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Regional Monitoring of Capital Flows and Coordination of Financial Regulation: Stakes and Options for Asia

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Abstract

The ongoing global economic crisis has punished Asian economies severely, despite the fact that its origins derive from outside the region. The global economic crisis was transmitted through real and financial channels, underscoring how vulnerable the region is to external shocks. This paper explores the microeconomic origins of the financial crisis and endeavors to ascertain how crises might be mitigated in the future through better regulation, supervision, and institution-building. Moreover, it makes the case for closer economic cooperation in order to internalize key externalities associated with modern global finance. This cooperation, in turn, should take place at the appropriate level, with incentives for cooperation at the global, regional, and subregional levels. It explores the potential for the creation of an Asian Financial Stability Board and deepening other initiatives in Association of Southeast Asian Nations (ASEAN)+3 and ASEAN forums. However, it stresses that the most important financial reforms in Asia will need to take place at the national level.

JEL Classification: G28, F36, F33

Contents

1. INTRODUCTION

The 2008–2009 economic “earthquake” may have had its origins in the United States (US), but the resulting tsunami has pounded the Asian economies no less than the US’. Negative growth rates in a number of Asian economies have even been more pronounced on the opposite side of the Pacific. Such an economic shock has not been seen in Asia since the economic crisis of 1997–1998. And for several economies in the region, the current global economic crisis has even taken a higher toll than did the previous one. When the dust clears, it is likely that the duration of the global economic crisis will be longer than that of the 1997–1998 crisis for most of the region.

From an Asian perspective, the main difference between the two crises in terms of policy is arguably that the crisis of 1997–1998 was mostly homegrown, while the global economic crisis has been imported. Most Asian economies were conservative in terms of their macroeconomic management prior to the global economic crisis, with relatively low inflation, budget deficits under control, stable exchange rates (relative to the Organisation for Economic Co-operation and Development [OECD] anyway), high current account surpluses and the build-up of a large cushion of foreign-exchange reserves. Asian economies did not invest heavily in “toxic” assets and other high-risk financial activities. While the “savings glut” hypothesis would assign some blame to the Asian economies in terms of the perpetuation of global economic imbalances (Bernanke 2005), ultimately the main responsibility for the crisis lies in the US and other developed economies where the global economic crisis broke.

Indeed, analysis of the global economic crisis “blame game” has already become popular and will continue to be an important topic for economists for years to come. Certainly many actors were culpable. The media places most of the blame on unsustainable high risk assets, such as subprime mortgages, credit-default swaps (CDS), and mortgage-based securities (MBS), overzealous financial deregulation, and lack of consistent and effective oversight of the international financial system, as well as unethical financial actors. Economists would add to these macroeconomic factors, such as overly-expansionary monetary policies, exchange-rate misalignments, and unsustainable global current account imbalances.

The goal of this paper is to ascertain how crises might be mitigated in the future through better regulation, supervision, institution-building, and regional cooperation. Section II is an overview of the regulation of capital flows and their implications for the economy in the context of rapidly-changing international financial markets. In this discussion, I also focus on highly-leveraged institutions such as hedge funds, which have been hitherto unregulated in major markets like the US, and credit-rating agencies, which are necessary to the smooth functioning of the international financial system but subject to conflict-of-interest problems. Next, Section III addresses issues surrounding the development of new regulatory regimes. In particular, I highlight and critique many of the shortcomings of the previous international and domestic regulatory and supervisory institutional structures. Section IV considers this analysis in the context of Asia. It first makes the case as to why improving financial markets in Asian economies is so crucial to future development, and surveys approaches to regional financial cooperation in recent years. Section V considers fresh approaches to financial cooperation. It begins with a discussion of when regional cooperation—as opposed to global cooperation—makes economic sense, and considers the potential for an Asian Financial Stability Dialogue (AFSD) (and how it might interact with the new Financial Stability Board and other institutions). It also makes the case for closer financial integration in the region with a focus on deepening asset markets in developing Asian economies and argues that this objective should be an important component of the Asian Financial Stability Board. Finally, Section VI summarizes key recommendations regarding the improvement of monitoring and regulation in the global and regional economies.

One important caveat before beginning: this paper mainly takes a microeconomic approach to the issue. But while I suggest that better regulation and monitoring can be developed in order to mitigate the effects and reduce the frequency and occurrence of future crises, it should be understood that crises cannot be avoided altogether. In the US, for example, the financial crisis of the late 1980s stemmed from a combination of deregulation, aggressive marketing of high-risk ("junk") bonds funding leveraged buy-outs, and unethical financial participants, some of whom went to jail. To "prevent" further crises of this sort, new legislation was implemented. In the early 2000s, the crisis produced by the likes of Enron, WorldCom, and Vivendi had its origins in lack of transparency, risk-management problems, off-balance-sheet shenanigans, and unethical financial participants, some of whom went to jail. New legislation was implemented in the form of Sarbanes-Oxley.[1] The current crisis is a far more serious one sparked by a collapse in the financial sectors and characterized by both new and old abuses. And some of the perpetrators of the crisis have already gone to jail.[2]

In the modern, open international financial marketplace, it is impossible to avoid crises altogether without stifling innovation. And there will always be fraudsters. The task of policymakers, therefore, must lie in improving transparency, regulation, and monitoring in such a way as to nip incipient excesses in the bud, identify bubbles (and do something about them), minimize "moral hazard" problems inherent in finance, and detect scams as early as possible so as to reduce their potential effects on the real economy. I address many of these issues in this paper; but I do not discuss the need to improve aggregate demand management in general and monetary policy in particular. Arguably toxic assets and other high-risk products that emerged prior to the global economic crisis were fed by overly-expansionary credit, not just regulatory failure. In this sense, it might be argued that this paper reviews the symptoms, whereas much of the "disease" lies more in macroeconomic management.

2. REGULATION OF CAPITAL FLOWS

2.1 Capital Flows: Internalizing the Externality through Regulation

Issues pertaining to the regulation of capital flows in the international system have been controversial, especially since the 1997–1998 Asian crisis. Up to that point, liberalization of the capital account was thought to be consistent with free-market logic that was dominant in the 1990s. Open capital markets would allow investment to flow to countries where the return was highest, and therefore where it would be the most productive, just as open markets for goods and services allowed for greater efficiency based on comparative advantage. This logic would suggest that developing countries would have the most to gain from open capital flows: after all, they tended to be capital scarce and, therefore, would receive the most investment, leading to gains in output, efficiency, and productivity.

The problem with this approach is that it ignores the externalities associated with international capital flows. These externalities render finance different from international trade, as articulately argued by Bhagwati (2004). International capital flows are a function of many different variables, not merely rates of return. And footloose (short-term) capital inflows into a country can rapidly transform into capital outflows, which under certain conditions could leave the financial system in ruins. Such a reversal was evident in the case of the Asian crisis of 1997–1998. The liberalization of domestic financial institutions beginning in the late 1980s freed up banks and non-bank financial institutions to expand activities locally

[1] The Sarbanes-Oxley Act of 2002 was implemented to establish new, higher standards for publically-held companies.

[2] The most egregious example, of course, is the case of Bernard Madoff, who was convicted of many crimes related to bilking investors to the tune of US$50 billion. He was sentenced to 150 years in prison.

and internationally. The large current account deficits that accumulated over this period were increasingly financed by short-term capital inflows (rather than long-term flows, such as foreign direct investment (FDI), particularly short-term bank loans. The resulting "double-mismatch" (i.e., maturity and currency mismatches) rendered the region vulnerable to external shocks and contagion.[3]

Thus, capital flows carry with them the potential for financial systemic risk—i.e., a negative externality. Such an externality does not exist in the context of FDI or trade. In fact, some have characterized the complications as being akin to economic problems associated with pollution ("financial pollution"[4]). In the general theory of second best, this would suggest a theoretical role for government in regulating capital flows.[5]

Kawai and Takagi (2008) identified three types of risks in the event that large capital inflows that are not managed properly. First, poorly managed large inflows can increase macroeconomic risk as they lead to a boom in domestic credit and real exchange rate appreciation. Second, they can produce potential financial instability through the "double-mismatch" phenomenon noted above, as well as leading to asset bubbles. And third, there is a potential for capital-flow reversal (or "financial pollution" effect). Kawai and Lamberte (2008) suggested that dealing with these problems is not easy, but they note that regional approaches to managing capital flows have considerable potential, in particular through greater regional exchange rate coordination, financial market surveillance and integration, and regulatory and supervisory capacity building, perhaps under the auspices of an AFSD.[6] The AFSD was proposed by Asian Development Bank (ADB) President Haruhiko Kuroda in September 2008; it would include finance ministry and central bank officials, financial regulators and supervisors, and market participants, and could develop an early warning system to ameliorate surveillance of the region's financial markets. The AFSD is discussed at length in Section V.

The Asian experience of this period has reaffirmed that the capital-flow cycle so apparent in the crises of Latin American countries could actually be generalized. This has led to greater skepticism and, certainly, reluctance to embrace open capital markets. Indeed, even Singapore, which has one of the most advanced financial systems in the world, put its foot down when the US insisted on its never using capital controls in negotiations leading to the Singapore-US Free Trade Agreement (Naya and Plummer 2005). In fact, there has been little activity in terms of imposition of capital controls in Asia since the vast majority of the Malaysian capital controls expired one year after their imposition on 1September 1998.[7] No doubt, this is due to the fact that since the 1997 Asian crisis, the region has generated significant current account surpluses and, hence, the region's economies have become a significant net creditor to the global system. But it is no longer taboo to consider using controls if and when it may be necessary in the future.

Tables 1 and 2 compare the degree of openness of developing East Asian economies relative to other developed and developing regions based on a new database developed by the IMF (Abiad, Detragiache, and Tressel 2008). This database includes financial reforms covering 91 countries over the period 1973–2005. The results are interesting: while developed countries obviously score top marks, East Asian economies are rather middle-of-

[3] An extensive review of this process is beyond the scope of this study and, given the abundance of literature on the topic, would be redundant. See, for example, Kim, Kose, and Plummer (2001).

[4] In essence, the argument suggests that in order to avoid a systemic breakdown, policymakers need to "cap" risk, much as policymakers have developed systems to cap carbon emissions (Beville 2009).

[5] It is important to point out that, as is the case of all second-best policies, economic efficiency requires that the cure be less harmful than the externality itself. To paraphrase Harry Johnson, the problem with second-best policies is that they may be created by third-best politicians and implemented by fourth-best bureaucrats.

[6] They also note the potential of global approaches, but these tend to deal merely with enhancing transparency and information flows. These are necessary but not sufficient conditions for better management.

[7] One exceptional episode took place in December 2006, when the Thai government imposed capital controls pre-emptively in order to prevent further baht appreciation (but this occurred with negative consequences).

the-road in terms of their financial liberalization programs. For example, relative to Latin American countries they score lower markets for every financial reform component except the securities market (Table 2). However, it is also true that East Asian regimes are more stable in terms of back-tracking: they had less frequent “large reversals” in financial-sector-related policies than did Latin America and Africa, receiving a score that is one-half the full-sample average (Table 1). They also displayed greater reforms in this area than did any other region (including the advanced economies) save the transitional economies, which created an entirely new financial system over this period.

Table 1: Distribution of Financial Sector Policy Change, Selected Country Groups (%)

	Full Sample	Advanced Economies	Developing Asia	Latin America and Caribbean	Sub-Saharan Africa	Transition Economies	Middle East and North Africa
Large Reversal	0.50	0.14	0.25	1.65	0.45	0.00	0.00
Reversal	4.42	1.70	5.64	7.72	3.57	5.16	3.57
Status Quo	65.16	73.15	63.73	59.19	70.09	45.24	69.64
Reform	24.65	20.60	27.21	24.26	21.88	39.29	22.77
Large Reform	5.27	4.40	3.18	7.17	4.02	10.32	4.02
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Abiad, Detragiache, and Tressel 2008.

Table 2: Distribution of Financial Liberalization by Components, Average 2005a

	Full Sample	Advanced Economies	Developing Asia	Latin America and Caribbean	Sub-Saharan Africa	Transition Economies	Middle East and North Africa
Credit Controls	2.374	2.784	2.154	2.191	2.304	2.292	2.286
Interest Rate Controls	2.725	3.000	2.615	2.765	2.429	2.611	2.857
Entry Barriers	2.725	3.000	2.385	2.706	2.714	2.778	2.429
Bank Regulations	1.978	2.636	1.538	1.706	1.500	2.167	1.857
Privatization	2.000	2.409	1.231	2.000	2.357	2.111	1.143
Capital Account	2.363	3.000	2.154	2.412	1.500	2.556	1.857
Securities Market	2.253	3.000	2.385	1.941	1.571	2.111	2.143

[a] All components vary between 0 and 3, with 3 indicating maximal openness.

Source: Abiad, Detragiache, and Tressel 2008.

Empirically, as theory would suggest, the economic desirability of capital controls has been a source of controversy. Edison et al. (2002) offers a comprehensive survey of the literature on the economic effects of capital account liberalization, as well as undertaking their own empirical investigation. They came up with several salient conclusions: (i) while developed countries have largely liberalized their capital accounts and there has been a movement in this direction for some developing countries, the majority of developing countries continue to retain significant capital controls; (ii) the empirical literature addressing the issue of capital account liberalization and economic performance is agnostic—that is, there is mixed evidence that capital account liberalization promotes long-term economic growth; (iii) however, their own regression results suggest a positive relationship for East Asian economies and developed countries. Klein (2005) concluded that the ultimate effect of capital account liberalization on economic growth is a positive function of institutional development.

I suggest that the Klein (2005) results are intuitive. But “institutional development” is certainly an elusive term. The US and the United Kingdom arguably had in place what were deemed the most developed financial institutions in the world. Yet, the global economic crisis financial earthquake began with them. If developing financial institutions means moving to the frontier defined by the developed countries, it must be shown that the “best practices” are truly best. Clearly this was not the case in certain aspects of the Anglo-American approach. In this paper, I endeavor to identify means to ensure the creation of a new set of “best practices” within the framework of a more effective regulatory and monitoring system.

2.2 Dealing with the New Finance: Hedge Funds and Regulatory Complications

The financial scandals that emerged in the late 1990s and through the 2001 crisis, of which Enron Corporation was the most notorious case, to no small degree stemmed from off-balance-sheet transactions. These transactions distorted the balance sheets of firms and created problems of transparency (and, sometimes, outright fraud). Included in these transactions were a number of vehicles, including stock options, that were difficult to measure and, hence, were not included as costs to the firm in public reports. Stock options had an important economic role to play; they were designed to bring the goals of management in line with that of stockholders, and thereby address the traditional “principal-agent” problem. Nevertheless, they also had the effect of distorting incentives of management to focus on short-run profits and stock price at the expense of the long-run interests of the firm. Enron manipulated mark-to-market accounting rules and used special purpose entities to effect favorable stock price movements. Enron’s price, for example, reached US$90 per share in mid-2000 but fell to US$0.10 by October 2001. While it was famous for its highly-complex and modern approach to risk management, these “cutting edge” practices turned out to be disastrous to the firm, which had used derivatives extensively as well as employed special purpose entities. Its questionable practices should have been picked up by its auditor, famed accounting firm Arthur Andersen, but the latter received hefty auditing and consulting fees from Enron, creating a massive conflict of interest.[8]

The Enron scandal is indicative of how methods deemed “best practices” today could, in fact, be anything but. The complicated nature of finance that has emerged over the past quarter century, including complex derivatives—that few market participants understand completely—and other forms of financial engineering, has made regulating the financial sector increasingly difficult. Sarbanes-Oxley legislation in the US was, perhaps, sufficient to help prevent scandals of the Enron type appearing in the future; it was even criticized by some as being overly-strict. Nevertheless, it did not prevent the emergence of another set of fundamental problems that ultimately revealed themselves with the subprime crisis and, of course, the global economic crisis.

Sophisticated risk-management strategies and complex derivatives often give the impression of effective hedging, stability, and competence when, in fact, they can generate risk exposure significantly beyond expectations, with the potential for catastrophic consequences. When the markets are doing well, such strategies appear to be ingenious.

[8] Arthur Andersen folded due to its loss of reputation associated with the Enron case.

And if everyone is profiting, there is no reason to look too deep at potential problems.[9] It is during downturns that the house of cards reveals itself. The MBS and CDS, after all, would pose no systemic risk during an economic expansion. But the housing-market bubble in the US and in other OECD countries was widely anticipated as the instigator of the next recession, and when prices did fall, so did the financial system.

Value-at-risk models within banks and non-bank financial institutions (like investment banks and hedge funds, discussed below), which had also become extremely sophisticated, failed as well. These models work out how much capital to set aside for risky assets. However, they tend to assume that the volatility of asset prices and correlations across prices are constant, when in fact they are not. An episode starring the Hunt brothers, at one time among the richest families in the US, may illustrate the point. The Hunt brothers began to accumulate silver in 1973 and by 1979 essentially cornered the market (with some associates), controlling 50% of global deliverable supply (Trumbore 1999).[10] Silver prices had risen from US$1.95 per ounce in 1973 to a peak of US$54 per ounce in early 1980. When the price of silver collapsed later in 1980, this prompted the Hunts to sell holdings they had in the cattle market to meet margins in silver, thereby causing a precipitous drop in cattle prices as well. This underscores how two markets—silver and cattle—could seem completely independent in theory and recent data trends but in practice are linked by market participants in a largely unpredictable way. To create an effective value-at-risk model, therefore, would require knowledge that would be extremely expensive to obtain (if even available). Yet, mathematical precision in existing value-at-risk models produce a false sense of security. In addition, the potential exogenous shocks were generally assumed to be characterized by a normal distribution, which would suggest that major financial crises would happen extremely rarely, rather than every 10–20 years (as is the case recently).[11]

This problem is especially present for hedge funds, which are highly-leveraged investment funds. When the Long-Term Capital Management (LTCM) hedge-fund—founded by two Nobel Prize winning economists—collapsed in 1998, systemic risk associated with highly-leveraged positions in these institutions became apparent. Nevertheless, regulation of this sector continued to be extremely mild after LTCM's demise, especially compared to banks and many other financial institutions. Highly-leveraged investment funds have been identified as major actors in the global economic crisis.

In a speech on 17 November 2004, Timothy Geithner, who was at the time President of the New York Federal Reserve Board and is currently the US Secretary of the Treasury, noted that:

> Hedge funds combine the classic mix of factors that have been associated with institutions at the center of past instances of stress in financial markets. They can be highly leveraged and can be vulnerable to pressure to liquidate assets quickly if they sustain significant losses. They can be active in complex instruments, and assessing the risks in their exposures is formidably challenging. Additionally, they are not subject to the public disclosure or regulatory reporting requirements that apply to a range of other financial institutions. And they operate largely outside the framework of other requirements established by regulatory authorities to protect the stability of the financial system.

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[9] Some testimony in the US regarding the origins of the global economic crisis suggested that risk-management staff in financial institutions and other firms were often afraid of raising potential risks when top management did not want to hear it.

[10] http://www.buyandhold.com/bh/en/education/history/2000/hunt_bros.html

[11] Johnston et al. (2009) provides excellent analysis of valuation methods and risk models in its Box 1.

> …systemic concerns have two dimensions. First is the possibility that the behavior of hedge funds in periods of market stress could amplify rather than mitigate the shock, induce larger moves in asset prices, or cause broader damage to the functioning of markets when it is most important they function well. Second is the possibility that the failure of a major hedge fund or group of funds could significantly damage the viability of a major financial institution, both through direct exposure to the fund and losses resulting from the impact on other market risks to which the institution is exposed.
>
> These concerns existed before the events associated with Long-Term Capital Management (LTCM) in 1998, but that episode provided a powerful example of both sets of risks, and how the erosion of counterparty discipline can magnify those risks.
>
> Our overall judgement is that the U.S. financial system today is significantly stronger than it was in 1998. It has proven to be quite strong in the face of a number of fairly substantial recent adverse events. And there is some evidence that hedge funds have helped contribute to this resilience, not just in the general contribution they provide by taking on risk, but as a source of liquidity in periods of increased stress and risk aversion in the rest of the financial system.
>
> And yet, hedge funds – and financial leverage more generally – still present a source of potential risk to the financial system.

He does not, however, recommend direct regulation of the sector. He notes that prudential regulations (e.g., through capital or leverage requirements) were not on the horizon in the US, as investors in hedge funds had a strong interest in their being well-managed. He also suggests that, while greater disclosure might reduce systemic risk, he realized that this would pose challenges (given an obvious aversion to revealing investment strategies). Thus, he proposed means to improve risk management of potential exposures.

No doubt, he would take a different approach today. The systemic risks posed by hedge funds were obviously far greater than believed at the time. Risk management techniques suffered from many of the problems noted above. Moreover, the non-transparency of hedge funds—combined with other factors—made the Madoff scandal possible, for example.

The American International Group, Inc., (AIG) case highlights both examples of risk. AIG was rescued by the US government in mid-September 2008 in order to prevent its bankruptcy, which would have had severe—potentially catastrophic—consequences for the national and global economies. While AIG was the world's largest insurer, its financial products division caused its downfall. And as US Federal Reserve Board Governor Ben Bernanke noted, the company was being run exactly like a hedge fund (Torres and Son 2009). At the time of this writing, the company has required US$180 billion in US government financing. In an example of how hedge funds can make things worse, in March 2009, AIG reported a loss of US$7.8 billion due to short-selling of hegde funds of CDSs in which AIG had accumulated significant exposure.

Nevertheless, investment banks particularly in the US were arguably hit the worst in 2008. Famed investment bank Bear Sterns nearly collapsed and Lehman Brothers actually failed; others had to seek government help and reformed as "bank holding companies."[12] In fact, with the global economic crisis came the virtual disappearance of the once-mighty US investment bank industry (to reappear later in 2009). While the specifics varied by firm, the industry's demise was generally characterized by the collapse in the prices of "structured

[12] A bank holding company is simply an enterprise that owns one or more banks. The investment banks made this change because it allowed them to take advantage of additional funding programs being provided by the US Federal Reserve Board in order to support banks during the crisis.

securities” (soon to be called “toxic assets”), unhedged securitization positions, and the freezing-up of asset markets (Bank for International Settlements [BIS] 2009).

While officials would like to avoid stifling innovation through greater regulation, they are required to ensure stability of the financial system and the avoidance of systemic risk. Given the high leverage associated with hedge-fund-related investments, these non-bank financial institutions are particularly problematic. Greater monitoring of hedge funds and, perhaps, greater regulation will likely result due to the global economic crisis. International rules and regulatory best-practices, therefore, will likely be an important theme for discussion across international regulators in coming years. Monitoring became an important topic for the Financial Stability Forum (discussed in Section III); its Hedge Fund Working Group even launched a set of best-practices standards in January 2008. The Financial Stability Forum will certainly be more important for its successor, the Financial Stability Board, in the future.

2.3 The Credit-rating Agency Issue

As a final issue, the issue of credit-rating agencies should be considered; these entities have been much maligned, particularly in the current crisis. Credit rating agencies are essential to the smooth functioning of asset markets. As they are often used as a regulatory tool for supervisory bodies, regulators need to have sufficient criteria in order to rate credit-rating agencies. The Basle Committee on Banking Supervision suggests the following criteria: objectivity, transparency, credibility, international access, adequacy of resources, and recognition by a national regulatory supervisory authority (see, for example, ADB 1999). The main criticisms of credit-rating agencies during the Asian financial crisis related mainly to questions of transparency, particularly because the ratings that were given to the sovereign debt issued by the crisis-affected economies were seen in the region as exaggerated. In the current crisis, objectivity and transparency have both been called into question.

In theory, reliable credit-rating agencies become increasingly important for sovereign and corporate debt as asset markets develop. However, at the national level in developing Asia, there has not been a great deal of energy put into the development of national credit-rating agencies. Accomplishing this takes a good deal of time; the credit-rating-agency issue, though important, does not appear to be of the highest priority in the short run for most developing Asian economies. Even Singapore, for example, does not have any rating agencies; it requires that non-resident corporations issuing bonds in Singapore dollars obtain investment-grade ratings from two of the three most prestigious international credit-rating agencies (i.e., Standard & Poor's, Moody's, Fitch). For many years, Thailand only had the Thai Rating and Information Services (TRIS), but as of May 2001, a second agency emerged in the market, that is, Fitch-Thailand. The Philippines has three agencies but they are not very active in the sense that any corporate action is really being undertaken by only the top-tier firms that effectively do not require a rating.

Depending on the type, credit rating agencies do play an important role not only in addressing the traditional information asymmetries problem, but also in promoting transparency in the system and, if successful, bringing in a wide variety of firms to asset markets. Reputable credit rating agencies can also help in bringing foreign investor participation to the market.

The fallout from the global economic crisis suggests that the objectivity in the ratings of the major international credit-rating agencies is especially worrisome. Getting ratings from Moody’s, Standard & Poor’s, and Fitch is very expensive for clients, and lucrative for the agencies themselves. The conflict of interest problem is evident. Moreover, the ratings of “repackaged” financial assets—e.g., MBS—have been heavily criticized. For example, in the US, high-risk subprime mortgages were being sliced up and re-bundled into assets that were given high ratings. Obviously, this method proved to be disastrously improper.

Reforming credit rating agencies will be essential particularly as the 2004 Revised Framework on International Convergence of Capital Measurement and Capital Standards ("Basel II" accord) is implemented. External credit rating agencies will play a greater rule under Basel II in the risk-weighting of bank assets (Tarullo 2008). Improving these agencies—especially in correcting the conflict-of-interest problem but also in improving their ability to rate highly-complex assets—will need to be a priority in the post-global economic crisis architecture.

3. CREATING MORE STABLE REGULATORY REGIMES AND IMPROVING SUPERVISION

The International Monetary Fund (IMF) notes that there are four key areas where the existing international financial architecture failed in the current crisis (IMF 2009):

1. **Surveillance of global economic developments and policies did not give sufficiently pointed warnings about the risks building up in the international financial system.** I might note that this is true despite various institutions that did identify—though, perhaps, they could have done it more forcefully—these risks, including the Group of Seven and Group of Eight, the Financial Stability Forum, and the IMF itself.

2. **Coordination of macroeconomic policies across governments did not produce the international leadership needed for a concerted response to the global risks identified.** In particular, on the debtor side, the US continued to run unsustainably high current account deficits, while on the creditor side, surplus countries accumulated US securities in order to keep stable currencies and retain international competitiveness. These imbalances were known well before the crisis hit. The problem was that there was no effective way—or at least no strong incentives—to engineer a soft landing through coordination. These issues were critiqued and discussed in many international forums but pointing out imbalances is easier than getting sovereign nations to do anything about them without ex ante agreements on burdens of adjustment.

3. **Regulation and supervision of internationally active financial institutions did not provide a sufficiently robust framework to allow problems to be resolved smoothly.** As I noted above, insufficient regulation of highly-leveraged investment funds, pricing problems of CDS and MBS and other complex derivatives, and failures of value-at-risk models in banks and other financial institutions suggested that the system of "best practices" was highly flawed.

4. **Arrangements for international public liquidity and loans to support adjustment did not fill gaps adequately as the crisis spread, reflecting shortcomings in design and size.** This critique obviously pertains to the international financial system and the financial fallout from the liquidity squeeze in late 2008. This is one area where the international community has responded, however, with a major increase in IMF resources, an expanded size and multilateralizataion of the Chiang Mai Initiative, and the like.

These shortcomings in the international system tend to be relatively uncontroversial. Topic (4) is briefly discussed in Section V. Topic (2) is a macroeconomic question that is beyond the scope of this study; so it is discussed here only in the context of surveillance.[13] Instead, in this section, Topics (1) and (3) are focused on as good points of departure in the planning of how to create a more stable international regulatory system while outlining the major shortcomings of the existing system.

[13] I have focused specifically in this topic elsewhere in Kreinin and Plummer (2008).

3.1 Key Issues in Creating a More Efficient Regulatory and Surveillance Framework

Many financial institution-related variables require reform in order to create a more stable and robust global financial system. Of course, as finance is the business of risk, there can be no iron-clad way of imposing certainty without stifling innovation and efficiency. Still, I would suggest that some of the most salient areas that beg reform would be the following.

1. The global economic crisis revealed a need to improve information dissemination and transparency. As previously mentioned, these areas would include: improved disclosures on exposures assumed by large and complex (bank and non-bank) financial institutions; greater disclosure, assessment, and analysis of complex "structured products"; revamping of indicators of financial stability analysis to focus on improved early-warning mechanisms; and improved transparency in over-the-counter derivatives markets, in particular CDS (Johnson et al. 2009). I would argue that these are the most important areas in need of reform in the post-global economic crisis era, not the least because they are so closely linked to all the other areas.

2. In a global economy, it is essential to develop common rules in order to prevent the most risky activities moving to areas where there is the least regulation. Thus, it is important to improve cross-border arrangements for financial regulations. There do exist best practices to avoid "regulatory arbitrage" and improve burden-sharing across jurisdictions by international financial institutions, but these need to be strengthened considerably given the nature of the modern international financial regime. In particular, ground rules should be improved and cooperative approaches in times of crisis ameliorated (IMF 2009).

While there has been a good deal of effort to harmonize bank prudential requirements and supervisory practices across countries, the threshold for intervention differs considerably across countries, as was clear in the global economic crisis (IMF 2009). This also could lead to regulatory arbitrage.

3. Related to issue (2), international rules on host vs. home responsibilities in times of crisis need to be enhanced, as the dearth in rules in this area has become increasingly problematic as international financial services become more integrated. Supervisors' obligations to their own citizens take priority over foreigners in the absence of ex ante agreements, and problems in a local institution can lead to crisis in a foreign country. For example, Italian-owned banks comprise 20% of the Polish banking market, but their assets account for only 4% of the Italian market (IMF 2009). Burden-sharing and rules-covering cross-border bank resolution, therefore, need to be clearly specified, as in the time of even a small crisis in an Italian bank, Italian regulators could provoke a crisis in Poland.

4. While there were many warnings that the financial systems in the US, European Union, and elsewhere were exhibiting problems well before the crisis hit, the speed and severity of the collapse beginning in 2008 were unanticipated. Clearly the system requires improved surveillance and early-warning systems. Given its mandate, the IMF has been quite pro-active in stressing the need to improve these. For example, IMF (2009: 1) notes that:

> Vulnerabilities can arise from a variety of sources, including unexpected events, bad policies, misaligned exchange rates, credit-fueled asset booms, external imbalances, or data deficiencies that obscure trends. To gain traction, surveillance needs to be reoriented to ensure warnings are clear, to successfully connect the dots, and to provide practical advice to policy makers.

It would be difficult to disagree with such a recommendation. However, the devil is in the details. When is it clear that an asset boom is a problem? What are acceptable imbalances, and who should bear the burden of adjustment? For example, prior to the global economic crisis, many pundits stressed that there were, indeed, asset bubbles that eventually would pop, and imbalances were obvious.[14] What is needed is not only an objective framework but also an effective way to determine the burden of adjustment. I would argue that in the current crisis, the latter issue was more of a problem than the former. It may be easier to address the burden of adjustment in the context of subregional and regional cooperation than at the global level, however.

5. In terms of macroeconomic surveillance, more attention needs to be focused on the exchange-rate issue. A considerable amount of attention has been paid to global imbalances and exchange-rate misalignments generally, though as I argue above, there is no reliable model that indicates when a situation is at the breakpoint. But there are also exchange rate issues that are recognized but generally ignored. For example, the "carry trade" phenomenon has been cited as a major force in moving exchange rates, especially the value of the Japanese yen but also the US dollar (e.g., vis à vis the euro). A lack of data on carry-trade transactions is probably to blame for this; still, if exchange rates adjust rapidly during times of crisis, they should be part of the metric. Also, there is, perhaps, a problem in terms of currency mismatches exacerbated by excessive leverage that persists. As noted by Morris Goldstein in a recent speech (Goldstein 2009):

> Clearly, regulation and supervision are not doing enough to discourage currency mismatching. We are not reflecting enough in our capital charges the message from uncovered interest rate parity that when an entity borrows in a low-interest foreign currency, it faces a higher risk that repayment will be made in a currency that has appreciated relative to when the borrowing was undertaken. We are not paying enough attention in our supervisory practices to the fact that foreign-currency loans to borrowers without a ready source of foreign-exchange earnings are more risky than those to borrowers with foreign-currency earnings: A foreign-currency mortgage for a homeowner carries greater currency risk than a foreign-currency loan to an exporter. And we are not putting enough of a public spotlight on rapidly growing currency mismatches before they unravel.

6. In order to avoid the pro-cyclical nature of financial crises, financial authorities need to adopt correct prudential regulations and encourage larger liquidity buffers. Value-at-risk models are structured such that a firm will take on more risk during benign periods but will retrench during a crisis. Hence, they lead to pro-cyclical investment strategies. Credit-risk management has the same effect. This problem is another reason why risk-management models need to be improved—e.g., applying smoothing techniques to credit risk capital allocations (Andritzky et al. 2009).

7. The "too big to fail" issue. The moral hazard problem is inherent in international finance. Hence, it is something that needs to be watched closely. As banks form the core of all financial systems and the moral hazard problem is clear in banking they tend to be the most closely watched. During the Asian crisis, just a few key banks dominated the financial markets of the crisis-affected economies, which led to excessive risk-taking.

But the same problems emerge in the case of large non-bank financial institutions, particularly highly-leveraged ones, and as they are less regulated, the potential for disaster can be even worse. Now, if these institutions did not pose a systemic risk, there would be less concern. But the global economic crisis has underscored that they definitely do.

In the post-global economic crisis world, this issue will need to be addressed, though there is surprising little work on it in the academic literature. Trillion-dollar bailouts of financial institutions are socially intolerable, particularly when it would appear that the current system is allowing the privatization of profits and the socialization of risks. One approach to

[14] *The Economist* magazine has examples of this.

regulation in this regard would be to keep it as light as possible, but to ensure that the failure of one financial institution would not cause systemic risk and force a government-engineered bailout. This would provide a very strong incentive for non-bank financial institutions to auto-regulate—e.g., improve significantly their risk and investment strategies and adopt best-practices. However, the issue begs the question as to what is "too big to fail" and what to do about those that meet that criteria.

4. FACTORS NECESSARY TO IMPROVE CAPITAL MARKETS IN ASIA

Above I mainly focused on issues related to reform of the global financial architecture at various levels. As the global economic crisis began in the US and other developed countries, the analysis was mostly focused on those countries. In this section, the discussion moves to application to Asia.

4.1 The Need for Better Financial Markets in the Region

As finance is the oil that makes the real economy run, improving financial markets in the region is essential. Market growth may be considered from three perspectives: the supply, demand, and institutional aspects of financial markets. First, Asian countries have generally had high savings rates, at least compared to other developing countries. Given the region's growth prospects, demographics, institutional characteristics, and savings behavior, it is likely that this supply of savings will continue to be high over the medium-long term.

So where have these savings been going? Before the 1997 Asian crisis, a large share was invested in speculative markets such as real-estate ventures. A considerable amount also went overseas, especially to the US but also to Europe, only to come back to Asia in the form of short-term bank lending. The lack of financial instruments and capital market information reduced the options offered to savers in Asia, be they households or institutions such as pension funds. The highly developed financial markets outside the region, which were deemed low-risk and characterized by economies of scale, made it all too easy to avoid the hard choices and institutional reform needed to rectify this.

Second, in recent decades Asia has been the most dynamic region in the world with a very strong demand for credit. Infrastructure demand in particular is expected to grow significantly in the future. Moreover, as most Asia economies now have fiscal deficits, they are being forced to find cheap and innovative ways of raising funds, or at least there is a much higher incentive to do so. This strong demand for investible funds will no doubt persist over the medium-long term. Further, from a political point of view, Asian economies have been nervous about such a high reliance on intermediation outside the region, a nervousness that was all too justified in light of the global economic crisis.

How has the region been able to finance its investments? To date it has mostly been through bank lending. Outside the financial centers of Japan and the Asian newly industrialized economies, equity markets tend to be thin, highly-volatile, and illiquid; fixed income markets are even less developed, particularly corporate debt markets in the developing Asian economies. While a strong reliance on bank lending is not necessarily an impediment to longer-term economic development—the continental European financial model, for example, is based much more on bank intermediation—it strongly limits the options available to firms and places a greater strain on the banking system…as well as creating a disproportionate reliance on the banking system for the health of the economy (which can, among other things, cause moral hazard problems in itself, as was evident during the Asian crisis).

This lack of diversity in investment vehicles in many Asian economies has been burdensome for the larger companies and public-sector equities facing limited sources of funds at home;

either they work through the local banking system or they try to tap international markets, listing directly or via the bond markets. This strengthens the liquidity and efficiency of developed-country markets but to the disadvantage of local development. Moreover, small companies, and especially start-up companies (so important in the information and communication technology age) can be left out of the system completely, as banks have a natural tendency to rely on larger, more established clients and venture capital markets are generally absent. The lack of a reliable yield curve in many developing Asian economies has been a perennial problem for corporate issues.

Thus, the huge supply of savings and strong investment demand in Asia was (and is) directly or indirectly intermediated outside the region, or if it took place inside the region, it was done mostly through the local banking system. The shortcomings of such a situation are obvious; most importantly, it makes the system entirely dependent on the banking system and creates high-exposure to the actions of market participants of, and the economic performance in, countries outside of the region. It also develops a tendency toward double-mismatches. The global economic crisis has affected Asia through not only the real-side effects of decreases in export demand but also the financial channels, including the wealth effect, trade finance, and the drying up of international liquidity.

The processes for addressing immediate problems of the banking system due to the Asian crisis have been generally successful—e.g., in increasing foreign partnerships in the sector, new business lines and other forms of asset diversification, greater transparency, and improved supervisory and regulatory systems (Adams 2008). Policymakers in the region have also turned their attention to market diversification and deepening issues, but with less success. Nevertheless, most countries have enacted or have plans for reforms designed to deepen equity markets, and to create deeper and more liquid bond markets (discussed more fully in Section V). In this sense, the Asian crisis, though extremely costly in terms of social and economic costs, had a positive side in that it is forcing governments to expand capital markets and strengthen financial systems, thereby increasing the potential for future sustained growth and, hopefully, mitigating the effects of any future crisis. As Robert J. Shiller notes in his influential book, *Irrational Exhuberance* (2000: 228–229):

> Given that speculative bubbles tend to occur, their eventual bursting may indeed be on balance a good thing. The Asian financial crisis of 1997-98, sparked by the withdrawal of world investors from Asian markets, may be viewed not as a crisis in the long-term sense but as a sanity check that prevented what might have turned out to be a more disastrous speculative bubble from ever developing.

Of course, today Shiller would no doubt say that the lack of a “sanity check” in the OECD countries did, indeed, lead to disastrous speculative bubbles.

The need to finance emerging government deficits in the region, robust demand for infrastructural projects, and ambitious business plans of many private-sector companies make the development of asset markets a natural priority, though a major challenge. According to numerous recent studies, including those conducted by the ADB Institute in Tokyo, ADB in Manila, and the Asia-Pacific Economic Corporation, much remains to be done in strengthening the local markets. To summarize briefly some of the findings from these reports, market impediments include: lack of reliable yield curves and liquidity in the markets; lack of local institutional investors that are active in the market; underdeveloped clearing and settlement systems; weak protection of intellectual property; and insufficient protection and fiduciary responsibilities. As I argue in this paper, the global economic crisis will require new financial and regulatory frameworks. In this sense, development of local and sub-regional financial markets reform should be undertaken in the context of the emerging “best practices” framework, which hopefully will be superior to the previous one.

While developing asset markets in Asian developing economies are mainly a challenge for local governments, there is a strong case to be made for concerted development and regional integration of these markets.

4.2 Financial Cooperation to Date

There exist many excellent reviews of surveys of financial cooperation in the Asian region, including Henning (2002), de Bouwer (2005), ADB (2008), and Hamanaka (2009). The review here is a cursory one. But before beginning, I would note that, while formal trade agreements in Asia are more numerous and advanced than financial arrangements, it is notable that real-sector and financial cooperation are developing simultaneously in Asia. The normal sequencing—e.g., in the case of the European Union (EU) and the North American Free Trade Agreement (NAFTA)—has trade cooperation deepening well before financial cooperation. In part, this reflects the timing of Asian regionalism: Asian regionalism took off after the Asian crisis, and given the financial nature of that crisis, cooperation in this area was only natural. However, it also reflects the recognition of the importance of financial cooperation in bolstering real-sector competition and economic growth.

One might trace the first modern initiative in favor of monetary/financial cooperation in East Asia under the Association of Southeast Asian Nations (ASEAN)+3 framework to be the original "Miyazawa Plan," which was initiated by Japan during the Asian crisis to create an Asian Monetary Fund to supplement the IMF. The plan was opposed by the IMF and the US, but eventually led to the establishment of currency swap arrangements among East Asian countries (basically bilateral swaps between Japan and individual countries at first) at ADB's annual meeting in May 2000 (also known as the "Chiang Mai Initiative"). These swaps have grown in terms of nominal values and the agreement was upgraded in May 2009 to be the "Chiang Mai Initiative Multilateralized" (CMIM), in which the swap arrangements have been multilateralized and the total value has risen to US$120 billion in the form of an "Asia Fund" facility. Indeed, the CMIM seems to be similar to what was envisioned in the Asian Monetary Fund. While multilateralization of the Chiang Mai Initiative was proposed well before the demise of Lehman Brothers and the onset of the global economic crisis, uncertainties related to the unfolding of the sub-prime crisis in the US gave it momentum.

The Executives' Meeting of the East Asia and Pacific Central Banks (EMEAP) is a forum of regional central banks whose goal might be characterized as ultimately developing an "Asian BIS" (Hamanaka 2009). Like APEC itself, it began essentially as a Japanese initiative and its first meeting was held in Tokyo in February 1991. It was institutionalized in July 1996. It meets semi-annually and is mainly a forum for dialogue, exchange of information, and other technical matters. It has three working groups—i.e., financial markets, payment and settlement systems, and bank supervision—which essentially parallel the BIS; however, it does not have a formal secretariat.

Under the EMEAP, the first Asian Bond Market Fund (ABF-1) initiative was launched in June 2003 with an investment of US$1 billion in Asian bonds (de Brower 2005). This was followed in April 2004 with ABF-2, which was created in 2005 and invested in local currency denominated bonds with initial seed money of US$2 billion. The ABF initiatives are managed under the auspices of the BIS and are funded through pools of reserves of the EMEAP central banks. While the value of investments under the ABF framework is trivial compared to the stock of foreign exchange reserves in the region, this fledgling process constitutes an interesting initiative particularly in its purchasing of locally denominated bonds (and counter the "original sin" problem in international finance). Nevertheless, many barriers exist to the development of the ABF, both in terms of cross-border impediments (e.g., capital and foreign exchange controls, regulatory barriers, and delivery and settlements problems), and local-market impediments (e.g., taxes, regulatory fragmentation, and insufficient market infrastructure).

There are a number of other cooperative groups in the region, including the ASEAN+3 Finance Ministers Meeting (ASEAN+3 FMM) and the APEC Finance Ministers Meeting process. Established in the wake of the Asian crisis, the ASEAN+3 FMM focuses on financial sector cooperation, surveillance (including monitoring of capital flows), and policy dialogue. The Chiang Mai Initiative was developed as part of the ASEAN+3 FMM, as was the Asian Bond Market Initiative. The Economic Review and Policy Dialogue (ERPD) was created mainly to strengthen cooperation in the area of regional surveillance and foster dialogue on global, regional, and national economic developments. In May 2005, the ASEAN+3 Finance Ministers integrated and enhanced the ERPD with the Chiang Mai Initiative framework.

The APEC Finance Ministers' Meeting was first convened in 1994 as a one-time event, but under US influence was extended as a discussion forum on a regular basis (Hamanaka 2009). It henceforth became a "process" and is now aptly called the APEC Finance Ministers' Process (FMP). The FMP provides an annual forum for APEC member economies to exchange views and information on regional macroeconomic and financial developments and on national and regional policy priorities. Partners include ADB, the Inter-American Development Bank, the World Bank, and the APEC Business Advisory Council.

In short, at the Asia-Pacific and Asian levels, there exist a number of forums dedicated to dialogue, exchange of information, and technical interaction. However, concrete initiatives in the form of applied financial cooperation initiatives are less impressive, with the exception of the CMIM.

At the subregional level, ASEAN has been fairly active in the area of finance, though obviously real-sector integration takes a priority. The *Ministerial Understanding on ASEAN Cooperation in Finance* (March 1997) sets out the broad goals for cooperation in diverse areas of finance and macroeconomics, including banking, capital markets, insurance matters, taxation and public finance, as well as in exchanging information on developments affecting ASEAN countries in various multilateral and regional organizations. Realizing the importance of developing capital markets in the region, the ASEAN finance ministers endorsed a Finance Work Programme designed to deepen capital markets in ASEAN. In the Joint Ministerial Statement of the Fourth ASEAN Finance Ministers Meeting (25–26 March 2000), the ministers agreed that ASEAN should "…further strengthen corporate governance practices, including transparency and disclosure, and establish a regional framework for the development of the ASEAN bond market. Our aim is to develop and deepen ASEAN's capital markets, particularly bond markets." On 15 December 1997, the ASEAN heads of government focused on the need to move toward greater regional cohesion and economic integration, as expressed in the ASEAN Vision 2020 statement. In this document, they pledged, among other things, to maintain regional macroeconomic and financial stability through closer cooperation in terms of monetary and financial policies. The next year (15 December 1998) in Viet Nam they agreed to the "Ha Noi Plan of Action," which calls for: (1) maintenance of financial and macroeconomic stability; (2) strengthening of the financial systems; (3) liberalization of financial services; (4) intensification of cooperative efforts in monetary, tax, and insurance matters; and (5) developing ASEAN capital markets.

The ASEAN Economic Community (AEC) was formally launched in January 2007 and is slated for completion (for the ASEAN-6) by 2015. The AEC Blueprint,[15] which delineates the areas to be included in the AEC program, has four principal areas of focus: creation of a single market and production base; a more "competitive economic region"; "equitable economic development"; and enhanced integration in the global economy. Measures related to capital markets are included under the "single market and production base" and promise a "freer flow of capital." In fact, most concrete measures really refer to concerted efforts to develop national capital markets, rather than any grandiose regionally-integrated market. In

[15] The AEC Blueprint was formally approved by the ASEAN Heads of State on 20 November, 2007 ("Declaration on the ASEAN Economic Community Blueprint").

fact, while the blueprint does include harmonization of standards, some aspects of mutual recognition (e.g., with respect to professionals working in the area), and measures to broaden the base of ASEAN debt issuance, the approach is a cautious one, with references to the need to maintain stability, adequate safeguards, and promote liberalization carefully.

5. IMPROVING APPROACHES TO COOPERATION AND COORDINATION: OPTIONS FOR ASIA

5.1 Optimal Levels of Cooperation: Global, Regional, or National?

In considering new approaches to financial cooperation, the level at which cooperation should take place should be considered first.[16] Europe long grappled with this problem on the way to launching its Single Market Programme. A key idea that emerged was "subsidiarity," namely that policy should be adopted at the most decentralized level possible. Subsidiarity suggests that trade and competition policy need to be formulated at the EU level, because these activities involve more than one nation, but business-related policies and taxation can take place at the national level provided that they do not disadvantage non-resident member-state participants. Global economic cooperation might embrace the same concept: cooperation at the global (regional, national) level should address policy externalities that are global (regional, national).

Subsidiarity also argues for regional solutions where the externalities are primarily regional. In practice, the policies may have a disproportionate impact on a region, suggesting a corresponding policy role. This becomes even more compelling if political influences are factored in: a policy that may be feasible at the regional level may be difficult or impossible at the global level, due to indifference or opposition by non-regional actors.

Examples are not difficult to find. The EU would gain more from free flows of labor from throughout the world, rather than from just among member states, but such a solution would be politically impossible. Still, the EU is better off with free flows of labor at the regional level than none at all. Similarly, the World Trade Organization members would benefit most from global free trade, a system that they have been pursuing for many decades. Yet regional trading agreements, such as free-trade areas (FTAs) and other forms of deep integration can be productive as well, and have been blossoming throughout the world because global cooperation is often unobtainable. Second-best approaches to cooperation may make sense if they are superior to the status quo and, ideally, can make first-best cooperation at the global level easier.

Figure 1 summarizes ongoing initiatives at the global, trans-Pacific, and Asian levels in the areas of financial and monetary cooperation. Most initiatives at the global level are informal, except for those involving the IMF. The same is generally true at the trans-Pacific level. More is being done at the Asian regional level. ASEAN initiatives have been the most ambitious. The CMIM is also an important concrete initiative emerging out of the ASEAN+3 framework. In fact, The CMIM is an example of an initiative that can promote a stronger regional response to crises. If CMIM is seen as a viable alternative to the IMF and good source of insurance, it will enable countries to undertake more aggressive policies to stimulate their economies and to develop new regional sources of demand. It would do this by reducing the need to accumulate new reserves, and by increasing governments' confidence in their ability to sustain expansionary policies.

[16] This discussion borrows from Petri and Plummer (2009).

Figure 1: Macroeconomic and Financial Cooperation Initiatives

	Global	*Trans-Pacific*	*Asian*
Macroeconomic Policy Policy	**1. Group of Seven** **2. Group of Twenty** **3. IMF Surveillance** **4. ASEAN DP**	**1. APEC FMP** **2. Bilateral dialogues**	**1. Economic Review Dialogue**
Financial Regulation	**1. BIS** **2. Financial Stability Board**		
Liquidity Support	**1. IMF**		**1. CMIM**

APEC FMP = Asia-Pacific Economic Corporation Finance Ministers' Process, ASEAN DP = Association of Southeast Asian Nations Dialogue Partners, BIS = Bank for International Settlements, CMIM = Chiang Mai Initiative Multilateralization, IMF = International Monetary Fund.

Source: Adapted from Petri and Plummer (2009).

5.2 Monitoring and Coordination under the Asian Financial Stability Dialogue (AFSD)

As was noted above, the AFSD, which would include finance ministry and central bank officials, financial regulators and supervisors, and market participants, was proposed by ADB President Kuroda as an early warning system to ameliorate surveillance of the region's financial markets. There is some precedence for this. In the wake of the Asian crisis, the ADB partnered with crisis-affected economies to create the ASEAN Surveillance Process (ASP), which was designed to monitor economic fundamentals of the ASEAN member states and provide an early warning mechanism. The ADB invested significantly in the ASP, including in terms of capacity building for the staff of the finance ministries and the central banks. The ADB also has the "Asian Bond Monitor," that tracks not only movements in Asian bond markets but the economic fundamentals that drive them.

Expanding, deepening, and nesting the activities of the ASP in the form of a more comprehensive AFSD makes sense from a variety of economic perspectives. First, it would be an effective way to share information and promote dialogue across the finance ministries and central banks in the region. This would help in macroeconomic planning, particularly with respect to potential adverse movements in the markets.[17] Second, an effective monitoring system would improve transparency and would reduce market uncertainty. Third, it could be used as a means of "peer pressure" for economies that need to address underlying macroeconomic problems. Fourth, it could help the region develop joint positions that could reduce external imbalances.[18] Fifth, it could be used as a means to coordinate responses to economic shocks and emerging crises (e.g., "stimulus plans"). Sixth, the AFSD could help Asian economies project joint positions in international forums. And finally, I argue below that the AFSD could be used as a vehicle to enhance regional financial integration.

Importantly, coordination under the AFSD would be tricky. It is one thing to dialogue and exchange information; as I note above, it is another thing to impose any decisions and rules

[17] Given the inter-connectedness of the Asian economies and the potential for "contagion" across markets, this is particularly important.

[18] For example, the extremely large US balance of payments deficit was funded in large part by Asian economies, that bought up US-denominated assets in order to maintain exchange-rage stability. The resulting build-up in foreign exchange reserves, though often mostly sterilized, affected the money supply and interest rates in a less-than desirable way. Countries were hesitant to revalue in part out of fear for losing competitiveness. An effect AFSD could have led to concerted approaches to address the problem.

pertinent to coordination. As the region embraces a generally common set of macroeconomic goals, coordination in this area may not be as difficult as it would be in the area of financial regulatory measures and norms. The latter would have to be developed cautiously and in a step-by-step manner, in order to create confidence and a solid foundation on which to build deeper forms of cooperation and coordination based on best-practices and the common goal of systemic stability.

As the AFSD is a new concept, there is precious little in terms of relevant literature. One exception is Setboonsarng (2009). He offers a suggested mandate and institutional structure for the AFSD. He suggests that the AFSD should report directly to the ASEAN+3 Summit and the chair of the AFSD should coincide with the chairmanship of the ASEAN-3 FMM, and it would meet at least twice a year. He also recommends the creation of a formal secretariat for the AFSD.

5.3 Interaction with the Financial Stability Board

How would the AFSD relate to the Financial Stability Forum (FSF), which has now evolved into the Financial Stability Board (FSB)? The goals of the FSF, which was founded in April 1999, are closely related to those of the AFSD for the Group of Seven countries, that is, to promote international financial stability. The FSF held regular meetings of national authorities of the G-7 economies responsible for "…financial stability in international financial centers, international financial institutions, sector-specific international groupings of regulators and supervisors, and committees of central bank experts," (Financial Stability Board Press Release, 15 September 2009, p. 3) to exchange information and dialogue regarding financial supervision and surveillance issues. Three representatives from each of the Group of Seven countries participated, along with representatives from each of the major international groupings and organizations concerned with financial regulation.[19] The FSF promoted the observance of standards and codes of its Compendium, which is a guide to more than 60 sets of standards and codes from a variety of international institutions. Many, including those relating to accounting and corporate governance, involve rules and norms that operate within private-sector institutions as well as having an public-sector dimension. Key developing countries were included in some of the working groups. For instance two countries that had experimented with capital controls, Malaysia and Chile, were included in the Working Group on Capital Flows.

The FSB superseded the FSF with its inaugural meeting 26–27 June 2009, in Basel. It has expanded membership and has a broader mandate to promote financial stability.[20] It now includes seven regional economies: it has three participants from Japan (Bank of Japan, Ministry of Finance, and the Financial Services Agency); the People's Republic of China (People's Bank of China, Ministry of Finance, and the Chinese Banking Regulatory Commission); and one participant each from Singapore (Monetary Authority of Singapore) and Hong Kong, China (Hong Kong Monetary Authority); and three participants from India (Ministry of Finance, Reserve Bank of India, and the Security and Exchange Board of India), two participants from the Republic of Korea (Bank of Korea and the Financial Services Commission), and one from Indonesia (Bank Indonesia). Most major international financial institutions, international standard setting, regulatory and supervisory groupings, and committees of central bank experts, as well as the European Central Bank and The European Commission, are now members.

According to the FSB's inaugural press release (27 June 2009), it:

[19] One representative each from Australia; Hong Kong, China; Netherlands; and Singapore, which are not Group of Seven countries, were included.

[20] Details can be found at its homepage: http://www.financialstabilityboard.org/. This section draws from information available at that site.

> The FSB's mandate is to assess vulnerabilities affecting the financial system; identify and oversee action needed to address them; promote coordination and information exchange among authorities responsible for financial stability; monitor and advise on market developments and their implications for regulatory policy; advise on and monitor best practice in meeting regulatory standards; undertake joint strategic reviews of the policy development work of the international standards setting bodies; set guidelines for and support the establishment of supervisory colleges; manage contingency planning for cross-border crisis management; and collaborate with the International Monetary Fund (IMF) to conduct Early Warning Exercises.

In addition to an FSB Plenary group, the new structure would include a steering committee and three standing committees: Vulnerabilities Assessment, Supervisory and Regulatory Cooperation, and Standards Implementation. The FSB's first meeting focused on the global economic crisis but was also forward looking in consulting about exit strategies from the extraordinary monetary and financial policies put in place during the global economic crisis.

In sum, potentially there could be a good deal of overlap between the AFSD and the FSF. However, addressing such an overlap and issues of mutual interest at the regional level can have some additional advantages over cooperation at the global level, just as FTAs may complement the World Trade Organization even though they should have the same goals. There is some common membership across the groupings and the objectives of the two groups are similar, though the AFSD would be more focused. Clearly, there would be a good deal of potential for collaboration on various financial stability and regulatory issues across the two groups. Still, the AFSD would be able to give priority to issues that affect its member economies the most. For example, while the FSB may place a high priority on coordinating with the IMF on early warning exercises related to inflation and budget deficits in Latin America and Africa, these issues would be less relevant in the Asian context. On the other hand, developing and applying best practices in regulatory regimes would obviously be a high priority in Asia.

A case in point regards the first missions of the FSB, which have been assigned by the Group of Eight. For example, the FSB and its chairman, Mario Draghi, were first tasked with investigating issues related to bonuses in the financial sector. This is certainly an important issue in light of the current global financial crisis and an obvious area in which the FSB should have expertise. But bonuses are not an issue for Asian financial policymakers. These latter policymakers may be much more concerned with financial issues related to rebalancing, the future role of the dollar, concerted capital-market deepening, and the like. There are a sufficient number of critical issues of high priority in Asia but that are lower in importance at the global level, and vice versa, to justify an institutional cooperative structure such as the AFSD. The same is true in the context of EU economies: while the FSB is an important forum, it is complementary rather than competitive with the many EU bodies related to financial cooperation.

5.4 The Case for Closer Financial Integration in Developing Asia

As a final issue under the topic of options for regional cooperation, I consider the case for financial integration in Asia, particularly from the perspective of its developing member economies. Given the nature of the global economic crisis and the incentives facing Asian economies to diversify their respective financial structures, promoting regional financial markets is attractive. I argue above that this needs to be done mainly through reform and institutional building at the national level, but that regional approaches could strengthen this process, such as through the AFSD. I summarize the case for improving regional cooperation and integration of financial markets in particular below.

First, I can identify a number of incentives regarding the bond market. As a vibrant bond market can be a sine qua non for the development of deep equity markets, it needs to be a high priority for developing Asian economies.

1. Growth in demand for bonds internationally offers myriad opportunities for East Asian/ASEAN countries to attract the attention of international institutional investors, investment banks, multinational lending institutions, and the like. Deeper domestic bond markets and facilitating cross-issuances and integration across Asian bond markets would increase investors' interest in the region; harmonization and liberalization that would be necessary in building such a regional market would also render the local markets more attractive, hopefully building the necessary critical mass to put them on the international radar screen.

2. As part of their respective financial reform programs, Asian countries have been trying to diversify their heavy reliance on the banking sector in favor of other financial intermediation vehicles, including equity and fixed income markets. Over-reliance on the banking system has created many risks that could otherwise be avoided (as discussed in Section IV, there is also an important moral hazard problem). In particular, over-reliance limits the way in which a financial system can price risk efficiently, and reduces the options open to investors and borrowers. Allowing for greater cross-issuances of assets could deepen local markets and therefore enhance the financial integrity of the developing Asian countries, thereby mitigating or avoiding financial crises in the future.

3. Demand for bonds by the private sector and central banks in the region has been growing significantly, but Asian public and private investors tend to purchase them from outside the region when seeking portfolio diversification and high yields. This is a problem that the Asian Bond Fund is designed to address, but as noted above, it is only a fledgling initiative. I have argued that indicators point to a strong increase in this demand in at least the medium and certainly the long term, due to high savings rates, medium-term growth prospects, demographic change, and financial development in Asia. Facilitating cross-border purchases of Asian economy bonds would allow greater regional intermediation of this projected boom in investible funds, and would serve to increase the attractiveness of local markets. Both would serve to reduce any currency mismatches. It will also allow for additional investor portfolio diversification options. Moreover, higher levels of cross-border debt issuance and trading activity would enhance liquidity in the local market, which in turn would increase their attractiveness.

4. Growth in the supply of bonds in Asian economies over the past two decades has been impressive, but the medium/long term potential for bond debt issuances is even greater. Asian countries will no doubt continue to be among the fastest-growing regions of the world, with a strong demand for credit for (physical and human capital) infrastructure and investments by the private sector as the economy modernizes and grows. Asian countries have also seen significant—though, arguably, under control—fiscal deficits, a phenomenon that is rising in importance during the global economic crisis downturn and stimulus packages and will likely continue into the medium run. Tapping regional and national funds through improved regional and local markets for these investments, rather than merely relying on international capital flows, will also permit the region to avoid the currency and maturity mismatches that created and fed the Asian financial crisis in the past. Moreover, by increasing liquidity and diversity of bonds in the market, this process will lead to more reliable and longer yield curves, which would allow for better pricing of risk in the market and improve debt-management options in both the private and public sectors.

5. A key problem in fostering financial development in the region has been lack of transparency in national systems. As suggested by Adams (2008), the situation has improved over time, but regional banks continue to receive low marks from credit rating agencies. Moreover, the diversity of the region in terms of treatment of fixed income securities taxation, restrictions on foreign participation in bond markets, and various idiosyncratic investment laws in the Asian economies has made cross-border investment difficult. Asian investors often find that markets outside the region are much easier to navigate, have far lower transactions costs, higher liquidity, and lower principle and credit risks. Integrating Asian fixed income markets will create a far more attractive environment by increasing transparency and efficiency, reducing transactions costs by lowering taxes and making the tax structures within (i.e., between the bond and other capital markets) and between markets more equitable and understandable, and harmonizing policies making cross-issuances and purchases of bonds much easier.

6. In developing Asia, corporate bond markets tend to be small, and where they are fairly large, they tend to be dominated by a few large, well-established companies and often lack dynamism. Much needs to be done to broaden and deepen participation in the corporate markets. There are at least four specific advantages to improving the corporate bond market: First, it can help to avoid the "double mismatches"; second, a vibrant corporate bond market lowers the cost of borrowing by providing an alternative (competitive) vehicle in the financial markets (and, for well-established firms, interest rates on corporate bonds tend to be lower than interest rates applied in the banking sector); third, if the secondary market is well developed, corporate bond market development improves the efficiency of the financial sector by establishing accurate price signals in the market; and fourth, in times of a crisis and its aftermath, less of a reliance on the banking system allows firms to continue to borrow funds from the market when the banking sector is facing its financial restructuring difficulties. Moreover, once the corporate bond market reaches a threshold of sufficient liquidity, economies of scale will reduce transactions costs and lead to a "virtuous cycle." Policies that need to be adopted in order to allow for greater integration will not only facilitate cross-issuances of corporate bonds, but will also help increase participation and liquidity in the local bond markets.

In terms of equity markets, interest in stock market integration arises primarily because financial theory suggests that an integrated regional stock market is more efficient than segmented national capital markets. Capital market efficiency in Asia has become even more important since the Asian crisis as regional economies seek to reduce their traditional dependence of firms on bank loans, and at the same time hunt for new capital from outside the region.

With an integrated regional stock market, investors from all regional economies will be able to allocate capital to the locations in the region where it is the most productive. With more cross-border flows of funds, additional trading in individual securities will improve the liquidity of the stock markets, which will in turn lower the cost of capital for firms seeking capital and lower the transaction costs investors incur. These suggest a more efficient allocation of capital within the region.

From the perspective of a portfolio investor outside the region, stock market integration suggests that separate markets move together and have high correlations, so there is less benefit from portfolio diversification across countries. However, an integrated regional exchange could be more appealing to investors from outside the region who would find investment in the region easier or more justifiable. As shares become more liquid and transaction costs fall, fund managers become increasingly willing to take positions in the stocks. In addition, outside investors may take notice of the regional stock exchange instead of dismissing a collection of small national exchanges: the whole (one regional stock exchange) might be greater than the sum of the parts (individual country exchanges). This particularly holds promise in the context of ASEAN economic integration.

In sum, regional cooperation in Asia can support the development of assets markets in the region. It could expand opportunities for savers and investors, lower the cost of capital to firms and governments, reduce currency mismatches, enhance liquidity and intermediation in the region, and reduce regional exposure (at least at the margin) to non-regional economic shocks. The process will lead to the development of better financial institutions and create a strong incentive for the development of "best practices." I would argue that the potential in this area is so high that the AFSD might consider (micro) regional cooperation and coordination issues as a core functional area.

6. RECOMMENDATIONS FOR IMPROVING REGIONAL MONITORING AND COORDINATION OF FINANCIAL REGULATION

I have argued in this paper that a great deal of work needs to be done at the global, regional, national, and firm levels in terms of improving the regulatory environment, supervision, and "best practices" in the international financial system. So much went wrong during the global economic crisis that it is difficult to give a good summary of priorities in creating a more stable global financial regime. However, to summarize some of the main points of the discussion in this paper:

1. Capital flows are a necessary feature of the international financial system. They bring with them important economic benefits. However, there does exist a potential externality in terms of systemic risk when there are strong capital-flow reversals, something I have referred to as "financial pollution." Hence, there is a strong case to be made for close monitoring of capital flows in the national economy and taking prudential measures to avoid excessive risks. In Asia, mechanisms have been put in place since the Asian crisis to avoid negative externalities associated with capital flows. These have not been tested recently due to the creditor status of Asian economies; however, the region needs to remain vigilant as its respective financial systems develop.

2. Highly-leveraged but generally unregulated financial institutions in the OECD, including hedge funds, have been important actors in the global economic crisis. These financial institutions have proven themselves able to generate significant systemic risk to the national, regional, and global economy. They need to improve their own in-house value-at-risk models and investment strategies. However, their revealed potential for systemic risk implies that they need to provide greater transparency to markets and regulators and, in my opinion, will ultimately require greater regulation in order to ensure stability. While this is mainly an issue for OECD countries, Asian developing countries also have a stake in the matter, given their potential for disruption of global markets.

3. Credit rating agencies are necessary to the smooth functioning of the global financial system and they will become increasingly important as Basel II is implemented. Their bruised reputation due to the global economic crisis, in the form of poor valuation of structured products and "conflict of interest" issues, suggests a pressing need for their reform in order to ensure that they can play their necessary role effectively in the modern financial system.

4. In order to improve the global regulatory and supervisory environment, I have delineated a number of issues that need to be addressed, including better information dissemination and transparency, improved cross-border arrangements for financial transactions, better early-warning systems and macroeconomic

monitoring, new mechanisms to improve the “procyclical” nature of financial adjustments during crises, and the need to address the “too big to fail” issue.

5. In terms of early warning systems and macroeconomic surveillance, I noted that it is not sufficient just to identify emerging problems: there must be a system in place to deal with them. This is not an easy task, as it involves tackling the “burden of adjustment” problem. Regional economic cooperation can help in this area as it can facilitate concerned responses to emerging problems.

6. I have made the case for stronger financial institutions in Asia. Given the growth trajectory of Asian economies and the importance of finance to the future development of the region, I suggest that this needs to be a priority. Moreover, the global economic crisis underscored the problems associated with relying largely on financial intermediation outside the region. Once again, regional cooperation can help in this regard.

7. I also support the view that an AFSD could help the region address many issues of interest to the region’s economies in terms of improving financial stability, fostering development, and helping Asia project its positions more forcefully in international forums. Moreover, I suggest that emerging issues related to financial cooperation, coordination, and integration should be one of the key areas that the AFSD should include in its modus operandi.

8. But there are many other possibilities. As Asian economic cooperation and integration proceeds apace, the region will require additional means of boosting intra-regional trade, investment, and financial flows. In the area of finance, the CMIM and the ABF are two first (small) steps in this direction and others are in the works, and at the sub-regional level the ASEAN Economic Community program includes financial-related measures, though it is mainly focused on the real sector. The case for closer cooperation at the regional and sub-regional levels, nested within the context of global forums, is strong and should continue, from concerted measures to strengthen local capital markets to initiatives that facilitate joint issuances of paper instruments.

9. Still, the emphasis needs to be placed on national financial development. While the financial systems of developing Asian countries have improved since the Asian crisis, much remains to be done in terms of improving national financial institutions, particularly the banking system. Moreover, I have noted that development and deepening of local fixed-income and equity markets need to be part of this process. While global, regional, and sub-regional initiatives can help accomplish this, the most important reforms will have to be undertaken at the local level.

The global economic crisis has taken a horrific toll on global and regional economies. Thankfully, it would appear that I have seen the worst of the crisis. As of late 2009, most indicators point to the beginning of a sustained recovery.

But policymakers need to learn from this crisis and put in place a more stable, resilient international financial regime. The financial boat has revealed many leaks that need to be repaired if it is not to sink when the next storm hits it. Our economic captains have to be vigilant and forward-looking even if it looks like smooth sailing as the world recovers in 2010.

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