EAST ASIAN FINANCE

The Road to Robust Markets

CONFERENCE EDITION

Swati Ghosh

The World Bank
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OVERVIEW AND SUMMARY

This report seeks to contribute to the important discussion on the agenda for financial sector development that is now underway among policymakers and market participants in East Asia\(^1\). Developments since the financial crisis of 1997, as well as some of the lessons of the crisis itself, have prompted policymakers in East Asia to take a strategic look at the role that the financial sector needs to play in the region’s ambitious growth and development agenda.

THE CHANGING REGIONAL CONTEXT

Over the past eight years, some significant developments have taken place that are changing the context in which countries in the region are operating. These developments emphasize both the need for, and possibility of, more efficient intermediation and stronger, more diversified financial systems in the region.

One such important development has been the accumulation of substantial international reserves, which now amount to over US$1.6 trillion. This high level of reserves reflects not only the resumption of capital flows to the region—as East Asia has once again become the largest recipient of international flows—but also the accumulation of the region’s own savings. These resources will allow the region to meet its financing needs over the next few years. At the same time, as the financial crisis highlighted, there are also challenges in intermediating large capital inflows effectively without exacerbating the vulnerability of economies.

Looking ahead, both financing requirements and the demand for financial services are likely to expand, making it important to achieve efficient financial intermediation.

- Corporate financing needs are likely to rise over the next few years. Though recent economic growth has been strong—averaging 5.6 percent per year during 2000-2005\(^2\), much of it has stemmed from exports and private consumption (Figure 1). Investment has generally been weak and erratic; except in China, the average investment rate, at around 25 percent of GDP during 2000-2004, remains significantly below the pre-crisis average of 34 percent of GDP (1993-96). The fall in the investment rate has been especially large in Indonesia, Malaysia, and Thailand. Countries’ efforts to improve the investment climate can be expected to raise productivity, but the region is still likely to have sizable investment needs, including in infrastructure.

- A wider range of financial services will be needed. In the past, the financial sector focused largely on the needs of corporations. But as per capita incomes rise, it will face growing demands from consumers—especially for housing finance and other

\(^1\) The report covers China, Indonesia, Korea, Malaysia, Philippines, Thailand, Hong Kong (SAR) and Singapore and for brevity refers to this set of countries as the East Asia region. China is covered in less depth than the other countries, given the very distinct set of issues pertaining to its financial markets.

\(^2\) 5.1 percent excluding China.
consumer durables. Moreover, businesses in the region are looking for a broader range of services, including investment banking services.

- Intra-regional trade is deepening and firms that operate across borders will likely require cross-border financial services.

Figure 1: GDP and investment in the East Asia region

Another important development in the regional context is the growing attention to regional cooperation. While several regional arrangements and cooperative frameworks existed prior to the crisis, various initiatives for regional financial cooperation have emerged since then. There are two areas in particular where measures have been taken at the regional level.

The Chiang Mai Initiative (CMI), established in May 2000, is a network of bilateral currency swap agreements among 13 ASEAN +3 countries, designed to prevent currency crisis in the region. In May 2005, the finance ministers of these countries announced their intention to move to a collective or synchronized activation of bilateral swaps. The group also agreed to institute a more comprehensive mandatory surveillance mechanism for all ASEAN+3 members.

Initiatives to develop a regional bond market have been the second area of regional cooperation, as the crisis brought to the fore the importance of having more diversified financial systems in order to increase the risk-bearing capacity of the East Asian economies. Some of the

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3 These included a network of currency swap arrangements (ASEAN Swap Agreement-ASA), bilateral repurchase agreements, the EMEAP (Executives’ Meeting of East Asia and Pacific Central Banks), the Four and Six Markets Meetings, and the APEC Finance Ministers’ Meeting for financial cooperation among finance ministers and/or central bank governors.

4 Their agreement also covers the establishment of a network of contact persons to facilitate regional surveillance as well as a network of research and training institutions to strengthen the human capital of officials in the financial, banking, and fiscal areas throughout the region.

5 Financial intermediaries and markets tend to perform the core functions of a financial system—resource mobilization, resource allocation and risk management—in different ways and each may be better at certain aspects of these functions. Hence, they tend to be complementary (or imperfect substitutes). Indeed, financial intermediaries and
concrete measures that have been taken at the regional level in this context address what may be termed as the demand side constraints (from the perspective of investors) while others address the supply side issues (from the perspective of the issuers).

Under the Executives’ Meetings of East Asia Pacific Central Banks (EMEAP), two Asian Bond Funds have been launched using a portion of EMEAP’s international reserves. The first of these, the Asian Bond Fund I (ABF1)—pooled $1 billion of reserves and invested in US dollar denominated government and quasi-government bonds of eight ASEAN + 3 countries. The second (ABF2) of US$ 2 billion—is investing in local currency denominated sovereign and quasi-sovereign bonds. Its aim is to give both retail and institutional investors access to local bond markets in the region in a transparent and cost effective manner, and it is being enlarged through private placements by institutional investors, participating dealers and market makers.

ABF2 should also provide an impetus to broader market development in two ways. First, like ABFI, by being an actual fund it has allowed policymakers to “learn by doing” and has helped to identify critical impediments to cross-border listing and investing. Second, it is expected to spur the introduction of new instruments for investors: since the construction of the index and the compilation methodology will be published, managers of private funds can use these indices as benchmark indices and replicate or customize these for their fixed income products.

Working groups under ASEAN+3 and APEC have addressed some of the supply side constraints to cross-border investments, including the issuance of new securitized debt instruments; credit guarantee and enhancement mechanisms; foreign exchange transactions and settlement issues; the issuance of bonds denominated in local currency by Multilateral Development Banks (MDBs), foreign agencies and multilateral corporations; and local and regional credit rating agencies.

While regional cooperation is providing an impetus towards achieving more diversified financial markets, much of the needed policy measures will have to be undertaken at the domestic level. This is because the necessary deepening and diversification of markets largely depends on actions at the domestic level and also because the benefits of the regional initiatives themselves depend on the complementary development of domestic markets.

Indeed, while regional initiatives have helped identify and remove several of the direct barriers to cross-border bond investments, cross-border bond flows (especially within the region) remain quite small. Partly this reflects differences among countries in areas such as credit rating standards, legal and regulatory systems, and accounting and auditing standards and practices; these differences add to costs and uncertainty for both issuers and investors and can deter cross-border flows. Partly, too, it reflects the fact that the region’s institutional investor base is still quite small. The regulatory, governance and risk management frameworks of institutions such as pension funds and insurance companies need to be strengthened to ensure they have the incentive and ability to undertake cross-border investments. Domestic derivatives markets also need to be further developed and deepened, because limitations in this regard can reduce investors’ interest in cross-border investments. All these measures and actions need to be undertaken at the domestic level. At the same time, of course, regional financial integration can significantly enlarge the gains from domestic policy measures, and indeed, in some cases can make the development of domestic financial markets more viable.

markets are also complementary in that the former are key participants in financial markets and tend to play a supporting role in ensuring the full functioning of financial markets.
Much of the focus of policymakers therefore needs to be on domestic policy measures, while recognizing the potential synergies that can be obtained from undertaking regional measures in tandem with these domestic measures.

WHERE DO THE EAST ASIAN FINANCIAL MARKETS STAND TODAY?

As is now well-recognized, a vibrant East Asian financial sector of the future will need to have at least three characteristics. It will need to be highly diversified to meet the financial services needs of increasingly complex and sophisticated economies. It will need to provide financial services efficiently, contributing to the productivity and competitiveness of the economy as a whole. And it will need to be robust to able to withstand a range of shocks in a fast changing globalizing world economy. This section therefore looks at where financial markets in the region stand with respect to these aspects.

How diversified are the financial markets?

Over the past eight years, the region’s financial sector has deepened, with significant growth of assets in banking, equity and bond markets (Table 1 and Figure 2a). The total size of the East Asian financial markets assets in 2005 stood at US$ 9.6 trillion—or about 21 percent of the US financial market and almost half of that of Japan.

<table>
<thead>
<tr>
<th>Economy</th>
<th>Bank Assets % of GDP</th>
<th>Equity market capitalization % of GDP</th>
<th>Bonds outstanding % of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>124.4</td>
<td>207.4</td>
<td>191.6</td>
</tr>
<tr>
<td>Indonesia</td>
<td>34.3</td>
<td>14.4</td>
<td>68.4</td>
</tr>
<tr>
<td>Korea</td>
<td>67.7</td>
<td>118.0</td>
<td>91.9</td>
</tr>
<tr>
<td>Malaysia</td>
<td>100.6</td>
<td>170.0</td>
<td>162.5</td>
</tr>
<tr>
<td>Philippines</td>
<td>76.5</td>
<td>68.4</td>
<td>61.3</td>
</tr>
<tr>
<td>Thailand</td>
<td>79.7</td>
<td>127.4</td>
<td>102.1</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>208.2</td>
<td>343.3</td>
<td>443.3</td>
</tr>
<tr>
<td>Singapore</td>
<td>122.7</td>
<td>178.0</td>
<td>185.3</td>
</tr>
</tbody>
</table>

Source: IFS, BIS ADB Asian Bonds Online and staff calculations

Measured in terms of market capitalization, East Asia’s equity market has tripled since 1997—amounting to US$ 2.3 trillion in 2004 and US$ 2.8 trillion in 2005. While stock markets in the region are still considerably smaller than in the US, UK, and Germany (and in aggregate still only account for 6 percent of world stock market capitalization), in relation to the size of domestic economies they compare very favorably with those of advanced industrial countries. Indeed, stock market capitalization as a percentage of GDP is actually larger in Hong Kong, Singapore and Malaysia than in the US, UK or Germany.

The region’s bond markets have also seen sizable growth over the past six or seven years, albeit with considerable variation across countries in the region. In the region as a whole, bonds outstanding amounted to US$ 1.4 trillion in 2004 and US$ 1.5 trillion in 2005. However, much of the growth in bond markets (over 50 percent of the growth during 1997-2004 in all economies in the region except Hong Kong and Korea) has been on account of bonds issued by the government, largely to restructure the banking systems (Table 2). Although in several
countries corporate bonds have accounted for a reasonable proportion of the growth, in most economies they remain quite a small proportion of the overall bond market.  

Table 2: Breakdown by type of bond issuer

| Economy/region | 1997 (Gov) | 1997 (Corp) | 1997 (Fin) | 2004 (Gov) | 2004 (Corp) | 2004 (Fin) | Cont. to growth 1997-2004 (%)
<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>7.1</td>
<td>0.7</td>
<td>4.5</td>
<td>14.9</td>
<td>0.6</td>
<td>9.5</td>
<td>61.0</td>
</tr>
<tr>
<td>Indonesia</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>19.8</td>
<td>1.5</td>
<td>1.1</td>
<td>88.4</td>
</tr>
<tr>
<td>Korea</td>
<td>4.9</td>
<td>10.3</td>
<td>10.0</td>
<td>25.2</td>
<td>23.4</td>
<td>34.9</td>
<td>34.8</td>
</tr>
<tr>
<td>Malaysia</td>
<td>20.8</td>
<td>16.8</td>
<td>25.2</td>
<td>38.2</td>
<td>38.0</td>
<td>13.9</td>
<td>56.7</td>
</tr>
<tr>
<td>Philippines</td>
<td>23.3</td>
<td>0.1</td>
<td>0.0</td>
<td>28.4</td>
<td>1.2</td>
<td>0.0</td>
<td>85.0</td>
</tr>
<tr>
<td>Thailand</td>
<td>0.2</td>
<td>6.0</td>
<td>0.1</td>
<td>22.4</td>
<td>12.3</td>
<td>5.4</td>
<td>65.6</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>7.5</td>
<td>18.8</td>
<td>0.0</td>
<td>9.7</td>
<td>37.4</td>
<td>0.0</td>
<td>10.4</td>
</tr>
<tr>
<td>Singapore</td>
<td>13.6</td>
<td>11.2</td>
<td>0.0</td>
<td>41.2</td>
<td>32.4</td>
<td>0.0</td>
<td>56.6</td>
</tr>
</tbody>
</table>

Source: ADB, BIS and country sources.

Compared to countries in other regions with broadly comparable per capita incomes, those in East Asia have relatively large banking, equity and even bond markets. There is of course considerable variation globally in terms of financial structure; nonetheless, given their per capita incomes and the extent of their financial deepening overall, countries in the region lag behind in the importance of the bond markets, particularly of the corporate bond market, relative to the other financial segments (Figure 2b).

Figure 2a: Financial sector assets

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6 Although (in addition to Hong Kong and Singapore), Korea and Malaysia have developed sizable corporate bond markets.

7 Throughout the report we try to benchmark East Asian economies within the region and with peers within the same income group in other regions. The latter has some drawbacks since in general the East Asian financial systems are more developed relative to countries with the same level of income in other regions. Nevertheless we try to include in most tables data on comparator countries when it is available. The comparator countries, based on the level of the 2004 GDP per capita figures (at 2000 prices in US dollars) are divided in six groups: (1) Indonesia (Georgia and Ukraine); (2) China and the Philippines (Serbia and Montenegro, Albania, and Bolivia); (3) Thailand (Russian Federation, Turkey, and Peru); (4) Malaysia (Lithuania, Latvia, Chile, and Mexico); (5) Korea (Greece, Spain, and Slovenia); (6) Singapore and Hong Kong (Japan, US, and UK). We also systematically benchmark relative to industrial countries (Germany, Japan, United Kingdom, and the United States), which is arguably more useful if the region’s financial sectors are to position themselves well in the global arena.
How well are financial markets serving a broad set of needs?

To what extent are the financial sectors in the region serving the needs of consumers and firms through the different financial segments? In **banking**, the ratio of domestic credit to the private sector to GDP has yet to recover to pre-crisis levels in several of the crisis affected countries—notably Indonesia, the Philippines and Thailand—suggesting that banks are still holding many of their assets in forms other than loans (notably government bonds). In Indonesia and the Philippines government assets held by banks constitute around 15 percent of GDP.

Of the domestic credit that banks have extended to private borrowers, a growing share has gone to consumers. In 2004, consumer lending accounted for 53 percent of total bank lending in Malaysia, 49 percent in Korea, 30 percent in Indonesia, 17 percent in Thailand, 15 percent in China, and 10 percent in the Philippines. The bulk of these loans to consumers has been for housing, although other forms of lending, notably credit card lending, have also grown fast. Even so, several countries still have substantial scope for greater penetration of banking services to households.

Lending by banks to the corporate sector has remained muted. In part this reflects low demand, both because corporate investment has remained low and because firms have deleveraged and financed a significant proportion of their capital needs through retained earnings. Firms have also sought alternative sources of external finance as financial markets in the region have broadened. For their part, however, banks may have become more risk-averse; pre-crisis lending levels were not necessarily the appropriate ones, given that corporations in most countries were highly dependent on bank loans and were overly leveraged.

Source: Asian Bonds Online, BIS, IFS and WFE, WDI and World Bank Financial Structure Database.
Over the next few years, demand for corporate financing is likely to pick up in line with investment needs. Continued improvements in information disclosure and in overall corporate governance in the corporate sector, together with improvements in banks’ capacity to evaluate risks will be important in ensuring the resumption of bank lending to corporations on a sustainable basis.

**Equity markets** have provided another source of financing for corporates. For the region as a whole, new equity raised in the capital markets (from initial public offerings) amounted to US$ 32 billion in 2004 and US$ 31 billion in 2005.

The role of equity markets varies widely across countries in the region, however, with those in Hong Kong, Singapore, Korea and Malaysia playing an important role, and those in the other countries having the potential to play a much more important role than they do at present. In this latter group of countries, the amounts of equity raised are still relatively small, as are the number of listed firms, and a high proportion of stock market capitalization and trading is accounted for by the top ten firms. (At the same time though, it should be noted that, relative to countries at the same per capita income levels in other regions, the Philippines, Indonesia and Thailand are all doing well).

As noted above, **corporate bond markets** are still relatively small in most of the countries in the region, and could play a greater role in corporate financing than they are at present. The key reason for the small corporate bond markets is the lack of liquidity in secondary markets. This lack of liquidity in securities markets matters not only for efficiency, as discussed below, but also for the overall size of the market because there is a two-way interaction between the size of the primary market and liquidity in the secondary market. Investors are generally willing to invest in securities only if there is enough liquidity for them to sell and exit easily when needed. And, if liquidity is low and price discovery does not function well, the investors that do participate will generally demand a higher interest rate or return to compensate for the low liquidity, and this in turn, may further deter companies from listing on the stock exchange or issuing bonds.

**How efficient are the financial systems in the region?**

Significant structural changes have taken place in the **banking sectors** of the crisis-affected countries, in response to policymakers’ efforts to address issues of capitalization, governance, risk management and operational inefficiencies in the aftermath of the crisis. These efforts included closures and consolidation of banks, often entailing initial nationalization, followed by re-privatization. As a result, most countries in the region have seen a sizable rise in the foreign ownership of banks, as well as significant consolidation and an increase in the average size of banks, measured in terms of both assets and deposits.

Consolidation has also taken place in the banking sectors of Hong Kong and Singapore which were not directly affected by the crisis. Here, as in other advanced industrialized economies, the trend has been driven by competitive pressures arising from deregulation (domestic and foreign) and technological advances.

Most countries in the region have eased their restrictions to allow banks to conduct business in areas such as securities and insurance. Banks are responding, to varying degrees, by offering fee-based services in new areas, and some are beginning to form strategic alliances with other financial institutions and to outsource their non-core operational functions with a view to
generating greater operational efficiency. For example, four foreign banks have set up regional processing centers in Malaysia.

On average, banks in East Asia have become more efficient over the past few years. Several of the structural changes that have taken place, including the strengthening of capitalization and foreign ownership, seem to have helped improve banking sector performance and efficiency.

However, banks in the region have yet to realize the potential economies of scale and scope from the consolidation that has taken place. Larger banks and banks that pursue a broad range of activities perform less efficiently than smaller banks and specialized banks. This may be because it takes time to learn how to reap the benefits of consolidation, and for many banks in the region it may be too early to see the results of this learning process. But it is also important to recall that most of the consolidation that has taken place so far has been government-led. If consolidation is to be accompanied by improvements in performance, it is important to ensure that the banking systems in the region operate within a competitive environment.

Comparisons with countries at similar per capita income levels outside the region suggest that East Asia’s equity markets have room to improve their efficiency (Figure 3). Korea, Hong Kong, Singapore and Malaysia have the most efficient markets in the region—although Korea ranks in the third highest quartile and the remaining fall only in the median of a global sample of 124 economies. In the bottom quartile are Thailand, Indonesia Philippines and China.

In some of the countries in the region a sizable proportion of shares remains inaccessible to cross-border investors. As of end-2004, foreign investors did not have access to around 42 percent of the stock market in the Philippines, 41 percent in China, and 36 percent in Thailand. This, combined with the fact that there is also a sizable proportion of shares that are closely held in some economies (around 28 percent in China, 30 percent in Indonesia, 40 percent in the Philippines and 21 percent in Thailand), means that in some cases only a small percentage of shares is freely available to would-be investors. In turn, this can significantly dampen the liquidity and efficiency of a stock market.

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8 Based on standard indicators of efficiency such as operating costs to assets and net interest costs to assets.
9 The Equity Market Efficiency Indicator is a composite measure that captures transaction costs and the quality of information disclosure. Transaction costs are measured by the proportion of zero return days in a trading year. Since informed traders only trade when the benefits exceed the costs of doing so, a market with higher trading costs (both implicit and explicit) will exhibit more days without trading—hence a zero return. The quality of information disclosure is measured by “stock market synchronicity”, which captures the comovement between individual stock returns. A high level of comovement indicates that there is not much firm-specific information.
10 However, China is currently undertaking major reforms to increase access to shares by investors. First, it has started to convert about US$ 210 billion of non-tradeable “A” shares, essentially state-held equity, into common stock tradeable “A” shares that can be bought and sold on the exchanges. Companies seeking to convert non-tradeable stock must obtain the approval of the holders of tradable shares and offer cash or shares to compensate them for the increase in supply. As of end-2005, 421 listed companies had completed their negotiations with shareholders (about 31 percent of total listed companies accounting for 35 percent of total capitalization of China’s stock market). The companies that have completed the share reforms are now called “G” share companies. Second, new rules have been announced to allow foreign investors to buy strategic stakes in tradeable A shares (announced in January 2006). Overseas investors will be allowed to buy “A” shares using RMB, provided they acquire at least 10 percent stake in a firm and hold the stock for at least three years. Thailand has also recently loosened restrictions on foreign investors.
11 These figures are based on the IFCI (Investable) return index, which includes a subset of the stocks included in the IFCG (Global) index.
As noted above, the biggest constraint on the development of the bond markets is the limited liquidity in the secondary markets—which affects the efficiency of these markets overall. Of course, liquidity in bond markets is limited even in the advanced industrial countries. Nonetheless, the region’s bond markets are a lot less liquid than those of advanced industrial countries, and not surprisingly, liquidity is even lower in the corporate bond market (Table 3). Corporate bonds are generally much smaller than government bonds and their small issue size contributes to illiquidity.

Table 3: Liquidity indicators in the bond markets

<table>
<thead>
<tr>
<th>Economy</th>
<th>Value Traded</th>
<th>Turnover ratio</th>
<th>Bid-ask spread</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>US$ Billions</td>
<td>percent 2004</td>
<td>basis points 2004</td>
</tr>
<tr>
<td></td>
<td>Government</td>
<td>Corporate</td>
<td>Government and quasi-sovereign</td>
</tr>
<tr>
<td>China</td>
<td>568.6</td>
<td>1.4</td>
<td>2.2</td>
</tr>
<tr>
<td>Indonesia</td>
<td>27.7</td>
<td>0.9</td>
<td>0.6</td>
</tr>
<tr>
<td>Korea</td>
<td>952.2</td>
<td>382.2</td>
<td>3.3</td>
</tr>
<tr>
<td>Malaysia</td>
<td>84.3</td>
<td>38.1</td>
<td>1.8</td>
</tr>
<tr>
<td>Philippines</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a</td>
</tr>
<tr>
<td>Thailand</td>
<td>70.1</td>
<td>5.6</td>
<td>2.0</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>542.4</td>
<td>n.a.</td>
<td>34.7</td>
</tr>
<tr>
<td>Singapore</td>
<td>130.5</td>
<td>n.a.</td>
<td>3.2</td>
</tr>
<tr>
<td>Japan</td>
<td>29,964.2</td>
<td>1,139.6</td>
<td>5.4</td>
</tr>
<tr>
<td>Canada</td>
<td>6,428</td>
<td>n.a</td>
<td>30.6</td>
</tr>
<tr>
<td>Germany</td>
<td>6,600</td>
<td>n.a</td>
<td>10.1</td>
</tr>
<tr>
<td>UK</td>
<td>6,516</td>
<td>n.a</td>
<td>14.2</td>
</tr>
<tr>
<td>US</td>
<td>103,829</td>
<td>n.a</td>
<td>37.9</td>
</tr>
</tbody>
</table>

Sources: Value traded, turnover ratios and bid-ask spreads for Asian economies, Asian Bonds Online (ADB), ADB newsletter 2004, and for ABFII turnover ratio from International Index Company, Sept, 2005. For OECD countries, value traded and turnover ratios from Debt Management and Government Securities Markets, and bid-ask spreads from ADB newsletter except for Canada and Germany which are as of 2006 from World Bank FDSI.
And what is happening to risk?

**Banking sectors** in the region are sounder on average than they were a few years ago and their health is steadily improving. In all the formerly crisis-affected countries, the reported non-performing loan (NPL) ratios are now in single digits, reflecting gradual improvements in profitability in the economies. Banks’ capital positions have also improved and in all countries the average reported risk-weighted capital adequacy ratios (CAR) is now significantly above the 8 percent recommended by the Bank of International Settlements (BIS).

Nonetheless, there is considerable variation across banks as well as across countries in the region. Moreover, on average, East Asia’s ratio of non-performing loans (NPL) remains high relative to that in other regions such as Latin America or Emerging Europe, while its profitability and risk-weighted capital adequacy ratios are slightly lower.

In general, East Asia’s **securities markets** are relatively stable\(^2\) compared with those of other regions. Among a sample of 124 economies worldwide, Singapore falls in the highest (most stable) quartile, followed by Hong Kong and Malaysia in the second highest quartile. Indonesia, Philippines, and Thailand fall in the bottom quartile, as does Korea. Cross-country work suggests that inadequate disclosure of information can make it more likely that an equity market will be unstable and deliver large negative returns\(^3\). Hence, continued improvements in disclosure should strengthen the stability of equity markets in the region.

What about the risks and stability of the **financial systems** as a whole? In principle, a diversified financial system, with appropriately developed markets and mechanisms for risk-sharing and risk transfer, such as securitization and derivatives, can enhance the risk-bearing capacity of an economy as a whole, by enabling market participants to manage and transfer risks to those more able and willing to bear them.

Risk transfer through new financial instruments has been a major innovation globally. Global derivatives markets have grown extremely fast: over-the-counter (OTC) derivatives markets have grown tenfold over the past decade to reach US$ 248 trillion, while exchange-traded derivatives markets (ETDs) have grown to US$ 53 trillion in 2004.

Derivatives markets in the East Asia region have accounted for a sizable proportion of this growth, and the stability of the region’s financial systems seems to have improved as banks have transferred parts of their traditional credit risks to capital markets. But while risks can be intermediated and distributed more efficiently, they may simply become less visible as they move into less regulated segments of the financial markets

Two major potential risks in East Asian financial markets today—that policymakers need to be cognizant of—are that higher risks will become concentrated in public banks and that risks will be aggressively shifted to less sophisticated non-bank financial institutions.

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\(^2\) The stability indicator is a composite indicator which is based on measures of volatility and the skewness of returns—i.e. the extent to which markets are more likely to deliver large negative returns.

\(^3\) The reasoning is as follows: A corporation has more incentives to hide bad news than to hide good news. Thus good news is released to the public promptly, and stock market prices adjust immediately, which makes for more gradual price adjustments. In environments of poor disclosure, bad news can be covered up and accumulated by management. Of course, eventually, even bad news comes out. As a result bad news is released all at once and creates a much greater negative impact on stock prices. Furthermore the public will inevitably feel that the corporation is still hiding information and thus the reaction to the bad news is usually an overshooting decline. That is, a firm may deliver large negative returns on some days, but small positive returns most of the time.
In general, weaker banks have incentives to carry larger risks, partly because implicit safety nets such as deposit insurance tend to subsidize the pricing of risks. Public banks are usually tasked with carrying larger and lumper credit risks, often to serve national development goals. Meanwhile, most advanced private banks have begun selling undesirable credit risk in order to reduce risk capital charges (since under Basel II capital charges will be risk-based as opposed to being flat charges). Weaker banks, as well as public banks that do not always operate under risk-based frameworks, may be tempted to buy this credit risk in order to boost their revenues. If credit risk is being redistributed within the banking system, there is a possibility that larger risks are being concentrated in weaker and public banks, although they may not be visible as long as credit spreads remain at their current record low levels.

Some transfer of risks may also be taking place to the more weakly regulated non-bank financial institutions. The growth of modern risk transfer techniques is confounding the traditional assumption that banks face credit risks, mutual funds market risk, and insurance companies liquidity and maturity risk. Customized risk transfer from banks to non-banks is made easier by the sophisticated slicing of risk (with so-called real or synthetic collateralized obligations of debt, or loans or assets). Although data are scarce, market observers confirm that banks are net sellers of credit risk and insurance companies are net buyers.

Little information is available about the quality of credit risk management in non-bank financial institutions or about the potential credit risk in insurance or re-insurance companies, especially within East Asia. However, concerns have been expressed about the limited understanding of non-bank risk exposures, about regulatory arbitrage contributing to risk-shifting and about the ultimate risk takers being the most weakly regulated institutions.

THE ROAD TO ROBUST MARKETS

Sizable transformations have taken place in the financial systems in the region since the crisis. Banks have been restructured and recapitalized, many have been consolidated, and on average, they are now sounder. Countries have made efforts to upgrade prudential regulation and supervision since the crisis, although there are some areas which need further strengthening.\textsuperscript{14}

At the same time, as noted above, there is still scope for broadening access to banking services to households and in continuing to enhance the efficiency of banks that have started to provide a range of both income and fee-based services. Equity markets could play a more important role than they do at present in several countries in the region, while the potential role of bond markets is even greater since—despite the growth that has taken place—corporate bond markets are still relatively small.

Thus, despite the considerable progress that has been made, countries in the region face a broad-based agenda in the financial sector:

\textsuperscript{14} Assessments of compliance with the Basle Core Principles show the need, for example, to further strengthen the compliance with the requirements for evaluating asset quality and the adequacy of loan loss provisions and reserves; rules for identifying the limiting concentrations of exposures to single borrowers or to groups of borrowers; rules for lending to connected or related parties; and policies for identifying and managing country, market and material risks. For supervisors, compliance with the requirements for off-site supervision, with on site examination and with the conduct of consolidated supervision are still somewhat weak. It is important that these remaining weaknesses are addressed as these are likely to become more important going forward as banks get into new segments of lending and as the extent of cross-border participation of financial institutions increases.
• further strengthening the efficiency, access and soundness of the different segments of the financial system;
• developing sound markets and instruments that will enable market participants to share and transfer risks to those most able and willing to bear them;
• continuing to improve the institutional underpinnings of the financial sector (the exercise of corporate governance and information disclosure, and the legal and regulatory framework and accounting and auditing standards and practices);
• promoting a more diversified financial system.

The task that will help the most to advance the agenda as a whole is the further development of the securities markets. Despite the progress made in diversifying the financial structure in recent years, as noted, given the level of development and the depth of the financial sector, the financial systems of the East Asian countries is still dominated by banks. The development of securities markets, especially the bond markets, will be important both to cater to needs of savers/investors and corporate borrowers and to diversify the financial structure and hence enhance the risk-bearing capacity of the economies. The strengthening of the elements needed for securities markets development—including instruments and markets for risk sharing—and the institutional underpinnings, will also advance the development of robust financial systems overall.

While securities markets development will help broaden the structure of the financial systems and should contribute to risk diversification and overall risk reduction in the economies, there is also the possibility that inappropriate risk transfer will take place through the use of derivative instruments and other means—with risks shifted towards segments and institutions that have weaker risk management capacity and are weakly regulated. This requires a more proactive stance on the part of supervisors to improve the monitoring of risks and the supervision of these institutions.

Developing securities markets

As noted above, there is a two-way interaction between the size of a securities market and its liquidity and efficiency. Limited liquidity is the key issue in the East Asian securities markets, particularly the bond markets.

Three main factors affect (and are reflected in) liquidity or the lack of it (Figure 4):
• the availability of information to price securities accurately;
• transactions costs and
• the size and heterogeneity of the investor base

To enhance the efficiency of the securities markets policymakers will need to address each of these factors.
A) Improving the informational basis for pricing securities. Timely and accurate information is very important for liquidity; based on such information, liquidity can be generated by the activity of investors who disagree about fundamentals, facilitating the process of price discovery.

In improving the informational basis for pricing of securities, one fundamental element will be the continued strengthening of corporate governance and of information disclosure. Among the crisis-affected countries, Korea and Malaysia have moved the furthest in reforming their laws and regulations and practices, followed by Thailand. In Indonesia and the Philippines there is still considerable scope to strengthen corporate governance practices. More recently, China has also begun to strengthen corporate governance. It is important to continue to raise the awareness of good corporate governance principles and practices among companies, directors, shareholders and other interested parties in the region.

Broadly, the key challenges with respect to corporate governance lie in ensuring the effective exercise of minority shareholder rights, in improving the quality of financial reporting and disclosure, and in strengthening implementation of the rule of law. In many, if not most, cases, the legal and regulatory requirements on information disclosure, shareholder and creditor rights, and accounting and auditing standards are in place. But implementation and enforcement are often weak, because regulators lack sufficient independence, skills or resources.

The rights of non-controlling (minority) shareholders need to be protected against the expropriation by the controlling shareholder and insiders (managers). Since there is an inherent conflict of interest here that needs to be managed, mechanisms are needed to ensure that transactions between firms and insiders take place at arms-length and are properly authorized and adequately disclosed. It is also important that minority shareholders have mechanisms to seek
redress if their rights are violated. However, derivative actions are rare and class action laws do not exist in some jurisdictions.

Further efforts are needed to strengthen the oversight of the boards of directors and to improve the effectiveness of audit committees. Under good corporate governance principles, boards are expected to act in good faith, with due diligence and in the best interests of the company and the shareholders. They are also expected to fulfill certain key functions including selecting, compensating, monitoring and replacing key executives, ensuring a formal and transparent board nomination process, and monitoring and managing potential conflicts of interests of management, board members and shareholders. However, the concept of fiduciary duty is not explicit in many countries and Directors are often not held accountable for failing in their duties. Since the financial crisis, a high priority has been placed in countries in the region on restructuring corporate boards, including mandating outside directors and various committees (nomination, remuneration of directors and management, and audit). Often, though, ostensibly independent directors do not adequately challenge and probe the judgment of managers. Finally, the concept of audit committees is new, and often these committees are not effective.

In terms of information disclosure, though listed companies across the region adhere to the regular reporting of their financial results, there is still considerable room for improving the prompt disclosure of market-sensitive information and for strengthening the scope and content of disclosure, particularly in China, Indonesia and the Philippines. It is clearly important that firms disclose all material information, rather than a somewhat selective disclosure that seems to be the practice in many cases. Most countries have put in place disclosure-related rules and regulations for listed companies. What is needed is to enforce these rules and to cultivate a culture of greater disclosure over time.

The quality of financial reporting and disclosure depends on accounting and auditing standards and practices. East Asian countries are at different stages of convergence towards international standards, but where these standards are not yet followed full disclosure of this fact would promote greater investor confidence. Enforcing financial standards is also important. For high quality financial reporting, managers of firms need to have the incentive to take the steps needed to comply with applicable accounting standards in preparing financial statements; auditors need to be able and willing to fulfill their professional obligations; and regulators need to have the legal authority and capacity to monitor financial reporting and auditing practices, and enforce applicable accounting and auditing standards.

For bond markets, accurate pricing can be facilitated with several additional infrastructural components. First, there is the need to be able to price corporate bonds with reference to a “risk free” benchmark (or index interest rate)—most commonly the interest rate of a government bond. To be a valid comparator, the price of a government bond must be truly driven by supply and demand. For this to happen in China for instance, the authorities would need to move away from price controlled auctions. Benchmark bond issues must also be large and stretch across the maturity spectrum. Countries in the region have attempted to build benchmark yield curves in government bonds since 1998. And though Hong Kong and Singapore have succeeded in building both short and intermediate yield curves (up to 15 years), in other economies, liquidity in issues with a maturity of over 5 years is limited. China has no benchmark yield curve yet. The use of Primary Dealer Systems (PDS) can help in promoting greater liquidity in government benchmark issues, and aspects of the PDS need strengthening in several countries in the region.
A second important element for corporate bond pricing is the existence of good credit rating agencies. Rating agencies play a very important role in helping to determine the credit risk and thus the spread pricing of corporate bonds. Although rating agencies exist in all countries covered, and their penetration in domestic markets is relatively high, several of them are quite new and need more time to build a track record. International rating agencies, for their part, rate only the companies that issue cross-border. Some of these agencies have formed joint ventures with local rating agencies, but difficulties in comparability across countries can still hamper cross border investments.

**B) Reducing transactions costs.** Transactions costs comprise both explicit trading costs—such as commissions, settlement fees, and taxes—as well as implicit costs, which represent the opportunity costs of a delayed trade or not executing a trade. A market with high transactions costs will see less trading and have fewer price movements in response to relevant news and therefore be less liquid and less efficient. The factors that affect explicit and implicit transactions costs include withholding taxes and fees, the efficiency of the intermediaries, market infrastructure and institutional arrangements, and “complementary” infrastructure.

East Asia’s securities market infrastructure is relatively well developed (Table 4), with almost all countries in the region having advanced clearing and settlement systems with the recommended features to minimize the various risks (and potential opportunity costs of delayed or failed trade) associated with pre-settlement and settlement of securities. Going forward, these systems will need to expand to handle substantially larger volumes of transactions.

<table>
<thead>
<tr>
<th>Economy</th>
<th>GSCS benchmark clearance and settlement score</th>
<th>Post settlement score</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>92.5</td>
<td>A-</td>
</tr>
<tr>
<td>Indonesia</td>
<td>68.5</td>
<td>A</td>
</tr>
<tr>
<td>Korea</td>
<td>97.3</td>
<td>A+</td>
</tr>
<tr>
<td>Malaysia</td>
<td>93.3</td>
<td>A+</td>
</tr>
<tr>
<td>Philippines</td>
<td>92.4</td>
<td>A</td>
</tr>
<tr>
<td>Thailand</td>
<td>93.6</td>
<td>A</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>n.a.</td>
<td>A+</td>
</tr>
<tr>
<td>Singapore</td>
<td>n.a.</td>
<td>AA-</td>
</tr>
<tr>
<td>Greece</td>
<td>85.0</td>
<td>A+</td>
</tr>
<tr>
<td>Japan</td>
<td>n.a.</td>
<td>A+</td>
</tr>
<tr>
<td>Mexico</td>
<td>90.5</td>
<td>A+</td>
</tr>
<tr>
<td>Peru</td>
<td>97.8</td>
<td>A-</td>
</tr>
<tr>
<td>Turkey</td>
<td>98.3</td>
<td>A</td>
</tr>
<tr>
<td>Venezuela, RB</td>
<td>72.6</td>
<td>BBB</td>
</tr>
</tbody>
</table>

*Memorandum:*

Source: GSCS and Thomas Murray. GSCS compares the settlement efficiency of markets, incorporating average trade size, local market interest rates, the proportion of trades that fail, and the length of time for which they fail. Thomas Murray produces ratings of post-trade risk exposures according to various criteria of clearing and settlement, safekeeping, and asset servicing. The ratings follow a standard alpha scale from AAA to C.

East Asian countries vary more in their “complementary” or supporting infrastructure—that is, in the development of repo markets, securities lending, margin trading (in particular, short selling) and derivatives (Table 5). Lack of these instruments and facilities reduces liquidity and increases transactions costs of trading, and is an area that these countries now need to focus on.
### Table 5: Factors affecting transactions costs in bond markets

<table>
<thead>
<tr>
<th>Issue</th>
<th>Chn</th>
<th>Idn</th>
<th>Kor</th>
<th>Mys</th>
<th>Phl</th>
<th>Tha</th>
<th>HK</th>
<th>Sgp</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transactions costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>- Withholding taxes</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>CGT: 5% business tax; 33% profit tax.</td>
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</tr>
<tr>
<td>Interest tax 33%, none if held to maturity.</td>
<td></td>
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<tr>
<td>CGT: 20%. Interest 20%.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>CGT and interest tax 27.5%. Interest income tax deducted from accrued interest.</td>
<td></td>
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<tr>
<td>CTF 9%. Interest 15%.</td>
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</tr>
<tr>
<td>No tax on zero coupon bonds.</td>
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<tr>
<td>Uniform 20% WHT on interest applies. Based on net price principal.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>CGT 15%. No int. tax for govt or govt guaranteed debt. 15% otherwise. Tax applies to zero coupon bonds.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>0% tax on Govt. o and multi-lateral agencies. 16%or 17.5% profit tax on others.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Generous tax system. Tax free for Qualifying Debt Securities.</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>-Repo markets</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Planned in 2007(^2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Underdev. so dealers unable to short</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relatively developed</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Underdev. so dealers unable to short</td>
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<tr>
<td>Mature repo mkt</td>
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<tr>
<td>Mature repo mkt</td>
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<tr>
<td><strong>-Margin purchases</strong></td>
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<td></td>
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<tr>
<td>- margin purchase allowed?</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
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<tr>
<td>No(^1)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>No(^1)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Short sales</strong></td>
<td></td>
<td></td>
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<tr>
<td>- short sales allowed?</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No(^1)</td>
<td>Yes</td>
<td>Yes</td>
<td>No(^2)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>No(^1)</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

\(^1\)The new amendments to the securities law in China now leaves open the possibility of margin trading but does not specify purchases or sales.  
\(^2\) Repo markets in China available for government bonds but not enterprise bonds.  
\(^3\) Malaysia has just announced a partial lifting of the ban on short sales that was imposed during the crisis. Short selling will be limited however to less than 100 stocks out of the nearly 1000 listed.
Derivatives, provided they are developed within an appropriate framework of solid product design, regulation and sound market infrastructure, and used in the context of good corporate governance and sound risk management within the financial institutions, can play a very important role in allowing market participants to manage and transfer risks to those better able and willing to bear them.

Five main derivatives products traded in the East Asian markets. These are foreign exchange products, where the region is estimated to account for 15 percent of the global market (Table 5, column 1); interest rate derivatives, where the region accounts for under 2 percent of worldwide trading on the over-the-counter (OTC) market and slightly over 2 percent of the Exchange Traded Derivatives (ETD) market (columns 2 and 3); equity derivatives, which have witnessed the most rapid growth, often doubling every two or three years (column 4); commodity derivatives, which have a long history, especially in China (although commodity derivatives account for less than 10 percent of the turnover of the exchanges), and credit derivatives. Credit derivatives are among the fastest growing products, especially credit default swaps, that account for about half of this OTC market. It is estimated that about 10 percent of the worldwide US$6 trillion is located in Asia, mainly in Tokyo and Hong Kong. However, the bulk of derivative activity overall is at present limited to a few economies in the region, notably Hong Kong, Singapore and Korea (Table 6).

Table 6: Main OTC and ETD Derivatives in East Asia

<table>
<thead>
<tr>
<th>Economy</th>
<th>OTC-FX</th>
<th>OTC-INT</th>
<th>ETD-INT</th>
<th>ETD-EQU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>91</td>
<td>9</td>
<td>42</td>
<td>3</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>70</td>
<td>11</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Korea</td>
<td>10</td>
<td>1</td>
<td>13</td>
<td>50</td>
</tr>
<tr>
<td>Other East Asia</td>
<td>8</td>
<td>4</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>% total of world</td>
<td>15</td>
<td>1.8</td>
<td>2.1</td>
<td>3.7</td>
</tr>
</tbody>
</table>


To further develop the derivatives markets in East Asia, cross-experience suggests the following needs. First on the list are efficient, liquid and integrated cash markets (for bonds, equities, commodities and other assets) that are broadly determined by market forces rather than administered prices. Administered interest rates, segmented fixed income markets and capital controls, make it unlikely that interest or foreign exchange derivative markets can develop successfully.

The second is the need for a suitable legal and regulatory framework. In many emerging markets, including in East Asia, exchange traded derivatives have grown strongly and involved a mix of banks, securities firms, and institutional as well as retail investors. Hence, regulators have adopted a more functional-based regulation of derivatives markets, recognizing that such trading may pose higher risks for retail investors as well as for systemic stability. Indeed, many regulators have expressed a policy preference to channel derivatives trading from the unregulated OTC markets to regulated ETD markets—which have additional safety cushions, since every trade requires the prior cash deposit for margins that limit leverage. Strong coordination between regulators (local authorities, securities regulatory, central bank, and finance ministry) is critical to close any loopholes and ensure rules are strictly enforcement. There is also a need to enact a derivatives law that protects netting arrangements (see below) in bankruptcies and enables effective enforcement.
Third, to provide a level playing field for banks for OTC and ETD derivatives, capital rules for banks operating in the OTC markets need to be aligned with the margin rules that govern the ETD markets.

The development of derivatives markets also calls for certain key elements of institutional infrastructure, notably good accounting standards and disclosure—including the adoption of mark-to-market modalities as required under IAS39—and of market infrastructure. The single most important risk management tool for derivatives markets is to reduce exposure through close-out netting arrangements, ideally with a central counterparty (CCP) that interposes itself between counterparties to financial contracts traded in one or more markets. However, because a CCP also concentrates risks, it requires effective risk controls, financial resources, and oversight, because a failure could spill over to payments and other settlement systems. Therefore, a CCP is expected to have several safety cushions, including adequate capital and effective margin rules.

Bearing these issues in mind, experience suggests that there is merit to developing deep and liquid cash and repo markets first, then many of the derivatives products that trade primarily on the ETD. To promote safety and soundness, the development of the more complex OTC products should probably not be sought until a later stage (unless these products emerge spontaneously to fulfill a need). Index futures are among the first products to be introduced, before options on individual assets or more tailored and innovative OTC derivative products, such as credit default swaps.

C) Broadening the investor base. To foster greater liquidity and efficiency in the securities markets, countries in the region also need to enact measures that can help broaden and diversify the investor base. It is important to have a wide, heterogeneous investor base with different preferences and risk appetites. Thus, in addition to contractual savings industry (pensions and insurance), countries will need to further develop a mutual fund industry that can cater to retail investors, whose needs and risk appetites may be even more heterogeneous. Also important in attracting a wide variety of investors is the ability to provide different types of products to suit the different risk preferences of investors and to foster greater integration by opening up and facilitating cross-border investments.

Institutional investors

The assets of East Asia’s institutional investors have grown over the past few years and amount to around 45 percent of GDP in the region as a whole. Clearly though, the size of assets varies across countries, with the institutional investor base still being a very small percentage of GDP in China, Indonesia and the Philippines (Table 7).

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15 In general, this is an area that needs to develop further in the region; at present the base of intermediaries that can develop and market financial products that suit different client funding preferences on the one hand and investors with varying risk profiles on the other, is limited in many of the countries.
**Table 7: Assets of institutional investors**

**2004**

<table>
<thead>
<tr>
<th>Economy</th>
<th>Pension US$ billions</th>
<th>% of GDP</th>
<th>Life Insurance US$ billions</th>
<th>% of GDP</th>
<th>Mutual US$ billions</th>
<th>% of GDP</th>
<th>Total US$ billions</th>
<th>% of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>28.0</td>
<td>1.6</td>
<td>136.0</td>
<td>7.9</td>
<td>27.0</td>
<td>1.6</td>
<td>191.0</td>
<td>11.1</td>
</tr>
<tr>
<td>Indonesia</td>
<td>5.4</td>
<td>2.1</td>
<td>10.5</td>
<td>0.6</td>
<td>11.1</td>
<td>0.6</td>
<td>27.0</td>
<td>1.6</td>
</tr>
<tr>
<td>Korea</td>
<td>161.0</td>
<td>21.4</td>
<td>133.0</td>
<td>17.7</td>
<td>186.0</td>
<td>24.7</td>
<td>480.0</td>
<td>63.8</td>
</tr>
<tr>
<td>Malaysia</td>
<td>70.0</td>
<td>9.2</td>
<td>21.0</td>
<td>17.8</td>
<td>23.0</td>
<td>19.4</td>
<td>114.0</td>
<td>96.4</td>
</tr>
<tr>
<td>Philippines</td>
<td>7.9</td>
<td>9.2</td>
<td>2.7</td>
<td>2.3</td>
<td>1.4</td>
<td>1.6</td>
<td>12.0</td>
<td>14.0</td>
</tr>
<tr>
<td>Thailand</td>
<td>20.0</td>
<td>12.0</td>
<td>17.0</td>
<td>10.2</td>
<td>19.0</td>
<td>11.4</td>
<td>56.0</td>
<td>33.6</td>
</tr>
<tr>
<td>HK</td>
<td>38.0</td>
<td>22.9</td>
<td>9.0</td>
<td>5.4</td>
<td>465.6</td>
<td>280.3</td>
<td>512.6</td>
<td>308.6</td>
</tr>
<tr>
<td>Singapore</td>
<td>68.0</td>
<td>61.2</td>
<td>33.0</td>
<td>29.7</td>
<td>28.0</td>
<td>25.2</td>
<td>129.0</td>
<td>116.0</td>
</tr>
<tr>
<td>Total EA</td>
<td>398.2</td>
<td>11.8</td>
<td>362.2</td>
<td>10.8</td>
<td>761.0</td>
<td>22.6</td>
<td>1,521.7</td>
<td>45.2</td>
</tr>
</tbody>
</table>

Sources: HSBC 2005; Dalla 2005, BNM, BOT,

Pension funds. The pension schemes of the region differ widely in their institutional design, coverage, maturity, benefit provision, value of assets under management, and asset allocation—all of which bear directly on the actual and potential impact of pension funds on the development of capital markets. The conservative investment regulations generally observed in the region are typical of those governing public pension schemes in emerging economies. But, by and large, the actual allocations of pension funds tend to be even more conservative than the regulations permit. Other than in Hong Kong, where pension assets are largely held in equities, in most countries they are mainly invested in government securities and bank deposits.

Pension assets in the region are still relatively small. The Singaporean CPF and the Malaysian EPF have assets that exceed 50 percent of GDP, but since both these schemes also have non-pension related mandates, the amount of assets effectively connected to the pension function is smaller than might appear. Pension funds in the other countries amount to less than 25 percent of GDP. And although, Korea, Philippines and Thailand have national defined benefit schemes (which, in view of their long term liabilities, may be expected to have the strongest demand for longer-dated fixed income securities), these pension schemes are relatively immature, and their need for investment instruments is still quite small.

Even at their current asset size, the region’s pension funds could contribute more to capital market development if they were to invest a greater share of their assets in securities. What changes or reforms could be undertaken that would both advance the objectives of pension funds and simultaneously help develop the capital markets?

For defined benefit schemes, the adoption of an asset-liability framework would likely encourage greater investments in securities. Managers of such schemes have traditionally focused on investment management, managing their assets against a return benchmark for an asset class. However, since defined benefit schemes have predetermined liabilities or obligations, the focus should be on liability benchmarking—where a liability index is constructed and assets and liabilities are managed by taking into consideration the correlation between the two.

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16 Restrictions on pension investments exist to varying degrees across countries in the region (with the exception of Hong Kong, which essentially follows the “prudent person” rule, typical of Anglo Saxon countries, with ex-post controls on strategic allocations contained in scheme bylaws).

17 The Philippines is actually a blend since the SSS is a defined benefit plan while the GSIS is a defined contribution plan.
For defined contribution schemes, an argument could be made for increasing the annuitization component. This would improve both the inter- and intra-generational risk-sharing properties of the pension system. From the perspective of capital market development, increased annuitization would increase the potential impact of the pension system by increasing the set of professional institutional investors and the demand for long duration fixed income securities.

Allowing or encouraging pension funds to invest a greater proportion of their assets in securities will require strengthening their governance structures and their risk management systems. These are still relatively weak in many countries in the region.

Insurance sector. Assets of the (life) insurance sector in East Asia have grown quite rapidly over the past few years but remain relatively small. Looking ahead, the potential importance of the insurance sector for capital market development will depend more on the size of assets rather than on changes in investment regulations, as in general the latter are not binding.

Future growth in the assets of the insurance sector will, of course, depend on the scope for further developing the industry coverage and products. Penetration ratios—measured as the insurance premium as a percentage of GDP, and density ratios—measured as the premium per capita, show a still substantial scope for further growth, particularly in China, Indonesia, Philippines, and Thailand (Figure 5).

Figure 5: Insurance penetration and density in the East Asian countries

![Insurance penetration and density in the East Asian countries](chart)

Source: Swiss Re, various issues.

A potentially important impetus to capital market development might come from a consolidation of the insurance industry. In several countries in the region, including in Indonesia, Malaysia, the Philippines and Thailand, the industry consists of many small players (Table 8)—in part because the legal minimum capital levels for entry into the industry are low by international standards. The small size of these companies prevents them from playing an important role in the capital markets.
Several jurisdictions in East Asia are moving to introduce risk-based capital requirements in the insurance sector. In turn, this is likely to enhance insurance companies’ risk management skills and allow countries to move to less restrictive investment regimes. Focusing on capital regulations will also likely lead to consolidation of the industry in those countries that currently have a large number of small companies, enabling the industry to play a larger role in capital markets.

Mutual funds. At the end of 2004, East Asia accounted for about 10 percent of the US$ 16 trillion global net asset value of mutual funds. Both Hong Kong and Singapore have set out to be regional centers for asset management and unlike the other countries of the region they derive a large proportion of their assets from aboard. After Hong Kong and Singapore, mutual funds in relation to the domestic economy are largest in Korea and Malaysia (20 and 25 percent of GDP respectively), followed by Indonesia, China and the Philippines.

Mutual funds have grown rapidly in most countries in the region, albeit starting from quite a small base. Growth was above 20 percent during 2003-2004 in all countries, except Thailand, and was fastest in China and Indonesia (89 percent and 49 percent respectively). It should be noted though that this growth has not always taken place in a sustainable manner (as exemplified by Indonesia in 2005).

Clearly a wide range of investment products, with different investment objectives and strategies, are available to retail investors in Hong Kong and Singapore. Korea also offers quite a wide range. The variety of fund products in China, Indonesia, Malaysia and Thailand is still relatively limited, although many new collective investment products have been introduced in recent years.

The region’s experience points to some key elements that need to be put in place to develop the mutual fund industry on a sound basis:

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**Table 8: Indicators of concentration in the insurance industry**

<table>
<thead>
<tr>
<th>Economy</th>
<th>Year</th>
<th>Herfindhal index</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Life</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Non Life</td>
</tr>
<tr>
<td>China</td>
<td>2004</td>
<td>1803</td>
</tr>
<tr>
<td>Indonesia</td>
<td>2004</td>
<td>811</td>
</tr>
<tr>
<td>Korea</td>
<td>2004</td>
<td>1846</td>
</tr>
<tr>
<td>Malaysia</td>
<td>2003</td>
<td>1683</td>
</tr>
<tr>
<td>Philippines</td>
<td>2004</td>
<td>1439</td>
</tr>
<tr>
<td>Thailand</td>
<td>2004</td>
<td>2527</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>2005</td>
<td>926</td>
</tr>
<tr>
<td>Singapore</td>
<td>2004</td>
<td>1989</td>
</tr>
</tbody>
</table>

Note: WB research of comparisons across markets suggests that a Herfindhal index value of around 1,200 to 1,500 (out of 10,000) would be the natural range for life insurance markets, and because of greater economies of scale and lower concerns of risk aggregation, around twice that level for life insurance.

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18 Just over 60% of Hong Kong’s total assets (US$ 500 billion) and 70% of Singapore total assets (US$ 355 billion) derives from abroad (whereas generally, the majority of money invested in most countries’ mutual fund sector derives from their domestic market). Source: Fund Management Activities 2004, HK Securities and Futures Commission, and 2004 Singapore Asset Management Industry Survey, MAS. Recently, Korea has also announced its long-term vision to become a regional financial hub with special expertise in asset management.

19 Of course, assets under management in investment funds may increase as a result of more sales of fund shares or units, or simply as a result in the increase in the value of the assets held by the funds, or as is most commonly the case, a combination of the two. So the increases discussed are not necessarily the result of more sales of fund shares or units.
a) Ensuring an appropriate and flexible regulatory framework. While financial markets innovate constantly, laws are difficult and time consuming to change. In some countries, for example, in the Philippines, outdated legislation has hindered the development of the mutual fund industry. While laws governing mutual funds are needed to provide a clear legal basis for fund operation and regulation, it is preferable that they deal only with issues of principle and leave the details to subsidiary legislation. To accommodate changes, such as new forms of funds or to allow for new investment powers, such as derivatives, regulations can be adapted more easily than laws, but they remain governed by the key principles set out in the law. Hong Kong and Singapore have followed this approach.

b) Establishing and maintaining investor confidence. Several aspects are important in this respect including: having a clear definition of the legal form of the fund; imposing clear and primary duty on the managers of funds and custodians to act in the interests of fund investors; ensuring that the rights of investors are well defined; ensuring equitable treatment of incoming, ongoing and outgoing investors in open ended funds through valuation, pricing and issue and redemption rules; ensuring adequate disclosure to investors; having unambiguous rules identifying different categories of funds, and taking steps to avoid any portfolio abuses.

c) Ensuring enforcement of regulations. In ensuring the stability—and hence ultimately the sustained development of the mutual fund industry—enforcement of the rules and regulations in an equitable manner is important.

Developing instruments that appeal to a broader set of investors

Securitization—which entails transforming illiquid assets into securities that can be traded on securities markets, can provide an important mechanism for risk-sharing—in particular, for credit risks. For investors, these securities offer yields that exceed those on comparable corporate bonds and provide diversification into a different form of investment. Securitization therefore broadens the investor base because it caters to investors with different risk/return appetites who are willing to bear incremental credit, prepayment and liquidity risks in return for a higher yield. And for originators, such as corporations, asset securitization provides a new and potentially cheaper form of financing20.

Securitization is increasingly being used for a wide variety of purposes—ranging from facilitating access to capital markets for small and medium enterprises (SMEs), through banks’ transfer of credit risk to capital markets, to both banks’ and non-bank financial institutions’ (NBFI’s) transfer of mortgage loans to capital markets. In East Asia thus far, most of the securitization activity has taken place in Hong Kong, Singapore, Korea and Malaysia—although a few deals have taken place in Thailand and in the Philippines.

Securitization requires that certain legal, regulatory and accounting elements be in place. In particular, it requires legislation that allows for the creation, transfer and perfection of ownership interests to be in place (Table 9). While the details vary among jurisdictions, a generic requirement for securitization is to be able to ensure a true sale—that is the irrevocable transfer of assets to an insubstantive special purpose vehicle (SPV) to which the asset seller has no ties of

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20 Securitization sometimes involve the creation of derivative products, such as mortgage backed securities MBS (which are option derivatives), but can also involve straightforward schemes of asset backed securities.
ownership or control\textsuperscript{21} (a true sale). The transaction must withstand any legal claim in bankruptcy against the asset seller (bankruptcy remoteness).

In general, the elements of law that are typically associated with securitized transactions in advanced markets, involving existing or future claims originated by financial intermediaries, are present in the three common law jurisdictions—Hong Kong, Singapore and Malaysia. The civil law countries (China, Indonesia, Korea, Philippines and Thailand) have all introduced or plan to introduce, enabling laws that to different extents permit the creation of securitized transactions recognized by international standards. But, except in Korea, where the relevant laws are well established and actively used, these laws have yet to be tested either by a large number of transactions or in conditions of stress or challenge.

Table 9: Status of key elements needed for securitization in East Asia

<table>
<thead>
<tr>
<th>Economy</th>
<th>Sale, assignment or other conveyance of assets by originators to securitization vehicles</th>
<th>Creation, maintenance and operation of SPV</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Legal framework for creating, transferring and perfecting ownership interests</td>
<td>Restrictions on types or terms of financial assets that can be transferred</td>
<td>Taxation and gain recognition issues</td>
</tr>
<tr>
<td>China</td>
<td>1-2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Indonesia</td>
<td>2-3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Korea</td>
<td>5</td>
<td>4</td>
<td>3-4</td>
</tr>
<tr>
<td>Malaysia</td>
<td>5</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Philippines</td>
<td>2-3</td>
<td>2-3</td>
<td>1-2</td>
</tr>
<tr>
<td>Thailand</td>
<td>3-4</td>
<td>3</td>
<td>3-4</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>5</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Singapore</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

Notes: Score 1 (lowest) to 5 (highest). Scores such as 2-3 represent an intermediate appraisal between two given levels. These split scores are intended to reflect degrees of uncertainty as to commercial outcomes Source: Arner et al (2006).

There are contractual restrictions as to the transfer of financial claims in all review markets, except generally in Hong Kong and Singapore. The table includes no appraisal of national accounting standards. The table makes no attempt to summarize regulatory restrictions on investors, which may have as great an impact on the early stages of market development. Such restrictions have traditionally been widespread, and only in Hong Kong, Korea and Singapore have been subject to relaxation since 2000, in relation to both professional and retail segments.

While securitization offers strong potential benefits for originators and investors and can be an important means of risk transfer, it also introduces risks of its own which, in turn, require the development of risk management instruments and the presence of reliable counterparts. Since the nature of the risks can vary depending on the type of securitization, there may also be an argument for sequencing the more complicated forms of securitization in line with the development of the requisite market players and derivatives markets. Thus, even if simple securitization can be implemented, it may be more appropriate for some countries to wait to pursue the more complicated, tranched securitization deals involving complex credit risks,

\textsuperscript{21} There is, as yet, no market in East Asia for covered transactions of the kind that has spread prolifically since the early 1990s from Denmark and Germany. Covered transactions resemble securitized deals, except in particular for a lack of severance of ownership from the asset originator (Arner et al (2006)).
foreign exchange risks and interest rate risks, because to reduce these risks requires many different market players and risk management tools. Without these tools, risks are often substantially higher in (some forms of) securitized products. Thus in promoting securitization in the region, it is important for countries to keep in mind the need to also develop the derivatives markets.

Harnessing gains from integration

Although regulations prohibiting or restricting capital inflows and outflows have been progressively reduced (and except in China, are now fairly minimal), several other factors continue to impede cross-border transacting in East Asia’s bond markets. These include withholding taxes; the lack of hedging instruments; and differences in market practices and infrastructure (extent of documentation needed, trading platforms and conventions, procedures for clearance and settlement and custodian systems, differences in settling foreign exchange trades), as well as in credit rating, legal and regulatory systems, and accounting and auditing standards. These factors need to be addressed—and as noted above, several of them are being dealt with by ASEAN + 3 working groups.

A key building block of a bond market is the assessment of credit risk. From the perspective of cross-border investments, however, there are several issues. First, although the three big international rating agencies operate in the region, these rate only a small number of Asian firms and financial institutions that issue in international markets; hence the smaller size companies do not get rated. Second, national rating agencies’ standards differ widely, making it difficult for foreign investors to assess investment possibilities. Third, no finely graded ratings within the region are available to potential investors; at present there are only international and national ratings scales.

Policymakers in the region may therefore wish to consider the pros and cons of establishing a regional credit rating agency. Such an agency could ensure that an assigned rating would denote the same probability of default in any East Asian country; it could provide more finely graded credit ratings than are now available on a regional scale; and it could help smaller companies acquire ratings for their international issuances (to the extent that there is cross-subsidization). It could also help develop credit risk assessment capabilities across the region and provide the necessary training for the national rating agencies to speed the convergence of standards across the region.

The merit of setting up a regional credit rating agency would hinge critically on a) the growth of cross-border issuance and investments over the next five to ten years and b) the credibility that such an agency could establish for itself. This, in turn, would depend on the governance structure that is established. In particular, the shareholder structure would need to follow certain key principles: shareholders would need to be seen as credible and fostering independence of operations; shareholding would need to be widely dispersed (and fortified by a strong shareholders’ agreement); the maximum shareholding would need to be limited to say 5-10 percent, unless the shareholder were an independent third party such as a rating agency or multilateral agency; and a balanced regional representation in the shareholding structure would be essential.

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22 There are moreover a number of inconsistencies even among the ratings of the international agencies—in particular, a BIS study has shown a number of inconsistencies in the relationship between foreign and local currency ratings used by a single international rating agency as well as sizable disagreements among the international rating agencies on the relationship between local currency and foreign currency ratings. Packer (2003).
Ensuring appropriate risk-sharing and risk transfer

As noted above, it is possible that risks will be shifted in a manner that is not evident from stronger private banks to public banks and from banks to the more weakly regulated non-bank financial institutions. Such players may not adequately assess and manage the risks they are taking on. Strengthening corporate governance of these institutions is clearly of paramount importance. So are proactive measures by regulators and supervisors to better monitor risks and to strengthen supervision on a consolidated basis.

Globally, financial segments are increasingly interlinked and the traditional separation between banking, insurance, and securities markets is breaking down as a result of technological innovations, deregulation and liberalization. Financial intermediaries now offer products that partly resemble those traditionally offered by other intermediaries. The securitization of traditional forms of credit, (such as mortgages, credit card receivables and commercial loans) and the proliferation of increasingly sophisticated ways of building, repackaging and trading risks, is weakening the distinction between equity, debt and loans (such as through the creation of hybrid instruments). The development of new products is also giving rise to new forms of linkages across financial intermediaries and markets. And competition is spurring different types of financial intermediaries to merge, producing large financial conglomerates that provide a broad range of services across the financial segments.

These developments pose challenges for risk monitoring, regulation and supervision. In response to these challenges, a number of countries worldwide have started to examine how they regulate and supervise financial intermediaries.

Some, including Korea and Singapore, have adopted so-called unified or integrated supervision, in which a single agency is responsible for supervising the entire financial system. But the prevailing model in the region is one of multiple supervisors, in which at least one agency supervises banks, another oversees securities firms and a third oversees insurance companies. Economies with multiple supervisors include China, Hong Kong, Indonesia, Philippines, and Thailand.

Countries that have adopted unified supervision have done so in the belief that a single supervisor can be more effective than multiple supervisors in monitoring the soundness of individual financial institutions as well as the vulnerabilities of the entire financial system. In particular, they believe that unified supervision allows them to better understand and monitor risk transfers among different financial intermediaries and market segments; to better assess the real and potential impact of industry and market-wide issues, such as market turbulence, that affect the financial system; to better understand the cross-sector nature of the business of financial conglomerates and more easily develop policies toward the risks affecting a financial conglomerate as well as its single entities; and to use a consistent approach to monitoring similar financial products and services, regardless of what type of financial institution provides them.

However, arguments can also be made against unified supervision. First, a mega-regulator may become excessively bureaucratic in its procedures and slow to react to emerging problems. Second, the effectiveness of supervision may be compromised if a new integrated agency fails to develop a consistent framework of regulation and supervision for the financial

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23 In many countries, for instance, insurance companies are allowed to offer short-term deposit-like products. Some new types of securities products, such as credit derivatives, in practice bear many of the characteristics of an insurance product.
sector. While a certain degree of harmonization of supervisory practices between the banking, insurance and securities supervisors is desirable to reduce regulatory arbitrage, it is important to recognize that the particular characteristics of each industry requires specific regulations. It should also be noted that if the supervision of financial markets is poor under separate entities, it will still be poor under a unified regime, unless weaknesses in regulation and supervision are effectively addressed. Finally, if the process of merging is not managed properly, it may result in the departure of experienced personnel and the demoralization of the rest of the staff, affecting the overall supervisory effectiveness during the transition period.

CONCLUSIONS

As is well recognized in the region, there is a need to focus on further developing the securities markets and the corporate bond markets in particular.

A key constraint in the bond markets is the lack of liquidity that affects efficiency and the overall role they are able to play. To enhance liquidity in the bond markets further development of non-bank financial institutions (NBFIs) is needed, both in terms of asset size and the level of sophistication of the institutions themselves. These institutions can play an important role in mobilizing and channeling long-term resources through securities markets to meet the financing requirements of corporations as well as those of housing and infrastructure projects. The further development of the bond markets will also require efforts to strengthen information disclosure and exercise of corporate governance and their institutional underpinnings. Since many of these elements are important for the robust functioning of the financial markets more generally, addressing them will help advance the broader agenda of financial sector development.

Greater integration of securities markets, especially of bond markets, across national borders could also yield strong benefits. Bond markets in individual East Asian countries have been too small and fragmented to fully benefit from economies of scale that are generally associated with successful bond market development. Thus, regional cooperation to remove some of the remaining impediments to cross-border investments can be very useful. And creating regional financial products, such as regional index funds, will further facilitate investment within the region.

Concurrent actions at the domestic level are essential if the full benefits of regional cooperation are to be reaped. For instance, not only does the still narrow base of institutional investors need to be developed at the domestic level, but if significant cross-border investment is to take place, differences in credit rating standards, in legal and regulatory frameworks, and in accounting and auditing standards and practices also need to be addressed. Eventually these standards, regulations, and practices need to converge if countries are to be able to fully integrate their financial markets and reap the resulting benefits.

Policymakers also need to be cognizant that, while markets and instruments for transferring and sharing risks offer tremendous potential for enhancing the efficiency of financial markets and for better distributing risks among market players, inappropriate risk transfer also poses dangers. Strengthening the corporate governance of financial institutions, as well as the ability to monitor and supervise these institutions, will be key in this regard.