, ASEAN+3 countries brought a better concept than CMI, called CMIM, and in order to enhance the independence of CMIM, they established the independent surveillance unit called AMRO. Even with all the past efforts to perfect the regional monetary cooperation system, CMIM still has a room for the improvement.

3. Comparison with Other Regional Financial Pooling Arrangements

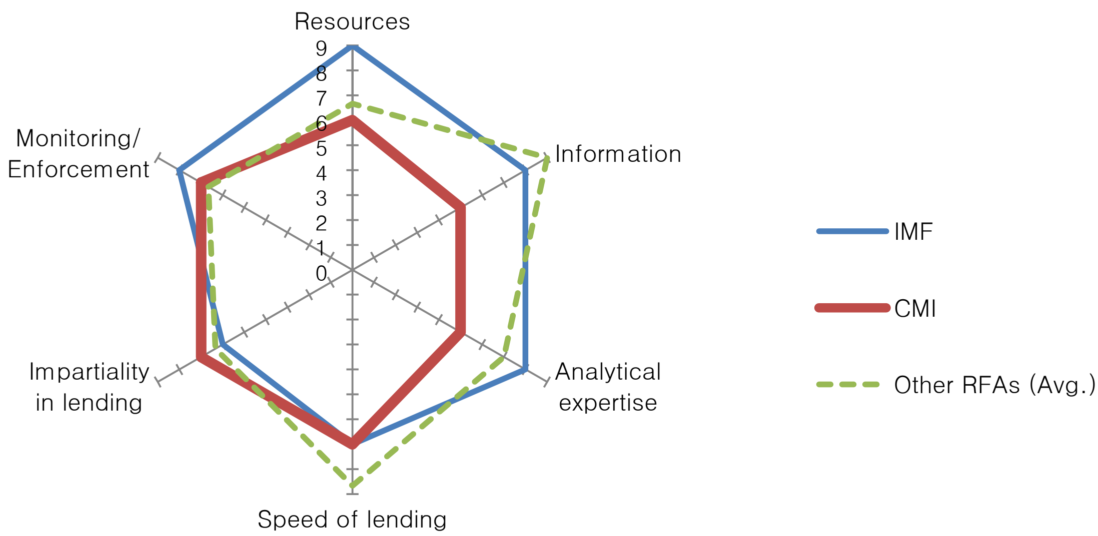
McKay et al. (2010) compare the characteristics of various regional financing arrangements with those of the IMF as in <Table 10>. The greater the number, the more desirable characteristic the relevant financing arrangement has as a regional financial pooling arrangement. Six characteristics are considered in the paper; resources, information, analytical expertise, speed of lending, impartiality in lending, and monitoring/enforcement. Although McKay et al. (2010) consider CMI instead of CMIM, we plot a modified version of spider web diagrams in their paper in order to see the differences with other regional financial pooling arrangements. <Figure 13> shows that the average numbers of other regional financial pooling arrangements are significantly greater than those of CMI in the area of information, analytical expertise and speed of lending. CMI recorded a lower score in information and analytical expertise because there was no specialized surveillance agency. CMI received a lower evaluation in speed of lending because 80% of CMI lending was tightly linked to the IMF lending. In addition, compared with the IMF lending, regional financial pooling arrangements including CMIM have less financial resources.

<Table 11> Comparison of CMI with other regional financing arrangements and IMF

		Resources	Information	Analytical expertise	Speed of lending	Impartiality in lending	Monitoring/ Enforcement
IMF		9	8	8	7	6	8
CMI		6	5	5	7	7	7
Other RFAs (Avg.)		6.7	9	7	8.7	6.3	6.7
	MTFA	8	9	7	8	8	6
	AMF	5	9	7	9	6	7
	FLAR	7	9	7	9	5	7

Source : McKay et al., (2010)

<Figure 13> Comparison of CMI with other regional financial arrangements and IMF



Note : Other RFAs include MTFA, AMF, and FLAR.

Source : McKay et al., 2010, "Regional Financial Arrangements and the Stability of the International Monetary System"

The diagram reveals which area of CMI requires to improve the most. That is, resources, information, analytical expertise, and speed of lending. The development from CMI to CMIM enabled ASEAN+3 countries to make an improvement in the area of resources and speed of lending. The size of resources enlarged to US$ 120 billion and the swap receiving country no longer needs to deal with swap providing country.

Building on McKay et al. (2010), Eichengreen (2010) [24] suggested that there are five attributes for regional reserve pooling system to be effective: 1) the adequacy of the finance that is able to provide; 2) its capacity to undertake economic and financial surveillance; 3) the speed of its decision making; 4) the perceived legitimacy; 5) the ability to work together with the multilaterals. The first characteristic requires that the pool has to be large enough to cover possible needs under balance-of-payment shocks. The second characteristic shows the need for independent surveillance unit within the system. The existence of surveillance unit ensures the contributors to a pool that problems, such as moral hazard and unnecessary drawing on the pool, are being avoided. The third characteristic is important because shocks in financial markets often hit unexpectedly and quickly spread to neighboring countries in the region. Fourthly, the regional reserve pooling system should be perceived legitimate so that those operating the system can be seen as accountable for their actions. Lastly, the system is ready to cooperate with the multilaterals because it might want to outsource the negotiation of conditionality and need their helps to supplement the pool.

In terms of the size of funds, CMIM is relatively small. But other RFAs such as AMF and FLAR also have a limited fund size. CMIM may be ranked in the middle in terms of stability of funding sources: CMIM uses the members' foreign exchange reserves as the source of its fund. This method is more stable than the European method,

[24] Eichengreen, Barry, "The International Financial Architecture and the Role of Regional Funds," Papers and Proceedings – The International Financial Architecture, FLAR, August 2010

which is issuing debts in the international capital market when a request is submitted, but less stable than the AMF and the FLAR[25], which are accumulating their own funds by pooling some of each member's foreign reserves.

In terms of surveillance mechanism, CMIM has a lower score than other RFAs in that its surveillance unit (AMRO) newly established and is still in the early stage. Speed of decision making of CMIM can be considered relatively fast because it takes majority of vote system for lending decision. However, its strong link with the IMF program can delay quicker decision making since the IMF-related portion of CMIM lending takes longer time to receive.

As to cooperation with the IMF, the current relationship between CMIM and the IMF is somewhat unilateral in that CMIM strongly depends on the IMF for its lending decision of the 80% IMF-linked portion. The relationship should improve in the future so that both parties work more closely for surveillance and liquidity provision but lend more independently.

In the future, the full functioning of AMRO is expected to help CMIM to become more powerful in terms of surveillance capacity and speed of decision making. 80% of IMF linked portion is still an obstacle for faster decision making.

[25] In case of FLAR, issuing bonds in the financial market is another option for financing.

<Table 12>   **Other Regional Reserve Pooling Mechanisms versus CMIM**[26]

	MTFA (Europe)	AMF (Middle East)	FLAR (Latin America)	CMIM (Asia)
Source of financing	Issuance of debts by the European Commission	· Contributions by the members · Deposits by central banks and public institutions in the region	· Contributions by the members · Liabilities · Deposits	Some of each member's foreign exchange reserves
Surveillance mechanism	Regular review conducted by European Commission	Regular review conducted by 50 staffs from the AMF	Regular review conducted by Economic Studies Division in the FLAR	Established AMRO, but still in the early stage
Speed of decision making	Relatively quick decision making	Taking 1.5 months from a request submission to disbursement (due to a relatively complicated procedure)	Relatively quick decision making operated through voting system (a request will be passed if more than 5 out of 7 members approve)	Can be quick because it takes majority vote system (yet, the IMF-linked portion might take longer)
Cooperation with the IMF	Usually support a country in need at the same time with the IMF	None	No official connectivity but sharing information and getting advisory unofficially	80% of lending limit is related with the IMF

Source: Eichengreen (2010)

[26] For the comparison between EFSM, EFSF, ESM and CMIM, see Table 2

IV. Recommendations to strengthening the CMIM Function

1. Strengthening the current CMIM Function

A. Diversifying Supporting Methods

As seen in the Arab Monetary Fund (AMF) and Latin America Reserve Fund (FLAR), it is needed to examine whether supporting methods and procedure should be diversified in accordance with the purpose and size of the funds. In the cases of AMF and FLAR, there are four to five lending methods each aligned to specific situation. For instance, supporting funds for temporary liquidity shortage is easier to lend than general supporting funds.

With respect to diversifying supporting methods, a regional credit line in connection with the IMF's FCL or PLL is one of many options that can be considered to enhance the precautionary function of CMIM. For the introduction of the regional credit line, it is required to discuss what would be included in the eligibility requirements and how to evaluate eligibility. At present, 80% of CMIM fund is activated if and only if rescue money is provided by the IMF to a country in need. It is proposed that such criterion is relaxed in the case of a regional credit line so that a country allowed to have access to the IMF's FCL or PLL is eligible to draw money from CMIM.

B. Enlarging the Size of CMIM

Regardless of the main function, the current size of available fund in CMIM is small; therefore, it is necessary to increase the size of CMIM for the purpose of its function. Currently, the maximum CMIM swap amount of each member country as a ratio of IMF quota marks 240% on average. In particular, the average of China, Japan, and Korea is

149% for and the average of ASEAN is 542%. IMF-delinked portion is even much smaller. On the other hand, the size of the IMF's FCL offered to Poland and Mexico amounted to about 1,000% of IMF quota. Especially, considering that IMF has difficulties in increasing its fund size, the practical role of regional financial safety nets as a complementary funding source is becoming important to deal with a financial crisis in the region.

C. Encouraging Bilateral Swap in the Region as a Complementary Funding Source

If member countries additionally lend money under the same borrowing conditions and surveillance system of CMIM after CMIM supports money, actual firepower of CMIM lending can be enlarged. Actually, there are many examples for some leading countries in the region to participate in the lending program of regional financial safety nets and the IMF. For instance, central banks of Sweden, Denmark, Finland, Norway and Estonia contribute €1.9 billion through swap agreements in the 2008 Latvia lending by the IMF, EU and the WB. In this regard, expansion of bilateral currency swap agreement in the region could be a way to support additional funds—for example, the recent increase in and intensification of bilateral currency swap agreement between Korea and Japan or between Korea and China.

D. Institutionalization

Since the ultimate goal is to be a legal international institution, the loose cooperation of CMIM is needed to be gradually institutionalized. There are two ways to institutionalize CMIM: (1) EFSF in Europe that issue bonds under the guarantee of member countries, and (2) AMF and FLAR that use funds from the capital of member countries. In regard to the process of the recent Euro-zone debt crisis, the facility method of EFSF would be limited if the change of credit ratings in core member countries could negatively affect the cost and funds in the crisis.

E. Collaborating with the IMF and the Other IFIs in an effective way

Since the independent surveillance system of CMIM has yet to improve much, in the meantime, it is realistic to reduce the IMF-delinked portion only gradually. In the mean time, it is important to elaborate the collaboration between CMIM and IMF to enhance the surveillance capacity of AMRO. AMRO can get technical support from the IMF. It can be review whether having AMRO experts participate in the IMF mission to a country in the region would be helpful for the purpose.

CMIM and the IMF should communicate well with each other and make efforts to establish a necessary pre-set procedure to help the 80% IMF-linked portion of CMIM lending to be executed smoothly and swiftly when needed. Since the global financial crisis, the IMF has diversified lending methods by introducing FCL and PLL besides the conventional IMF stand-by agreement. For this reason, “the link to the IMF lending” should be defined in consideration of the change. In the G20 commission in 2011, it was recommended that the regional financial institutions admit the Fund's preferred creditor status of the IMF lending. Thus, it should be considered whether this recommendation would be reflected in the CMIM agreement. For instance, the maximum 2 years term of the CMIM support, which is shorter than the 3.3 to 5 years term of the IMF support, would be contradicted in practice to the G20 recommendation to accept the Fund’s preferred creditor status.

In the long run, it is necessary to find a way for CMIM to operate at arm’s length from the IMF while keeping a close and effective collaboration with the IMF. With the increasing size of CMIM and the intensified function of AMRO, the amount of the direct connection between CMIM supporting funds and IMF lending would decrease. It is desirable to create a practice that CMIM does not directly follow the borrowing conditions of IMF but make role sharing with the IMF, as EFSF in Europe has done, by utilizing superior information in the region.

It is also important to enhance a firm cooperation with other international financial institutions such as the World Bank and the ADB. Not only did they provide additional funding source in the process of crisis resolution, but also they can share information and technical expertise with the CMIM and AMRO. For instance, the World Bank offers a simulation exercise about financial sector distress which involves several countries. Government officials from the participating countries can strengthen their readiness for financial crisis with such simulation game.

F. Building up the Regional Surveillance System

In order to resolve the moral hazard from the financial supports, the regional financial institution needs to intensify monitoring and surveillance systems. For this reason, ASEAN+3 Macroeconomic Research Office (AMRO) is needed to function its role as soon as possible. Through the collaboration with IMF, the function of AMRO could be intensified. For example, until AMRO functions its role successfully, AMRO could get supports from the IMF by sending staffs to IMF or AMRO staffs could be participated in Annual Consultation of IMF under the member countries' agreement. In addition to the collaboration with the IMF, the secondment to governments or central banks in member countries would help to strengthen the function of AMRO.

There are several areas of AMRO that might try to improve its capacity and contribute to buildup of the stronger regional financial safety nets. First, it may establish an early warning system at the national and regional level. Second, scenario analysis and stress test methods can be developed at the regional level. In order for the stress test to be realistic, it is important to detect the most imminent risk factors which may damage the stability of the system. Finally, in the long run, AMRO should be able to take responsibility for assessment of availability or ceiling of CMIM lending to each member country.

2. Introduction of Crisis Prevention Function

The three regional financial pooling arrangements in Europe, Middle East and Latin America have contributed to recover the stability of their own regions by actually activating their lending to members in need during the recent global financial crisis. In contrast, in ASEAN+3 region, there was no actual lending executed by CMI in the recent crisis. Instead, the central bank swap with the US Fed was an important turning point to resolve foreign exchange liquidity shortage risk. It demonstrates that further improvements need to be made in order for CMIM to find its adequate role within the whole system of global financial safety nets. In this respect, before discussing the specific aspects of CMIM, it is needed to establish the blueprint of both CMIM and AMRO institutionalization in terms of their role in the global financial safety net so that they can utilize their comparative advantage fully.

The two main functions of financial safety nets are crisis prevention and crisis resolution. So far, the major role of CMIM has been limited to ex-post crisis resolution. There are at least two reasons why crisis prevention function should be introduced for CMIM. First, early detection of and quick policy response to an outbreak of financial crisis is more cost-efficient than dealing with a widespread and full-blown crisis. Second, regional financial safety nets such as CMIM should have a comparative advantage in crisis prevention. Regional financial safety nets often has a better access to internal and qualitative information about their own regional economies. Therefore, they can identify signs of a crisis earlier. Moreover, regional financial safety nets usually have a smaller number of member countries than international financial institutions such as the IMF and member countries of regional financial safety nets tend to feel stronger ownership about the regional economy due to a tight economic relationship within the region. Therefore, regional financial safety nets tend to make a quicker decision, which is one of desirable characteristics a crisis prevention mechanism should have. In contrast, the IMF has somewhat limited ability to collect sophisticated information on a specific region and has many member counties with different views and interests. Information asymmetry between the IMF and the borrowing member country can cause a moral hazard problem. That leads the IMF to rely more on standardized and quantified information for the decision of its lending. That may make lending conditions more dependent on quantified standards and delay the process of lending decision. Moreover, crisis prevention function fits best to the initial motivation of founding CMIM, that is, avoiding stigma effect of the IMF lending. If CMIM has a crisis resolution function, its lending is offered only after a financial crisis already has occurred. In that case, the borrowing country will suffer from a stigma as a crisis-hit country even if it does not receive the IMF lending itself.

As for the basic framework of a crisis prevention function, two options can be explored: i) complementing the current CMIM; and ii) establishing a Regional Credit Line (RCL). Two approaches can be considered to introduce a crisis prevention function by complementing the current CMIM. First, the IMF de-linked portion, currently 20%, can be utilized for crisis prevention. Second, the whole resource of CMIM can be utilized for a limited designated period, say 6 months, without IMF link. If the symptoms of crisis diminish, the swap will be terminated. Otherwise, the swap will be switched to the crisis resolution track.

The second option can be establishing a new Regional Credit Line (RCL) separately from the current CMIM. RCL grants drawing rights to a beneficiary country for a designated period of time, given that the country meets the ex-ante qualifications. For RCL to work properly, sufficient amount of fund needs to be secured. Not all the member countries may be qualified for sufficient amount of credit lines. Therefore, the first option (complementing the current CMIM) may still be needed for a member country which is not eligible for RCL although a RCL is introduced.

With regard to the design of crisis prevention function of CMIM, there are several points that need to be considered. While each CMIM member country has comparative advantage in collecting high-quality information about its own economy, such advantage may not be fully utilized unless CMIM is equipped with a mechanism sufficient enough to put together and analyze raw information and produce valuable information relevant to crisis prevention. In this respect, it is important to enhance the role of the newly found AMRO.

ASEAN+3 consist of various countries with different economic size and structure, and external relationship. Therefore, shocks to each member country and approaches to cope with risks may be different among the countries. It implies that a liquidity providing procedure for crisis prevention in CMIM may not have to be uniform. For instance, some member countries may be eligible for FCL or PLL of the IMF but others may not be qualified for those facilities. Such difference should be considered in the design of crisis prevention mechanism.

Market confidence is an essential element of a crisis-prevention function, and to earn market confidence, sufficient amount of fund is required. In this light, the firepower of CMIM in terms of fund size should be significantly increased.

For a quick and efficient response to an early sign of a crisis, departure from the IMF-link condition should be considered. One way to explore this option would be to allow 20% IMF-delinked portion of CMIM to be used not only for crisis resolution but also for crisis prevention and to gradually expand the size of the IMF-delinked portion. If actual pooling of reserve is introduced, those pooled reserve should be first assigned for crisis prevention function since the real pooling system should react swiftly to any sign of a future

References

Arab Monetary Fund, “Arab Monetary Fund Annual Report 2010,” April 2011.

Development and Outlook,” ADBI Working Paper Series, ADB Institute, July 2010

________________________,“Institution Building for Macroeconomic and Financial Cooperation in East Asia,” Thailand Development Research Institute, 2011

Eichengreen, Barry, “The International Financial Architecture and the Role of Regional Funds,” Papers and Proceedings – The International Financial Architecture, August 2010.

European Commission, 2011, “Balance of Payments,” November 22, 2011 (http://ec.europa.eu/economy_finance/eu_borrower/balance_of_payments/index_en.htm).

____, 2011, “European Financial Stability Facility (EFSF),” November 9, 2011.

____, 2011, “European Financial Stabilisation Mechanism (EFSM),” October 10, 2011 (http://ec.europa.eu/economy_finance/eu_borrower/efsm/index_en.htm).

____, 2011, “European Stabilisation Actions – the EU’s response to the crisis,” June 27, 2011 (http://ec.europa.eu/economy_finance/eu_borrower/european_stabilisation_actions/index_en.htm).

Fondo Latinoamericano de Reservas, “History and Performance in Perspective,” FLAR, September 2011.

Grimes, W. William, “The Asian Monetary Fund Reborn? Implications of Chiang Mai Initiative Multilateralization,” Asia Policy, Number 11, The National Bureau of Asian Research, January 2011.

International Monetary Fund, “International Capital Flows: Reliable or Fickle,” 2011.

________________________, “Mapping Cross-Border Financial Linkages: A Supporting Case”, 2011.

________________________, "Recent Experiences in Managing Capital Inflows – Cross-cutting Themes and Possible Policy Framework.", 2011.

________________________, "IMF, Regional Financial Safety Nets to Create Stronger",2010.

International Relations Department of Republic of the Phillippines , "Chiang Mai Initiative Multilateralization," (November 2011) by at http://www.bsp.gov.ph/downloads/Publications/FAQs/CMIM.pdf.

Korea Institute of Finance, 2011, "A Method to Enhance the East Asian Regional Financial Safety Net," November 2011.

Links," IMF Survey Magazine, 2010.

Ministry of Finance, Japan, ADBI Working Paper , 2010.

________________________, "Factsheet: The IMF's Flexible Credit Line (FCL)" (15 September 2011), at http://www.imf.org/external/np/exr/facts/fcl.htm

________________________, "Factsheet: The IMF's Flexible Credit Line (FCL)," September 2011 (http://www.imf.org/external/np/exr/facts/fcl.htm), 2011.

Qureshi et al., "Managing Capital Inflows: the Role of Capital Controls and Prudential Policies," NBER WP 17363. 2011.

Reinhart and Rogoff , "This Time is Different: A Panoramic View of Eight Centuries of Financial Crises", 2009.

Sussangkarn, Shalongphob, "The Chiang Mai Initiative Multilateralization: Origin,

Tadahiro, Asami, "Chiang Mai Initiative as the Foundation of Financial Stability in East Asia," Institute for International Monetary Affairs, March 1, 2005