Introduction

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Asia, particularly Southeast and East Asia, suffered the full effects of the financial crisis that broke out in 1997. This crisis prompted the Association of Southeast Asian Nations, the People’s Republic of China, Japan, and the Republic of Korea – collectively known as the ASEAN+3 – to jointly pursue financial stability through various regional cooperation initiatives. A policy dialogue process among ASEAN+3 finance ministers was then created to promote the exchange of views and information on the state of their economies and to pursue cooperation to achieve financial stability.

One example of such cooperation is the Chiang Mai Initiative (CMI). During the 1997–98 Asian financial crisis, Thailand, Indonesia, and the Republic of Korea sought liquidity support from the International Monetary Fund. Their difficult experience with IMF programs prompted the ASEAN+3 to launch the CMI to supplement the role of the IMF. In 2000, the 13 countries that comprise the ASEAN+3 gathered at the Annual Meeting of the Asian Development Bank in Chiang Mai, Thailand, and agreed upon bilateral currency swap arrangements to fight currency speculation and preempt future crises.

In 2009, the collection of bilateral swaps was multilateralized, leading to the renaming of the initiative as the Chiang Mai Initiative Multilateralization (CMIM). Multilateralization entailed the creation of a central pool of foreign exchange liquidity, supported by swap agreements with member countries that could be flexibly provided to participating countries when they anticipate a liquidity crunch but before actually facing a balance of payments problem. In 2010, the ASEAN+3 collectively committed US$120 billion to support the CMIM. In 2012, the amount was doubled to US$240 billion.

Clearly, the CMIM needs to be governed by proper rules and guided by competent macroeconomic surveillance functions. To supplement the role of the IMF,1 the CMIM’s rules need to be reasonably flexible. This flexibility is reflected in a portion of the CMIM that member countries are allowed to use without being linked to an IMF program. At the same time, this flexibility needs to be checked and balanced with sound...
the governing rules include quotas assigned to each ASEAN+3 member country, based on leverage ratios (or purchasing multiple) applied to its contribution amount (Table IV.1). The leverage ratios reflect the CMIM’s intended purpose to support the ASEAN, particularly lower-income ASEAN members. On the other hand, the ‘+3 countries’, particularly the PRC and Japan, are contributors to the CMIM rather than beneficiaries of it.

In 2011, ASEAN+3 established the ASEAN+3 Macroeconomic Research Office to conduct continuous surveillance of ASEAN+3 economies to serve as a basis to judge whether and how a member country needs to be supported with additional liquidity. It also periodically reports to ASEAN+3 finance ministries and central banks to update authorities on the state of economies in the region and beyond. A remaining challenge for AMRO may be to eventually go beyond macroeconomic surveillance and capture financial sector risks.

In 2003, the ASEAN+3 launched another important initiative called the Asian Bond Market Initiative (ABMI). While the CMIM aims to support member countries to pre-empt a future liquidity crunch at the macro level, the ABMI is designed to address one of the root causes of the 1997–98 Asian financial crisis. Prior to 1997, businesses in the crisis-hit countries were financing long-term projects and assets that generated returns in a local currency with short-term borrowing in foreign currencies. When foreign creditors sensed the growing risks associated with this widespread practice and began to retreat, businesses faced great difficulty in liquidating their assets and obtaining sufficient foreign exchange to repay their obligations. Attempts by monetary authorities to defend their local currencies against mounting depreciation pressures led to the depletion of foreign exchange reserves. Eventually, drastic depreciations caused massive bankruptcies among businesses with unhedged exposures to currency risks. Banks and finance companies that were financing those businesses also went under because of their large holdings of non-performing loans.

The experience vividly showed that a major financial crisis can occur even when the economy’s aggregate indebtedness is not excessive if the currency and maturity structure of assets and liabilities are misaligned. This so-called ‘double mismatch’ problem tends to occur in the financing of businesses and projects that generate returns in local currency while requiring long-term financing and imported capital goods. Infrastructure is typical of such a business or project. Indeed, Asia is projected to need a massive amount of investment in infrastructure in the years to come and, therefore, must approach its financing with care.

The crisis also showed that micro level prudential measures alone are
### Table IV.1  CMIM resource allocation

<table>
<thead>
<tr>
<th>Countries</th>
<th>Financial contribution (billion USD)</th>
<th>Share (%)</th>
<th>Purchasing multiple</th>
<th>Maximum swap amount (billion USD)</th>
<th>Basic votes</th>
<th>Vote based on contribution</th>
<th>Total voting power %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Plus Three</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>192.00</td>
<td>80.00</td>
<td>0.5</td>
<td>117.30</td>
<td>9.60</td>
<td>192.00</td>
<td>201.60</td>
</tr>
<tr>
<td>(excluding Hong Kong)</td>
<td>76.80</td>
<td>32.00</td>
<td>28.50</td>
<td>34.20</td>
<td>3.20</td>
<td>68.40</td>
<td>71.60</td>
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<tr>
<td>Hong Kong, China</td>
<td>8.40</td>
<td>3.50</td>
<td>2.5</td>
<td>6.30</td>
<td>0.00</td>
<td>8.40</td>
<td>8.40</td>
</tr>
<tr>
<td>Japan</td>
<td>76.800</td>
<td>32.000</td>
<td>0.5</td>
<td>38.40</td>
<td>3.20</td>
<td>76.80</td>
<td>80.00</td>
</tr>
<tr>
<td>Korea</td>
<td>38.400</td>
<td>16.000</td>
<td>1</td>
<td>38.40</td>
<td>3.20</td>
<td>38.40</td>
<td>41.600</td>
</tr>
<tr>
<td><strong>ASEAN</strong></td>
<td>48.000</td>
<td>20.000</td>
<td></td>
<td>126.20</td>
<td>32.00</td>
<td>48.000</td>
<td>80.00</td>
</tr>
<tr>
<td>Indonesia</td>
<td>9.104</td>
<td>3.793</td>
<td>2.5</td>
<td>22.76</td>
<td>3.20</td>
<td>9.104</td>
<td>12.304</td>
</tr>
<tr>
<td>Thailand</td>
<td>9.104</td>
<td>3.793</td>
<td>2.5</td>
<td>22.76</td>
<td>3.20</td>
<td>9.104</td>
<td>12.304</td>
</tr>
<tr>
<td>Malaysia</td>
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<td>3.793</td>
<td>2.5</td>
<td>22.76</td>
<td>3.20</td>
<td>9.104</td>
<td>12.304</td>
</tr>
<tr>
<td>Singapore</td>
<td>9.104</td>
<td>3.793</td>
<td>2.5</td>
<td>22.76</td>
<td>3.20</td>
<td>9.104</td>
<td>12.304</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>2.000</td>
<td>0.833</td>
<td>5</td>
<td>10.00</td>
<td>3.20</td>
<td>2.00</td>
<td>5.200</td>
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<tr>
<td>Cambodia</td>
<td>0.240</td>
<td>0.100</td>
<td>5</td>
<td>1.20</td>
<td>3.20</td>
<td>0.24</td>
<td>3.440</td>
</tr>
<tr>
<td>Myanmar</td>
<td>0.120</td>
<td>0.500</td>
<td>5</td>
<td>0.60</td>
<td>3.20</td>
<td>0.12</td>
<td>3.320</td>
</tr>
<tr>
<td>Brunei</td>
<td>0.060</td>
<td>0.025</td>
<td>5</td>
<td>0.30</td>
<td>3.20</td>
<td>0.06</td>
<td>3.260</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>0.060</td>
<td>0.025</td>
<td>5</td>
<td>0.30</td>
<td>3.20</td>
<td>0.06</td>
<td>3.260</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>240.000</td>
<td>100.000</td>
<td></td>
<td>243.50</td>
<td>41.60</td>
<td>240.00</td>
<td>281.600</td>
</tr>
</tbody>
</table>

*Source:* ASEAN+3 Macroeconomic Research Office.
insufficient to prevent a system-wide crisis because the rational behavior of individual businesses and financial institutions can collectively create a major risk to the whole economy. Their attempts to protect their interests and manage risks can cause market-wide panic and failure owing partly to the procyclical nature of micro-prudential rules. Thus, macro-prudential policies and measures are necessary.

Policymakers in the region recognized that the underdevelopment (or lack) of local currency bond markets was a key cause of the double mismatch problem that contributed to the 1997–98 Asian financial crisis. Businesses and financial institutions could not raise sufficient long-term finances in their domestic currency, which caused them to rely on external funding even though it created currency mismatch risks in their assets and liabilities. The cheap and easy funding at the short-end of foreign banks’ maturity curve enticed Asian firms to take on maturity mismatch risks as well. The underdevelopment of local bond markets also caused businesses to depend heavily on bank lending, which amplified systemic risks.

Observing these lessons, the ASEAN+3 launched the ABMI to develop the region’s local currency bond markets. The resolution of the 1997–98 turmoil made it necessary for countries hit hard by the crisis to issue large volumes of government bonds to finance the recapitalization of banks and finance companies. Subsequently, they needed to develop secondary markets for their bonds to allow banks and finance companies to better manage their liquidity. Therefore, bond market development became both a policy objective and an immediate necessity.

Because a bond market is not a single institution but a place of interaction among many market participants, efforts to develop it require tackling a number of interdependent issues. For example, countries need to develop and diversify their investor base beyond the banking system not only to broaden and deepen the sources of demand, but also to reduce the systemic risk to which a banking system is vulnerable. Yet, the recent global financial crisis showed that policymakers also need to pay attention to banks’ exposure to shadow banks via repurchase markets and securitization. To work on this complex set of interdependent issues, the ABMI has developed through a few stages to take its current shape led by four task forces that seek to address issues of bond supply, demand, regulation, and market infrastructure, respectively (Figure IV.1).

Thanks to the regional initiatives as well as national efforts, local currency bond markets within the ASEAN+3 have grown rapidly in size over the past decade. Yet, the ABMI needs to continue to tackle two major challenges: (1) assisting individual member countries to further develop their domestic bond markets; and (2) integrating the existing bond markets of member countries. The first challenge involves two different issues. One is
to further develop the existing corporate and sub-sovereign bond markets, which is relevant for middle income ASEAN+3 members that already have functioning government bond markets to a varying degree. The other is to develop a core government bond market, which is critical for lower-income ASEAN+3 members that do not yet have a functioning domestic bond market. Cambodia, the Lao People's Democratic Republic, and Myanmar belong to this group. At present, these countries have good access to concessional resources from multilateral and bilateral sources. With their sustained high growth, however, they are likely to soon reach a stage where market interest rates will be applied to donor financing. Thus, they need to be prepared to develop their local currency bond markets, particularly government bond markets.

The second challenge of integrating regional markets stems from the ASEAN+3’s aim to promote the efficient allocation of capital across national borders. Net borrower countries can benefit from the additional resources available from net saver countries, while net savers can manage their excess resources for productive use within the region and earn returns instead of investing those in foreign currency-denominated assets outside the region, only to wait for them to return as short-term, speculative money. This challenge is relevant for middle- and high-income ASEAN+3 members that already have domestic bond markets to integrate. The five


Figure IV.1  ABMI structure
original members of the ASEAN (Indonesia, Malaysia, the Philippines, Singapore, and Thailand) and the ‘+3 countries’ (the PRC, Japan, and the Republic of Korea) can meaningfully work on this agenda. Among the remaining members of the ASEAN+3, Viet Nam is also increasingly a candidate for participation.

To meet this second challenge, the ASEAN+3 established the ASEAN+3 Bond Market Forum (ABMF) as a part of the ABMI. The ABMF is facilitating the standardization of regulations for corporate bond issuance and investment, and the creation of a multicurrency common bond issuance framework. It is also promoting the straight-through processing of bond trades to settlement across national borders. It is linked to a separate initiative under the ABMI to establish a common settlement infrastructure in the region. It is now pursued under the Cross-border Settlement Infrastructure Forum (CSIF). Furthermore, there is interest among ASEAN+3 members in deepening the currency swap market to facilitate the financing of infrastructure via the bond market.

The ASEAN also has its own multi-track plan to create an ASEAN Economic Community (AEC) by 2015 to promote more integrated ASEAN markets. The AEC is akin to the concept of the European Economic Community (EEC) in seeking the free movement of goods, services, investment, and skilled labor, and the freer movement of capital. In particular, the liberalization of the financial services trade and improved money and capital mobility will have significant implications for financial stability in Southeast Asia.

While integration is expected to create a more efficient and competitive financial sector operating in a large, single ASEAN market, it also creates challenges in regulating and supervising financial markets and institutions operating across national borders. Under the ASEAN Capital Market Forum, stock markets in member countries are increasingly interconnected to allow cross-border investment and trading. Securities market authorities of member countries have been working on standardizing regulatory requirements and strengthening procedures for supervisory cooperation at the regional level. At this stage, investment flows are still oriented to domestic and global markets, with only modest levels of cross-border intra-regional investment. The ASEAN’s multicurrency environment including not fully convertible currencies is an obvious hurdle. As the region’s financial authorities make progress toward integration, however, they need to be prepared for new types of capital flows to ensure the systemic stability of markets.

Financial integration is also a process of creating systemically important financial institutions at the regional level. The ASEAN is pursuing the creation of an ASEAN banking framework under which qualified
banks will be allowed to operate across the region. In order to implement this plan, the bank supervisory authorities of ASEAN member countries need to develop, among other things, arrangements for the resolution of distressed financial institutions operating across national borders. In this regard, issues currently being debated in the Eurozone are relevant for the ASEAN, although the ASEAN is unlikely to move toward a single regional regulatory authority model in the foreseeable future.

Integration is bound to move slowly because of large differences in the level of financial-sector development across ASEAN member countries. For example, not all countries have a deposit insurance scheme, while a clearly defined role for deposit insurance will be crucial in tackling the resolution of distressed banks operating across national borders. Each ASEAN member country is likely to have to move on the basis of when it is ready. A principle of reciprocity may also be applied. To keep the momentum for integration, support for capacity building in less developed members is essential. Under the ASEAN Central Bank Forum, four working committees (Payments and Settlement Systems, Capital Markets Development, Capital Account Liberalization, and Financial Service Liberalization) and one task force (Banking Integration Framework) are examining specific steps for integration in their respective areas along a road map adopted by a senior-level committee led by deputy governors.4 Individual member countries as well as the working committees and task force identify capacity gaps. The steering committee for capacity building5 coordinates mutual support efforts among the members to fill capacity gaps.

**CHALLENGES OLD AND NEW**

While the region’s initiative to achieve financial stability has made good progress, it does not address all macro-prudential issues, including the management of capital flows. When the GFC broke out, countries in the region were exposed to highly volatile external conditions. The US Federal Reserve Bank and the European Central Bank implemented massive quantitative easing measures to cope with the acute contraction of liquidity in their home markets. The enormous liquidity created by QE spilled well beyond national borders6 and generated large capital flows into emerging markets, including those in Asia. Subsequently, the US and the European financial supervisory authorities, as well as global authorities,7 introduced tougher prudential standards for banks. Together with losses suffered by US and European banks, these new measures led banks to pursue deleveraging. Because US and European banks have a significant presence in
Asia, their deleveraging generated capital outflows from the region. Asian countries were later faced with QE measures taken by the Bank of Japan, and are now facing a possibility of the Federal Reserve winding down QE. This series of events has led to massive capital flows in and out of the region.

A dilemma for Asian authorities is that their successful efforts to develop domestic bond markets, while helping to address the problem of double mismatches, is creating a new channel of risk transmission. For example, Indonesia, Malaysia, and Thailand experienced significant capital inflows into their government bond markets, putting appreciation pressure on their currencies as a result. The core of any bond market is almost always the government sector, particularly in the case of developing economies, and Asian economies are not an exception. Although many government bonds are long-term instruments, the markets for them are designed to be liquid and, therefore, facilitate the easy entry and exit of foreign portfolio investments. They thus enable investors to speculate on the domestic currency value and arbitrage interest rate differentials (that is, currency carry trades), especially when monetary authorities in developed economies are engaging in massive QE efforts.

The ASEAN’s efforts to integrate the region’s economies and allow freer movement of money and capital, will, in effect, promote capital flows. Under the ABMI, the Asian Multicurrency Bond Issuance Facility (ABMIF) of the ASEAN+3 could create a new channel of capital flows. Ongoing efforts to enhance the cross-border settlement of bond trades, establish comparability among credit ratings issued by local credit rating agencies, and enable corporate issuers to overcome sovereign credit ceilings and tap regional and international bond markets with the Credit Guarantee and Investment Facility (CGIF) will further facilitate cross-border investment and trading. Although corporate bonds are usually less liquid than government bonds, ASEAN and ASEAN+3 authorities will need to watch this new channel.

Needless to say, not all capital flows are harmful, and inflows of committed long-term capital such as foreign direct investment are generally welcome. In formulating policy measures to control capital flows, however, there is only a fine line between FDI and portfolio flows in their statistical definitions. Even among portfolio flows, there are long-term flows and speculative ones. In fact, capital controls introduced by some Asian countries to cope with capital inflows generated by QE have created some undesirable side effects. It is, therefore, critically important for countries to develop a capability to monitor capital flows and distinguish between beneficial and harmful flows.

With the gradual recovery of the US economy and in anticipation of
eventual QE tapering by the Federal Reserve, capital flows have begun reversing themselves. Asian currencies are coming under depreciation pressure once again, which is raising inflationary concerns in economies dependent on imports, such as Indonesia. Monetary authorities in such economies are tempted to raise interest rates. However, these countries are also seeking to sustain economic growth and contain widening income gaps, which could be worsened by interest rate increases.

In addition, Asian banks today hold significant bonds on their balance sheets and are more exposed to interest rate risk. A rise in market interest rates could cause significant capital losses to banks, weakening their financial soundness. Some Asian countries need to develop instruments and markets for hedging and managing interest rate risk. Global efforts are also underway to strengthen the supervision of over-the-counter derivatives markets by requiring the use of central counterparties (CCPs) for clearing to improve transparency and risk management. The developed economies among the ASEAN+3 are already moving in step with global efforts. Middle income Asian countries that do not yet have a derivatives exchange supported by a CCP may need to develop such a market. They may also so need to explore the possibility of using an existing CCP within the region. Regional cooperation should be useful to enable institutions to access CCPs in other economies since the access is otherwise limited by their member eligibility conditions.

On the other hand, frontier market economies – such as Cambodia, the Lao PDR, and Myanmar – need to focus on developing a core of their domestic financial systems and markets. Their economies are currently highly dollarized, and even their government finance depends significantly on concessional resources in foreign currencies made available from bilateral and multilateral sources. The resulting lack of a domestic government debt market is not helping the process of de-dollarization. A high level of dollarization seriously compromises the effectiveness and usefulness of monetary policy while not guaranteeing financial stability because currency mismatches can still be created in critical segments of the economy. It also deprives the central bank of a means to address a banking crisis. On the other hand, total dollarization is not an option for any of the frontier market economies in the region.

The frontier market economies operate in a quasi-fixed exchange rate regime. Their money and foreign exchange markets are neither well developed nor well organized, and their transparency, efficiency, and depth are limited. The foreign currency-denominated liabilities of the public sector and some businesses can put unexpected pressure on the value of a domestic currency in a shallow, disorganized, and non-transparent foreign exchange market. Such pressure could be caused by not only direct debt
but also contingent liabilities such as government guarantees for foreign currency payment obligations of businesses or projects that earn revenues in local currency (for example, utilities). If the local currency depreciates significantly, it could lead to default by or even the bankruptcy of such businesses. On the other hand, the central bank’s attempt to defend the value of the local currency could lead to a depletion of international reserves, which may invite attacks on the local currency through an offshore non-deliverable forward (NDF) market. Regional cooperation may be useful in regulating and supervising the NDF market.

Frontier market economies need to develop their money and foreign exchange markets, and upgrade their interbank payments system as it is a key piece of financial market infrastructure. Markets need to be better organized and more transparent to enable the monetary and financial supervisory authorities to anticipate and address possible emerging risks. These economies also need to develop their capacity to manage government cash flow and debt. Sound cash management by the government treasury is critical for the central bank to manage banking system liquidity and to promote the interbank money market. Sound management of government debt including contingent liabilities is a foundation for developing a government bond market. A core legal and regulatory framework such as a central bank law, banking law, securities law, and public finance or debt law must also be upgraded to enable these developments.

The need for contingent liabilities management is not limited to frontier market economies. Any economy seeking to aggressively invest in infrastructure through the use of public–private partnerships (PPPs), government guarantees, state-owned financial institutions, or fiscal decentralization needs to pay close attention to it. Owing to the region’s massive need for infrastructure investment and the drive to promote PPP to help finance such investment, many countries in the region need to make parallel efforts to strengthen their contingent liabilities management. Contingent liabilities tend not to be transparent, particularly under a cash-based accounting system in the public sector. It is necessary to make conscious efforts to explicitly account for the cost of contingent liabilities in the fiscal framework to avoid their uncontrolled growth.

With renewed global, regional, and national efforts to strengthen financial stability, a new dilemma seems to be that the more effective prudential measures are made, the less effective monetary policy will be. Tight prudential requirements constrain credit growth even when QE is being implemented. They can also limit access to financial services and compromise a polity to promote inclusive growth. Additional liquidity tends to sit in the current accounts of banks at the central bank instead of being lent to finance productive activities, even at rock-bottom interest rates. With the
global initiative to control shadow banking, repo market transactions, and securitization, the channels for excess liquidity to escape the prudential regulatory net are narrowing. Thus, balancing growth and stability will continue to be a challenge.

The chapters in this part discuss aspects of issues related to ‘financial integration and cooperation to support financial stability’. As stated in the synopsis of this volume, Chapter 9, by Cyn-Young Park and Rogelio Mercado Jr, examines the hypothesis that equity home bias should be declining for emerging Asian countries as a result of increasing financial integration and improving regulatory quality, given the experience with advanced economies. The results would be important for regulators in determining the types of financial market reforms to pursue to encourage lower equity home bias and greater international portfolio diversification. Chapter 10, by Emilios Avgouleas, Douglas W. Arner, and Uzma Ashraf, reviews the causes of the Eurozone financial crisis and draws parallels with the institutional infrastructures underpinning East Asian financial arrangements. Michael Andrews’s Chapter 11 considers the deposit insurance systems in the ASEAN+3 in the context of the Deposit Insurance Core Principles and other recent international developments. The second chapter by Michael Andrews (Chapter 12) argues that there is an opportunity for ASEAN+3 countries to learn from failures of other regions of the world and strengthen national resolution regimes. Finally, Chapter 13 by Paul Mizen, Frank Packer, Eli Remolona, and Serafeim Tsoukas discusses, among other issues, what drives the corporate bond issuance decision and capital structure for corporations in the context of emerging economies in Asia.

NOTES

1. The IMF developed new facilities at the global level including the flexible credit line (FCL) in 1999 and the precautionary credit line (PCL) in 2011.
2. High-income Brunei Darussalam does not have a local currency bond market, owing to a lack of borrowing need.
3. This framework is known as the Asian Multicurrency Bond Issuance Framework (AMBIF).
4. ASEAN and ADB (2013).
5. The Steering Committee is co-chaired by the ADB and the Southeast Asian Central Banks (SEACEN) Research and Training Centre.
6. The US dollar and the euro are fully convertible, international reserve currencies.
7. For example, the Basel Committee; International Organization for Securities Commissions (IOSCO), International Association of Insurance Supervisors (IAIS), and their Joint Forum; and the Financial Stability Board.
8. Donor lending to Myanmar is only now resuming owing to the fact that past arrears with donors were cleared in early 2013. The country is expected to take full advantage of concessional resources in the near future.
Implicit contingent liabilities also include unfunded pension liabilities, natural disaster risk, financial sector risk, and nonfinancial systemically important business risk.

REFERENCE