6 The role of securitisation and credit guarantees

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A key policy prescription for the prevention or amelioration of financial crises in emerging markets is the development of local bondmarkets, a strategy that has been embraced by a number of policymakers and international organisations (see World Bank and International Monetary Fund 2001, 2003). From a macroeconomic perspective, local bondmarkets can soften the impact of lost access to international capital markets or bank credit by providing an alternative source of funding.¹ From a microeconomic perspective, they can help create a wider menu of instruments to deal with inherent currency and maturity mismatches in emerging markets (see Eichengreen and Hausmann 1999, Hong Kong Monetary Authority 2001).

Recent developments in Asian bondmarkets

Since the East Asian financial crisis of 1997–98, local bondmarkets have grown considerably in emerging market countries, and have gradually become an important source of funding for local sovereign and corporate borrowers. There is a widely held view that developing local bondmarkets can be an important means of reducing countries' exposure to maturity and exchange rate risks and 'sudden stops' in access to international capital markets. Local bondmarkets can also be beneficial in diversifying funding sources, especially for corporate borrowers, with their generally heavy reliance on domestic banks, many of which have been undergoing restructuring. In addition, improving local bondmarkets can help strengthen corporate governance and transparency, developing a credit culture in emerging market economies. As a consequence, the governments of many emerging market economies have actively taken steps to develop local bondmarkets.

There are regional differences in the recent development of local bondmarkets. In Asia, the need to finance budget deficits that emerged after the 1997–98 crisis, including the need to recapitalise banking systems, has given a strong impetus to the development of local government bondmarkets. In countries that have always had fiscal surpluses and therefore no financing needs (such as Singapore and Hong Kong SAR), governments have made a conscious decision to issue government securities to create a liquid government bondmarket, complete with a benchmark yield curve, as key building blocks to develop local bondmarkets. The weakness in bank lending has also contributed to some increase in corporate bond issuance, in Asia as well as Latin America. In Latin America, the strong growth of local institutional investors, especially pension funds, has created a growing demand for local bonds, while the corporate sector also has large refinancing needs due to difficult external financing conditions. In Central and Eastern Europe, the harmonisation of regulations (and institutions) in the process of accession to the European Union has stimulated the growth of local bondmarkets, among other things by attracting foreign investors putting on ‘convergence trades’.

The total outstanding amount of bonds issued by Asian emerging market borrowers in both local and international capital markets increased rapidly to reach US\$1.1 trillion at the end of 2001, slightly more than half of the total outstanding amount issued by all emerging markets (Table 6.1). Together, however, emerging bondmarkets account for just 5.6 per cent of the global bondmarket. Compared with other regions, emerging Asia has issued fewer international bonds (13 per cent of the Asian total outstanding), a larger but still not very dominant share of government bonds in local markets (50 per cent) and a large private sector share (20 per cent for financial institutions and 17 per cent for corporates). The composition of the Asian bondmarkets is thus similar to that of mature bondmarkets: domestic governments bonds account for 49 per cent of total bonds, financial institutions for 22 per cent, corporates for 11 per cent and international bonds for 18 per cent. By contrast, Latin America has issued more international bonds (32 per cent, mainly by sovereign borrowers) and government bonds in local markets (55 per cent), leaving a small share for the private sector (13 per cent). Similarly, countries in Central and Eastern Europe have also issued more international bonds (23 per cent) and government bonds in local markets (73 per cent), with a negligible share of 4 per cent for the private sector.²

The size of domestic bondmarkets in Asia, relative to GDP, is around 38 per cent, of which the corporate sector accounts for about 8 per cent. By contrast, the US bondmarket accounts for about 150 per cent of the GDP of the United States, with the corporate market accounting for about 24 per cent, while the

Table 6.1 Size and structure of the global bondmarket, 2001 (nominal value in US\$ billion)

	Total bond outstanding	Per cent of world bond market	Government		Domestic Financial institutions		Corporate		International ^b	
			US\$ billion	Per cent of total	US\$ billion	Per cent of total	US\$ billion	Per cent of total	US\$ billion	Per cent of total
United States	17,598.2	47.3	8,557.1	48.6	4,367.4	24.8	2,452.5	13.9	2,221.2	12.6
Euro area 1 ^a	7,861.5	21.1	3,210.4	40.8	1,751.7	22.3	355.4	4.5	2,544.0	32.4
Japan	6,104.0	16.4	4,439.8	72.7	713.8	11.7	693.2	11.4	257.2	4.2
Other mature markets	3,537.2	9.5	1,123.0	31.7	775.6	21.9	403.5	11.4	1,235.4	34.9
Subtotal	35,100.9	94.4	17,330.3	49.4	7,608.5	21.7	3,904.6	11.1	6,527.8	17.8
Emerging markets										
Asia	1,098.7	3.0	541.7	49.3	223.9	20.4	186.5	17.0	146.6	13.3
Latin America	694.3	1.9	384.4	55.4	67.4	9.7	23.4	3.4	219.1	31.6
Eastern Europe, Middle East, Africa	284.4	0.8	207.7	73.0	4.2	1.5	6.4	2.3	66.2	23.3
Subtotal	2,077.4	5.6	1,133.8	54.6	295.5	14.2	216.3	10.4	431.9	20.8
Total	37,178.3	1,000.0	18,464.1	49.7	7,904.0	21.3	4,120.9	11.1	6,689.7	18.0

^a Euro area includes a total of 11 members of the Euro zone, excluding Luxembourg.

^b Includes bonds issued by governments, financial institutions and corporates in international markets.

Source: Bank for International Settlements.

Table 6.2 Emerging markets financing: domestic and international sources, 1997–2001 (US\$ billion)

	1997	1998	1999	2000	2001	1997–2001
Emerging markets ^a	833.92	955.52	646.83	879.58	713.71	4,029.57
Domestic	669.89	865.16	545.55	741.41	609.84	3,431.85
Equities	37.28	32.70	43.42	25.50	19.02	157.91
Bonds	399.02	638.51	408.34	486.40	434.42	2,366.70
Bank loans	233.59	193.90	93.75	229.48	156.36	907.10
International	164.03	90.36	101.28	138.17	103.88	597.72
Equities	18.42	5.59	15.76	31.90	8.81	80.47
Bonds	83.25	48.37	56.97	54.50	60.23	303.32
Bank loans	62.35	36.41	28.55	51.78	34.84	213.93
Asia	238.88	268.86	308.76	396.05	395.77	1,608.33
Domestic	160.10	243.49	268.20	325.55	339.38	1,336.73
Equities	28.11	16.69	35.52	20.65	10.76	111.73
Bonds	6.85	42.70	46.71	98.41	147.75	342.42
Bank loans	125.13	184.11	185.97	206.49	180.87	882.57
International	78.78	25.37	40.56	70.50	56.40	271.61
Equities	10.50	4.05	13.92	26.45	7.65	62.56
Bonds	33.67	9.40	18.10	20.24	31.65	113.06
Bank loans	34.61	11.92	58.54	2,382.00	1,710.00	95.95
Central Europe ^b	50.68	79.21	63.17	61.72	94.86	349.65
Domestic	42.51	70.34	55.38	55.03	88.09	311.35
Equities	1.31	6.60	3.35	1.29	0.95	13.49
Bonds	43.43	47.59	59.78	56.94	65.08	272.83
Bank loans	-2.23	16.15	-7.75	-3.20	22.07	25.04

International	8.17	8.88	7.79	6.69	6.77	38.29
Equities	2.60	1.47	1.17	0.38	-	5.61
Bonds	2.53	4.65	4.48	2.09	4.07	17.83
Bank loans	3.05	2.76	2.14	4.22	2.69	14.86
Latin America	544.35	607.45	274.90	421.81	223.08	2,071.59
Domestic	467.28	551.33	221.97	360.83	182.37	1,783.77
Equities	7.86	9.41	4.55	3.56	7.31	32.69
Bonds	348.74	548.27	301.89	331.08	221.63	1,751.60
Bank loans	110.69	-6.35	-84.47	26.19	-46.57	-0.51
International	77.08	56.12	52.93	60.98	40.72	287.82
Equities	5.33	0.07	0.67	5.07	1.16	12.30
Bonds	47.06	34.32	34.39	32.16	24.51	172.43
Bank loans	24.69	21.73	17.87	23.75	15.05	103.09

^a Emerging markets: China, Hong Kong SAR, Malaysia, Singapore, Republic of Korea, Thailand, Argentina, Brazil, Chile, Mexico, Czech Republic, Hungary and Poland.

^b Incorporates sovereign issuance data.

Source: Capital Data; International Monetary Fund, *International Financial Statistics*, International Monetary Fund, Washington, DC; Standard and Poors'; Emerging Markets Database; and Hong Kong Monetary Authorities.

Japanese corporate bondmarket accounts for about 17 per cent of Japan's GDP. For Australia the share is over 10 per cent of GDP.

Asian local bondmarkets have become an important source of funding for both public and private sectors. In 1997, local bondmarkets supplied less than 3 per cent of the funds raised by Asian entities in all local and international loan, bond and equity markets (Table 6.2). In 2001, the share of local bondmarkets rose to 38 per cent of total financing, as the local bondmarket volume of US\$150 billion almost matched the domestic bank lending total of US\$180 billion. Over the same period, the share of international bond and bank financing fell from over 30 per cent to less than 15 per cent.

In Asia, the largest corporate bondmarkets are in Malaysia (equivalent to 51 per cent of GDP in 2001) and the Republic of Korea (28 per cent of GDP). Measures by Malaysia's Securities Commission to streamline the process of capital raising have supported further growth of the already deep corporate bondmarket. The cost of bond issuance has reportedly fallen below that of bank loans in Malaysia, and bond issuance has overtaken bank credit as a source of corporate funding since 1997 (see Moody's Investors Services 2002). In Korea, corporate bond issuance was concentrated among the major *chaebols*, guaranteed by commercial banks and placed with investment trust companies. These linkages led to the collapse of the bondmarket when a *chaebol* defaulted. The authorities have repeatedly supported the local bondmarkets through periods of instability since 1997–98.

Besides issuing more government securities, governments in many emerging market countries have implemented measures to improve market infrastructure, including the establishment of primary dealers. In particular, the Hong Kong Monetary Authority has continued to upgrade its trading, clearing and settlement systems, more recently linking up with Euroclear and Clearstream, and other local markets such as Korea in 1999 and China in 2002. Secondary market activity, as measured by trading volumes, has recovered strongly in the past years to exceed pre-crisis levels. The increase in secondary trading has been most noticeable in Malaysia and Korea.

Despite their relatively rapid development, Asian local bondmarkets still remain somewhat underdeveloped by the standards of mature markets, even though there is a wide regional variation in terms of size, depth, liquidity and sophistication. The main problem is that a modern bondmarket requires international best-practice in a wide range of inter-related fields so as to make them mutually reinforcing—from legal and regulatory framework to market infrastructure and foundation, to supporting markets such as repurchases and derivatives, as well as the presence of established investor bases. Weaknesses in one or two areas, despite progress elsewhere, can still cause

problems for modern investors, causing 'the market' to move elsewhere. In fact, the main challenge of development, and not just of bondmarkets, is to attain a certain level of competence in a comprehensive manner. Specifically, the Asian local markets are illiquid, especially for corporate bonds. They remain segmented and insulated from one another, and in the case of China, even within the same country. In China, segmentation exists across investors, instruments and trading mechanisms. Investors in several countries are not allowed to invest outside of their home market, and international investors face difficulties and relatively high costs in hedging exchange risk when investing in local currency bonds. There is also a lack of standardisation across the region in bond contracts, underwriting, clearing and settlement rules and procedures, market regulation and taxation. Lack of transparency and lingering questions regarding corporate governance contribute to difficulties in pricing credit risk, helping to retard the development of a credit culture. Name recognition, rather than rigorous credit analysis, to some extent still influences investment decisions. Although the relatively large amount of government issuance has helped to establish benchmarks in local bondmarkets, it may have crowded out some corporate issuers. Moreover, for prudential reasons local institutional investors are often constrained in the range of instruments in which they can invest, which also reduces the available funds for corporate bonds.

It is important that authorities in the region continue to focus attention on implementing measures—in both primary and secondary markets—that can help further develop the Asian bondmarkets. In this context, the role of securitisation and credit guarantees has received much discussion.

The role of securitisation

Securitisation refers to the issuance of new bonds collateralised by a pool of assets, which can be other bonds, loans or any receivables with a regular cash flow. This is usually done via a special purpose vehicle specifically set up to own and receive the income from the pool of assets, and use it to service the bonds it issues in its name. The proceeds from the bonds issued are used to pay the original owner or owners of the pool of assets. The special purpose vehicle can be established by the original owner or owners of the assets, or by a third party.

The pooling of assets can provide diversification benefits to potential investors. Asset-backed securities can be issued in several tranches of different maturities and different risk–return configurations, and can be rated at different credit levels. Specifically, credit guarantees can be used to enhance the credit

worthiness of some of the tranches, making them eligible to a wider range of investors. Credit enhancement can also be achieved through over-collateralisation of the asset-backed securities. Asset-backed securities can be issued in sizes bigger than those usually used in emerging corporate bondmarkets, and are therefore likely to have better liquidity in secondary markets—likewise desirable characteristics for investors.

Consequently, securitisation can contribute to the development of corporate bondmarkets by overcoming the problems of the small size and low credit quality of most emerging market issuers—problems that have plagued the emerging corporate bondmarkets. By participating in a securitisation program, or by collateralising their future receivable cash flows, small and medium-sized corporates are able to tap into capital markets. In addition, securitisation has served as an important tool for cleaning up banks' balance sheets and improving capital ratios during the bank restructuring process.

The best example of the use of securitisation to develop bondmarkets, improve access to low-cost finance and create overall economic benefits is the development of US mortgage-backed securities markets, which have surpassed in size the US Treasury securities market. Government-sponsored enterprises such as Ginnie Mae, Fannie Mae and Freddie Mae have played an important role in securitising diversified pools of mortgages and offering them to a wide range of investors—creating a stable and probably cheaper flow of financing to the housing sector, thus supporting the public policy goal of encouraging home ownership in the United States. These government-sponsored enterprises in turn have issued 'agency securities' to fund the purchase of mortgages, creating in the process a deep and liquid market.

More recently, the 'True Sale Initiative' in Germany has facilitated the establishment of a consortium consisting of Kreditanstalt für Wiederaufbau and five commercial banks to securitise bank loans and offer them as asset-backed securities to a wide range of investors, including international institutional investors. This program is designed to help banks better manage their balance sheets, improve their capital ratios and eventually become more inclined to extend credit to the small and medium-sized companies that currently find it difficult to obtain financing.

Essentially, securitisation creates a derivative product assembled from existing (underlying) securities or other debt instruments. For the securitisation market to function properly, the market and market infrastructure for the underlying assets have to be in good working order. On top of that, legal clarity and predictability on things like the true sale of assets, taking possession of collateral and realising its market value also need to be sufficiently assured. Consequently, some analysts doubt whether securitisation can be used as a

means to help develop bondmarkets, as a cash market has to be relatively developed before a market for securitised instruments can be introduced. In addition, to be viable, an asset-backed securities market needs to have in place institutions ready and able to provide credit guarantees or to buy the higher-risk 'mezzanine' tranches of the securitisation program. In emerging Asia, however, since bondmarkets have already been in existence for some time, albeit with large regional variations in terms of size, depth, liquidity and sophistication, securitisation can be useful in identifying gaps and deficiencies in cash market infrastructures and foundations. This in turn can help stimulate further reforms and developments in cash markets and beyond, in order to accommodate the proper functioning of securitisation markets (see Hong Kong Monetary Authority 2002).

In emerging Asia, Korea has the largest asset-backed securities markets, roughly equivalent to 45 per cent of the corporate bondmarket—not bad compared with a ratio of 59 per cent in the United States. The exponential growth of this market was triggered by the need to mobilise financing to address the problem of non-performing loans resulting from the 1997–98 crisis, and to restore liquidity to the banking system. Also helpful was the approval of the Asset Backed Security Law in 1998. In 1999–2000, collateralised loan obligations and collateralised bond obligations accounted for the bulk of transactions, as the focus was on addressing the non-performing loan problem and the refinancing of corporate bonds. In 2001–02, the focus was on securitising credit card receivables, the quality of which eventually suffered in the competitive rush for growth in the credit card business, with the Korean authorities having to step in to arrange rescue of affected credit card companies. Interestingly, even though residential and commercial mortgages have been securitised, they are not the preferred assets for securitisation as is the case in many other countries.

Recent experiences in the Korean corporate bond and securitisation markets, both in isolation and in relation to each other, are relevant in the debate about whether or how much securitisation—as well as credit guarantees—can help develop local bondmarkets. Corporate bonds were guaranteed by commercial banks prior to the 1997–98 financial crisis. They were concentrated in the largest five *chaebols*, and were little different from loans (only 17 per cent of corporate bonds were not guaranteed in 1996, compared with 97 per cent in 2001). They were then placed with investment trust companies owned, to a large extent, by the same *chaebols*. Waves of corporate defaults in 1998 and beyond have led to runs on investment trust companies. The government has had to step in to support the bondmarkets, as in current operations to support securitised credit card receivables markets.

Thus, although corporate bondmarkets have grown in volume, it is not clear how much this growth has helped improve the assessment and pricing of credit risk.

Thailand also passed a Securitisation Law, in 1997, but its asset-backed securities market has not visibly picked up. Market participants attributed this slow growth to the fact that, unlike the Korean law, the Thai law does not seem to adequately clarify certain issues critical to securitisation, such as the valuation and repossession of collateral, the legal status of special purpose vehicles and taxes. The Thai bankruptcy and foreclosure regime is also seen as inefficient and difficult to enforce.

The creation of a National Mortgage Corporation (Cagamas) in Malaysia in the mid 1980s contributed to the development of a deep mortgage market.³ However, this market levelled off during the 1997–98 crisis, and has yet to pick up in a meaningful way—despite the approval of the Securities Commission Guidelines on asset-backed securities. Market participants note that while Malaysia’s regulatory framework is favourable to securitisation, it is not as clear as the Korean law. Also, they note that the bankruptcy law does not appear to treat special purpose vehicles as bankruptcy-exempt (Dalla 2002). The lack of financial guarantees has been identified as a major constraint to the development of the market in Malaysia: banks and finance companies used to provide guarantees in 1995–98 with similar results to those in Korea. The authorities have since recognised the need for stand-alone financial guarantee companies, similar to the monoline insurance companies in the United States and elsewhere, and have studied measures to develop these institutions.

The financial centres of Singapore and Hong Kong SAR have well-developed regulatory frameworks for securitisation, but it is unclear how much this has contributed to the development of local bondmarkets. In Hong Kong SAR, the HK Mortgage Corporation has played a key role in developing a deep mortgage-backed security market, but issuance has slowed lately due to weakness in the housing sector. Some analysts argue that Singapore could play an important role in promoting securitisation at the regional level, through the establishment of a new regional credit guarantee corporation, or the revival of ASIA Ltd, the only regional credit guarantee corporation to have been established in Singapore (in 1995). A restriction on providing credit guarantees to non-Asian and industrialised Asian debtors is seen as the main reason for the corporation’s limited success.

In Latin America, cross-border asset-backed securities are relatively more common than domestic ABS transactions, a situation similar to that of the region’s bondmarkets. Cross-border structured finance products have been

around since 1993–94, but issuance slowed down considerably in 2002 due to the financial turmoil in the region, which resulted in the first defaults on rated structured finance products in the emerging markets. By contrast, 2002 was a relatively strong year for domestic structured finance products (Fitch IBCA 2003a). Countries like Chile, Colombia, Mexico and Peru had banner years for local market securitisation. Much of the growth was driven by private sector pension funds, which are required for investment in instruments with high ratings, as well as by the increasing adoption of partial guarantees. The credit-enhancing effect of securitisation has allowed many issuers to access an otherwise closed market, further attesting to the positive impact of pension funds in local bondmarkets.

The role of credit guarantees

Credit guarantees or insurances protect bondholders against the event of bond issuers' default, or any other kind of mutually agreed 'credit event'. As a result, credit guarantees upgrade the credit quality of a bond issuer to that of the credit guarantee provider. Consequently, credit guarantees can be used to enable borrowers of low credit quality to access domestic as well as international markets. Providers of credit guarantees can be private companies, government agencies or international financial institutions. Credit derivatives markets also allow investors to hedge against default risk, in addition to providing a transparent pricing of corporate and sovereign default risks.

Private sector credit guarantees or insurance have been provided by monoline insurance companies for a long time in the United States. Since they became active in the US municipal bond guarantee markets in the 1980s, US monoliners have expanded their scope and now offer financial guarantees in international and emerging bondmarkets. In the past two years, US monoline insurance companies have come under pressure and several were downgraded as a result of the default of collateralised debt or bond obligations they had guaranteed. This has led some insurance companies to rethink their participation in this line of business.

In emerging Asian markets, the economics of providing credit guarantees to individual corporate issuers is not yet compelling. To become a viable business, financial guarantors must be able to insure a diversified pool of credits with a reliable and long enough history of default and recovery rates in order to correctly price the insurance premium. Failing these conditions, a financial guarantor can either not enter the business or must quote such a high premium that it would be prohibitively expensive for small and medium-sized companies to buy insurance and enhance their bond issues.

Given local corporate bondmarkets' small issue size and limited variety of borrowers, it seems more fruitful to think about providing financial guarantees at the regional level, where there are more opportunities for diversification. It also seems more feasible to arrange insurance for asset-backed securities, as the pool of underlying assets is already diversified to some extent.

In this situation, established international monoline insurance companies do have a competitive advantage over potential local companies, and they can provide added value to the development of local guarantees markets. Established companies will have compiled historical default and recovery rates for other regions, which they will be able to modify to use as a rough guide for the Asian market. Their involvement in local guarantees markets can serve as a training model for local firms.

Governments could set up agencies to provide credit guarantees to targeted borrowers, usually small and medium-sized companies in strategically chosen sectors. If these agencies do not charge commercial premiums, they actually provide a government subsidy to local companies. This in turn raises issues of transparency, fairness, potential for corruption and potential fiscal costs to taxpayers. Such subsidy may also be incompatible with World Trade Organization trade rules. In addition, they may relieve pressure for corporate restructuring, thus delaying the strengthening of the corporate sector. Finally, there is no reason why government agencies should be better than private companies in assessing credit risk—this, after all, is the key to developing a local credit culture.

Multilateral development banks such as the World Bank and the Inter-American Development Bank have offered financial guarantees to some emerging market borrowers, including Argentina (which issued a series of six US\$250 million zero coupon bonds in 1999, maturing sequentially over 2000–04), the Electricity Generating Authority of Thailand (US\$300 million in bonds issued in 1998) and Colombia (US\$1 billion in amortising bonds issued in 2001). The intention of the guarantee program was to provide additional security to potential investors at a time when the issuer was having difficulty accessing international capital markets. However, guarantee structures such as the one used for Argentina (rolling reinstatable guarantees) are somewhat penalised in the markets because of the difficulty in modelling and valuing the enhancement incorporated in the bond.

In addition, credit derivatives markets also enable investors to hedge their credit exposures. However, in emerging markets, credit default swaps are currently only available for international bond issues by sovereign borrowers, and a few top-quality financial institutions and corporates.

Six areas for policy actions and reforms

Asian bondmarkets have grown substantially in recent years. Governments in the region should leverage this momentum to implement further reforms to bring the region's bondmarkets to a higher level of development. In the foreseeable future, the focus of policy will likely remain the improvement of local markets. However a longer-term vision of a more integrated regional market should be sketched, at least in broad terms, so that national reforms in policies and market infrastructures can be implemented with a view to facilitating rather than hindering the eventual process of regionalisation. For example, electronic trading, clearing and settlement platforms should be built with a view to them operating interactively across the region.

As a historical example, the development of European bondmarkets offers many useful lessons. Despite decades of gradual integration, including seven years of the single market, European bondmarkets experienced an increased degree of integration only when the euro was introduced at the beginning of 1999. The common currency has changed the investment practice of investors—some institutions such as insurance companies had faced restrictions on foreign currency exposures—and enabled the rapid take-off of corporate bond issuance. Even then, while money markets have been fully integrated, bondmarkets (let alone equity markets) are still segmented to various degrees, compared to the US market, due to less-than-perfect harmonisation in a variety of areas, including technical trading, clearing and settlement platforms.

Six areas of potential policy actions and reforms aimed at strengthening bond and securitisation markets in Asia are described below.⁴

Market infrastructure and foundation

In regards to market infrastructure and foundation, the following measures could be taken

- improvement of corporate governance and transparency, including accounting and auditing standards
- establishment of common financial disclosure and registration rules for bond issuers
- standardisation of bond contracts, underwriting standards and clearing and settlement procedures
- harmonisation of market regulation and taxation across countries.

Legal framework

An appropriate legal framework is particularly important for securitisation markets. In this regard, the following priorities must be set to strengthen

contract enforcement and increase predictability in the resolution of contractual disputes

- increased clarity in the assignability of receivables and the definition of ‘true sale’ of assets
- clear legal status for special purpose vehicles—especially when they are used to securitise assets
- bankruptcy law and foreclosure practice
- clarification of data privacy and bankers’ confidentiality.

Repurchase markets

A repurchase market that functions multilaterally for all market participants and not just bilaterally between commercial banks and the central bank can facilitate market participants’ funding and liquidity management. This, in turn, can help improve bond underwriting, trading and management activities, leading to better liquidity in the secondary market.

Derivatives markets

Regulation (including disclosure requirements) and supervision systems must be put in place to encourage the development of financial derivatives markets so that market participants can hedge their interest rate, foreign exchange and credit risks. Credit derivatives markets are also useful in improving the efficiency of price discovery in local bondmarkets.

Investor bases

Asia needs to develop a more diversified range of institutional investors to complement the banks. In this regard, the following points are relevant.

- Experiences from Chile, Mexico and other Latin American countries that have implemented pension reforms show that pension funds, with their continually growing assets and demand for securities, can play a key role in developing local bondmarkets, increasing their depth and stability.
- Mutual funds are wonderful instruments for mobilising household savings and channelling them to capital markets. Experiences in Brazil, where a thriving domestic mutual fund industry has gathered more than US\$150 billion in assets under management (or 30 per cent of GDP), suggest that the mutual funds can play an important role in developing, and bringing stability to, local bondmarkets.
- Restrictions imposed on institutional investors need to be eased to allow them to have a fuller impact on local markets.

- Capital controls need to be gradually dismantled so that non-resident investors both within and outside the region can participate in local markets.

Credit culture

Credit culture is an intangible but crucial ingredient that marks the maturity of a bondmarket. The following steps must be prioritised.

- Protection of creditors' rights must be ensured.
- The requirement that all bond issuers be rated by a credit rating agency must be adopted.
- A competitive environment for established international credit rating agencies and local agencies must be maintained over the long term. Again, experiences in Chile over the past 20 years show that such an environment is conducive to the formation of local agencies with a high degree of professionalism and credibility—a sign of the maturity of Chile's credit culture.

Concluding remarks

Local bondmarkets are gradually but steadily becoming an alternative source of funding for sovereigns and corporate borrowers in emerging Asia. To some degree, existing corporate bondmarkets served as an alternative source of finance in Hong Kong SAR, Korea and Malaysia after the 1997–98 financial crises. Progress in these and other markets over the past five years has meant that these markets are likely to buffer the impact of future disruptions in other financial markets. The rapid growth of local bond issuance, aided by the use of guarantees and securitisation, is substituting for the reduced access to international capital markets, but mostly for top-tier corporates. Analysts hope that measures to encourage the growth of private pension funds and other institutional investors, combined with the support of more transparent government benchmarks and better corporate governance and transparency, may extend the benefits of corporate bondmarkets to lower-tier credits.

Finally, the recently launched Asian Bond Fund initiative is likely to provide an additional push to the development of local bondmarkets. Even though the immediate direct impact of the Asian Bond Fund is likely to be modest, given its small size and the fact that international dollar bonds issued by Asian sovereign borrowers—the current investment target of the fund—already enjoy a strong local bid, its symbolic meaning is significant. It is further concrete evidence of regional cooperation on development of regional financial markets. Managed by a third party of sterling reputation—the Bank

for International Settlements—and having transparent investment policy and guidelines, the Asian Bond Fund can serve as a tool for exerting peer pressure to ensure that best practices are adopted in the development of bondmarkets. This role will become even more relevant when the Asian Bond Fund eventually contemplates investments in local currency bonds.

Notes

- ¹ See Greenspan (1999). However, while bondmarkets and banks have served as backup forms of financial intermediation in the United States, empirical evidence for a broader set of countries shows a positive correlation between bank lending and bond issuance (see HKMA 2001).
- ² For a detailed discussion of emerging local bondmarkets, see International Monetary Fund (2002).
- ³ Malaysia's National Mortgage Corporation (Cagamas) was set up in 1986, with the principal aim of purchasing housing loans from financial institutions, funded by the issuance of fixed and floating rate bonds (Hohensee 2001).
- ⁴ A more general discussion for all emerging markets can be found in International Monetary Fund (2003).