Asian Regional Financial Safety Nets? Don't Hold Your Breath

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Abstract

By conjecturing that efforts to prevent and manage a crisis are the essence of providing financial safety nets, I argue that such efforts made by the ASEAN+3 officials especially in the provision of liquidity support during a crisis are far from adequate. The event of Lehman collapse in the fall of 2008 could be a game-changer in the global financial market, making the probability of a financial contagion higher than ever before. Even with improved financial conditions and stronger regulations in ASEAN+3 members, contagion can and will still strike. Making the CMIM more effective is therefore urgently needed.

Introduction

Any country is vulnerable to financial channels of a crisis, even if the crisis is occurring elsewhere. Developing an effective financial safety net is hence necessary. It is no exception for Asia. As the recent Eurozone crisis has shown, banks' deleveraging could have an impact on credit supply and asset prices in Asia. Shrinking trade finance affects the real sector by disrupting trade activities, and capital flows can reverse quickly even from countries with sound macroeconomic and financial conditions. Capital flows reversal can knock over equity and capital markets, especially where foreign investors have traditionally played a significant role like in Asia.[2]

Monetary and fiscal policy can help mitigate the impact and restore the fiscal space lost after the 2008 crisis. Yet, such old playbook is no longer adequate. A more important lesson is the need to have a robust financial safety net, including accumulating enough foreign reserves (self defense). Recent experience has also shown that maintaining sufficient liquidity is key for the economic engine to continue running. Vulnerabilities can be reduced by securing credit

[1] Views expressed in this paper are entirely his personal, not of the institutions he is attached to.
[2] Many Asian countries have sizeable exposures to European banks through loan syndication, wholesale funding, and trade credit lines.

lines, lengthening debt maturities, and securing currency swap.

But domestic safety net alone may not be sufficient, even for resilient Asia. If contagion effects are so severe, market may react indiscriminately. Many suggest that Asia is strong enough to weather the Eurozone crisis. Asia's house of card is unlikely to fall, so they say. But something unusual does not mean unlikely to happen. British novelist Wodehouse once remarked: "never confuse the unusual with the impossible." Witness the robust macroeconomic conditions prior to 1997 which failed to prevent the Asian Financial Crisis (AFC). In Europe, before 2008 no one had imagined that the Eurozone system will suffer like they do now. This is where the safety net provided by regional financial arrangement (RFA) will play an important role. To the extent that in an interconnected financial system the probability of spillover effects is high, and the global nature of most crises calls for coordinated policy response, the safety net provided by RFA can be complementary to domestic and global financial reform to respond to systemwide shocks.[3]

Using the case of RFA in ASEAN+3, I argue that the effectiveness of the region's RFA is so far limited. Its accomplishment is not as originally expected. This is despite the gradual progress and positive statements made by officials in various meetings. Much of the safety net remains provided by national resources. When domestic problems arise, this can put the region's financial sector at risk.

Asia's Financial Arrangement and Safety Net

The role of RFA is to provide crisis resolution (insurance-like) facilities that could be available on very short notice. By providing a swap line, for example, RFA can help overcome the temporary liquidity problem as well as to create confidence in the market. RFA can also have influence and capacity to catalyze private lending through agreed policy frameworks. Absent of RFA, central bank is the one who provides short-term liquidity. But central bank's capacity to do so is constrained by the size of foreign reserves it holds, and by the unintended consequences of its action.

Since the likelihood of crisis contagion and spillover effects of a unilateral domestic policy response can be large, and international financial institution such as the IMF has its own constraints, RFA emerges as an alternative. Through risk-pooling, RFA can also help address idiosyncratic shocks that hit an individual economy. Thus, RFA can play its part as a central pillar in providing the regional financial safety net.

[3] For the relationship between regional financial arrangement and the IMF, see Eichengreen (2012).

But that is an ideal scenario. The truth is, RFA in Asia is far from that ideal. From Asian Bond Market Initiative (ABMI) and the Credit Guarantee Investment Facility (CGIF), to Chiang Mai Initiative Multilateralized (CMIM) and the recently established ASEAN+3 Macroeconomic Research Office (AMRO), the region's efforts to have a meaningful financial cooperation still need to go through long and winding roads.[4] Before elaborating on this issue, let me first discuss the background and progress of these regional institutions/initiatives.

ABMI and CGIF

Based on the discussion in 2003, the objective of ABMI was to develop local currency bond markets in Asia in order to prevent recurrence of financial crisis by reducing double mismatches and recycling regional savings within the region.[5] There was a clear intention to do away with short-term borrowing in foreign currency, a widespread practice that led to the AFC in 1997.

The ABMI's first roadmap, set up in 2008, addressed issues related to supply, demand, regulation, and market infrastructure, for which four task forces were formed. One of the important outcomes of this was the establishment of CGIF in 2010. Another one was the launching of ABM Forum (ABMF), announced during the meeting in Tashkent, Uzbekistan in May 2010. The latter is meant to be a common platform to pursue standardization of market regulation and practices, believed to be an important factor for regional integration.[6] Other ideas, including the establishment of Regional Settlement Insititute (RSI) and the strengthening of the region's credit rating system, have not gone far.

In the 15th ASEAN+3 Finance Ministers and Central Bank Governors' Meeting on 3 May 2012 in Manila, authorities agreed to adopt New Roadmap+ and to set nine priorities, ranging from launching guarantee programs of Credit Guarantee and Investment Facility (CGIF), enhancing financial access to consumers and Small and Medium Enterprises (SMEs), to

[4] Although the development of regional bond market through ABMI is more for crisis prevention, not part of regional financial safety net per-se, crisis prevention and crisis resolution are in practice closely linked. This fact also guided the ASEAN+3 finance ministers and central bank governors in May 2012 to combine CMIM with crisis prevention facility named "CMIM Precautionary Line" (CMIM-PL).

[5] At the earlier stage, there were 4 working groups to discuss specific issues: New Securitized Debt Instruments (led by Thailand), Credit Guarantee and Investment Mechanism (Korea and PRC), Foreign Exchange Transactions and Settlement Issues (Malaysia), and Rating Systems and Dissemination (Singapore and Japan).

[6] The ABMF activities began by, among others, comparing regulations and market practices in different countries in the region. It is expected that the assigned sub-group will produce comprehensive market guides to clear information gaps. The market guide will provide investors and other market participants a complete set of information and guide on key aspects of bond markets in the region.

strengthening the foundation for a regional credit rating system.

When the CGIF was established in May 2010, ASEAN+3 officials requested the Asian Development Bank (ADB) to help. For this purpose, the ADB set up a trust fund with an initial capital of US$700 million (ADB contributed $130 million as paid in capital). The main function of CGIF is to provide credit enhancement to allow the region's marginal issuers to issue local currency bonds and larger issuers to issue across national border by overcoming the sovereign credit ceiling.[7] While the CGIF could develop as an investment facility in the future, and the ABMF has published "ASEAN+3 Bond Market Guide," it remains to be seen how this will help strengthen the regional bond market to make it deeper and more efficient through greater cross-border bond issuance and investment in local currency.[8]

Many ABMI meetings have taken place, improvements have been made, and new ideas and proposals have been discussed. A decade after its inception, questions are raised about the effectiveness and the accomplishment of this initiative.

Since 2003, more countries have issued more bonds with lengthened maturity, not only for their financing need and fiscal stimulus during the crisis, but also for setting a benchmark yield curve for corporate bonds.[9] Yield curves tend to get flatter and shifting downward as authorities in the region soften the monetary policy in response to the likely impact of Eurozone crisis. Rules to facilitate bond issuance are issued, including for the issuance by revenue generating sectors such as local government and public utilities (e.g., in Indonesia, Philippines, Viet Nam, and the PRC), resulting in a growing number of participating issuers. Some countries, notably Thailand and Malaysia, allow foreigners to issue local currency bonds onshore and make the procedure easier for them. As a result, foreign ownership markedly increased.[10] It should be noted, however, that the recent inflows of foreign fund are largely due

[7] The ADB listed in Tokyo Pro-Bond market as a pilot project. At the time of writing, over 95% of CGIF paid in capital has been remitted to the CGIF Trustee which has authorized the Treasury Department to manage for a fee of 10 basis points on behalf of CGIF. The CEO and CRO commenced their employment in October, 2011.

[8] Aside from the CGIF, three possible areas are studied for future cooperation; i) infrastructure financing, ii) disaster risk insurance, and iii) using local currencies for the regional trade settlement. One of the sticking issues on infrastructure financing is whether to increase the resources for multilateral institutions to provide significantly larger lending for infrastructure, or to establish a new mechanism to channel resources for infrastructure development.

[9] Many ASEAN+3 countries have developed a benchmark yield curve for corporate bonds over the past few years. They have also changed the tenor of benchmark bond issuance to match the market demand. For example, Thailand has changed the tenor of benchmark bond issuance from 7 to 10 years to 5 to 10 years, and has issued government bonds with 30 years maturity. Indonesia has also issued government bonds with a similar maturity.

[10] Under its Medium-Term Note Program, the ADB has issued local currency denominated bonds in a

to uncertainty in the global economy and increased market volatility, implying that Asia is seen as a "safe heaven" by most investors.

Corporate bond is also growing steadily, in some cases even faster than the growth of government bond.[11] In PRC, Korea, and Malaysia the corporate bond market have exceeded the BIS threshold for a "deep and liquid market" (US$100 billion). To strengthen the role of SME and micro enterprises, some governments encourage the financing of these activities through bond issuance. Also, selected local governments in the PRC (Shanghai, Zhejiang, Jiangsu, and Guangdong province) are allowed to issue bonds up to the amount of CNY 25 billion divided equally into 3-year and 5-year tenor.

Some countries have also made improvements in the institutional arrangement by strengthening corporate governance and transparency in the listing and disclosures rules, and moving toward the adoption of international accounting and auditing standards. This is meant to attract more investors in order to raise market liquidity.

The quality of domestic rating agencies has presumably improved as they have been trained on the international best practice to harmonize the rating practices. Also important to note is the collaboration with the Association of Credit Rating Agencies in Asia (ACRAA). Improvements are made in the registration requirements to be in line with the adoption of ASEAN+ standards. Some countries are also considering to accept the IFRS and ISA for cross border offering, and to comply with IOSCO principles for securities regulations.

To enhance cross border bond transaction, efforts are made to harmonize the Asian Bond Standards by involving existing self-regulating organizations (SROs) in the region to ensure consistent adoption of standards and practices. Some countries also made attempts to improve insolvency laws to deal with issues like debt funding, debt recovery, secured transactions and insolvency processes. On the information and educational side, the Asian Bond Online (ABO), one of ABMI's products, has become the envy of other organizations as it provides

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few ASEAN+3 countries using common disclosure standards and terms and conditions governed by a common law as steps towards to the harmonization of these standards. To date ADB has issued $673.2 million under its Asian Currency Note (ACN) program in Hong Kong and Singapore. It is also worth to note that ASEAN+3 requested the ADB through OREI to review the progress made under the 2008 roadmap and agreed to adopt a New Roadmap+. Korea made a proposal to broaden the scope of ABMI to include other capital markets, and it was agreed that ABMI will only facilitate and not necessarily accelerate the establishment of RSI.

[11] In some countries, government bond issuance has declined but that is due to intentional policy to reduce public debt (Indonesia is a notable example)

comprehensive data and information on the development of Asian bond market.[12]

All in all, the quantity and quality of the market have improved. The question is, how much of these developments are due to the ABMI related activities? This is a strategically important question to ask, as it may suggest a reassessment of the whole concept of ABMI. But this is also a very difficult question to answer since methodologically one needs to disentangle the determinants of bonds market development, i.e., separating components that are independent of ABMI from those caused by the ABMI. The development of bond market in the region may have taken place anyway, with our without ABMI, since policy makers in each country fully realize the importance of it as an alternative source of long term financing.

A lot have been done in each country. New policies, rules and regulations have been issued, all of which have contributed to the development of local currency bond market, albeit not necessarily cross-region holding of bond. Measuring their impacts, let alone the indirect impacts, however, is a different matter. "With and without" approach is always preferable, but it is also more difficult to do than "before and after" approach.[13] Unless such an exercise is done, however, we will never be able to evaluate precisely the true impact of ABMI.

CMIM/AMRO

Disappointed with the IMF-driven policy during the AFC, a number of countries initiated regional cooperation to deal with future crisis. The early proposal to set up an Asian Monetary Fund (AMF) was shelved because of the rejection by some countries, notably the US, who argued that Asia's capacity to provide resources for regional financial safety net in terms of both financial resources and capacity to do surveillance is limited. But they completely ignored the fact that financial resources and capacity can be built up and developed overtime. Many suspect the real reason for rejection was a fear of duplication and competition that could undermine the Fund's role and credibility.[14] The IMF subsequently introduced Supplementary

[12] The following table shows the number of hit on the ABO website during the last two years:

Period	Total Site hits	Total Unique Visitors	Total Visits	Total Pageviews	Total ABM Hits	Total WDH Hits
2010	9,674,093	65,472	528,971	1,879,713	208,237	65,443
2011	11,597,752	84,506	627,179	2,294,895	212,713	119,485

For January-February 2012, the following is recorded: Hits/day : 32,174 (+2.85%); Unique Visitors :11,980 (+6.36%); Visits/day : 1,864 (+5.19%); Page views/Day: 5,822 (+3.41%).

[13] Not less important is the question of distribution of benefits. No wonder some countries are aggressively pursuing the liberalization of regional bond market, and even trying to broaden the initiative by including all capital market instruments.

[14] Following the rejection, a surveillance mechanism in the Asia-Pacific region was created in November 1997, subsequently named as the Manila Framework Group (MFG) that includes the United States,

Reserve Facility (SRF) and Contingent Credit Line (CCL) to strengthen its position as the lender of last resort. The counter-argument, however, points to the fact that the severity of the Asian crisis required fast and large amount of disbursement of liquidity support that put serious constraints on the IMF to act in a timely manner with sufficient financial resources.[15]

The episode did not stop some governments in the region to pursue further cooperation. Eventually the efforts led to the establishment of the Chiang Mai Initiative (CMI) in May 2000, which effectively expanded the swap arrangements among ASEAN countries to include Japan, PRC and Korea (hence the term ASEAN+3). Intended to focus on closer cooperation and RFA, the proposal stipulates the importance of regional surveillance and monitoring, particularly of capital flows, and the need to complete a network of Bilateral Swap Arrangements (BSA) that would provide liquidity support for member countries when needed.

Following intense discussions, Finance Ministers and Central Bank Governors of ASEAN+3 and the Monetary Authority of Hong Kong, China declared an expanded CMI, the Chiang Mai Initiative Multilateralization (CMIM), to be effective in March 2010. To deal with crisis prevention, they stressed the importance of enhancing market confidence, setting the committed amount of $120 billion, and collaborating with the IMF on the surveillance work. More controversial was the decision to link the provision of facility with the IMF ("IMF-link"). Only 20 percent of CMIM borrowing quota can be taken without linking it to IMF programs, an inconsistent proposition with the *raison d'être* of CMIM. Given the short-term nature of the facility (90 days), and recognizing the fact that the effect of any attached conditionality will be much longer, to adopt the link makes very little sense. Inconsistency aside, insisting such arrangement where IMF stigma is still widespread suggests that no one actually expected the CMIM facility will ever been implemented. It was like merely for a "feeling good" purpose. Indeed, the sincerity of ASEAN+3 to provide regional financial safety net at the time was seriously questioned. Since the crisis prevention mechanism would apply only for member countries with strong policy track records, question was raised as to how the group will deal with those countries not be qualified for it.[16] But it was only the beginning, hence it should be

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Australia, and New Zealand in addition to Asian economies. Its contribution, however, was very minimum if none at all. The second line of defense it arranged for Indonesia and Korea was neither ever detailed nor activated.

[15] A case in point was the far too small supplementary support from the IMF to Thailand and Indonesia during the 1997 crisis. The disbursement of financial support was also not timely, because it was done in several tranches; see Azis, I.J (2009). Building on the this experience, the IMF initiated a reform of its lending toolkit after 2009 and introduced more tailored crisis prevention tools, including the *Precautionary and Liquidity Line* (PLL), designed to meet the liquidity needs of those with sound economic fundamentals and policies but have temporary BOP problem.

[16] The different design of IMF's traditional Stand-By Arrangements (SBA) and that of the Flexible

seen as a good start.

To support the CMIM, on April 2010 officials agreed to establish an independent regional surveillance unit, *ASEAN+3 Macroeconomic Research Office* (AMRO). This marked the region's first step toward institutionalizing financial cooperation, an early form of Asian Monetary Fund. AMRO is expected to monitor macroeconomic and financial conditions, detect emerging vulnerabilities, and support the CMIM decision-making. For it to play a pivotal role, however, it has to be credible, competent, and independent in conducting the surveillance analysis.[17]

During the 15th ASEAN+3 Finance Ministers and Central Bank Governors' Meeting in Manila, officials agreed to double CMIM resources to US$240 billion and increase the IMF de-linked portion to 30 percent with a view to raise it to 40 percent in 2014 when conditions warrant. They also agreed to lengthen the maturity of both the IMF-linked and IMF-delinked portion, i.e., from 90 days to 1 year, and from 90 days to 6 months, respectively. Similarly, the supporting period was lengthened from 2 years to 3 years, and from 1 year to 2 years, respectively. Obviously it is a progress, but doubts about the effectiveness of CMIM remain especially with regards to the IMF-link. Reducing the link from 80 to 70 percent does not remove the inconsistency.[18]

It is interesting to note in this context the difference between the IMF-link in Europe and that in CMIM. In the eurozone rescue, the €110 billion pledged in the first bailout package (spread over three years) was financed two-thirds by the EU and one-third by the IMF. At the request of European officials, the Fund spearheaded the negotiation (outsourced), but the conditionality was jointly decided by the EU and the IMF, with the EU having most of the role-playing. This is the opposite with the IMF-link in CMIM. To the extent that the IMF has long experience and expertise in surveillance, aside from the inaccuracy of diagnosis and suitability of the conditionality, the European modality makes more sense. For ASEAN+3, where funding is not a major constraint given the region's excess saving, it should be more appropriate to link with the IMF on the surveillance work rather than on the funding.

Credit Line (FCL) was highlighted at the time, where the latter has the potential to overcome problems related to the IMF stigma. Officials were also contemplating the idea to complement the IMF's FCL and the Precautionary Credit Line (PCL).

[17] At the time of writing, AMRO has three surveillance teams, each of which comprises one senior and three economists. The fourth team is to be set up in 2012. Until then AMRO will have 4 senior economists and 12 economists, and about 10 other staff.

[18] To strengthen the CMIM, finance ministers and central bank governors also agreed to introduce crisis prevention facility named "CMIM Precautionary Line" (CMIM-PL).

To evaluate the effectiveness of CMIM is not easy because the facility has never been activated. The pledged amount of US$240 billion does not promise to provide anywhere near sufficient resources to stave off a 21st century financial crisis. It was only around 5 percent of the reserves held by ASEAN+3 countries. Some argued that the facility was actually designed for ASEAN countries, not the "+3." This is clearly inconsistent with the whole concept of RFA. Was the facility in the Eurozone area intended only for the periphery countries? Will Spain and Italy have no chance to benefit from it even if their situations warrant? There is no such thing like "optimal" size of committed amount, what matters is market perception. Any amount able to deter market from shorting a currency would be suitable. But US$$240 billion does not seem calculated based on this rationale, rather based on the IMF funding related to the 70 percent IMF-link. With this persistent inconsistency, I have a serious doubt that CMIM facility is "ready" for activation and that it is enough to make a real alternative in times of need for liquidity support.

That the utilization of CMIM facility depends on independent and credible surveillance work, which in turn depends on the quality of shared information, is everyone's knowledge. So far, the information-sharing is done through the Economic Review and Policy Dialogue (ERPD), the effectiveness of which is questionable at best, especially for CMIM purposes. Ideally, CMIM should be able to rely on its own assessments when making decisions about the amount to lend and the required conditionality associated with it.

Another challenge is on the procedural matter. Too many lessons have been learned that the mechanisms of liquidity support need to be rapid to make it effective. Yet, delays in activation due to institutional and procedural constraints always happen. All these suggest that a careful preparation needs to be made. It is also unclear if a detailed procedural system has been in place for a member country to follow. What information to prepare, what steps to take before contacting CMIM authority, and whom and what number to call, if, let's say, one country is requesting to use the facility next week due to contagion effect of the eurozone crisis.

Given the current global economic condition, all eyes are looking at Asia, including how the region cooperates. Being an Asian RFA, the CMIM has now become the center of attention to judge how serious Asia is in providing regional financial safety net. Many will also watch the progress of AMRO's activities. As financial crisis is increasingly more global than regional, where contagion and spillovers go beyond regional boundary, combining domestic safety net with regional and global safety net is necessary, and this means the relationship between RFA and the IMF also becomes more important. While RFA has all the desirable promised features for financial safety net, the IMF is in a better position to examine the implications on Asia of policy response to a crisis occurring elsewhere, as well as to analyze the global implications of

policy decisions taken in Asia by using its Financial Sector Assessment Program (FSAP).[19]

The discussion above shows that RFA in Asia is still far from expected. The effectiveness of each institution and initiative remains limited, implying that given an idiosyncratic shock the region still cannot rely on its RFA. Financial safety net will continue to be supported mostly by countries' own resources, including their ample foreign reserves. Under such circumstances, mitigating risks caused by a crisis remains limited, forcing authorities to go through a difficult balancing act: developing financial market infrastructure and expanding products on the one hand, and maintaining stability in the midst of global economic uncertainty and market volatility on the other. This is the reason why deregulations in financial market have been increasingly "matched" by rules and regulations that will limit some financial transactions.[20]

This does not necessarily mean that Asia's financial sector is currently vulnerable. Thanks to the lessons of 1997 AFC, financial sector in most countries are relatively sound and resilient, enabling them to weather the impact of the shock caused by the Lehman collapse and the Eurozone crisis. Ironically, this may have been one of the reasons why efforts to strengthen the RFA have not been high in priority.

Financial Integration

Financial integration is often associated with openness. Despite the promised risk sharing and other benefits of it, financial integration can cause greater volatility and vulnerability (Azis, 2011). Some argued that the volatility caused by integration is only up to a certain threshold, implying that the benefits of financial integration in terms of risk sharing and consumption smoothing can be expected beyond such threshold (Kose, Prasad, Terrones, 2003). In reality, however, risk sharing following integration is often limited. Doubts are therefore raised regarding the usefulness of financial integration.

But a more integrated financial market can also serve as safety net that will strengthen

[19] FSAM was launched in 1999 in response to the AFC. It is meant to help national authorities to identify financial sector vulnerabilities and to design long term policies and reforms in order to prevent future crises. Ironically, non-Asian members are more enthusiastic than Asian members about it. Questions about its effectiveness have been raised especially in light of FSAP assessment prior to the Lehman collapse and the Eurozone crisis. Nonetheless, G20 leaders made participation in FSAP mandatory (every 5 years) for jurisdictions with financial sectors deemed "systematically important."

[20] For example, the Bangko Sentral ng Pilipinas (BSP) issued a memorandum last year requiring investments of banks in offshore issuance of peso-denominated government securities transacted and settled in foreign currency to be recorded as a foreign currency-denominated asset. To minimize unsafe banking practices, BSP also requires banks performing as underwiter of equity securities to undertake the function through a separate department.

financial stability.[21] For that to happen, however, financial market integration should be guided by greater exchange-rate flexibility, freer capital mobility, and transparent rules and regulations. Fair competition on reciprocity that allows private sector to adjust given any changes is also needed.

Asia's financial sector has been growing steadily and more resilient than before. But judged by the volume of cross border holding of asset it is still far from integrated, lagging behind trade integration.[22] Indeed, Asian economies have closer financial linkages with industrial countries than among themselves, although the trend measured by either asset-return correlation or cross border financial holding has changed since the Great Recession in 2008.

The size of cross-border holding bond in Asia in 2010 is only less than 8 percent (US$233 billion), increased from 4.2 in 2001, of which short-term debt account for a larger share than the long-term ones. The lack of regional bias is clearest in the case of Japanese investors, who invested only 1.1 percent of their total debt portfolio investment in Asia, while Korean investors about 8.8 percent, down from 21 percent in 2001 (see Table 1).

Table 1 Asia Cross Border Debt Securities Investments (in million USD)

Investment from: end-2010

Investment in:	Hong Kong, China	India	Indonesia	Japan	Korea, Republic of	Malaysia	Philippines	Singapore	Thailand	Total Asia	United States	EU 15	Total value of investment
China, P.R.	45,875	...	106	494	167	9	...	1,970	1	48,622	1,602	6,332	58,647
Hong Kong, China	...	...	144	1,484	405	234	217	6,440	419	9,341	2,297	8,023	22,380
India	9,131	...	10	1,057	94	235	...	10,570	446	21,542	5,009	17,665	58,988
Indonesia	376	...	...	2,649	74	253	697	12,637	43	16,730	9,622	14,191	42,294
Japan	18,332	4	14	...	1,220	65	62	10,650	73	30,419	52,700	194,567	534,465
Korea, Republic of	18,383	...	115	12,200	...	2,427	...	17,543	11,412	62,079	25,772	48,240	147,925
Malaysia	5,555	...	49	2,774	186	...	21	8,264	133	16,982	11,940	21,185	51,409
Philippines	1,161	--	1	2,937	219	512	...	2,769	46	7,646	7,506	7,177	26,656
Singapore	5,308	7	721	4,998	149	1,991	138	...	176	13,488	7,552	11,199	40,438
Taipei,China	1,664	...	5	25	17	...	...	4,283	--	5,996	377	6,676	13,226
Thailand	729	...	2	886	83	165	...	3,146	...	5,010	2,035	4,810	12,860
Vietnam	290	...	1	38	22	...	...	113	1	464	674	2,009	3,168
Total Asia (A)	106,805	12	1,167	29,542	2,635	5,890	1,135	78,384	12,750	238,320	127,086	342,076	1,012,457
Total value of investment (B)	344,854	527	5,549	2,667,349	29,990	10,843	5,843	204,636	17,942	3,287,533	2,091,088	12,403,303	24,827,387
Ratio of A to B	31.0	....	21.0	1.1	8.8	54.3	19.4	38.3	71.1	7.2	6.1	2.8	4.1
United States	72,199	175	246	868,676	12,760	1,047	1,804	35,895	1,604	994,407	....	1,928,954	5,968,406
EU 15	93,912	302	1,468	874,774	7,871	1,182	1,144	58,852	1,055	1,040,560	923,866	8,109,088	12,454,422

Source: Author's calculation based on data from IMF, Coordinated Portfolio Investments Survey

Notes: The data are derived from the creditor side for both assets and liabilities

-- Indicates a zero value or a value less than US$ 500,000

.... Indicates an unavailable datum

(p) Indicates preliminary data

(c) Indicates that a non-zero datum was not disclosed for reasons of confidentiality

[21] In a recent speech in Tokyo, Bank of Korea Governor Kim Choong Soo remarked: "If better integrated Asian markets can produce more safe assets of our own, offer greater risk hedging, and help to reduce financial mismatches, the financial stability gains to us could be quite large."

[22] In the context of ABMI, the cross border bond issuance between Korea and Japan was discussed for the first time in 2004.

By end of 2010, investors from Thailand are the most regional bias with respect to debt investment. Their exposure in Asia is roughly 71.1 percent, mostly in Korea. Malaysia is ranked the second, 54.3 percent, also mostly in Korea. Meanwhile, although as a share of their total investment US and EU15 investors' exposure in Asian debt market in 2010 is small, less than their equity investment (the majority of this is in Japan), the size of their total investment in Asia far exceeded that of regional investors. The EU15's exposure alone (US$342 billion) was not only larger than that of the US (US$ 127 billion), but it also exceeded the intra-Asian investment (US$233 billion). This has raised concern among Asian policy makers during the Eurozone crisis.

Broken down into short-term and long-term, most cross border debt within the region is long-term with a total intra-Asian value of US$150 billion in 2010, where Hong Kong, China (US$15 billion), Japan (US$13 billion) and Singapore (US$10 billion) markets dominate. In the case of short-term debt, where total intra-Asian value amounts to US$45 billion, Singapore and Thailand's investments in Korea take the lead (US$3.8 and US$3.5 billion, respectively).

The cross border holding of equity is higher than in the case of bond, but even that is still less than what US investors invested in Asia. During 2001-2010, the size increased from 10.6 to 23.6 percent, or US$38 to US$373 billion. By the end of 2010, the exposure of US and EU15 investors in the Asian equity market reached more than US$1.1 and US$0.8 trillion, respectively. EU-15 invested around 12.1 percent by end of 2010 (Table 2). Among investors in Asia, those in Indonesia, Singapore, Malaysia and Korea are the most regional-bias, although with the exception of Singapore the cross-border investment has been concentrated in only few countries; i.e., Indonesia-India, Malaysia-Singapore-Hong Kong, China, and Korea-PRC-Hong Kong, China. A significant increase of investment by regional investors has taken place in India, jumping from a quarter of a billion to almost US$28 billion. Singaporean investors have been particularly attracted to the Indian market. More recently, Indonesian investors also follow suit.

Table 2 Asia Cross Border Equity Securities Investments (in million USD)

Investment from: end-2010

Investment in:	Hong Kong, China	India	Indonesia	Japan	Korea, Republic of	Malaysia	Philippines	Singapore	Thailand	Total Asia	United States	EU 15	Total value of investment
China, P.R.	146,252	4	13	13,491	10,639	347	...	34,217	102	205,054	100,624	106,245	436,934
Hong Kong, China	...	65	3	16,554	6,134	2,599	--	8,192	206	33,752	132,520	102,971	298,376
India	630	...	...	5,163	3,182	66	...	18,680	4	27,725	86,477	75,019	317,490
Indonesia	1,224	44	...	3,341	416	766	--	2,877	21	8,689	25,239	21,512	59,625
Japan	5,507	31	...	...	4,459	147	...	14,713	16	24,872	450,096	244,506	813,613
Korea, Republic of	1,656	32	...	5,816	...	403	...	8,385	1	16,293	122,416	98,952	259,871
Malaysia	948	1	...	1,851	319	...	...	8,613	12	11,745	20,270	16,746	54,345
Philippines	138	1	...	271	116	28	...	974	2	1,529	9,026	5,496	16,720
Singapore	6,483	7	22	8,427	859	7,196	5	...	585	23,583	56,356	38,047	131,725
Taipei,China	3,791	13	...	3,306	797	629	...	3,365	...	11,901	94,279	68,109	185,843
Thailand	884	42	...	1,605	321	320	...	2,978	...	6,150	20,999	24,056	54,752
Vietnam	140	...	...	222	480	31	...	395	12	1,281	407	887	2,676
Total Asia (A)	167,655	240	37	60,037	27,721	12,531	5	103,389	960	372,576	1,118,709	802,546	2,631,970
Total value of investment (B)	584,087	1,057	948	678,491	86,697	25,050	19	194,121	5,035	1,575,495	4,646,908	6,618,085	15,462,872
Ratio of A to B	28.7	....	4.0	8.8	32.0	50.0	26.1	53.3	19.1	23.6	24.1	12.1	17.0
United States	18,758	204	871	269,567	22,465	6,487	9	30,073	1,215		....	1,193,213	2,321,589
EU 15	86,741	504	2	154,547	15,695	2,489	3	32,873	1,660	--	1,629,967	3,451,482	6,317,213

Source: Author's calculation based on data from IMF, Coordinated Portfolio Investments Survey

Notes: The data are derived from the creditor side for both assets and liabilities

-- Indicates a zero value or a value less than US$ 500,000

.... Indicates an unavailable datum

(p) Indicates preliminary data

(c) Indicates that a non-zero datum was not disclosed for reasons of confidentiality

A number of studies tried to analyze the intraregional flows of financial assets. García-Herrero, Wooldridge, and Yang (2009) looked into the geographical composition of the cross-border portfolio holdings of more than 40 source countries, and Park and Shin (2011) analyzed the role of institutional factors as market barriers to cross border holding of assets in ASEAN+3. Kim, Lee, and Shin (2006) assessed the East Asian financial integration by linking it with the degree of risk sharing, attempting to find the explanations why the region's level of integration is low. Borensztein and Loungani (2011) looked at the cross-country dispersion in equity returns and interest rates in Asia to evaluate the region's degree of financial integration. All these studies suggest that the cross border holding of financial assets in Asia is indeed low, albeit in some cases increasing. That the integration of bond market is lag behind equity market seems to be a "normal" pattern as it also happens in other emerging economies (see Adarov & Tchaidze, 2011).

Why is there a lack of regional bias? What are the most critical criteria regional investors use in their investment decision? I and Saby Mitra of the Asian Development Bank analyzed this question by combining gravity model using random effects panel least square procedure and primary data analysis based on a field survey.[23]

[23] The field survey covers 69 respondents in 10 countries, conducted during March to mid-May 2011 using the method of the Analytic Hierarchy Process (AHP); see Saaty (1996) and Saaty (2001). It is found that the primary driver for Asian investors to invest outside home country's bond market is to improve overall returns and lower portfolio risks. Openness and trading barriers are the top two criteria in

Results of the econometric study point to financial market and economic size, market liquidity and stability, and financial openness as important determinants of investment decision (the specific equations and the results are shown in the appendix). The size of both source- and destination-country significantly matters in Asian investors' decision to hold foreign debt securities. Size serves as the immediate and primary sign of financial market and economic development - attracting potential foreign investor participation. The importance of bond market liquidity is also evident. This might be the reason why Asian investors prefer to access the major financial centres since they have relatively higher liquidity compared to Asian bond markets. Critically important to Asian investors is the degree of openness of own and destination financial markets. Capital controls and barriers to bond market access increase transaction costs and inhibit Asian investors from participating in other Asian markets.

On average, investor holdings of foreign debt assets significantly respond to two components of portfolio returns: the source-country yields are negatively related to holdings of foreign local currency bonds and the return stemming from the exchange rate gains and losses when converted to the currency of the source country.

Results of the field survey using the Analytic Hierarchy Process (AHP) reveal similar conclusions. In particular, increasing overall return is the primary motivation of Asian investors to make their investment decision. Risk minimization is a factor closely considered. This suggests general cautiousness among participants in considering intra-regional investment. The enormous weight placed on economic and political stability also provides partial explanation as to the high degree of home bias among Asian investors. This emphasis on stability is primarily a function of familiarity and knowledge. Lack of familiarity raises doubts about the perceived stability of a country from the foreign investor's point of view.

Since familiarity is highest in domestic markets, perceived stability is greatest in the investor's own country. Consequently, investing in global or intra-regional becomes less attractive. Prioritizing liquidity, openness and trading barriers only exacerbate the hesitation in intra-regional investment as most of the emerging markets in Asia are still in a developing stage. Finally, intra-regional investments are hampered by the ability to freely move capital, whether due to existing regulatory restrictions or due to a limited depth and/or breadth in market liquidity.

Another important feature for evaluating the merit of integration is the extent to which it

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their investment decision, followed by a challenging regulatory framework and transparency of governance. Low-yield investors placed higher importance on openness than trading barriers, whereas the reverse is true for high-yield investors.

provides benefits in terms of risk sharing. Numerous studies have tried to measure the degree of risk sharing in Asia to reveal almost unanimously that the degree of risk sharing in the region is small, even after the proliferation of regional arrangements in trade and finance. Using several welfare measures and alternative scenarios of risk sharing, Azis (2007) concludes that "….while the level of East Asian financial integration may have increased, its benefits in terms of consumption and investment risk sharing have been limited. Even the advantage of having greater resilience to external shock, that could be potentially reaped from greater synchronization of business cycles, has not been evident." Similarly, a recent study by the IMF concludes that risk sharing in Asia is low intra-regionally. For a given degree of contagion risk exposure, the US stands out as the one that reaps the most benefit from sharing risks with Asia. The study suggests that the region should promote efforts to increase the degree of risk sharing without exposing countries to greater contagion risks: "pursuing these regional policy avenues should receive a priority over a push for further overall financial integration whose welfare effect may be ambiguous" (IMF, 2011)

Other studies on financial integration looking at the international risk sharing also found that contrary to theory, despite increased integration there appears to have been no substantial improvement in the degree of international risk sharing. I suspect part of the explanation rests on the fact that countries can insure themselves through accumulation of domestic assets, the size of which is sufficient to deal with the consequences of capital flows. The degree of risk sharing will increase only when the size of capital flows among the integrated economies is large.[24]

The preceding discussion clearly shows that financial integration in Asia is still limited, and the process of integration has not been really propelled by explicit governmental initiatives through a full scale top-down approach. Instead, it has largely been driven by the private sector. Given the low returns in slow growing economies of industrial countries, and the financial reform including the harmonization of rule and standard will continue in Asia, market may dictate that the financial sector will become more integrated in the coming years. The benefit of integration in terms of risk sharing has been so far small. If RFA leads to further integration, in which the volume of intraregional capital flows increases, one expects that the provision of financial safety net is enhanced. In the process, however, integration may increase the risk of volatility up to a certain threshold, beyond which the risk sharing can be high. The question is, what is that threshold and when will it be reached, if ever.

[24] The ability to default may also restrict international and interregional risk sharing.

Concluding Remarks

Preventing a crisis is as important as managing it. They both are part of financial safety net. In ASEAN+3, the ABMI is designed for crisis prevention by promoting integration of regional bond market to avoid double mismatch, and the CMIM is for crisis management by providing liquidity support.

So far, financial integration in the region is still limited. Asian investors are more global and local bias than regional bias. Post Lehman collapse, they are becoming more local bias. This should not be a major concern, however, for at least three reasons. Domestic saving being invested in the same country is not incompatible with the idea of recycling Asian excess saving within the region, which is one of the ABMI goals. The main point is not to have the excess saving invested outside Asia. Secondly, financial integration being lag behind trade integration is a normal pattern. It occurs everywhere. As policy makers continue working on removing obstacles to intraregional flows and harmonizing rules and standard, with or without ABMI market may eventually dictate what will happen with such flows. Given the current trend in the global economy, I predict intraregional flows will increase. Thirdly, as we have learned from the Erozone crisis, integration carries risks. A more balanced view therefore suggests that we should not impose integration without considering its potential costs and risks (Azis, 2011, ADB, 2012).

But integration is not the same with cooperation. To the extent that the process of integration in Asia can accelerate along with its potential benefits and risks, regional cooperation is needed to manage the risks. One of such risks is the financial contagion of a crisis. Cooperation in providing regional financial safety net is therefore necessary. But the next crisis can be rooted *alas* in new vulnerabilities, and transmitted through new channels which we may or may not be able to detect. Trying to explain the 2008 crisis, Acemoglu (2009) argued that "……*there remains much uncertainty about what happened in the financial markets and inside many corporations*…..…… most of us did not recognize them before the crisis." Even in an economy with relatively robust macroeconomic and financial sector like in ASEAN+3, domestic safety net alone may not be adequate to deal with such vulnerabilities, especially when the contagion channels do not mirror past events. It needs support from an effective regional safety net.

Yet, the safety net provided by CMIM at the present stage is ineffective, far from what it can and should be. Progress to make the facility ready when needed has been slow, always collides with flagging political will. Inconsistency of the IMF-link is the most serious bottleneck. Along with inadequate amount of resources it deters member countries to use the

facility. Ironically, the region's current resilience and stable sources of funding may stand in the way of having more effective financial safety net.

The notion that only some ASEAN countries, not the "+3," will be on the receiving end, hence the currently committed amount is sufficient, contradicts the essence of cooperation. It is also inconsistent with the principle of regional safety net which requires a large amount of resources given uncertain nature of future crisis and contagion (imagine EFSF excludes Italy and Spain).

That is not to say that progress in CMIM has not been made. Nor it suggests that the region is in danger of an imminent crisis. I simply argue that the current regional safety net is not ready. It should be made ready soon by removing the inconsistency. In this current world of uncertainty, making a conjecture that Asia is always resilient is a show of bravado. We don't learn from past mistakes if we believe domestic safety net is sufficient to deal with a future shock. So, next time around when contagion effect of the Eurozone crisis forces one of ASEAN+3 countries to ask for help from the CMIM, I would say: don't hold your breath.

Appendix

The determinants of bilateral debt securities holdings are analyzed using the following equation:

$$\ln FI_{sdt} = \beta_0 + \beta_1 \ln Size_{st} + \beta_2 \ln Size_{dt} + \beta_3 BAS_{dt} + \beta_4 Yields_{st} + \beta_5 Yields_{dt} + \beta_6 ER\_app_{dst} + \beta_7 ExpER\_App(1)_{dst} + \beta_8 Y\_Volatility_{dt} + \beta_9 FinOpen_{st} + \beta_{10} Postrade_{dt} + \varepsilon_{sdt} \quad (1)$$

where FI_{sdt} is the cross-border holdings of the source country s of debt securities issued by the destination country d. $Size_{st}$ and $Size_{dt}$ are the amount of domestic bonds outstanding in the source country and destination country, respectively. The link between bond market size of the destination country and investments in the bond market was proposed by Eichengreen and Luengnaruemitchai (2004). BAS_{dt} is the bid-ask spread prevailing in the bond market of the destination country d. A large spread indicates an illiquid market.

$Yields_{st}$ and $Yields_{dt}$ are the yields on a 5-yr local currency (LCY) bond of the source and destination countries, respectively. They measure comparative returns from holding bonds. ER_app_{dst} is the appreciation of the destination country's currency relative to the currency in the source country; it indicates currency returns, i.e. an appreciating currency makes the domestic asset more expensive which effectively lowers the return. $Y\_Volatility_{dt}$ is the volatility in yields which accounts for valuation risks and is computed using a 12-month rolling standard deviation. $Postrade_{dt}$ refers to barriers in post-trading infrastructure of the destination country, such as those pertaining to the use of omnibus accounts and to settlement practices. A higher value indicates a larger number of barriers in the market infrastructure that can impede financial trading transactions. The index is a component of market barrier index constructed by Park and Shin (2011). $FinOpen_{st}$ is the financial openness in the source country to reflect the ease of investing offshore. It is based on the index computed by Chinn-Ito using information from the IMF Annual Report on Exchange Arrangements and Exchange Restrictions.

The stock market and banking sector may either complement or crowd out participants in the bond market. To test this, the following specification is used:

$$\ln FI_{sdt} = \beta_0 + \beta_1 \ln Size_{st} + \beta_2 \ln Size_{dt} + \beta_3 BAS_{dt} + \beta_4 Yields_{st} + \beta_5 Yields_{dt} + \beta_6 ER\_app_{dst} + \beta_7 ExpER\_App(1)_{dst} + \beta_8 Y\_Volatility_{dt} + \beta_9 FinOpen_{st} + \beta_{10} Postrade_{dt} + \beta_{11} DC\_GDP_{dt} + \beta_{12} MCap\_GDP_{dt} + \varepsilon_{sdt} \quad (2)$$

where DC_GDP_{dt} is outstanding domestic credit in the banking sector as a proportion of GDP of destination country, $MCap\_GDP_{dt}$ is the stock market capitalization in destination country.

To the extent that banking sector and stock market directly influence the size of bond market, causing multicollinearity problems, the model is modified by removing bond market size from the equation. Both stock market and banks can be a potential source of funds such that they can reduce bond issuances. But banks may also be a large supplier of bonds. The GDP of partner countries is included to account for the force of attraction between two masses (the basis of gravity model):

$$\ln FI_{sdt} = \beta_0 + \beta_1 \ln GDP_{st} + \beta_2 \ln GDP_{dt} + \beta_3 BAS_{dt} + \beta_4 Yields_{st} + \beta_5 Yields_{dt} + \beta_6 ER\_app_{dst} + \beta_7 ExpER\_App(1)_{dst} + \beta_8 Y\_Volatility_{dt} + \beta_9 FinOpen_{st} + \beta_{10} Postrade_{dt} + \beta_{11} DC\_GDP_{dt} + \beta_{12} MCap\_GDP_{dt} + \varepsilon_{sdt} \quad (3)$$

where GDP_{st} and GDP_{dt} are the GDP of the source and destination countries, respectively.

The following Table summarizes the results of using the above three gravity model equations:

Dependent Variable: LOG(LT_DEBT)
Cross-sections included: 58

	Equation (1)			Equation (2)			Equation (3)		
	Coefficient	Std. Error	Prob.	Coefficient	Std. Error	Prob.	Coefficient	Std. Error	Prob.
C	2.952	1.024	0.004	3.134	1.035	0.003	2.739	1.242	0.028
LOG(SIZE_SOURCE)	0.322	0.107	0.003	0.260	0.107	0.016			
LOG(SIZE_DEST)	0.262	0.110	0.018	0.456	0.138	0.001			
YIELDS_DEST	0.082	0.041	0.047	0.068	0.041	0.102	0.066	0.041	0.108
YIELDS_SOURCE	-0.172	0.049	0.001	-0.187	0.049	0.000	-0.214	0.046	0.000
BAS_DEST	-0.012	0.003	0.000	-0.012	0.003	0.001	-0.012	0.003	0.000
FINOPEN_SOURCE	0.679	0.117	0.000	0.709	0.116	0.000	0.684	0.117	0.000
POSTRADE_DEST	-4.091	1.324	0.002	-4.211	1.377	0.003	-4.664	1.487	0.002
ER_APP	-0.027	0.014	0.060	-0.033	0.015	0.029	-0.031	0.015	0.034
EXPER_APP1	0.089	0.021	0.000	0.094	0.022	0.000	0.094	0.022	0.000
YIELD_VOL_DEST	-0.376	0.186	0.044	-0.402	0.192	0.038	-0.534	0.194	0.006
MCAP_GDP_DEST				0.091	0.040	0.023	0.089	0.039	0.023
DC_GDP_DEST				-0.884	0.396	0.027	-0.613	0.363	0.093
LOG(GDP_SOURCE)							0.266	0.139	0.056
LOG(GDP_DEST)							0.465	0.162	0.005
	Total panel (unbalanced) observations: 270			Total panel (unbalanced) observations: 263			Total panel (unbalanced) observations: 263		
	R-squared	0.243		R-squared	0.265		R-squared	0.247	
	Adjusted R-squared	0.214		Adjusted R-squared	0.229		Adjusted R-squared	0.211	

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