Development of Asia-Pacific corporate bond and securitisation markets

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Abstract

Since the Asian financial crisis in 1997–98, policymakers in Asia and the Pacific have put a high priority on bond market development. From 2005 to 2011, the corporate bond market in emerging Asia continued to grow rapidly, even during the 2007–09 crisis. However, during the peak of the crisis, almost all major economies in Asia and the Pacific experienced sharp capital outflows from their domestic bond markets. Credit derivatives and structured credit markets in the region had also exhibited steady growth before 2008, but since then have been slow to develop.

JEL classification codes: E44, G12, G15, G18.

Keywords: local currency bonds, corporate bonds, off-shore bond markets, credit derivatives, structured credits.

1. Introduction

The development of local currency bond markets is a long-term task requiring efforts by both policymakers and market participants. Since the Asian financial crisis in 1997–98, policymakers in Asia and the Pacific have put a high priority on bond market development as a way to promote financial deepening and help avoid financial crises, and have pursued various national and regional policy initiatives. In November 2005, the BIS Representative Office for Asia and the Pacific and the People's Bank of China held a high-level seminar in Kunming, China, on the theme of "Developing corporate bond markets in Asia" (BIS (2006)).

In November 2011, the BIS Representative Office for Asia and the Pacific and the Bank of Japan co-hosted a seminar revisiting Asian bond market development issues. In particular, the seminar considered the progress made since 2005, and the prospects for these markets to become a globally important asset class. During the peak of the recent international financial crisis, almost all major economies in Asia and the Pacific experienced sharp capital outflows from their domestic bond markets. After the crisis, the further development of local currency bond markets received renewed attention from policymakers interested in enhancing their ability to act as a "spare tyre" in cushioning a contraction in credit.[2]

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[2] Chan et al (2012) provide discussion on the spare tyre role of local corporate bond markets.

Local currency bond market development has also become an important component of global initiatives to strengthen national and global financial market stability, and enhance the resilience of emerging markets against capital flow shocks. In October 2011, G20 finance ministers and central bank governors approved the G20 Action Plan to support the development of local currency bond markets, prepared by the G20 Sub-working Group on Capital Flow Management. This plan emphasises the coordination of existing and future initiatives of various international organisations and forums, and also the improvement of data bases to deepen the understanding of key aspects of local currency bond markets.

In this article, we review the developments in the corporate bond markets in Asia and the Pacific, both on-shore and off-shore, and also consider recent trends in credit derivatives and structured finance markets in the region.

2. Corporate bond market development in Asia and the Pacific

The domestic debt market of Asia and the Pacific has grown rapidly, almost doubling in size from $10.5 trillion outstanding in September 2004 to $20.8 trillion by March 2011. Within this amount, emerging Asia's has expanded at the fastest pace, more than tripling from $2.0 trillion to $6.1 trillion. In major Asia-Pacific economies, the development of government bond markets has made noticeable progress since the Asian financial crisis in 1997–98. However, the corporate bond market and the repo market still need to develop further in the region. In the first part of this section, we review the evolution of the Asia-Pacific corporate bond markets before, during and after the recent international financial crisis. The second part discusses recent developments in off-shore bond markets in the region.

2.1. Overview of domestic corporate bond markets

From 2005 to 2011, the corporate bond market in emerging Asia continued to grow more rapidly than those in other emerging markets, even during the period of the recent international financial crisis. The share of corporate bond issuance by emerging Asian corporates out of total emerging market issuance is around 70 per cent so far this year (Graph 1). The sharp increase in the amount of bond issuance by emerging Asian corporates from 2008 to 2009 was particularly noteworthy, as it helped compensate for declines in bank lending to corporates that became evident by the second quarter of 2009.

Across the Asia-Pacific region, the degree of bond market development varies considerably. In terms of the absolute amount of corporate bonds outstanding, Japan, China and Korea are the three largest markets (Graph 2, left-hand panel). In terms of the size of the corporate bond market relative to GDP, the three largest markets are Korea, Malaysia and Thailand (Graph 2, right-hand panel).

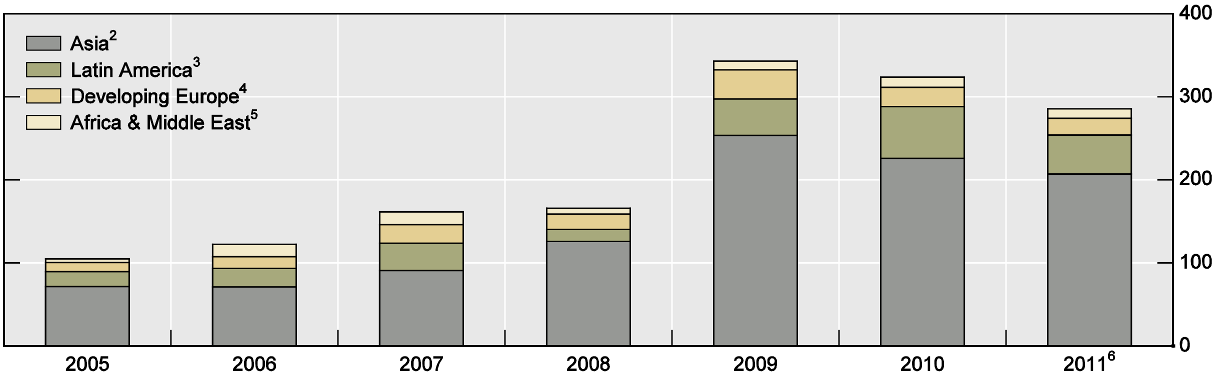
The rapid growth of corporate bond issuance in the region can be attributed to many factors. One factor is the functioning of credit rating agencies. Countries including China, India, Japan, Korea, Malaysia and Thailand have active local credit rating agencies, many of which were set up under governmental initiatives or in joint ventures with large international rating agencies. The existence of these local credit rating agencies has supported the issuance of corporate bonds in the region.

During the crisis, issuers with low ratings from the international rating agencies were almost completely shut out from the market. In 2008, sub-investment grade bond issuance was only 3% of all bonds with international ratings, compared to more than 30% the previous year (Table 1). However, the issuance of bonds with sub-investment grade ratings from the international agencies came back after 2008, so that by 2011 their share of all issuance rated by international agencies (31.6%) had reached the level of 2005.

Graph 1

Emerging market corporate bond issuance[1]

In billions of US dollars



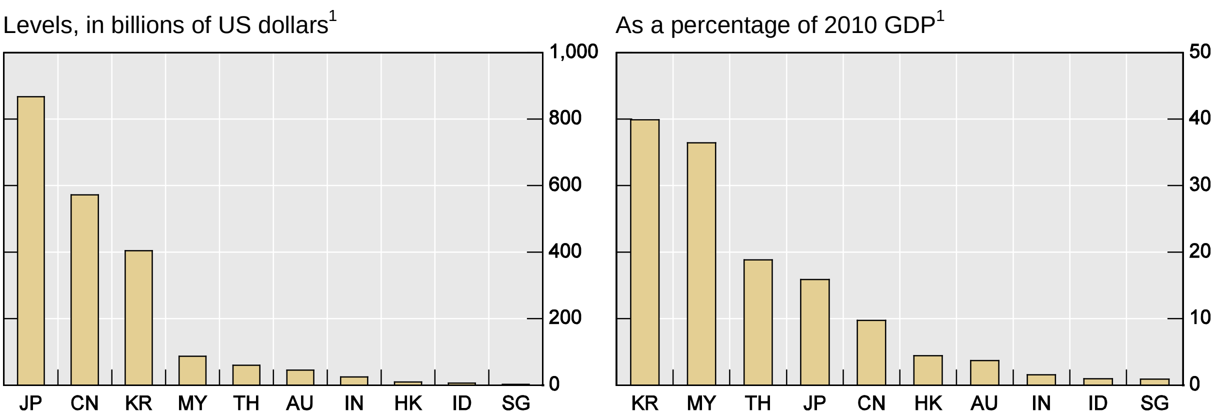
[1] Includes bonds issued by non-financial corporates residing in the economies in respective regions. Includes both bonds rated by at least one of the three major international credit rating agencies and other bonds either rated by other rating agencies or not rated. [2] Azerbaijan, Bangladesh, China, Chinese Taipei, Hong Kong SAR, India, Indonesia, Korea, Kyrgyz Republic, Malaysia, Pakistan, the Philippines, Singapore, Thailand, Uzbekistan and Vietnam. [3] Argentina, Brazil, Chile, Colombia, Dominican Republic, Jamaica, Mexico, Peru, Trinidad and Tobago, Uruguay and Venezuela. [4] Belarus, Bulgaria, the Czech Republic, Croatia, Hungary, Latvia, Lithuania, Poland, Russia, Turkey and Ukraine. [5] Botswana, Egypt, Ghana, Iran, Israel, Liberia, Morocco, Nigeria, Qatar, Saudi Arabia, South Africa and the United Arab Emirates. [6] Up to the end of September 2011.

Source: Dealogic DCM Analytics

Despite declining issuance of internationally rated bonds through 2008, the amount of emerging Asian corporate bond issuances unrated or rated only by local credit rating agencies increased from 2005 to 2009 (Table 1, bottom two rows). This suggests that the corporate bond market in the region, supported by local rating agencies as well as local investors, may have fulfilled a "spare tyre" function for corporate financing during the crisis, insuring against fluctuating sentiment in global markets as well as slowing banking credit.

Graph 2

Amount outstanding of bonds issued by corporates



AU = Australia; CN = China; HK = Hong Kong SAR; ID = Indonesia; IN = India; JP = Japan; KR = Korea; MY = Malaysia; SG = Singapore; TH = Thailand.

[1] Economies are listed, in descending order, according to the size of amount outstanding as of Q1 2011.

Source: BIS.

Table 1

Issuance of corporate bonds by rating for emerging Asia[1]

Total amount in millions of US dollars

	2005	2006	2007	2008	2009	2010	2011[2]
AAA	0.2%	0.0%	0.7%	0.0%	8.5%	8.1%	1.9%
AA	9.2%	8.4%	0.8%	12.3%	18.8%	12.5%	1.2%
A	15.9%	51.5%	22.2%	50.6%	46.3%	43.7%	43.8%
BBB	43.4%	20.6%	41.4%	34.2%	2.1%	18.5%	21.5%
BB	17.2%	9.8%	21.1%	3.0%	24.2%	11.5%	26.9%
B	10.9%	9.0%	13.8%	0.0%	0.0%	5.8%	4.7%
CCC	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%
Total (internationally rated)[3]	15,266	13,378	6,206	4,147	11,628	10,455	12,451
Total (locally rated/unrated)[4]	56,150	57,591	84,423	121,940	241,850	215,177	194,571

[1] China, Chinese Taipei, Hong Kong SAR, India, Indonesia, Korea, Malaysia, Pakistan, the Philippines, Singapore, Thailand and Vietnam. [2] Up to the end of September 2011. [3] Includes bonds rated by at least one of the three major international rating agencies. [4] Includes bonds rated only by local credit rating agencies or not rated.

Source: Dealogic DCM Analytics.

Encouraging foreign participation in the bond market is another important way to foster the development of domestic bond markets. However, not only can the resulting capital inflows pose challenges to maintaining monetary policy objectives, but "sudden stops" and reversals in capital flows can increase volatility in the bond and foreign exchange markets.

Almost all major economies in Asia and the Pacific experienced sharp capital outflows from their local bond markets in 2008 and early 2009, followed by strong capital inflows (Graph 3). Despite concerns over contagion from the sovereign crisis in Europe, capital inflows in Asian bond markets have generally remained positive throughout 2011. Turner (2012) shows that because growth-induced interest rate differentials tend to favour dynamic emerging market economies over the medium-term, foreign investors started to come back to their bond markets after the peak of the 2007–09 crisis. It remains to be seen whether the indications of heightened interest in Asian local currency bonds by foreign investors is the outcome of an increasing search for yield in a low-interest rate environment or a structural shift towards greater weighting of Asian bonds in the portfolios of global investors.

2.2. Off-shore bond markets

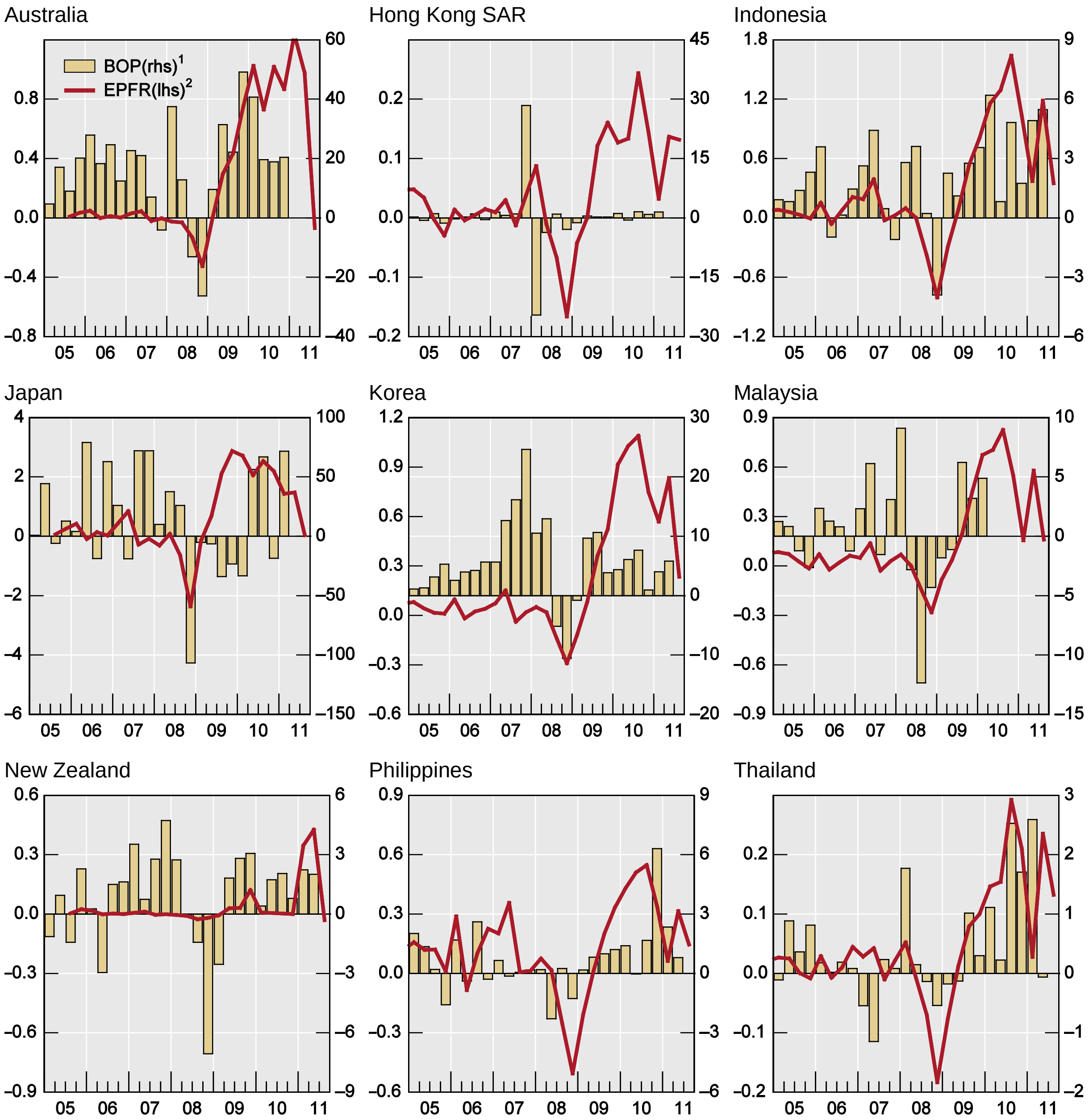
The existence of off-shore bond markets benefits domestic issuers by providing them with access to large and more diverse funding sources. Competition from the off-shore bond market may also improve the efficiency of the on-shore bond market. However, the off-shore market might also draw liquidity away from underdeveloped domestic bond markets, and slow their development.

Many firms in Asia and the Pacific have access to both on-shore local currency bond markets and off-shore foreign currency bond markets. For many emerging economies, the off-shore bond market is relatively large and liquid compared to the domestic bond market. The choice between on-shore and off-shore markets is effectively a choice of currency denomination and investor base. The factors influencing this choice include the cost structure of each market as well as the ability to hedge and manage currency risk.

Graph 3

Bond flows to selected economies in Asia and the Pacific

In billions of US dollars



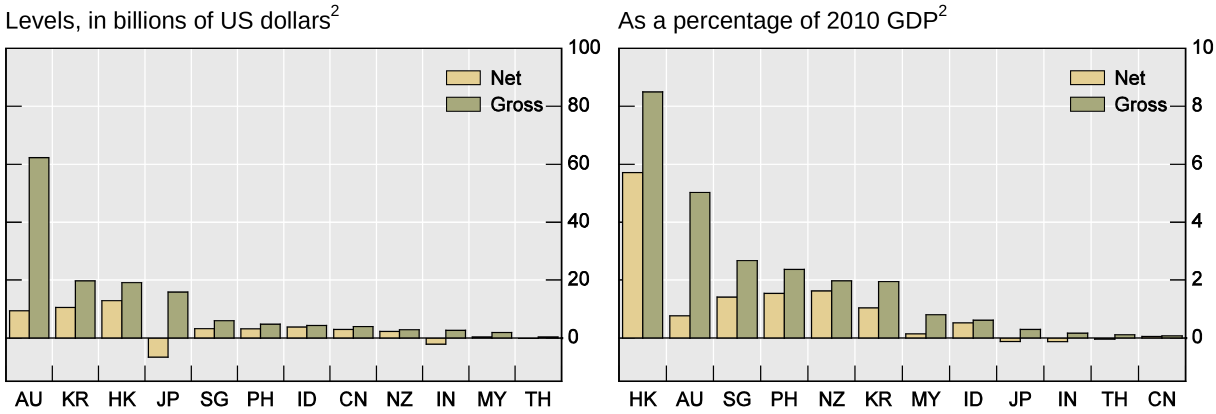
[1] Portfolio investment liabilities, debt securities. [2] Net flows into emerging market portfolio funds.

Sources: IMF, International Financial Statistics; EPFR.

Off-shore markets are growing in many jurisdictions in Asia. As in the domestic bond markets, there exists a wide variety in the region in terms of off-shore bond market activity. In particular, some off-shore bond markets have relatively long histories, such as the euroyen, eurokiwi and uridashi markets. Within the region, Australia, Hong Kong SAR (henceforth Hong Kong), Japan, Korea, New Zealand and Singapore have seen the most international bond issuance as of the end of the first half of 2011 (Graph 4).

Graph 4

International bond issuance of Asia-Pacific economies[1]



[1] By residence of issuers in the first half of 2011. [2] Economies are listed, in descending order, according to the gross issuance.

Sources: IMF, World Economic Outlook; BIS.

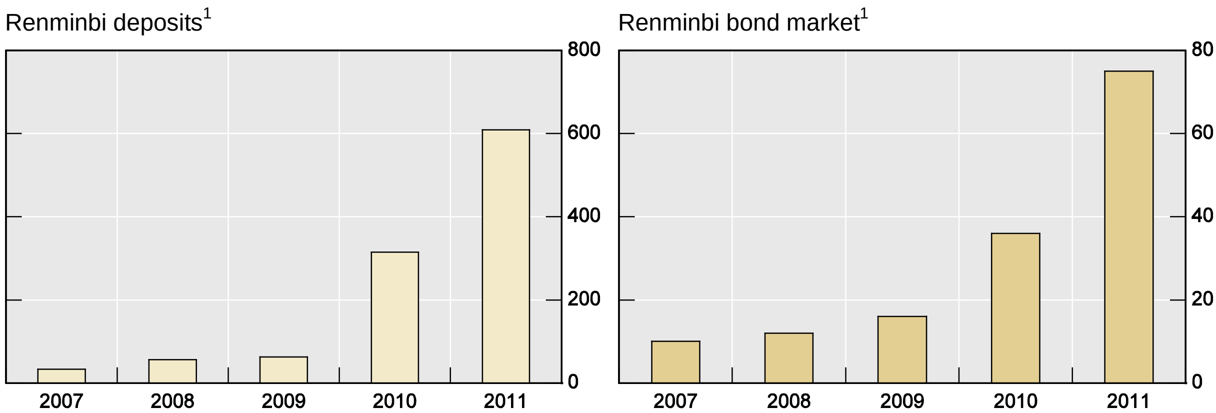
There has been a recent surge in both deposits and the issuance of off-shore bonds denominated in renminbi and issued in Hong Kong (so called dim sum bonds). The off-shore renminbi deposit market in Hong Kong started in 2004 when Hong Kong residents were allowed to convert Hong Kong dollars into renminbi. After 2008, the Chinese authorities started to promote off-shore use of the renminbi in Hong Kong, with the goal of mitigating US dollar exposure for some debtors and enhancing the international use of renminbi. Renminbi deposits in Hong Kong grew particularly starting in 2010 (Graph 5, left-hand panel).

At the same time, dim sum bond issuance has also risen sharply (Graph 5, right-hand panel). Issuers of dim sum bonds have become increasingly diverse, so that they now include China's Ministry of Finance, Chinese corporates and foreign companies. However, the dim sum bond market is still very small compared to the bond market in China, just as the size of off-shore renminbi deposits in Hong Kong is small compared to the total renminbi deposits.

Graph 5

Renminbi markets in Hong Kong SAR

In billions of renminbi



[1] 2011 data is as of the end of August 2011.

Source: Hong Kong Monetary Authority.

The Chinese case presents an example where the off-shore market has developed before the liberalisation of the on-shore market was complete. In order to maintain their ability to manage capital flows and control access to still underdeveloped domestic financial markets, the Chinese authorities decided to liberalise the off-shore renminbi market first. This is different from the US approach, under which the on-shore market developed first and off-shore market developed later.

3. Credit derivatives and structured finance markets in Asia and the Pacific

Credit derivatives and securitisation markets play important roles to support the development of domestic bond markets in Asia and the Pacific. Especially, foreign investors tend to rely on credit derivatives when they take exposures in the region (see Remolona and Shim (2008) and Goswami and Sharma (2011)). This section reviews recent developments in the credit derivatives and structured finance markets of Asia and the Pacific. The history of securitisation in the region is short compared to that of the United States and Europe. Credit derivatives markets in the region are small and illiquid, and structured credit markets have been slow to develop.

3.1. CDS markets

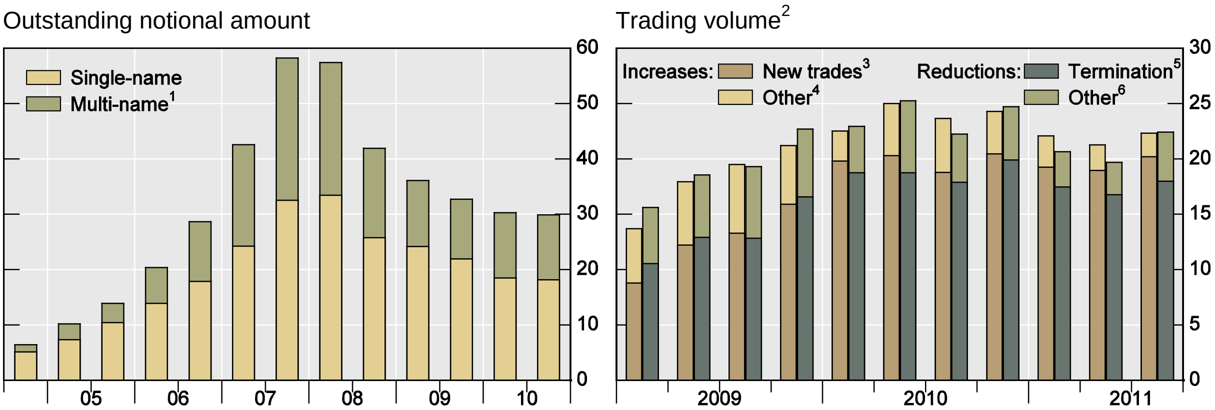
The first CDS contracts referencing borrowers in Asia and the Pacific emerged in the late 1990s, while the first CDS indices devoted to regional credits began trading in 2004. A few years later, after an increase in bond issuance in 2006, CDS contracts were written on the new names in the market, and CDS indices were reconstituted to include them.

The Asia-Pacific CDS market tends to be dominated by *international* investors. One reason for this is that many local currency bonds, though highly rated by domestic rating agencies, are less highly rated by international rating agencies. Thus, foreign investors may be more interested in hedging and trading the concomitant credit risks than domestic investors.

Graph 6

CDS outstanding amount and trading volume

In trillions of US dollars



[1] Multi-name contracts include credit default tranches. [2] Summary of transaction activity. [3] Newly traded contracts. [4] Backloads, ie contracts previously executed and confirmed non-electronically. [5] Partial and full unwinding of contracts in the warehouse. [6] Matured contracts and contracts removed due to credit events.

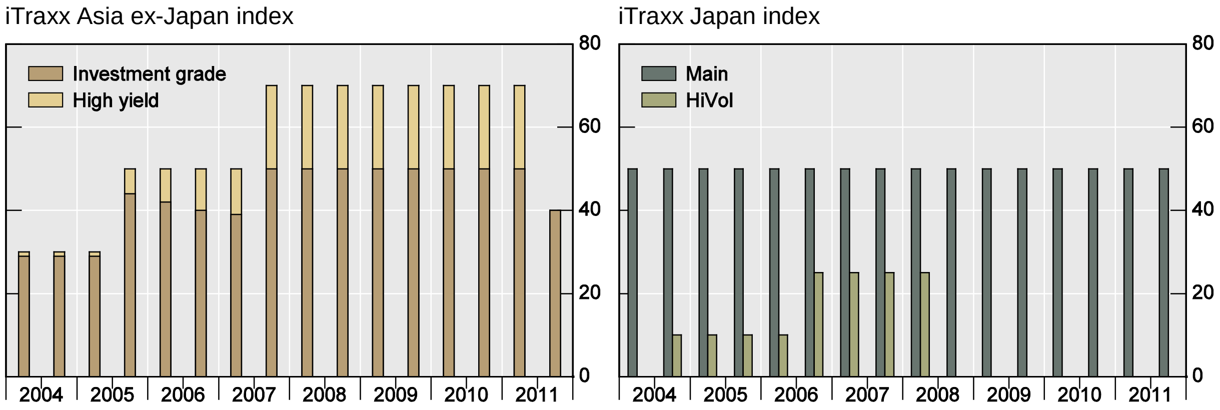
Sources: DTCC Deriv/SERV; BIS.

The international financial crisis dampened activity in the global CDS market, which shrank rapidly from the second half of 2008 (Graph 6, left-hand panel). After 2009, global CDS market activity slowly stabilised. Data from the Depository Trust and Clearing Corporation show that while reductions in CDS contracts were consistently larger than increases until mid-2010, increases have been larger during most of this year (Graph 6, right-hand panel).

Liquidity in Asian CDS markets has declined from 2008 in line with reduced global activity. While it is not easy to track the transaction volume of CDS contracts written specifically on Asia-Pacific entities, we can infer the change in liquidity conditions by examining the composition of the Asian-Pacific CDS indices. For instance, the number of entities in the iTraxx Asia ex-Japan index had increased from 30 names in 2004 to 70 by September 2007 (Graph 7, left-hand panel). However, it had decreased to 40 in September 2011.

Graph 7

Number of entities in Asian CDS indices



Source: Markit.

The number of high-yield or sub-investment grade names within the Asian indices also indicates declining activity of recent vintage. When the iTraxx Asia ex-Japan index started trading in 2004, only one entity was included in the index. This number had reached 20 when the new iTraxx Asia ex-Japan High Yield index was constituted in 2007. However, reflecting the lack of liquidity in Asian sub-investment grade names after the crisis, this index was discontinued in September 2011, and no sub-investment grade names are now included in the iTraxx Asia ex-Japan index.

Similarly, the iTraxx Japan HiVol index was created in 2004, comprising ten (later expanded to 25) Japanese entities with the widest spreads from the 100 most liquid single names (Graph 7, right-hand panel). But, this index was discontinued in 2008 due to lack of market interest. By contrast, the iTraxx Australian index has consistently comprised 25 investment grade entities since its inception in 2004, with roughly one new name per semester.

The recent decline in CDS trading on non-investment grade names in Asia is surprising given the robust issuance volume of sub-investment grade corporate bonds in emerging Asia discussed in Section 2.1. One reason could be that the main players in global CDS markets such as large international investment banks and hedge funds have greatly reduced their credit risk exposures. Another reason may be that large bond issuers on whom CDS contracts had been written before the crisis, such as sub-investment grade Chinese property developers, have become less popular in the CDS market. Finally, the collapse in activity of synthetic and single-tranche CDOs, which were based on CDS contracts, may have also contributed to the overall decline in non-investment grade CDS activity.

3.2. Structured credit markets

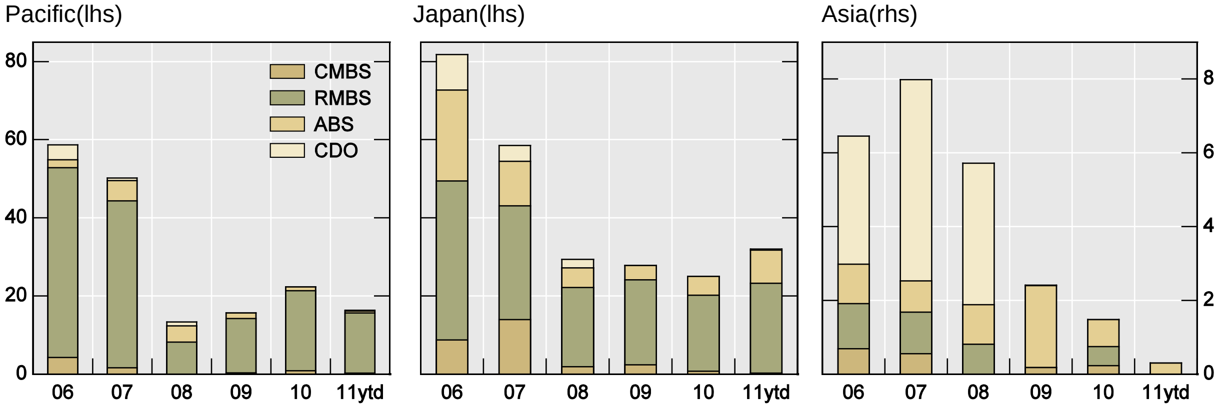
The first structured credit markets in the Asia-Pacific region were based on mortgages and consumer finance assets. The main contribution of these instruments was to enhance the liquidity of the underlying assets rather than the credit quality. Prior to the recent international financial crisis, however, structured credit markets had begun to match local investors' preference for highly rated debt with local issuers' average credit quality. In particular, structured finance products backed by corporate debt (CDOs) offered the promise of easier market access for lower-quality borrowers, by reducing through diversification the credit risk associated with holding their obligations.

Most Asia-Pacific banks were not active in originating assets for securitisation and, therefore, the collapse of structured credit markets in mid-2007 did not have a significant impact on their balance sheets. Despite the limited damage to bank balance sheets in the region, greatly reduced appetite for securitised products is evident in plunging issuance volumes (Graph 8). Not only the size but also the nature of structured finance in the region has been transformed by the crisis. In particular, securitisation has been moving "back to basics": that is, a decline in more complex securitisations and a shift toward simpler structures.

Graph 8

International rating scale issuance of structured finance products in Asia and the Pacific

In billions of US dollars



Sum of local market issuance (ie, domestic issuance) and cross-border issuance (ie, international issuance). It includes issuances rated by Standard and Poor's, and excludes issuances rated by local credit rating agencies. 2011 data is to the end of August 2011.

Sources: Reserve Bank of Australia; Standard and Poor's.

Certain securitisation subsectors have held up better than others. The fall in the issuance volume of asset-backed securities (ABSs) in Asia and the Pacific has been relatively mild. Residential mortgage-backed securities (RMBSs) continue to remain an important market in the region, albeit at a smaller scale than before the crisis. RMBS issuance in Australia remains below pre-financial crisis levels due partly to the more cautious participation of off-shore investors.

By contrast, CDOs have not yet recovered from their collapse across all of the Asia-Pacific economies in 2008. Single-tranche CDOs disappeared, while synthetic CDOs greatly lost popularity. Only a few CDOs based on Asian names were issued in 2011. In contrast to RMBS, only a small number of commercial mortgage-backed security (CMBS) deals have been completed recently in the region, reflecting both reduced risk appetite and generally tighter credit conditions for commercial property borrowers.

Improved credit conditions across most sectors in Asia are likely to support stable performance of structured finance assets and thus new structured finance issuance. Simple

ABS and RMBS markets will continue to attract domestic and foreign investors. At the same time, a few countries are either trying to introduce or just started to issue covered bonds, an alternative form of structured finance which may make some strides in the region in the coming years.

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