Financial integration and cooperation in Asia and the global crisis

Giovanni Capannelli
Asian Development Bank
gcapannelli@adb.org

Paper prepared for presentation at the Annual Conference of the American Economic Association
ACAES session on "Financial Integration in Asia: New Wine in Old Wineskins?"
Saturday, 3 January 2009, San Francisco

PRELIMINARY DRAFT NOT FOR CITATION

Abstract

The financial crisis that hit Asia in 1997/98 triggered the introduction of reforms to restructure and improve national financial systems, together with a substantial progress in regional financial cooperation initiatives. By many standards, Asian financial markets are now more efficient than before and more integrated among themselves, although the degree of financial integration in Asia remains low compared to the degree of trade integration and to the degree of Asian financial integration with the rest of the world. A number of cooperation initiatives have flourished after the 1997/98 crisis and in some cases they may need streamlining. Nevertheless, Asia is facing a deficit of established institutions to promote regional cooperation and further market integration. The ongoing global economic crisis created by the financial turmoil that started with the collapse of the US subprime housing market, is a good case to test the preparedness of the region to provide a collective response to limit the negative impact of the crisis on Asian economies and ensure stability and continued economic prosperity. So far, however, no significant development is being observed, especially on the front of economic policy dialogue and coordination. The reason may lie in the late realization that Asia is not immune from the crisis and the scarcity of effective institutions for regional cooperation. Asian economies need to enhance their institutional capabilities to promote cooperation and integration by strengthening and streamlining existing mechanisms, and creating new ones. Institutions for regional cooperation are important for: (i) implementing initiatives to help alleviate the immediate impact of crises; (ii) conducting effective regional economic policy dialogue and coordination to promote growth and maintain stability; and (iii) ensuring that economic and financial liberalization continues to follow the path set forth by multilateral institutions, particularly to avoid the adoption of inward-looking and beggar-thy-neighbor policies. Improving the efficiency and effectiveness of Asian institutions for regional cooperation and integration is important not only for the region itself but also for the rest of the world, which is becoming more dependent than in the past on Asia as an engine of global economic growth.

Keywords: Regional economic cooperation, Asian financial integration, institutional development.

Acknowledgments
The author would like to thank Ippei Yamazawa for suggestions provided on the topics discussed in this paper and to Rogelio Mercado for the assistance provided in some data gathering and analysis.

1. Introduction

The ongoing economic crisis which started with the financial turmoil emerged in the US subprime market eighteen months ago is reshaping the international economic order and the global financial architecture. The dimensions of the shock have seen no precedent since the end of the Second World War, both in terms of number of countries affected by the contagion and length of time needed for recovery. During the second half of 2008, all G3 and other developed and industrializing economies entered into recession, while international financial institutions continue to revise downwards their growth projections for the short and medium term.

Due to its dynamism and resilience, Asia –referring in particular to the emerging East Asian region[1] and India– now stands as the engine of world's economic growth: it is by far the world's region which enjoys the highest growth rate of GDP and still has relatively stronger economic fundamentals compared to other regions. But the ripple effect of the crisis is now being felt in Asia as well and the potential negative consequences on the region's economies may be much worst than anticipated, if Asian authorities fail to act promptly, decisively, and collectively to respond to the challenges the crisis is posing.

The impact of the global financial crisis on Asia's economies was initially felt on the financial sector and it was relatively modest. The knock on effect which is now following on the real sector is much stronger and may last longer than it was initially thought. Asian economic authorities have responded individually with macroeconomic policies on the monetary and fiscal front and some Asian countries have secured liquidity support to help fend off the global credit crunch through bilateral agreements, while others were forced to ask for rescue packages to the International Monetary Fund (IMF) to restore macroeconomic stability and confidence and maintain internal social stability. Asian countries have also resorted to some initiatives for regional cooperation but so far only at the margin. Although announcements on the Chiang Mai Initiative multilateralization are expected at the next ASEAN+3 Finance Ministers meeting, Asian countries have been unable to undertake new significant initiatives to promote regional financial stability and to foster dialogue and coordination of their economic policies. Regional action is needed in a number of areas to ensure macroeconomic and financial stability, including harmonization of fiscal policies and financial regulations, coordination of monetary and exchange rate policies, and others.

Asian economic integration is intrinsically driven by the market and led by the private sector. Regional cooperation initiatives have been engineered in response to various shocks that hit the region during the last few decades and to compensate for market failures. The process of Asian regionalism, as described by a recent Asian Development Bank (ADB) study[2] has its own distinct characteristics and is strikingly different from the European model: (i) it does not follow a legalistic and ideology-driven but a pragmatic approach; (ii) it is not a top-down but bottom-up process, based on several independent subregional programs; (iii) it does not follow the Balassa sequencing, where financial integration follows real market integration, but trade and financial integration happen in a more simultaneous way; and (iv) it is not based on the development of strong regional institutions with a clear mandate from the member countries to manage shared regional sovereignty in certain areas, but 'institution-lite' and structured on initiatives for intergovernmental cooperation. At this juncture, however, Asian economies should consider the merits of strengthening their institutional capabilities for regional cooperation.

---

[1] In this paper emerging East Asia refers to the following fourteen economies: the ten ASEAN countries (Brunei Darussalam, Cambodia, Lao PDR, Indonesia, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam), the People's Republic of China, Hong Kong, China, the Republic of Korea, and Taipei,China.

2 Asian Development Bank, 2008.

Although regional cooperation typically emerges as a reaction of an economic or financial shock, there are considerable costs to pay for being unable to be proactive in crisis prevention, as economic systems tend to overshoot during the correction process towards new equilibrium. The fact that the impact on Asia of the ongoing global economic and financial crisis has mostly arrived through a knock on effect may have created an initial illusion that the region was immune from contagion and that existing regional cooperation mechanisms were adequate to respond to the challenges posed by the crisis. This lacking sense of emergency and the scarcity of region-wide institutional capabilities for cooperation have affected Asia's reaction to the crisis. Asian economies need to realize the importance of regional action and enhance their institutional capabilities to promote cooperation and integration by strengthening and streamlining existing institutions, and creating new ones. Enhancing institutions for regional cooperation is important to implement initiatives to help alleviate the immediate impact of crises, conduct effective regional economic policy dialogue and coordination to promote growth and maintain stability, and avoid the adoption of inward-looking and beggar-thy-neighbor policies, which could derail the multilateral process of economic and financial liberalization.

This paper will review the recent developments occurred in Asia's financial cooperation and integration, with particular regard to the ongoing global economic crisis, and discuss some possible future course of action for consolidating or harmonizing existing regional initiatives, strengthening established institutions, and creating new ones. The paper is structured as follows. Section Two will present a brief description of the crisis and its impact on Asia. Section Three will discuss the implications that financial crises have on regional cooperation, looking at the European experience and focusing in particular on the evolution of Asian regionalism after the Asian financial crisis of 1997/98. Section Four will review the very recent developments occurred in 2008 with regard to the institutional dialogue aimed to promote regional cooperation in Asia and the need for the region to fill in the existing institutional deficit. Conclusions are discussed is Section Five.

2. The ongoing crisis and its impact on Asia

The ongoing economic and financial crisis is generally perceived as the single most important shock the world economy has been experiencing since the Great Depression. The crisis started in the US suprime market and immediately spread out to the rest of the US and European financial systems, forcing several major financial institutions to collapse, imposing governments around the world to introduce rescue plans of sizes and scopes that were unseen before, and bringing serious financial and currency problems to a number of developed and developing countries which experienced sudden capital outflows. Foreclosures in many countries and industries are expected to escalate in the coming months, economic activity, trade, and employment will likely shrink for a while, with a looming global recession which may have several adverse impacts. The current economic and financial crisis is challenging the way financial deregulation has brought in unscrupulous practices and has created havoc in the markets. The globalization process will slow down for some time; authorities will introduce a new set of rules and standards to better regulate markets and increase investors' protection; developing economies will eventually increase their power to influence the shaping of the global financial architecture, although the extent to which advanced countries will be ready to give up of their old power is still not clear at all.

The impact of the ongoing crisis on Asian economies was felt initially in the financial sector mainly by affecting capital flows, including both portfolio and foreign direct investment, causing sharp declines in equity prices and depreciation of Asian currencies. The need for US and European financial institutions to sell-off of risky assets by deleveraging to secure the needed liquidity at home in a credit crunch situation, together with the unwinding of the yen carry trade and a re-pricing of risk induced a sudden reversal of capital flows from Asia back to the US and Europe, that drastically increased the risk premium and limited external funding for Asian borrowers by restricting access to international capital markets (Kawai, 2008). This situation has been affecting the entire region, in particular those economies with vulnerable external positions –including high current account deficits and large exposure to short term capital inflows– and fragile fiscal balances.

Despite the high degree of global integration of Asian financial systems, however, Asian financial institutions were not hit too badly in the first round, mainly because they had learnt their lessons from the 1997/98 Asian financial crisis (and Japan's banking crisis). Their exposure to toxic assets was relatively low: while financial authorities proceeded cautiously in deregulating financial markets in the region and improved risk management practices by strengthening prudential supervision and regulations, Asian financial institutions maintained a prudent approach avoiding excessive investment in collateralized debt obligations, mortgage-backed securities, and other high-risk, high-return financial instruments. At the same time, they lagged behind US and European financial firms in introducing sophisticated products and business models as a result of complex financial innovation. In addition, the prudential and soundness indicators of Asian banks and other financial institutions remain solid, strong capital-adequacy ratios, low leveraging, and relatively limited exposure to real estate financing (ADB, 2008b. James et al., 2008). Table 1 shows how the non-performing loan ratio of Asian banks has considerably declined over the last eight years for all countries and remained well below 5% by mid-2008.

< Insert Table 1. NPL ratios >

But as the global financial turmoil continues, financial conditions in Asian economies may eventually turn considerably negative, especially if global financial stress and instability intensify. As several Asian economies are still largely dependent on bank financing,[3] the effect of tighter domestic credit on the overall economic activity will be substantial. As financial volatility increases and risk appetite slows down, with investors' looking flying for safety and quality, external funding sources will narrow. If credit conditions will tighten further, Asian firms will find it very difficult to finance new investment as shares prices continue to fall, while the already low business and consumer confidence may worsen, affecting the performance of the region's exchange rates. The ADB (Figure 1) has recently shown how external vulnerability –defined as the sum of the current account deficit, short-term debt, and foreign holdings of stocks and local currency bonds divided by the total amount of international reserves– has been affecting the trend of the currencies of Asian individual economies (ADB, 2008b).

< Insert Figure 1. Vulnerability ratios and currency trends >

As the global financial turmoil continued, some Asian economies, especially those largely exposed to foreign capital such as Korea and Indonesia, have experienced liquidity shortages of foreign currency as their access to international interbank markets has become difficult. Major international banks reduced the interbank credit to Asian financial institutions, with massive withdrawals of foreign currency liquidity which may seriously threaten financial stability.

Economies across the region have introduced a number of measures to protect their banking systems. Some governments (Malaysia, Hong Kong, Singapore) have guaranteed the repayment of bank deposits held with authorized institutions, while others (China, Hong Kong, Japan, and Korea) have announced their readiness to recapitalize weak financial institutions. In addition, Korea has introduced a $130 billion package to guarantee short-term foreign bank loans. Korea and Singapore have also signed a $30 billion contact each with the US Federal Reserves to open a new currency swap line in case of sudden liquidity needs.

---

[3] See Section Three later for data on the evolution of the composition of financial assets (between Bank claims, equity markets, and bond markets.

As inflationary pressures eased substantially with the unfolding of the crisis, inducing marked declines in energy and commodity prices, and due to the scarcity of liquidity in international markets, most countries have found room for monetary easing. Indonesia and the Philippines have secured support from regional and multilateral financial institutions, to be activated should they become in urgent need of liquidity, while in Asia so far Pakistan is the only country which was forced to seek for help from the IMF through a rescue plan of $7.6 billion.[4]

A second round effect has now started to hit the region through the real sector and income channels, as the G3 economies entered into recession.

Development of regional production networks based on intraregional trade and investment: increase in intraregional trade shares over the years (ADB, 2008a). Asia is becoming more important as a recipient region of Asian exports from 34% in to 50% in 2007 (Figure 2).

< Insert Figure 2. Exports composition >

However, as intraregional trade is largely structured on intermediate products, it eventually depends on the final demand of non-regional economies, particularly the US and Europe (ADB, 2008a). Estimates by the ADB show that 67.5% of Asia's trade in 2006 was still dependent on the final demand of non-Asian economies, particularly the US and Europe.

< Insert Figure 3. Trade dependency on external demand >

Given the above trade structure, a prolonged recession in the G3 economies will cause a severe disruption of Asian economic growth, which is largely based on export. While Asian economies need to increase the importance of domestic demand as a source of growth, they are facing a pronounced risk of intraregional trade implosion if the G3 contraction, combined with unfavorable currency trends (appreciation of Asian currencies), will impact too heavily on their demand of Asian products. In addition, if the recession is protracted, some Asian economies may revert to protectionism in one way or another, further affecting negatively world trade and prosperity.

A part from exports, other channels through which the economic crisis hits Asia are: (i) unemployment; (ii) foreign workers' remittances (Philippines, Vietnam, Indonesia); and (iii) smaller tax revenues.

Nevertheless, due to its dynamism and resilience, Asia now stands as the engine of world's economic growth: it is by far the world's region which enjoys the highest growth rate of GDP and still relatively stronger economic fundamentals compared to other regions.

< Insert Table 2. World GDP growth (IMF) >

Within Asia, Japan as well as the relatively more open economies such as Singapore, Hong Kong, China, and Taipei,China, have already entered into recession as the latter are largely dependent on their sources of external demand, which have contracted sharply.

< Insert Table 3. Asia GDP growth (ADB) >

- *Discussion on the possible length of the crisis: the whole of 2009? How much into 2010?*

[4] The IMF rescue package for Pakistan, of which $3.1 billion was made immediately available to strengthen the foreign reserve position of the State Bank of Pakistan, has two main objectives: (i) to restore macroeconomic stability and confidence (through tightening macroeconomic policies); (ii) to ensure social and political stability.

- *Which region will recover faster than the others? The US because of the Obama-effect? Or Asia because of stronger fundamentals and resilience? In any case, it looks like Europe will be the slowest.*
- *Asia's economic growth is important not only for Asia but also for the rest of the world to ensure a fast recovery of the US and Europe as well. Until from 2007 until mid-2008, countries experienced a reversal trend in trade flows as US exports to China started to increase*

3. Financial crises, regional cooperation, and trend of Asian regionalism

- Crisis as a trigger of regional cooperation initiatives (everywhere in the world, from Europe to Asia)
- In Asia the financial crisis of 1997/98 was a watershed that prompted several initiatives for regional financial cooperation, including the start of the ASEAN+3 Finance Ministers' process. Although this process doesn't have a proper secretariat yet, it has given birth to the Chiang Mai Initiative (CMI), to the Economic Review and Policy Dialogue (ERPD) and the Asian Bond Markets Initiative (ABMI). In finance, ASEAN+3 is the most active forum for regional cooperation in Asia and the one which is likely to show the most important developments in the near future. But weaknesses remain, especially the lack of a permanent structure and body of professional staff supporting the process.

Financial markets' integration - Asia is less integrated in finance than in trade. However, its financial markets are today larger, deeper, and more sophisticated than they were a decade ago, and its legal and regulatory frameworks have improved. By several measures, Asia's financial integration has also progressed. However, most Asian funds are intermediated through distant global markets, despite the region's large savings and ample investment opportunities.

Since the crisis of 1997/98, Asian financial markets have grown rapidly, both in absolute terms, as a share of total financial assets, as well as a share of GDP (ADB, 2008a). During the last decade, Asian financial markets have also experienced a structural re-balancing, from being too dependent on the banking sector to increased shares of capital markets: equities and bonds (Table 4 and Figure 4).

< Insert Table 4. Evolution of Asian financial assets >

< Insert Figure 4. Structural change of Asian financial assets >

However, Asia's financial integration is still low (albeit increasing over the last decade)[5]. A surprisingly low share of Asia's financial resources is invested in Asian assets (ADB, 2008a).

Add 1-2 paragraphs to describe the costs and benefits of regional financial integration.[6]

---

[5] It is difficult to agree on a universal definition of financial integration. In general, integration of financial markets is related to free movement of capital, financial openness, and integration of financial services. The literature also suggests that financial markets are integrated when the law of one price holds.

[6] Advantages and disadvantages of regional financial integration: Regional financial integration is an important factor to fostering economic growth as it facilitates the allocation of capital to its most productive use. Economic integration implies price convergence. Therefore, in a financially integrated region the price of similar assets – those with similar expected risk-adjusted returns – will tend to converge. Even in the presence of different regulations and imperfect information flows, arbitrage will tend to erode price differentials. As regional financial integration advances, portfolio diversification allows the sharing of idiosyncratic risks across countries in the region, facilitating the insurance of national income against country-specific shocks. In other words, the capacity of national economies to borrow and lend with other regional economies increases, allowing for domestic investment and savings to increasingly diverge (Kose et al., 2006). Fluctuations in national consumption may thus become less dependent on changes in national output, smoothing thereby consumption over time: fluctuations in national consumption may thus become less dependent on changes in national output; national and regional

- Analysis of quantity and price indicators of regional financial integration (Lee, 2008)
- Quantity indicators: trend of intraregional portfolio investment (IMF data, only up to 2006). Asian financial integration is still low, especially if Japan is included in the definition of Asia, but increases slightly over the years and tend to increase to about 25% if Japan is excluded (Table 5 and Figure 5)

< Insert Table 5. Trend of intraregional portfolio investment >

< Insert Figure 5. Portfolio investment: Evolution of regional shares >

Considering the volume of foreign investment in Asia, it is fair to say that the region is financially globalised but that less progress has been made towards financial integration within the region (ADB, 2008a; García-Herrero, Yang and Wooldridge, 2008). Given Asia's position as a net capital exporter, the globalisation of Asia's financial markets implies — a large flow of capital from the Asian economies to the developed world.

As shown in Table 5 and Figure 5, in 2006 the share of intraregional portfolio investment flows (sum of assets and liabilities) among Asian economies was approximately only 25% if Japan is excluded from the definition of Asia, and 10% if Japan is included (Japan is highly financial integrated with non-Asian markets, especially the US).[7] Although these values show the relative low level of regional financial integration, it is also worth noting that the ratio has increased over the years (in 2001 it was respectively 20% excluding Japan and 7% including Japan).

- Price indicators: analysis of average standard deviation of cross-market differentials of Asia over the US for (i) overnight interest rates; and (ii) bond yields (5 or 10 year, show the same trend). Use of very recent data, updated to the end of December 2008 (Figure 6).
- It is interesting to observe that these price indicators of regional financial integration have improved until mid-2008, but since the start of the global financial turmoil they show a somewhat reversal trend as interest rates shoot up and yield curves became steeper

< Insert Figure 6. Progressing financial integration: Price indicators >

To have a closer look at price indicators of financial integration, one could also examine the cross-country correlations of financial asset returns by constructing the degree of co-movement of stock prices. As financial markets become more integrated, market movements of stock prices will tend to become more closely associated with each other. The matrix showing the average of pairwise correlation coefficients of quarterly changes in stock price index in Asia before and after the 1997/98 crisis is shown in Table 6 (where the precrisis period runs from the 2nd quarter of 1990 till the 4th quarter of 1996, and the postcrisis period is from the first quarter of 2000 till the second quarter of 2008). To correlation coefficients are

---

consumption may also become increasingly correlated. The drawbacks of financial integration are also well known: in a world with imperfect capital markets, financial integration may heighten a country's vulnerability to macroeconomic and financial crises. In particular, contagion and reversals of capital flows could result in higher output volatility and even lower average growth for a certain period of time, although the evidence is inconclusive (Kose et al. 2006). In any event, the benefit of faster, sustainable growth should, in principle, outweigh the risks in the long run, although countries' initial circumstances as well as the type of financial integration may tilt that balance somewhat differently.

[7] This is strikingly different from trade patterns in the region – intraregional flows account for over half of Asia's trade. It is also in stark contrast with investment patterns in Europe – over half of the region's portfolio investment is in other European countries.

calculated using quarterly data on stock exchange indexes, averaging daily data from Bloomberg and converting these indexes from national currencies into US dollars (Capannelli, Lee, and Petri, 2009).

< Insert Table 6. Correlation of stock price indexes >

The results of this analysis show that the value of the correlation coefficients before and after the 1997/98 crisis increases considerably for all Asian countries. In particular, while these coefficients were negative for several countries before the crisis, all negative coefficients disappear after the crisis. The average value of the entire region, in particular, increases from 0.27 during the period 1990-1996 to 0.524 during the period 2000-2008. However, this result alone cannot be used as an indicator of increased financial integration, as the stronger correlation among Asian stock exchange indexes may be due to an increased correlation between Asian indexes and indexes of stock exchange outside the region, which is simply reflected in the intraregional values.

But as bilateral correlations between Asian stock indexes are generally higher that those with the US, both before and after the 1997/98 financial crisis (see ADB, 2008a), and also a closer look at table 6 shows that bilateral correlations among Asian stock indexes have increased before and after the crisis in more than 80% of total cases, it is safe to conclude that Asian financial integration —as measured by price indicators— is growing.

Figure 7 ranks the 10 Asian countries for which data are available in terms of the average increases in the bilateral correlations pre- and post-crisis. Korea is the country that, by this standard, has become more closely integrated with the region, followed by Japan, while Malaysia is the last.

< Insert Figure 7. Change in correlation of Asian stock price indexes >

Deeper financial integration will depend on the actual impact of the ongoing global financial turmoil and further improvements in the region's financial systems, including regulatory structures that restore confidence in financial institutions and protect investors.

While there is little evidence of increasing regional financial integration in Asia, cross-border bank claims have increased, money market rate differentials are converging, and stock market indices are increasingly moving together (ADB 2008a). What are the main impediments to further financial integration in Asia?

Asia's legacy of underdeveloped national financial markets and institutions is perhaps the biggest impediment to greater regional financial integration and intermediation. While some economies have more developed financial sectors than others, and all have made huge progress over the past decade, the traditional dependence on bank financing and the legacy of financial repression have stunted the growth of equity and bond markets in many economies. Likewise, while regulatory frameworks vary across the region and are generally much improved, many countries suffer from an inadequate legal framework, weak regulation, low accounting and auditing standards, poor transparency, weak corporate governance, and weak investor protection (ADB, 2008a).

Considerable barriers to financial flows still exist in many Asian economies. Inadequate deregulation and the limited openness of national financial markets impede their development. It hinders the issuance of local currency bonds, limits investment in foreign bonds by domestic investors, and prevents foreign borrowers from issuing bonds denominated in different currencies in Asian markets. Restrictions on capital account transactions and barriers to the entry of foreign financial institutions also impede financial integration.

4. Asia's institutional deficit for regional economic cooperation

Regional financial cooperation has increased markedly since the Asian financial crisis, notably through innovations such as the start of the ERPD, the CMI and the ABMI, but also through the Asian Bond Funds (ABF) initiative under the EMEAP, the ASEAN Surveillance process started by the group's finance ministers, and the dialogue conducted through transregional forums such as the Asia-Pacific Economic Cooperation (APEC) and the Asia-Europe Meeting (ASEM). More recently, a dialogue was also started among finance ministers under the East Asia Summit (EAS), which expands the ASEAN+3 group to include India, Australia, and New Zealand (Table 7).

< Insert Table 7. Main financial cooperation forums in Asia >

Description of how the dialogue is conducted under the different forums and the emerging need to streamline some of the initiatives. While there are several overlapping memberships and areas of focus, the relationships among different forums are not always well established.

Sometimes government agencies that are members in different forums find it very difficult to participate in all the activities, subgroups, and working groups that are being created within each forum, not the least due to shortage of qualified personnel to attend the meetings. For example, the ASEAN Surveillance process could be collapsed and ASEAN countries could provide more active contribution directly to the ASEAN+3 Finance Ministers Meeting.

In other cases existing groups such as ASEAN+3 (initiated by Finance Ministries) and EMEAP (started by Central Banks) should established a closer dialogue and perhaps joint working groups to discuss common challenges, although there is a problem with different memberships. But as the issue before them of ensuring regional financial stability is a daunting challenge, with large implications not only for Asian economies but for the rest of the world as well, they could find a way to converge and include also market regulators by creating a new institution such as an "Asian Financial Stability Dialogue", as it was proposed by the ADB (ADB, 2008a). To respond to the global financial turmoil, indeed an immediate regional priority is to strengthen supervision, surveillance, and dialogue on financial markets; to this end, the creation of such dialogue should be given proper consideration by regional financial authorities.

Other priorities include steps toward the harmonization of financial regulations and the adoption of minimum standards that permit early mutual recognition, at least among subsets of economies.
It will be also important to deepen and expand the ABMI and ABF, and to build a strong regional infrastructure for payments, settlement, and information exchange systems. Despite the shock received by the ongoing financial crisis, regional cooperation initiatives to promote the issuance of local currency bonds in domestic markets in Asia have been quite successful. Figure 8 shows the evolution of the local-currency denominated bond markets in 10 Asian economies since the start of the ABMI in 2003 until today, in terms of share of total issuances as a ratio of GDP. Japan and Korea lead the group, but also China, Thailand and Korea a show remarkable growth especially when comparing the share of total issuances in 2003 and 2008.

< Insert Figure 8. Asia's local-currency denominated bond market >

Initiatives such as the ABMI and the ABF are intrinsically important as they help improve local standards by introducing international best practices, establishing market infrastructure, and promoting financial liberalization also through peer pressure (ADB, 2008a).

Local currency denominated bonds outstanding in Asia grew sharply from $7.5 trillion in 2003 to almost $11.8 trillion in September 2008. However, much more needs to be done to offer more sophisticated products and to give Asian corporations better access to the region's bond markets. A number of options and opportunities are discussed in ADB, 2008b, including the creation of a regional credit guarantee for bonds issued in local currencies. Such facility is expected to improve the corporate sector's access to bond markets, minimize the currency and maturity mismatches, and eventually contribute to ease some of the financing constraints created by the ongoing financial crisis.[8]

Recent developments in regional financial cooperation in Asia

As the global crisis started to unfold since September 2008, Asian countries have missed a first opportunity to boost regional financial and economic cooperation. The reason for inaction may be due to a combination of three factors: (i) lack of initiative and/or interest from individual countries to take a leadership role in brining the region together and push for cooperation; (ii) underestimation of the actual impact of the crisis on Asia, especially of the knock on effect on the real sector; and (iii) lack of effective institutions for regional cooperation to take the lead and introduce specific initiatives in response to the crisis.

But in fact the second factor may be also dependent on the third one: in the presence of regional institutions with a specific mandate for regional economic and financial monitoring, and with professional and qualified staff, one would logically expect that the impact of the crisis could have been better estimated and assessed, including the provision of effective and sensitive policy advice for Asian economic authorities to intervene in order to maintain economic and financial stability and to ensure continued economic prosperity for the region.

To date, the most significant development in terms of cooperation among regional economies is the first meeting among the leaders of the **Trilateral Summit** (China, Japan, and Korea) which was held in Fukuoka, Japan, on 13 December 2008.[9]

- Historical importance of the meeting also for its political significance

The leaders discussed, for the fist time under this format, a wide range of issues, including the need to boost domestic demand, to introduce detailed plans for fiscal stimulus in each country, and reaffirmed their commitment (expressed during the G20 meeting a month earlier) to global trade liberalization and to not revert to protectionist policies. They also agreed to expedite the ADB capital increase and discussed other issues such as territorial disputes.[10]

---

[8] The fast-track creation of a Credit Guarantee and Investment Mechanism (CGIM) was agreed in November 2008 by the ASEAN+3 Deputy Finance Ministers. The CGIM (a trust fund with capital from ASEAN+3 members and the ADB) is expected to provide credit guarantees for bonds issued in the region and investments in domestic credit guarantee companies.

[9] The concept of the Trilateral Summit officially started in October 2003 when the leaders of China, Japan, and Korea launched a joint study on the modality of investment arrangements among the three countries. The study group that was set up in 2004 included representatives from the government, business, and academia. The proposal of the study group was agreed upon in 2004 and in 2005 the three countries launched a mechanism to improve their business environment to facilitate reciprocal investment and business activity by improving transparency in laws and regulations, protection of intellectual property rights, a dispute consultation mechanism, and investment promotion. The three countries have now prepared an Action Agenda, which has been recently made public after the Trilateral Summit in December 2008.

[10] The lack of solid trilateral cooperation has not been helpful in strengthening the collective partnership of China, Japan, and Korea (the Plus Three) with ASEAN. While Japan and China have always been keen on strengthening ties with ASEAN, Korea has been slow in doing so. Furthermore, among the numerous bilateral ties that have been formed so far, the one between Japan and China has been the weakest, mainly for issues of political nature. In that sense, it is quite significant that the recent Trilateral meeting among the Plus Three leaders was successfully concluded by issuing a statement to promote trilateral financial cooperation.

Related to this meeting, there was the start of a regular annual meeting between the governors of the three central banks, a meeting among the Trilateral Finance Ministers on the side of the G20 meeting in Washington DC in mid-November, and the subsequent meeting of the 3-countries' Deputy-Finance Ministers in Japan, that provided the details of a new bilateral swap agreement to face temporary liquidity needs, which Korea secured with both Japan (for 20 billion USD) and China (for 26.5 billion USD).[11]

The concept of the Trilateral Summit officially started in October 2003 when the leaders of China, Japan, and Korea launched a joint study on the modality of investment arrangements among the three countries. The study group that was set up in 2004 included representatives from the government, business, and academia. The proposal of the study group was agreed upon in 2004 and in 2005 the three countries launched a mechanism to improve their business environment to facilitate reciprocal investment and business activity by improving transparency in laws and regulations, protection of intellectual property rights, a dispute consultation mechanism, and investment promotion. The three countries have now prepared an Action Agenda, which has been recently made public after the Trilateral Summit in December 2008.

<u>Other main meetings (which leaders or finance ministers attended):</u>

- *G20 Meeting: Summit on Financial Markets and the World Economy, Washington DC, 15 November: (China, Indonesia, Japan, Korea) - Action Plan to Implement Principles for Reform;*
- *ASEM Leaders' Meeting in Beijing (24-25 October 2008, Beijing, China); Leader's pledge for major reforms of financial systems;*
- *APEC Leaders' Meeting (8-9 November 2008, Lima, Peru); Statement on the Global Economy.*

<u>Upcoming meetings</u>

- *ASEAN Summit – Mid-February 2009, Thailand*
- *ASEAN+3 Finance Ministers' Meeting – Mid-February 2009, Thailand, and May 2009, Bali*
- *East Asia Summit – Mid-February 2009, Thailand*

<u>Addressing the institutional deficit for regional cooperation in Asia</u>

Asian economic and financial authorities should realize the urgency to provide a collective response to the ongoing global and financial crisis and enhance their institutional capabilities to promote cooperation and integration by strengthening and streamlining existing mechanisms, and creating new ones.

Institutions for regional cooperation are important for three main reasons: (i) implementing initiatives to help alleviate the immediate impact of crises; (ii) conducting effective regional economic policy dialogue and coordination to promote growth and maintain stability; and (iii) ensuring that economic and financial liberalization continues to follow the path set forth by multilateral institutions, particularly to avoid the adoption of inward-looking and beggar-thy-neighbor policies. In addition, regional institutions are an important vehicle for knowledge creation and capacity building in each of the above categories.

(i) IMPLEMENTING INITIATIVES TO HELP ALLEVIATE THE IMPACT OF CRISES

This is done through the CMI and its Multilateralization (CMIM)

- *Progress of the CMI since the ASEAN+3 Finance Ministers' Meeting in Madrid, May 2008*
- *May 2008 - Decision to Multilateralize the CMI with a pool of at least $80 billion, to be contributed by ASEAN countries (20%) and the Plus Three countries (80%); 20% of the funds to be available without IMF conditionality, but no agreement on the details of the mechanisms for disbursement; on the criteria for eligibility, and on the way to conduct proper economic and financial surveillance* (Table 8)

[11] In addition, the Bank of Korea signed earlier a similar agreement with the US Federal Reserve for 30 billion USD.

< Insert Table 8. Swap arrangements under the CMI >

- Question: is the CMI an effective tool to provide liquidity support? If yes, why Korea (and Singapore) signed new bilateral agreements with the FED (Korea and Singapore), and later Korea signed bilateral agreements with Japan and China (Soesastro, 2008)?
- This raises both the question of the adequacy of the size of CMI (is it too small even if it is increased to $120 billion?) and effectiveness of the disbursement mechanism (which is still not clear).
- November 2008: ASEAN+3 Leaders meeting on the side of the ASEM in Beijing decided to expedite the CMIM. They agreed that the funds available under the CMIM should be a self-managed reserved pooling arrangement that would be governed by a single contract and decided to announce the details of the CMIM at the Finance Ministers Meeting to be held during the ASEAN Summit (postponed from Dec-08 to Feb-09).
- The details of the new fund were discussed during a technical working group meeting in Manila on 20 November and the ASEAN+3 Deputy Finance Ministers Meeting held in Hakone, Japan, on 28 November (Soesastro, 2008).
- Open issues which require some form of political decision: (i) size of the fund (many expect the fund to be increased by 50%, from $80 to $120 billion, but this is still not clear, as others push for a fund close to 10% of available international reserves (approx. $4 trillion); (ii) how to conduct effective regional surveillance (issues of the proper agency, whether existing ones like the ASEAN Secretariat or creating new ones, and where to locate this new institution); (iii) IMF conditionality (whether to leave it at more than 20% of the fund total, increase it to 50%, or eliminate it while strengthening the surveillance mechanism); (iv) membership (whether this should be expanded to include Hong Kong, China, India, and other economies); (v) scope of the fund (whether this should be limited to provision of liquidity support or expanded to provide other form of support such as fund to recapitalize financial institutions and/or purchase toxic assets from banks, etc.); (vi) details on the implementation mechanism of funds disbursement, repayment schemes, and escape clauses; and (vii) perhaps the most important issue, which remains a very sensitive one, both politically and economically, is whether the CMIM will be the first step towards the creation of a self-managed Asian-type Monetary Fund (this relates also to the ongoing debate on the IMF quotas)

(ii) CONDUCTING EFFECTIVE ECONOMIC POLICY DIALOGUE AND COORDINATION

Currently this is under the ASEAN+3 ERPD, but it is still not very effective. While macroeconomic data and information are being shared among members (to a certain extent) and policies are being discussed, there are no binding rules or a proper follow up mechanism on implementation of policy announcements. Besides, two very important component of macroeconomic policy are missing: exchange rate and fiscal policy dialogue and coordination.

While it may be premature to introduce a mechanism for coordination of exchange rate and fiscal policies, what regional authorities could do is to establish an informal process where they begin with information sharing and gradually become familiar with their regional neighbors' policy issues and underlying economic structures, where they can share experiences and analysis, set up joint research and working groups to provide policy advice. Dialogue and coordination is also very important to ensure that Asian countries do not recur to the adoption of not only inefficient, but also harmful policies for other regional members. Policies introduced by individual countries may have negative spillovers for their neighbors and a regional economic policy dialogue is important to make sure that such policies are avoided.[12]

[12] For instance, a bank deposit guarantee provided by one country may be able to attract capitals from neighboring countries, exposing, in turn, these countries to greater financial risks and volatility (Kawai, 2008).

The challenges that Asia is facing require proper regional collective analysis and responses. On the front of exchange rates, for example, individual economies may simply revert to competitive devaluation policies looking at short-term individual gains and forgetting that they are part of a wider and highly interdependent region. Eventually such beggar-thy-neighbor policies will result detrimental for the entire region. At the same time, the high degree of trade and investment interdependence existing among Asian economies imposes them to maintain a certain degree of synchronization of their exchange rate movements, in order not to disrupt the real economy conditions. It is time for Asian economies to set up an Asian Currency Unit (ACU), which could serve for monitoring trends of the region's exchange rates against a regional benchmark and following the European example also become a future mechanism for regional coordination of exchange rate policies (Kawai, 2008).[13]

Asian economies should start a constructive dialogue also on fiscal policy to exchange information, learn from each other experiences, and avoid introducing policies which may cause damage to their neighbors. The recent fiscal and administrative measures recently adopted in selected Asian countries are shown in Table 9 (taken, with some modifications, from ADB, 2008b). There is a large scope for comparing notes between fiscal policy offices of different countries, to know what has worked in the past and what did not, in order to avoid to repeat mistakes and to design fiscal policies and stimulus packages able to deliver the kind of public goods they are meant for *(can add a discussion on some controversial measures introduced by different administrations: for instance the cash-handouts to all registered families decided by Japan).* Asian economic authorities should also discuss the spillover effects that their policies may have on other regional members and collectively provide the optimal fiscal stimulus for the region as a whole.[14]

< Insert Table 9. Recent fiscal and administrative measures >

(iii) MAINTAINING OPEN SYSTEMS, CONSISTENT WITH MULTILATERAL APPROACH

- Regionalism as a stepping stone for multilateralism and benefiting the global economy
- Nature of Asian regionalism and one of the main success factors for economic growth lies in the region's openness to the rest of the world
- Regionalism has an intrinsic discriminatory component which is justified as a step towards globalism
- Efficiency gains in maintaining international competition
- Important also to increase the degree of responsibility in designing the agenda for a new global economic and financial architecture

Add 1-2 paragraphs to discuss the importance of knowledge creation and capacity building cutting across the three categories above

Improving the efficiency and effectiveness of Asian institutions for regional cooperation and integration is important not only for the region itself but also for the rest of the world, which is becoming more dependent than in the past on Asia as an engine of global economic growth.

Asian economic and financial authorities should consider the following:

A. <u>Streamline existing mechanism (functionally or geographically)</u>

[13] An ACU can also be used to denominate financial instruments.

[14] Both the IMF (2008) and ADB (2008b) suggest the importance of regional fiscal policy coordination.

For example consolidating (and expanding) the Finance Ministers' activities and dialogue under the ASEAN+3 umbrella (see also the results of the ADB perception survey, ADB 2008a); in the trade area, there is also a strong rationale to consolidate the many bilateral and plurilateral Free Trade Agreements (FTAs) which have proliferated among Asian countries into a region-wide agreement (Kawai, 2008). While ASEAN+3 may be a good forum for financial stability, the EAS could be also good for a regional FTA;

B. Strengthen existing institutions, especially those effectively working at subregional level

The ASEAN Secretariat is the most obvious such institution, but it is not the only one, others like the Central Asia Regional Economic Cooperation (CAREC); the South Asian Association for Regional Cooperation (SAARC), of the Pacific Islands Forum (PIF) are also important subregional institutions whose functions and effectiveness should be strengthened; and there are various other forums, which put together provinces of Asian countries like the Greater Mekong Subregion (GMS), the Brunei Darussalam, Indonesia, Malaysia, Philippines, East-ASEAN Growth Area (BIMP-EAGA), the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) just to cite a few, which deserve close analysis and further strengthening;

C. Create new institutions when the need arises

ASIAN FINANCIAL STABILITY DIALOGUE (AFDS)

- As an immediate priority is to strengthen financial sector supervision, surveillance, and dialogue on financial markets; to this end, consideration should be given to creating a new, high-level "Asian Financial Stability Dialogue" to bring together finance ministries, central banks, and other supervisory and regulatory institutions.
- This new institution would be useful to address financial market vulnerabilities and regulations, and to engage in dialogue with the private sector.
- An AFSD can also assist individual economies to progress on the harmonization of financial regulations and the adoption of minimum standards that permit early mutual recognition.
- An AFSD may be also instrumental to intensify efforts to make national financial systems more efficient through the measured and prudent liberalization of capital accounts and cross-border financial service flows where these are still controlled.

ASIAN SECRETARIAT FOR ECONOMIC COOPERATION (ASEC)

- Given its interdependence, Asia would benefit from strengthening its mechanisms for monitoring and potentially coordinating macroeconomic and exchange rate policies.
- Consideration should be given to a new central structure—such as an "Asian Secretariat for Economic Cooperation"—to support these and other functions with qualified, permanent staff.
- The current ERPD under the ASEAN+3 process should be further strengthened with agreements on the tools, indicators, and standards used to monitor economic activity.
- The Secretariat could manage the CMIM as a new fund to provide short-term financial facility.
- The Secretariat could oversee the region's pooled foreign exchange resources and, in a crisis, negotiate economic policies with governments seeking support.
- The Secretariat could manage the creation of new mechanisms to enhance policy dialogue and coordination in the areas of exchange rates and fiscal policies.
- Finally, the Secretariat could also establish a fund to redistribute regional income and compensate those economic subjects who will be losing from regional cooperation and integration initiatives.

Beyond finance, Asian economic cooperation could embrace the creation of regional institutions such as an Asian Trade Forum (ATF), meant to facilitate regional trade, gradually consolidate existing bilateral and plurilateral FTAs into a region-wide agreement, expand the scope of the agreements to include a wide range of non-trade issues, and channel into such agreement possible future bilateral and plurilateral FTAs. An ATF could also be instrumental to develop guidelines for 'best practices' in sub-regional trade agreements (ADB, 2008a).[15]

Finally, a new regional institution such as an Asian Infrastructure Investment Fund (AIIF) may be needed to support connectivity and promote economic growth within the region by developing cross-border transport, communication, and energy systems. Enhancing intraregional interconnectivity is important to expand the development opportunities to remote areas and link the poorer economies and individuals with the centers of regional development. Asia still lacks not only a large amount of economic infrastructure, but also the related software and technology for maintenance. The creation such fund will be instrumental to support the expansion of regional aggregate demand, which is most needed to lessen the dependency from the region's external demand.

Add 2-3 paragraphs on the comparison with Europe (different historical experience of creation of national identity and sharing sovereignty issue; Role of the Commission, Council, and Presidency of the EU, although there is no common fiscal policy stance in Europe, or a single plan for fiscal stimulus)

5. Conclusion

As the region responds to the crisis, and faces the perspective of substantial economic slowdown in the months ahead, Asian economic authorities should make considerable effort to enhance their institutional capabilities for regional cooperation. Existing institutions may need be consolidated or reinforced, while some new institution created. The analysis conducted in this paper suggests that there is large room for action and intervention in a number of areas. In particular, there is merit in considering the creation of an Asian Financial Stability Dialogue (AFSD) and an Asian Secretariat for Economic Cooperation (ASEC) to help stabilize financial markets, conduct effective macroeconomic policy dialogue and coordination, and ultimately support a sustainable process of economic growth in the region.

The issue of institutions' development to support regional cooperation in Asia (and in other regions of the world) deserves a much deeper analysis that the one presented in this work. Issues such as membership, entry conditions, membership fees, budget contribution, governance, decision making structures, staffing, and location, should be examined in detail. Suggestions for consolidation and strengthening of existing institutions should be based on accurate assessments of costs and benefits, including not only economic, but also social and political considerations. At the same time, proposals to create new institutions would require detailed feasibility studies and accurate consultations with all prospective stakeholders.

Crises are unique opportunities to improve the system, as they point out to existing problems and push for solutions. Although the current crisis did not generate in Asia and Asian economies are not responsible for it, Asia is being hit hard by the crisis due to its pronounced trade and financial integration with the rest of the world, especially the US and Europe. Should Asia isolate itself from the rest of the world to be able to fend off the challenges posed by the crisis? The answer is no. The solution to Asia's economies current problems is not one of isolation, but one of further engagement and dialogue both regionally and globally.

[15] Independently negotiated trade agreements often involve inconsistent rules of origin and other provisions. Narrow, partial agreements are also more likely to harm excluded regional and global partners. To ensure that sub-regional trade agreements recognize regional interests and are more easily consolidated, they should be guided by regionally accepted 'best-practice' principles.

In a sense, Asia's problem current, which the ongoing crisis is making clear, can be seen as a typical one for development: coming of age, or completing the transition from adolescence to responsible adulthood. Asia's individual economies should now start to rely more on themselves than on economies outside the region. A first priority would therefore be to promote regional demand and decrease their dependency on external demand. Second, Asian economies should strengthen their institutional capabilities for regional cooperation to properly implement initiatives to help alleviate the immediate impact of the crisis, to conduct effective economic policy dialogue and coordination to promote growth and maintain stability, and to maintain open systems, consistent with the multilateral approach. Thirdly, Asian economies should become more active members of the international economic and financial community by increasing their decision making power in global institutions, such as the IMF, the WTO and the G20.

As Asia's economic fundamentals remain relatively strong, improving the efficiency and effectiveness of Asian institutions for regional cooperation and integration is important not only for the region itself but also for the rest of the world, which is becoming more dependent than in the past on Asia as an engine of global economic growth.

REFERENCES

Asian Development Bank. 2008a. *Emerging Asian Regionalism. A Partnership for Shared Prosperity*. ADB, Manila. June.

———. 2008b. Asia Economic Monitor. ADB, Manila. December.

Capannelli, Giovanni and Carlo Filippini. 2009. *East Asian and European Economic Integration: A Comparative Analysis*. ADB Regional Economic Integration Working Paper Series. Forthcoming.

Capannelli, Giovanni, Jong-Wha Lee, and Peter P. Petri. 2009. *Developing Indicators for Regional Economic Integration and Cooperation*. ADB Regional Economic Integration Working Paper Series. Forthcoming.

City of London Corporation. 2008. The Future of Asian Financial Centres: Challenges and Opportunities for the City of London. Available: www.cityoflondon.gov.uk/economicresearch. October.

Draghi, Mario. 2008. "Combating the global financial crisis: The role of international cooperation". Hong Kong Monetary Authority Distinguished Lecture, Hong Kong, 16 December.

Eichengreen, Barry. 2009. "How Asia Can Benefit from the European Experience". In: Kawai, M. J.-W. Lee, P. Petri (eds.) *Asian Regionalism in the World Economy*. ABD, Manila. Forthcoming.

Eichengreen, Barry and Richard Baldwin (eds.). 2008. "What G20 Leaders Must Do to Stabilise our Economy and Fix the Financial System". London: Centre for Economic Policy Research and VoxEU.org.

Fung, Laurence Kang-Por, Chi-Sang Tam and Ip-Wing Yu. 2008. "Assessing the integration of Asia's equity and bond markets". In: *Regional Financial Integration in Asia: Present and Future*. Bank of International Settlements. BIS Paper N. 42. 1-37. October.

García-Herrero, Alicia, Doo-Yong Yang, and Philip Wooldridge. 2008. "Why is there so Little Regional Financial Integration in Asia?" In: *Regional Financial Integration in Asia: Present and Future*. Bank of International Settlements. BIS Paper N. 42. 38-61. October.

International Monetary Fund. 2008. Global Financial Stability Report. Financial Distress and Deleveraging. Macro-Financial Implications and Policy. IMF, Washington D.C. October.

———. 2008. World Economic Outlook Update. IMF, Washington D.C. November.

James, William E. et al. 2008. The US Financial Crisis, Global Financial Turmoil, and Developing Asia: Is the Era of High Growth at an End? ADB Working Paper Series No. 139. December.

Kawai, Masahiro. 2005. "East Asian Economic Regionalism: Progress and Challenges". Journal of Asian Economics. Vol. 16, No. 1, 29–55. February.

———. 2008. "The Global Financial Crisis and Asia's Economic Integration" Speech delivered at the International Conference: *The Future of Economic Integration in Asia: Changes Amid Global Financial Turmoil*. Thamassat University, Bangkok, Thailand. 20 November.

Kose, M. Ayhan, Eswar Prasad, Kenneth Rogoff, and Shang-Jin Wei. 2006. *Financial Globalisation: a Reappraisal*. IMF Working Papers, no 06/189.

Lee, Jong-Wha. 2008. *Patterns and Determinants of Cross-Border Financial Asset Holdings in East Asia.* ADB Working Papers Series on Regional Economic Integration N. 13. Manila, February.

Park, Yung-Chul and Charles Wyplosz. 2008. Monetary and Financial Integration in East Asia: The Relevance of European Experience. European Economy, Economic Papers N. 329. European Commission, Directorate General for Economic and Financial Affairs. September.

Shin, Kwanho. 2008. *Global and Regional Shocks: Challenges to Asian Economies*. ADBI Working Paper 120. Tokyo: Asian Development Bank Institute. November.

Soesastro, Hadi. 2008. East Asia' Response to the Global Economic Crisis. East Asia Forum. December. Available: http://www.eastasiaforum.org/2008/12/23/east-asias-response-to-the-global-economic-crisis/comment-page-1/

Yap, Joseph. 2007. *Ten Years After: Financial Crisis Redux or Constructive Regional Financial and Monetary Cooperation?* Philippine Institute for Development Studies, DPS 2007-05 (1-26). June.

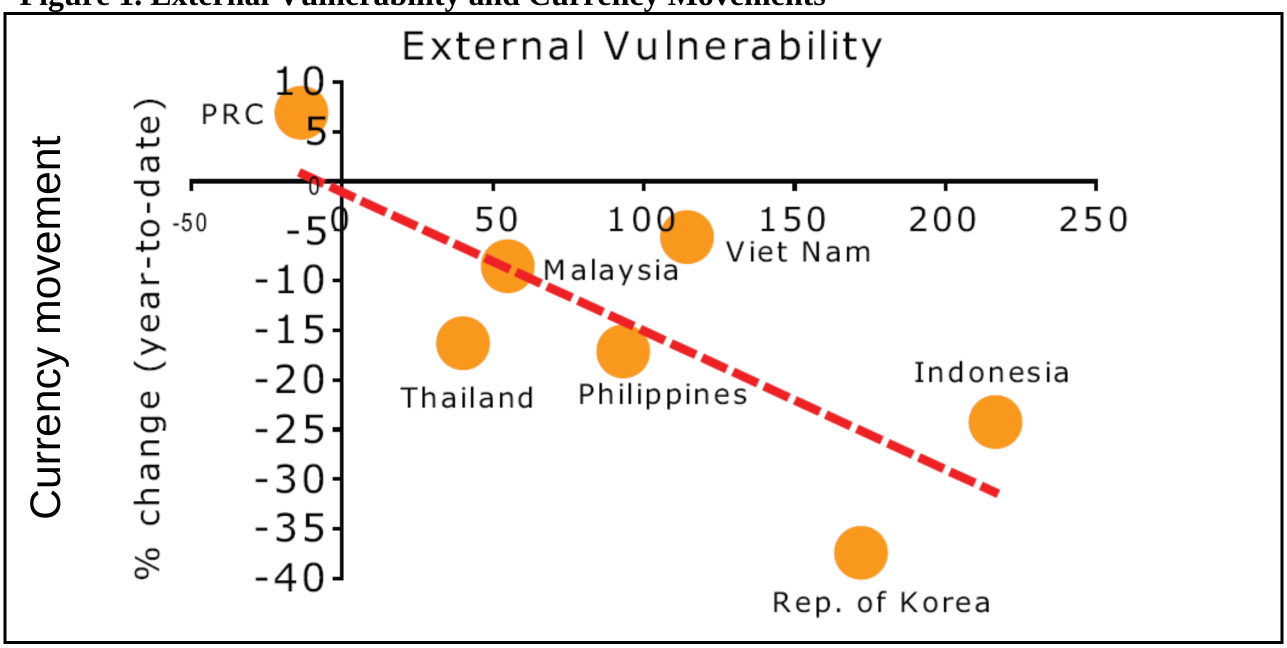
TABLES AND FIGURES

Table 1. Nonperforming Loans of Asian Banks
Percent of total commercial bank loans: 2000-2008

	2000-2004 Average	2004	2005	2006	2007[1]	Sep-2008[2]
China, People's Rep. of	21.0	13.2	8.6	7.1	6.2	…
Hong Kong, China[3]	4.8	2.3	1.4	1.1	0.9	0.8
Indonesia	10.6	5.7	8.3	7.0	4.6	3.9
Korea, Rep. of	3.5	1.7	1.1	0.8	0.6	0.7
Malaysia[3]	8.9	6.8	5.6	4.8	3.2	2.4
Philippines[3]	14.8	12.7	8.2	5.7	4.4	4.0
Singapore	5.3	5.0	3.8	2.8	1.8	…
Taipei,China	5.2	2.8	2.2	2.1	1.8	1.6
Thailand	13.5	10.9	8.3	4.1	3.9	3.3

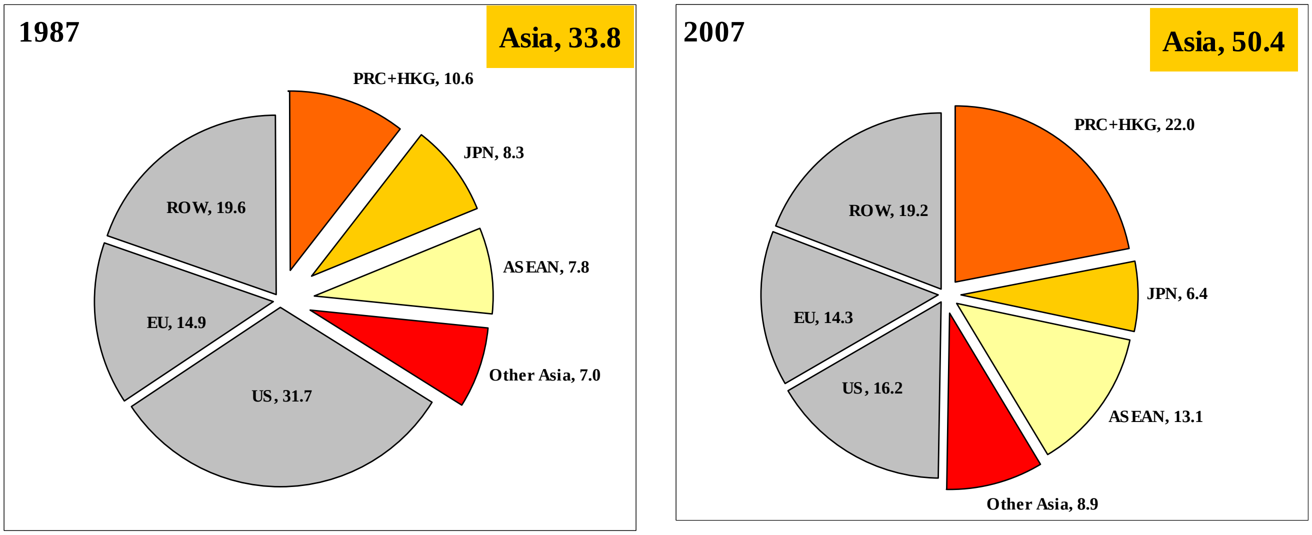
Notes: (1) Data for Singapore are as of September. (2) The most recent data for 2008 are available as of September for all countries except Taipei,China (June); Hong Kong, China (March); the PRC and Singapore (not available).
Source: Asian Development Bank, 2008b.

Figure 1. External Vulnerability and Currency Movements



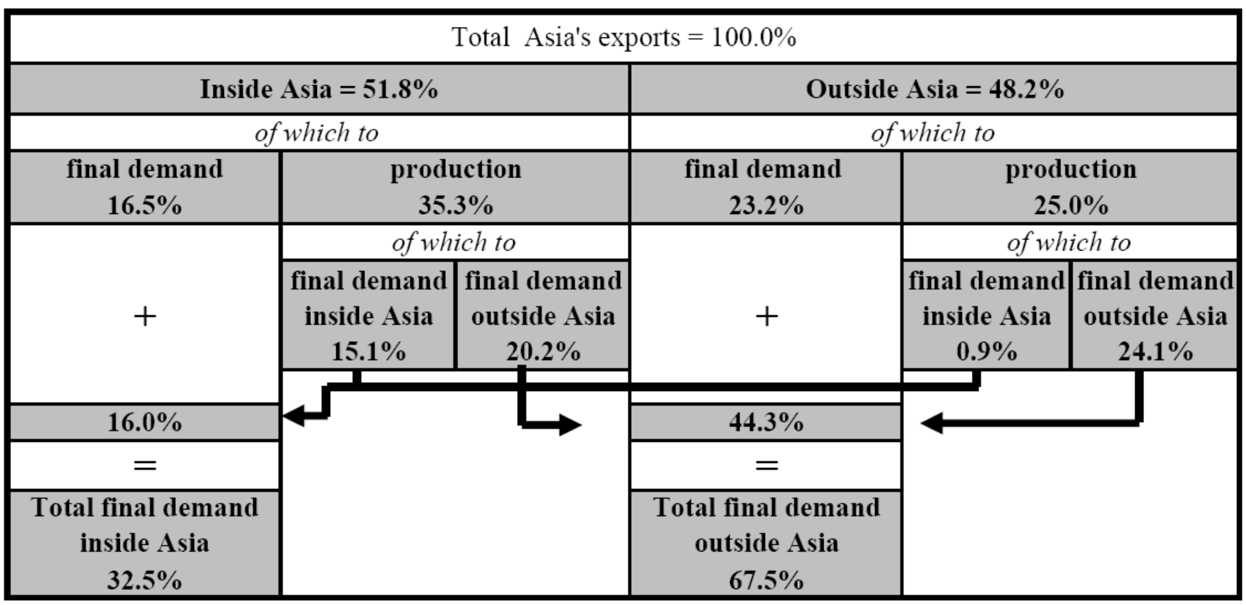
Note: External vulnerability ratio is derived by dividing the sum of current account deficit, short-term debt, and foreign holdings of stocks and local currency bonds by total reserves. Currency movement is the percentage changes of the US$ value of local currency. Negative values indicate depreciation of local currency, and positive values indicate appreciation.
Source: Asian Development Bank, 2008b.

Figure 2. Evolution of ASEAN+3 exports by destination
Shares (%) on total exports of ASEAN+3



Source: Author's elaboration on data from the International Monetary Fund. Direction of Trade Statistics. Available: www.imf.org. Accessed: September 2008.

Figure 3. Final demand composition of Asia's exports in 2006



Source: Asian Development Bank, 2008.

Table 2. World GDP growth rates (2006-07) and projections (2008-09)

Region/Country	Year-on-year percent change						Q4 over Q4		
	Actual		Projections		Difference with 2008 WEO Projections		Estimates	Projections	
	2006	2007	2008	2009	2008	2009	2007	2008	2009
World	5.1	5	3.7	2.2	-0.2	-0.8	4.8	2.5	2.4
United States	2.8	2	1.4	-0.7	-0.1	-0.8	2.3	0.4	-0.5
Euro area	2.8	2.6	1.2	-0.5	-0.1	-0.7	2.1	0.1	--
Asian NIEs [(1)]	5.6	5.6	3.9	2.1	-0.1	-1.1	6.1	2.2	4.4
PRC	11.6	11.9	9.7	8.5	-0.1	-0.8	11.3	9	8.3
India	9.8	9.3	7.8	6.3	-0.1	-0.6	8.9	6.6	6
ASEAN5 [(2)]	5.7	6.3	5.4	4.2	-0.1	-0.7	6.6	4.4	5.2

Notes: [(1)] Asian NIEs = Hong Kong, China, Republic of Korea, Singapore, Taipei,China.
[(2)] ASEAN5 = Indonesia, Malaysia, Philippines, Thailand, Vietnam.

Source: IMF. 2008. World Economic Outlook Update, November.
Available: http://www.imf.org/external/pubs/ft/weo/2008/update/03/index.htm/
Accessed: December 2008.

Table 3. GDP growth rates of Asian economies (2006-09)

	2006	2007	2008H1	2008Q3	ADB Forecasts 2008	ADB Forecasts 2009
Developing Asia	**8.9**	**9.0**	**8.1**	**6.2**	**6.9**	**5.8**
Emerging East Asia [1,2]	**8.7**	**9.0**	**8.1**	**6.2**	**6.9**	**5.7**
ASEAN [1,2]	**6.0**	**6.5**	**5.8**	**4.4**	**4.8**	**3.5**
Brunei Darussalam	4.4	0.6	…	…	-0.5	2.0
Cambodia	10.8	10.2	…	…	6.5	4.7
Indonesia[3]	5.5	6.3	6.4	6.1	6.1	5.0
Lao PDR	8.3	7.9	…	…	7.5	6.5
Malaysia[4]	5.8	6.3	7.1	4.7	5.0	3.5
Myanmar[5]	12.7	…	…	…	…	…
Philippines[6]	5.4	7.2	4.5	4.6	4.5	3.5
Singapore	8.2	7.7	4.5	-0.6	2.3	1.2
Thailand	5.2	4.9	5.6	4.0	4.0	2.0
Viet Nam	8.2	8.5	6.5	6.5	6.3	5.0
Newly Industrialized Economies[1]	**5.5**	**5.6**	**5.3**	**2.0**	**3.5**	**2.4**
Hong Kong, China	7.0	6.4	5.8	1.7	3.3	2.1
Korea, Rep. of	5.1	5.0	5.3	3.9	4.2	3.0
Singapore	8.2	7.7	4.5	-0.6	2.3	1.2
Taipei,China	4.8	5.7	5.4	-1.0	2.4	1.7
China, People's Rep. of	11.6	11.9	10.4	9.0	9.5	8.2
Japan	2.0	2.4	1.1	-0.5	0.5	-0.2
US	2.9	2.2	2.3	0.8 [8]	1.4	-0.7
eurozone	2.8	2.6	1.7	0.6 [8]	1.2	-0.5

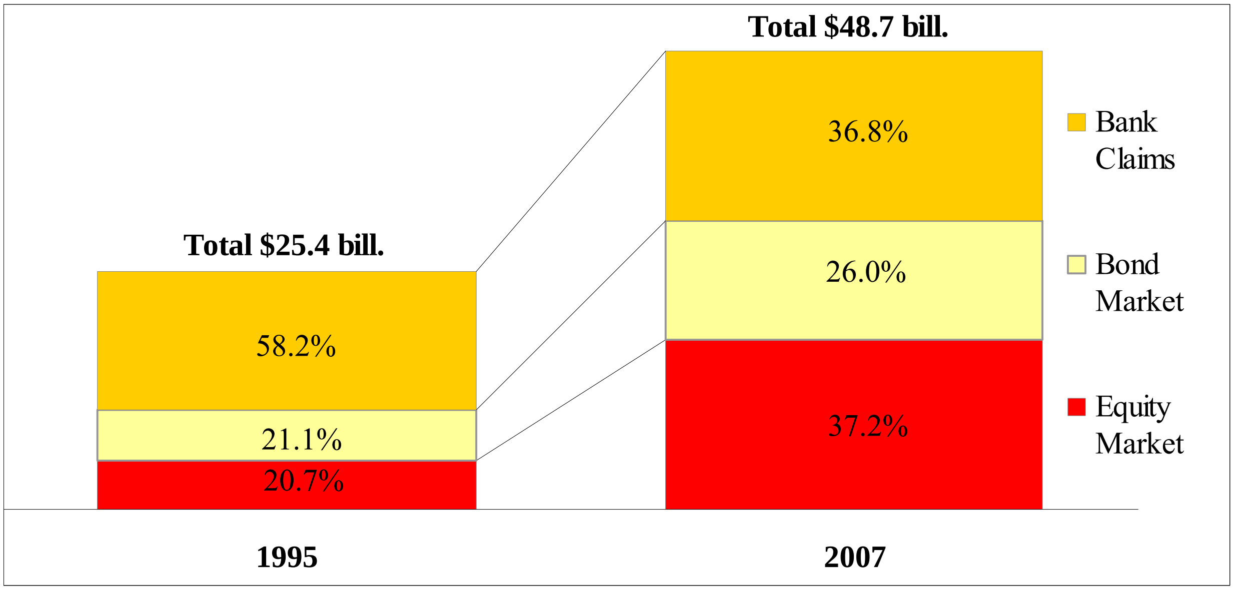
Source: Asian Development Bank. 2008. Asia Economic Monitor, December.

Table 4. Evolution of Asian financial assets

$ Billion	Bank claims		Equities market		Bond market		Total	
	1995	2007	1995	2007	1995	2007	1995	2007
China, People's Republic of	641	4,655	42	4,479	47	1,531	729	10,665
Hong Kong, China	205	260	304	2,654	28	68	537	2,982
India	149	575	370	3,479	71	435	590	4,489
Indonesia	103	171	66	212	3	90	172	472
Japan	12,253	9,841	3,545	4,331	4,738	8,803	20,536	22,974
Korea, Republic of	556	1,061	182	1,123	274	1,119	1,012	3,303
Malaysia	111	221	214	325	62	156	387	702
Philippines	47	66	59	103	26	50	132	219
Singapore	64	136	151	539	18	87	233	762
Taipei,China	444	679	187	664	76	197	707	1,540
Thailand	225	274	136	197	15	132	376	603
Total Asia	**14,799**	**17,937**	**5,256**	**18,106**	**5,357**	**12,667**	**25,412**	**48,710**
Percent of GDP	Bank Claims		Equities market		Bond market		Total	
	1995	2007	1995	2007	1995	2007	1995	2007
China, People's Republic of	88	143	6	138	6	47	100	328
Hong Kong, China	142	126	211	1284	19	33	372	1443
India	42	52	105	317	20	40	167	409
Indonesia	46	39	30	49	1	21	77	109
Japan	232	224	67	99	90	201	389	524
Korea, Republic of	107	111	35	117	53	117	196	345
Malaysia	123	118	237	174	69	84	429	376
Philippines	62	46	78	71	34	35	174	152
Singapore	76	84	179	334	22	54	276	472
Taipei,China	162	177	68	173	28	51	258	402
Thailand	134	111	81	80	9	54	224	245
Total Asia	**186**	**157**	**66**	**158**	**68**	**111**	**320**	**425**

Sources: Asian Development Bank. AsianBondsOnline. Available: http://asianbondsonline.adb.org/regional/regional.php; International Monetary Fund. International Financial Statistics. Available at http://www.imf.org; Bank for International Settlements. Available at http://www.bis.org; World Federation of Exchanges; and World Bank. World Development Indicators. Available at www.worldbank.org/data.

Figure 4. Structural change of Asian financial assets
Total billion US$ and shares on total: 1995 and 2007.



Note: Asia includes the People's Republic of China, Hong Kong, China, India, Indonesia, Japan, Republic of Korea, Malaysia, Philippines, Singapore, Taipei,China, and Thailand.
Sources: Asian Development Bank. AsianBondsOnline. Available: http://asianbondsonline.adb.org/regional/regional.php; International Monetary Fund. International Financial Statistics. Available at http://www.imf.org; Bank for International Settlements. Available at http://www.bis.org; World Federation of Exchanges; and World Bank. World Development Indicators. Available at www.worldbank.org/data.

Table 5. Trend of intraregional portfolio investment (US$ billion)
Million US$ and percent shares on total assets and liabilities

Reporting region/ country		Assets invested in: Asia excluding Japan	Japan	Asia including Japan	Outside Asia	TOTAL ASSETS
2001	**Asia excluding Japan**	**48.6**	**20.0**	**68.6**	**256.2**	**324.8**
	Share	15.0%	6.2%	21.1%	78.9%	100.0%
	Japan	**21.7**		**21.7**	**1,268.1**	**1,289.8**
	Share	1.7%		1.7%	98.3%	100.0%
	Asia including Japan	**70.3**	**20.0**	**90.3**	**1,524.3**	**1,614.6**
	Share	4.4%	1.2%	5.6%	94.4%	100.0%
2006	**Asia excluding Japan**	**237.9**	**28.2**	**266.6**	**675.3**	**941.9**
	Share	25.3%	3.0%	28.3%	71.7%	100.0%
	Japan	**50.6**		**50.6**	**2,292.9**	**2,343.5**
	Share	2.2%		2.2%	97.8%	100.0%
	Asia including Japan	**288.5**	**28.2**	**316.7**	**2,968.6**	**3,285.3**
	Share	8.8%	0.9%	9.6%	90.4%	100.0%

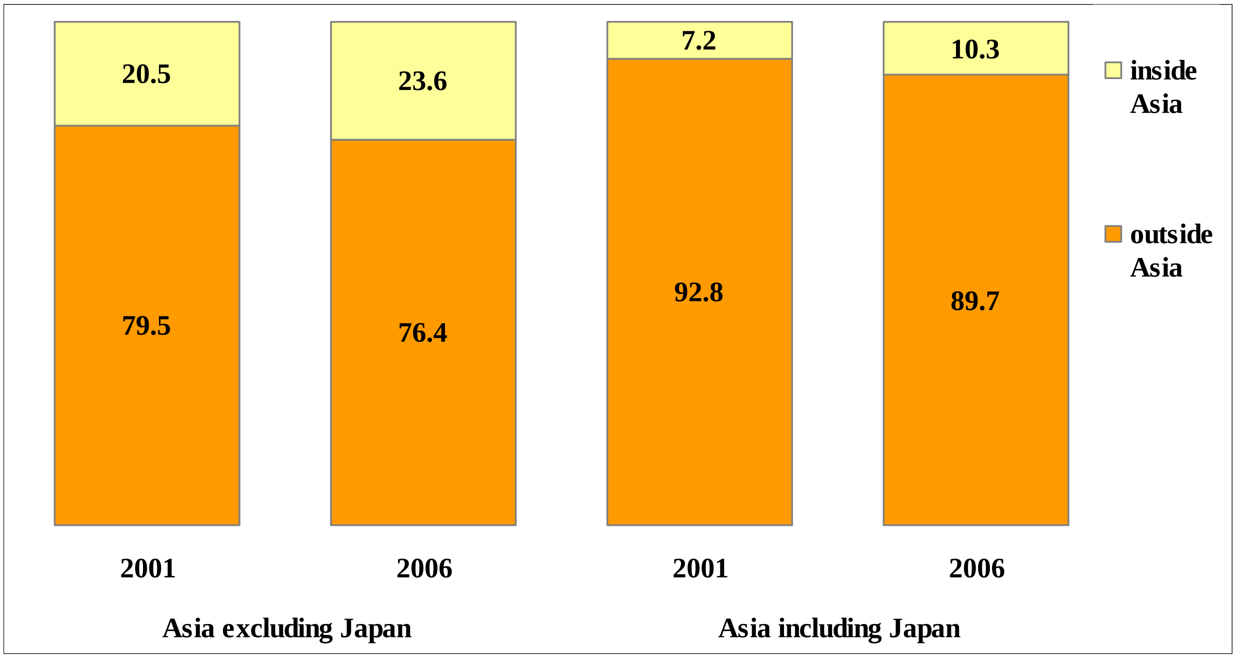
Reporting region/ country		Liabilities received from: Asia excluding Japan	Japan	Asia including Japan	Outside Asia	TOTAL LIABILITIES
2001	**Asia excluding Japan**	**48.6**	**21.8**	**70.4**	**283.6**	**354**
	Share	13.7%	6.1%	19.9%	80.1%	100.0%
	Japan	**20**		**20**	**522.3**	**542.3**
	Share	3.7%		3.7%	96.3%	100.0%
	Asia including Japan	**68.6**	**21.8**	**90.4**	**805.9**	**896.3**
	Share	7.7%	2.4%	10.1%	89.9%	100.0%
2006	**Asia excluding Japan**	**238.4**	**50.7**	**289.1**	**1126.4**	**1,415.50**
	Share	16.8%	3.6%	20.4%	79.6%	100.0%
	Japan	**28.2**		**28.2**	**1,406.7**	**1,434.90**
	Share	2.0%		2.0%	98.0%	100.0%
	Asia including Japan	**266.7**	**50.7**	**317.4**	**2,533.0**	**2850.4**
	Share	9.4%	1.8%	11.1%	88.9%	100.0%

Note: Asia includes Brunei Darussalam; Cambodia; People's Republic of China; Hong Kong, China; India; Indonesia; Japan; Republic of Korea; Lao People's Democratic Republic; Malaysia; Myanmar; Philippines; Singapore; Taipei,China; and Thailand.
Source: IMF 2007. Coordinated Portfolio Investment Survey. Available: http://www. imf.org/external/np/sta/pi/cpis/html.

Memo Item: Intraregional shares

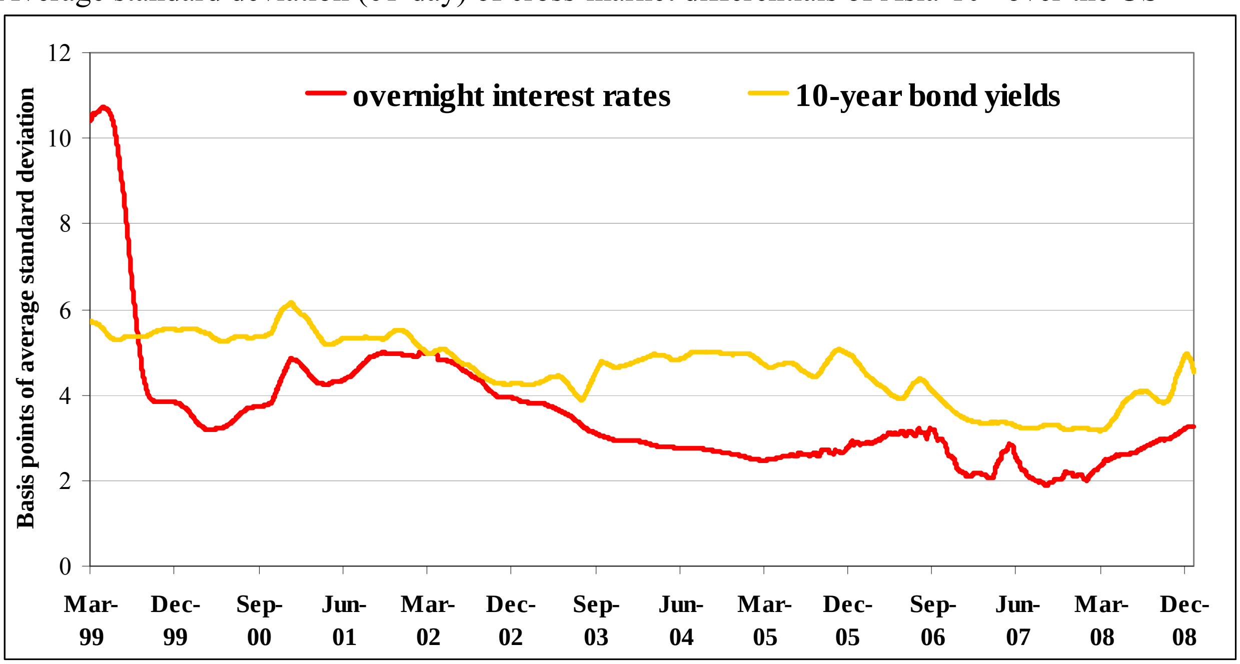
Regions	Assets		Liabilities	
	2001	2006	2001	2006
ASEAN+3	3.1%	3.7%	5.9%	4.3%
ASEAN	11.0%	10.4%	11.8%	9.4%
Integrating Asia 16	5.6%	9.6%	10.1%	11.1%
IA15 (IA16 less Japan)	15.0%	25.3%	13.7%	16.8%

Figure 5. Portfolio investment: Evolution of regional shares
Shares (%) of total portfolio investment (assets plus liabilities)



Asia includes Brunei Darussalam; Cambodia; People's Republic of China; Hong Kong, China; India; Indonesia; Japan; Republic of Korea; Lao People's Democratic Republic; Malaysia; Myanmar; Philippines; Singapore; Taipei,China; Thailand; and Vietnam.
Source: IMF 2007. Coordinated Portfolio Investment Survey. Available: http://www. imf.org/external/np/sta/pi/cpis/html.

Figure 7. Progressing financial integration: Price indicators
Average standard deviation (61-day) of cross-market differentials of Asia-10* over the US



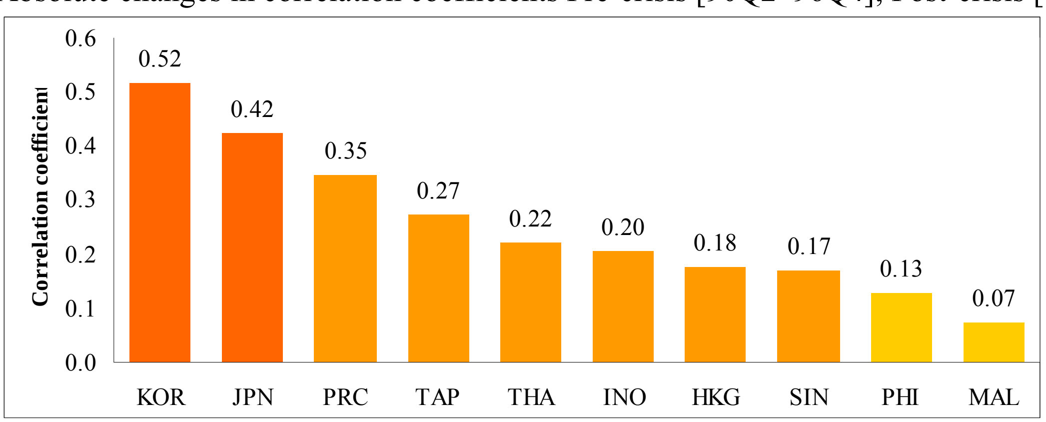
Note: *Asia-10 includes: PRC, Korea, Indonesia, Japan, Malaysia, Philippines, Singapore, Taipei,China, and Thailand.
Source: Data from Bloomberg. Available: http://www.bloomberg.com.

Table 6. Correlation of stock price indexes in selected Asian economies

	PRC	HKG	INO	KOR	MAL	PHI	SIN	TAP	THA	JPN
	Pre-crisis 1990:Q2–1996:Q4									
PRC	1.00	0.24	0.06	-0.47	0.00	0.02	-0.26	-0.09	-0.33	-0.49
HKG	0.24	1.00	0.59	-0.06	0.69	0.53	0.62	0.18	0.48	-0.15
INO	0.06	0.59	1.00	-0.06	0.68	0.51	0.59	0.15	0.67	-0.10
KOR	-0.47	-0.06	-0.06	1.00	0.04	0.07	0.15	0.39	0.10	0.33
MAL	0.00	0.69	0.68	0.04	1.00	0.70	0.74	0.36	0.72	0.18
PHI	0.02	0.53	0.51	0.07	0.70	1.00	0.78	0.63	0.65	0.17
SIN	-0.26	0.62	0.59	0.15	0.74	0.78	1.00	0.44	0.74	0.27
TAP	-0.09	0.18	0.15	0.39	0.36	0.63	0.44	1.00	0.16	0.34
THA	-0.33	0.48	0.67	0.10	0.72	0.65	0.74	0.16	1.00	-0.03
JPN	-0.49	-0.15	-0.10	0.33	0.18	0.17	0.27	0.34	-0.03	1.00
Average	**-0.15**	**0.35**	**0.34**	**0.06**	**0.46**	**0.45**	**0.45**	**0.28**	**0.35**	**0.06**
	Post-crisis 2000:Q1–2008:Q2									
PRC	1.00	0.25	0.19	0.09	0.36	0.30	0.21	0.12	0.09	0.17
HKG	0.25	1.00	0.44	0.59	0.49	0.54	0.73	0.62	0.50	0.58
INO	0.19	0.44	1.00	0.59	0.67	0.70	0.68	0.43	0.74	0.47
KOR	0.09	0.59	0.59	1.00	0.49	0.65	0.69	0.77	0.72	0.60
MAL	0.36	0.49	0.67	0.49	1.00	0.57	0.64	0.58	0.59	0.42
PHI	0.30	0.54	0.70	0.65	0.57	1.00	0.78	0.56	0.67	0.43
SIN	0.21	0.73	0.68	0.69	0.64	0.78	1.00	0.64	0.63	0.59
TAP	0.12	0.62	0.43	0.77	0.58	0.56	0.64	1.00	0.69	0.57
THA	0.09	0.50	0.74	0.72	0.59	0.67	0.63	0.69	1.00	0.52
JPN	0.17	0.58	0.47	0.60	0.42	0.43	0.59	0.57	0.52	1.00
Average	**0.20**	**0.53**	**0.54**	**0.58**	**0.53**	**0.58**	**0.62**	**0.55**	**0.57**	**0.48**

Note: HKG=Hong Kong, China; INO=Indonesia; JPN=Japan; KOR=Republic of Korea; MAL=Malaysia; PHI=Philippines; PRC=People's Republic of China; SIN=Singapore; TAP=Taipei,China; THA=Thailand.
Source: Author's elaborations based on data from Bloomberg.

Figure 7. Change in correlation of Asian stock price indexes
Absolute changes in correlation coefficients Pre-crisis [90Q2–96Q4]; Post-crisis [00Q1–08Q2]



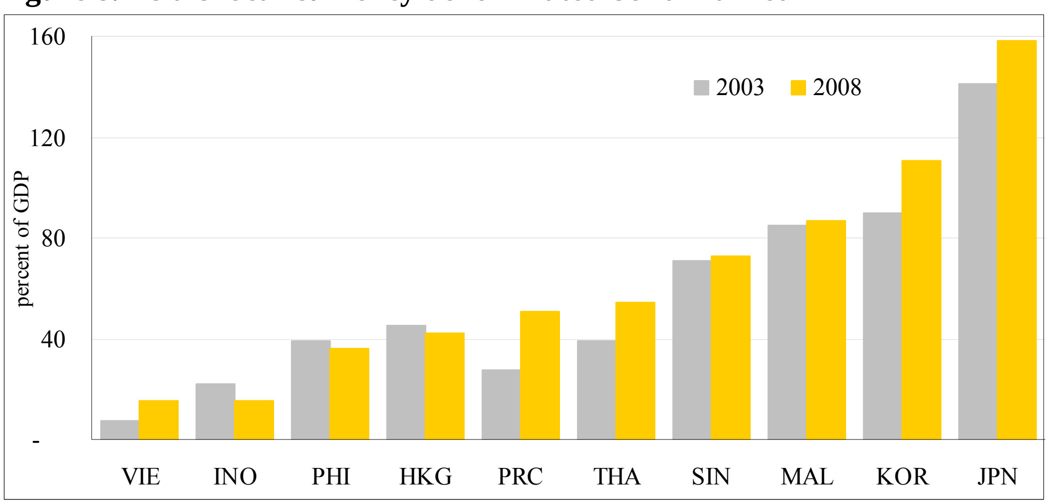
Note: HKG=Hong Kong, China; INO=Indonesia; JPN=Japan; KOR=Republic of Korea; MAL=Malaysia; PHI=Philippines; PRC=People's Republic of China; SIN=Singapore; TAP=Taipei,China; THA=Thailand.
Source: Author's elaborations based on data from Bloomberg.

Table 7. Main financial cooperation forums in Asia

Forum		ASEAN	ASEAN+3	EMEAP	APEC	ASEM	EAS
Year established		1967	1999	1991	1989	1996	2005
Number of members		10	13	11	21	45	16
Function	Policy dialogue/ information exchange	✓	✓	✓	✓	✓	✓
	Surveillance/ peer review	✓	✓	✓			
	Regional financing arrangements	✓	✓	✓			
	Regional capital-market development	✓	✓	✓	✓		
	Capacity building	✓	✓	✓	✓	✓	
	Research	✓	✓	✓	✓	✓	✓

Note: APEC = Asia-Pacific Economic Cooperation (includes Australia, Brunei Darussalam, Canada, Chile, People's Republic of China, Hong Kong, China, Indonesia, Japan, Republic of Korea, Malaysia, Mexico, New Zealand, Papua New Guinea, Peru, Philippines, Russian Federation, Singapore, Taipei,China, Thailand, United States, Vietnam); ASEAN = Association of Southeast Asian Nations (includes Brunei Darussalam, Cambodia, Lao People's Democratic Republic, Indonesia, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam); ASEAN+3 = ASEAN countries plus People's Republic of China, Japan, Republic of Korea; ASEM = Asia-Europe Meeting (includes ASEAN+3 countries, ASEAN Secretariat, India, Mongolia, Pakistan, 27 European Union member countries, the European Commission); EAS = East Asia Summit (includes ASEAN+3 countries plus Australia, India, New Zealand); EMEAP = Executives' Meetings of East Asia-Pacific Central Banks (includes the Reserve Bank of Australia, People's Bank of China, Hong Kong Monetary Authority, Bank Indonesia, Bank of Japan, Bank of Korea, Bank Negara Malaysia, Reserve Bank of New Zealand, Bangko Sentral Ng Pilipinas, Monetary Authority of Singapore, Bank of Thailand).
Source: Based on Yap, 2007, Table 3.2, p.30, with modifications.

Figure 8. Asia's local-currency denominated bond market



Note: Total issuances refer to corporate issuances plus government issuances. HKG =Hong Kong, China; INO=Indonesia; JPN=Japan; KOR=Republic of Korea; MAL=Malaysia; PHI=Philippines; PRC=People's Republic of China; SIN=Singapore; THA=Thailand.
Source: Asian Development Bank, AsianBondsOnline. Available at http://asianbondsonline.adb.org/regional/regional.php. Accessed: December 2008.

Table 8. Swap arrangements under the Chiang Mai Initiative (as of January 2008)

From \ To	PRC	Japan	Korea	Indonesia	Malaysia	Philippines	Singapore	Thailand	**Total**
PRC		3.0	4.0	4.0	1.5	2.0		2.0	16.5
Japan	3.0		13.0	6.0	1.0	6.0	3.0	6.0	38.0
Korea	4.0	8.0		2.0	1.5	2.0		1.0	18.5
Indonesia			2.0						2.0
Malaysia			1.5						1.5
Philippines		0.5	2.0						2.5
Singapore		1.0							1.0
Thailand		3.0	1.0						4.0
Sub-total	**7.0**	**15.5**	**23.5**	**12.0**	**4.0**	**10.0**	**3.0**	**9.0**	**84.0**
ASEAN Swap Agreement									**2.0**
Total									**86.0**

Source: Author's elaborations based on Japan's Ministry of Finance website. Available:http://www.mof.go.jp/english/index.htm. Accessed: December 2008.

Memo item: Details of contracts

Countries	**Billion US$**	**Direction**	**From**	**To**	**Billion US$**	**Currencies**	**Effective date**	**Expiration date**
PRC-Indonesia	4.0	One-way	PRC	Indonesia	4.0	US$-Rupiah	October 17, 2006	October 16, 2009
PRC-Japan	6.0	Two-way	PRC Japan	Japan PRC	3.0 3.0	Yuan-Yen Yen-Yuan	September 19, 2007	September 19, 2010
PRC-Korea	8.0	Two-way	PRC Korea	Korea PRC	4.0 4.0	Yuan-Won Won-Yuan	June 24, 2007	June 23, 2010
PRC-Malaysia	1.5	One-way	PRC	Malaysia	1.5	US$-Ringgit	October 9, 2002	October 8, 2005
PRC-Philippines	2.0	One-way	PRC	Philippines	2.0	Yuan-Peso	April 30, 2007	April 29, 2010
PRC-Thailand	2.0	One-way	PRC	Thailand	2.0	US$-Baht	December 6, 2001	December 5, 2004
Japan-Indonesia	6.0	One-way	Japan	Indonesia	6.0	US$-Rupiah	August 31, 2005	August 30, 2008
Japan-Malaysia	1.0	One-way	Japan	Malaysia	1.0	US$-Ringgit	October 5, 2004	October 4, 2007
Japan-Korea	21.0	Two-way	Japan Korea Japan Korea	Korea Japan Korea Japan	10.0 5.0 3.0 3.0	US$-Won US$-Yen Yen-Won Won-Yen	February 24, 2006 July 4, 2007	February 23, 2009 July 3, 2010
Japan-Philippines	6.5	Two-way	Japan Philippines	Philippines Japan	6.0 0.5	US$-Peso US$-Yen	May 4, 2006	May 3, 2009
Japan-Singapore	4.0	Two-way	Japan Singapore	Singapore Japan	3.0 1.0	US$-Sin$ US$-Yen	November 8, 2005	November 7, 2008
Japan-Thailand	9.0	Two-way	Japan Thailand	Thailand Japan	6.0 3.0	US$-Baht US$-Yen	November 9, 2007	November 8, 2010
Korea-Indonesia	4.0	Two-way	Korea Indonesia	Indonesia Korea	2.0 2.0	US$-Rupiah US$-Won	December 27, 2006	December 26, 2009
Korea-Malaysia	3.0	Two-way	Korea Malaysia	Malaysia Korea	1.5 1.5	US$-Ringgit US$-Won	October 14, 2005	October 13, 2008
Korea-Philippines	4.0	Two-way	Korea Philippines	Philippines Korea	2.0 2.0	US$-Peso US$-Won	October 17, 2007	October 16, 2010
Korea-Thailand	2.0	Two-way	Korea Thailand	Thailand Korea	1.0 1.0	US$-Baht US$-Won	December 12, 2005	December 11, 2007

Table 9. Recent fiscal and administrative measures adopted by Asian countries

Cambodia	Banned rice exports in the second quarter 2008 and subsidized fuel.
China	Announced a fiscal stimulus package of 4 trillion yuan over the next 2 years or about 7% of GDP in new spending per year;
	Implemented changes to the property market: reduction of down payment requirements for first homes, cuts in mortgage interest rate, and reduction of VAT on land sales; Introduced more tax rebates on 3,486 industry items.
Hong Kong	Increased value of large infrastructure projects; Introduced subsidy for household electricity charge; Increased old-age allowance and tax cuts.
Indonesia	Announced that government is seeking credit lines from Australia, Japan, World Bank and ADB to fund 2009 budget deficit with plans to increase spending on infrastructure and public services; Announced that MOF and Bank Indonesia will buy back a total of 4 trillion rupiah (approx. 350 billion US$) of government bonds.
Japan	Relaxed restrictions on share buy-back by corporations; Introduced supplementary budget for FY2008 for 1.8 trillion yen (18.5 billion US$) or 0.4% of GDP, including about 440 billion yen (4.5 billion US$) to support SME; Approved cash-handouts to families for 2 trillion yen (21 billion US$), for families with yearly income below 18 million yen (185,000 US$); Introduced 10% tax break on individual dividends and stock sale gains and a ban on naked short-selling to support the stock market; Approved 88.5 trillion yen (close to 1 trillion US$) budget for FY2009, the largest amount ever for an initially planned budget, and 6.6% larger than the original budget for FY2008, suspending fiscal reforms to combat the global economic crisis.
Korea	Announced increased spending of 10 trillion won (approx. 8 billion US$) for 2009, which includes infrastructure expenditure, financial support for small and medium-sized firms, and tax cuts; Invested 1 trillion won (approx. 800 million US$) to expand capital base of the Industrial Bank of Korea and provided 5 billion US$ to SMEs via the Korea Export Import bank; Announced a support package of 8 trillion won (6.3 billion US$) for the real estate/ construction sector; Announced that the National Pension Service will buy up 10 trillion won (8.3 billion US$) in new bonds from local banks and high-rated companies.
Malaysia	Announced a 7 billion ringgit (2 billion US$) fiscal stimulus package; Reduced subsidy on gas and diesel, followed by cuts in gas and diesel prices.
Myanmar	Restricted exports and domestic trade of rice.
Philippines	Postponed planned 2008 budget balance to 2010; Imposed domestic petrol price rollbacks in the third quarter of the year.
Singapore	Announced additional 50% increase in utility cost rebates and second installment of growth dividends, on top of special transfers disbursed earlier in 08.
Taipei,China	Announced the provision (on Jan 09 and to expire by Dec 09) of NT$3,600 (US$108) in shopping vouchers to each individual citizen; Increased government donation to the SME Credit Guarantee Fund to 6 billion NT$ (187 US$ million) in 2009 from 5 billion NT$ in 2008; Raised the ceiling of CGF-guaranteed credit to each SME by 20 million NT$ (625,000 US$) and doubled bank-guaranteed credit to SMEs to NT$20 million.
Thailand	Announced a spending boost of 100 billion baht (3 billion US$) for fiscal year 2008/09 targeted at alleviating burden of the crisis for low-income families and creating new jobs; Implemented a 1.4 billion US$, six-month stimulus package to cut excise tax on ethanol-mixed gasoline, provide free bus passage and partially subsidize home electricity costs.
Vietnam	Announced a fiscal stimulus package that includes $1 billion worth of foreign currency reserves for high-priority development projects, $89 million for canal dredging and interest-free credit to state-owned agricultural distributors; Controlled price increases in power, coal, cement & steel until Jun. Lowered domestic petrol price for the 3rd time in 21 Oct 08.

Source: Asian Development Bank, 2008b.