

# Developing corporate bond markets in Asia: a synopsis of the Kunming discussions

Guonan Ma, Eli Remolona and He Jianxiong<sup>1</sup>

## Overview

On 17-18 November 2005, high-level representatives from 11 central banks in Asia and the Pacific and from the European Central Bank (ECB) met in Kunming, China. They met to share their experience in developing local currency corporate bond markets at a seminar organised jointly by the Asian Office of the Bank for International Settlements (BIS) and the People's Bank of China (PBC). The topic was a timely one that generated lively and candid discussions.

To keep the seminar small and informal, only a few selected academics and market participants were invited to join the central bank representatives. Among the participants were PBC Governor Zhou Xiaochuan and BIS General Manager Malcolm D Knight, who delivered keynote speeches. Joseph Yam, Chief Executive of the Hong Kong Monetary Authority, set the stage for an active exchange of views by chairing the first session. The academics included Suresh Sundaesan of Columbia University and Marvin Goodfriend of Carnegie Mellon University.

The seminar was structured around five themes: 1) Why a corporate bond market? Growth and direct debt finance; 2) Legal and institutional frameworks: rules of the game; 3) Role of information: disclosure, rating agencies and benchmarks; 4) Market liquidity: microstructure and transparency; and 5) Central banks and corporate bond market development. One session was devoted to each of these themes, with lead presentations introducing the theme and raising issues for discussion. Participants contributed to discussions by drawing on the experience of their home markets.

## Why a corporate bond market? Growth and direct debt finance

Marvin Goodfriend of Carnegie Mellon University highlighted the importance of direct debt finance in the course of a country's economic development. Initially, firms rely on internally generated funds or funds borrowed from an extended family of firms. As the economy develops, firms need to secure external funding, first in the form of "information-intensive" indirect financing, ie loans extended by banks. From there, the bigger firms in good standing seek funding in the form of direct finance from the corporate debt and equity markets. At that point, though, banks continue to provide value-added services, while investment banks assist in the various forms of direct finance. Accordingly, multiple financing channels improve firms' capital structures, promote competition and encourage innovation. Professor Goodfriend also highlighted the role of bond finance in mitigating the problem of creditor runs, which are an inherent feature of short-term credit markets. In particular, he talked about the importance of the "spare tyre" offered by a functioning corporate bond market, especially for the resilience of a financial system to shocks.

Muhammad bin Ibrahim of Bank Negara Malaysia observed that the Malaysian financial system has its own very large "spare tyre". Indeed, the ringgit corporate bond market - what Malaysians call the "private debt securities" (PDS) market - is now larger than the local government bond market. The PDS market currently accounts for over 80% of funds raised domestically, compared with less than

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<sup>1</sup> Guonan Ma is a Senior Economist at the BIS Representative Office for Asia and the Pacific; Eli Remolona is the Deputy Chief Representative of the BIS Representative Office for Asia and the Pacific; He Jianxiong is Deputy Director-General of the International Department, the PBC.

half in 1997. In recent years, this market has been dominated by issuers from the infrastructure, construction and utility sectors. One of the fastest-growing segments of the market is the Islamic debt market, which now accounts for almost one-third of the PDS market. The maturities of Malaysian PDS issues range from one to 28 years, matching the needs of different issuers, but their relatively small issuance sizes may have contributed in some degree to market illiquidity.

Chandan Sinha of the Reserve Bank of India underscored the need and potential for developing India's corporate bond market. He emphasised five factors: 1) the existing bias of household financial savings towards bank deposits and government paper; 2) the dominant role of government bonds in the local debt market; 3) the heavy reliance of the corporate sector on bank borrowing; 4) the predominance of private placements over public offerings; and 5) an illiquid secondary market. In connection with this, Mr Sinha outlined the main obstacles to development of the Indian corporate bond market. First and foremost, there is a lack of market infrastructure and there are too few institutional investors on the demand side and too few quality issuers on the supply side. He enumerated some of the pre-conditions for further market development, including efficient government bond and money markets, a sound legal framework and the availability of hedging instruments. He suggested that enhanced transparency could lead to a big retail market for bonds.

Chuan Teck Lee of the Monetary Authority of Singapore illustrated how a robust corporate bond market can add to the depth of the capital market, even in a small economy. He outlined the measures taken thus far by Singaporean authorities to develop the market for both local currency and foreign-denominated issues. Between 1997 and 2004, the size of the Singapore corporate debt market expanded four-fold, with the result that the value of corporate securities outstanding is now about twice that of bank loans. The initiatives taken by the authorities to further develop the local bond market had three key objectives: 1) building a liquid government benchmark yield curve; 2) fostering the growth of an active secondary market, both for cash transactions and derivatives; and 3) encouraging issuers and investors, both domestic and international, to participate in the Singapore bond market. The Singapore case is interesting in that despite the small size of its economy, the authorities have made an effort to attract non-resident issuers in both local and foreign currencies as a way to enhance the size and depth of the corporate bond market.

Robert Breden of Morgan Stanley expressed his view as a market player on the role of the corporate bond market in broader financial market development. A public corporate bond market is important in fostering a credit culture, market discipline and observable benchmarks for issuers, bond investors and other providers of capital. It also offers access to longer-dated, unsecured financing for growth businesses. In addition, primary and secondary corporate bond spreads can be used by banks to assess mark-to-market (MTM) loan positions. However, Mr Breden noted that the current high liquidity and capitalisation of banks in Asia is pre-empting corporate bond markets, as firms have limited incentive to tap capital markets when banks are willing to lend at low spreads. He concluded by saying that savings rates and demographics in Asia could result in rapid growth in institutional money management, as well as greater participation by life insurance and pension plans. Effective asset management for these plans will require a balance of asset alternatives - and the currently underdeveloped corporate bond markets will lead to an overweight position in equities, government bonds and structured notes.

## **Legal and institutional frameworks: rules of the game**

What bankruptcy and insolvency rules are conducive to a well-functioning credit market and one that balances creditor and debtor rights? Suresh Sundaresan of Columbia University responded to this question by offering three guiding principles. First, the bankruptcy code should deliver efficient ex post outcomes in the sense that the total value of the claims (both equity and debt) in distress is maximised. Second, the code should make clear, ex ante, the penalty for not honouring contractual obligations by ensuring credible access to borrowers' assets. Finally, it should provide incentives for solvent but illiquid corporate borrowers to reorganise. Professor Sundaresan noted that bank loans tend to be secured and senior, and to be owed to only a few banks and therefore easier to coordinate and re-contract in times of distress. By comparison, there are typically myriad corporate bond investors for the same issuer, making debt negotiations in times of distress more complex. He then discussed a number of market mechanisms that can be used in resolving financial distress.

Erwin Nierop of the ECB described the European experience of developing corporate bond markets after the introduction of the euro. The establishment of the ECB and the single currency contributed to market development by fostering financial market integration through reduction of issuance costs and currency risks, and the expansion of market size and investor base. However, Mr Nierop pointed out that the euro area still has to contend with 12 effectively distinct financial markets under one currency and one monetary authority - with 12 regulators and legal jurisdictions. More generally, there are 25 separate capital markets within the European Union (EU). Such legal and regulatory fragmentation has limited the gains from market integration. He then reviewed the substantial recent or ongoing efforts and initiatives on the part of the EU and ECB level to harmonise 1) payment systems and other market infrastructures; 2) legislation; 3) regulations; 4) guidelines; 5) collateral policy; and 6) measures to promote financial stability.

Myong-Jong Lee of the Bank of Korea questioned the usefulness of bank guarantees in reducing and pricing credit risks in corporate bond markets. In Korea, the share of issuance of listed corporate bonds guaranteed by banks and other non-bank financial institutions in total issuance fell from 85% in 1997 to less than 1% in 2004. Mr Lee offered three explanations for this sharp decline in the role of guarantees. First, many Korean commercial and merchant banks came under considerable pressure during the Asian crisis, facing tough restructuring challenges in meeting their capital adequacy requirements - which made them extremely reluctant to provide guarantees for corporate bonds. Second, in face of a severe contraction in bank credit, the struggling Korean corporate sector was forced to raise funds from the bond market, even without bank guarantees. Finally, as the financial crisis subsided, domestic interest rates fell, which caused a huge inflow of funds into local investment and trust companies (ITCs), which, in turn, invested heavily in the Korean corporate bond market. Such inflows of funds into the ITCs almost trebled between 1997 and 1999. Mr Lee highlighted that one important ramification of this development has been that corporate bonds in Korea now tend to genuinely reflect underlying corporate credit risk rather than the credit risk of banks, which had been perceived to be implicitly backed by the government.

Mu Huaipeng of the PBC reviewed the challenges of regulatory fragmentation for corporate bond market development in China. There are still two separate bond markets in China: the interbank bond market regulated by the PBC and the securities exchange market regulated by the China Securities Regulatory Commission. Although some 40% of the government bonds are issued and traded in both markets (cross-market issues), other government bonds and most corporate bonds are traded only in one, but not the other (non-cross market issues). These two bond markets have rather different market microstructures, investor bases and custody and clearing systems, making it difficult for investors to arbitrage between them. As if two regulators were not enough, the allocation of quotas for corporate bond issuance is under a third government agency, the National Development and Reform Commission. Mr Mu made the further point that although different markets may meet the diverse needs of different investors and issuers, there should be less segmentation in investors, issuers, fund flows and custodian services between the two bond markets. He then explored a number of policy measures to develop a more unified bond market in China, including the adoption of a multi-layer OTC market microstructure, strengthened market discipline (by enhancing the role of credit rating agencies) and increased information disclosure.

In connection with this, the Malaysian experience showed how reduction in regulatory impediments and enhanced coordination can boost the corporate bond market. With the creation of the National Bond Market Committee, comprised of several agencies and regulators to consolidate regulatory responsibility under one umbrella, the approval process for corporate issuance has been reduced from 9-12 months to no more than 14 days. The size of Malaysia's corporate bond market surged 124 times from 1989 to 2004, and is now approaching 40% of GDP.

Robert Breden commented on the roles of credit derivatives, the Basel II framework and new accounting standards. He suggested that while credit default swap (CDS) markets are now important for corporate bond and loan markets, corporate bond markets will also be critical to the development of credit derivative markets. The Basel II capital treatment will encourage banks to seek credit derivatives to hedge excess exposure to certain credits, and may reduce crowding out in BB-rated credits. Mr Breden argued further that sensible accounting policy, particularly for insurance companies, can help develop a term structure in bond markets. In jurisdictions where there is a mismatch between MTM accounting of assets and policy liabilities, distortions will occur if long-dated liabilities are not marked to market while assets are. Insurance companies will then have a strong incentive to invest in shorter asset maturities, rather than matching their liability streams. In Japan, there was a change in accounting rules that allowed assets to be matched against liabilities, and

exempted this package from MTM accounting. This measure has been instrumental in creating capital market activity in long-term agency, municipal and corporate bonds.

## **Role of information: disclosure, rating agencies and benchmarks**

Mr Lee of the Bank of Korea described the Korean experience in MTM accounting standards and explored the ramifications for the bond market and the local fund management industry. Korea has imposed MTM accounting on bond funds managed by investment trust companies (ITCs) and on trust accounts held at banks, in phases since late 1998. One motivation for the MTM requirement was that the book value method tended to exacerbate the volatility in fund flows in and out of the ITCs, especially during the Asian crisis and during the Daewoo collapse in 1999. Indeed, this volatility was considered to be a major cause of the observed ITC booms and busts over the years. Mr Lee also argued that MTM accounting tends to promote transparency and enhance market liquidity, since investors are better informed about the fair value of the bonds, and have a greater incentive to trade than hold and avoid realising losses. However, practical problems plagued the implementation of the MTM standards, especially with regard to the valuation of illiquid corporate bonds. Korea has now turned to two private pricing agencies that provide bond valuations based on matrix pricing.

Thomas Keller of Moody's Investors Service discussed the role of credit rating agencies in developing corporate bond markets. Based on information provided by issuers and the rating agencies' vast experience in assessing credit risk, these agencies are able to provide opinions on the likelihood that an issuer will meet its obligations. Mr Keller asserted that such opinions often play a role similar to that of a public good, in the sense that they are available publicly and broadly communicated to investors, thus helping to mitigate information asymmetry. It is important to note, though, that current or potential bond issuers pay for rating services, which means that in addition to their strong analytical capability, rating agencies must maintain a high degree of independence and objectivity to avoid conflicts of interest.

Eli Remolona of the BIS Asian Office returned to a question posed by Mr Lee of the Bank of Korea: How do we tell whether market prices reflect good information? Market information about creditors may arrive in various forms: earnings reports, profit warnings, financial press reports and credit analysis by securities houses. Rating agencies help summarise such information and do so in several ways, namely, through rating announcements, outlooks and reviews. While rating announcements tend to be the most deliberate, and, therefore, slowest, rating reviews are typically the most timely, usually signalling rating decisions within the next 90 days. Mr Remolona shared the results of a study on the impact of these announcements on the CDS market. The results suggest that CDS contracts are as liquid as equity in reacting quickly to new information. Reviews by credit agencies generated the strongest reactions in both the CDS and equity markets, followed by outlooks and rating announcements. Moreover, these information releases seem to have a greater impact on credits at the lower end of the investment grade spectrum, reflecting the rules many institutional investors face against investing in speculative grade issues.

## **Market liquidity: microstructure and transparency**

Professor Sundaresan reviewed issues related to the microstructure of fixed income markets in general and the transparency of the corporate bond market in particular. In contrast to government bond markets, corporate bond markets accommodate many issuers, smaller issue sizes and non-standard contractual terms. Therefore, corporate bond markets tend to be less liquid than government securities markets, and institutional investors tend to dominate in the corporate bond markets. Moreover, highly rated firms typically differentiate themselves from others in terms of primary and secondary arrangements, resulting in different levels of market transparency. For instance, high-quality short-term commercial paper normally requires lower information production than high-yield bonds. In the primary market, underwriting procedures, targeted investor bases and disclosure requirements differ between public bond issues and unregistered issues. As for the secondary market, the main questions concern what the appropriate standards for pre-trade and post-trade transparency are, and what arrangements for collateralised lending should be adopted.

Nestor Espenilla of the Bangko Sentral ng Pilipinas focused on the Philippine experience of market microstructure and transparency. He emphasised the importance of transparency for market discipline, investor confidence and market liquidity. Until recently, the Philippine debt market had been plagued by fragmentation, inefficient price discovery and lack of transparency. He discussed the efforts to establish the Philippine Fixed Income Exchange as an integrated electronic trading platform for debt securities trading and settlement. This new integrated infrastructure is intended to promote market transparency, efficiency, liquidity and reliability, and is designed to cover all debt securities and accommodate different market microstructures. It will be a centralised market with exchange participation rights, freedom of investors to choose brokers, transparent pricing and a securities lending programme. Mr Espenilla also raised the question of how realistic it is to expect multiple market-makers to provide liquidity in corporate bonds and whether dealers should be required to reveal information on transactions. Finally, he raised the question of whether there is an advantage in having a regional clearing system.

Amy Edwards of the US Securities and Exchange Commission examined issues surrounding post-trade transparency, especially in light of the US experience of its Trade Reporting and Compliance Engine (TRACE) system. Introduced in 2003, TRACE requires that OTC trades in corporate bonds be reported within 15 minutes of the transaction. Since then, market liquidity has improved considerably, and her own research shows that such transparency lowers transaction costs dramatically. More generally, post-trade transparency benefits investors and helps regulators with their market oversight responsibilities. Ms Edwards noted, however, that it is important to keep in mind that requiring transparency does not mean imposing a particular market microstructure.

Pongpen Ruengvirayudh of the Bank of Thailand talked about the Thai experience with regard to information disclosure and transparency in the Bangkok secondary bond market. The Thai bond market has expanded considerably since the Asian crisis, with the total amount of bonds outstanding rising from 4% of GDP in 1997 to 42% in 2004. Nevertheless, government bonds still dominate the market and fragmented settlement systems impede its development. Additional constraints facing the Thai corporate bond market include a lack of quality issuers and inadequate market infrastructure. The market has two main trading platforms: the auto-matching Bond Electronic Exchange and the OTC market. An electronic trading platform designed to accommodate different trading structures will be introduced in 2006. The new system is expected to overcome some of the market impediments. A more reliable benchmark government bond yield curve is also expected to promote corporate bond market development.

The question of how important other fixed income markets and foreign exchange markets are for the efficient functioning of corporate credit markets was the focus of a presentation by Ric Battelino of the Reserve Bank of Australia. He drew three lessons from the Australian experience. First, the easiest way to develop fixed income markets is to start with the government bond market, since it is more liquid and conducive to infrastructure development and can provide a benchmark yield curve for the broader credit market. Second, once broadly based credit markets have developed, it is possible to scale back the government bond market without doing much damage to the markets generally, a possibility demonstrated by Australia during its recent episode of large fiscal surpluses. Third, it is important to have a free and open foreign exchange market, and preferably a floating exchange rate. The key considerations here are that a deep currency swap market encourages foreign issuers to tap, and foreign investors to invest in, the domestic market, while it allows domestic issuers to tap the overseas market and domestic investors to hedge their overseas investments. For a relatively small economy like Australia, a deep currency swap market is of even greater importance.

## **Central banks and corporate bond market development**

To set the stage for discussing the role of central banks, Hibiki Ichiue of the Bank of Japan (BoJ) surveyed the broader Japanese credit market, including the local corporate bond market, the Samurai bond market, syndicated loans, securitisation and credit derivatives. Bank loans still dominate Japan's credit market, but the corporate bond market expanded during the financial crisis. Mr Ichiue suggested that local and international credit agencies, as well as paperless bonds to be introduced in 2006, will promote corporate bond market development. One key factor influencing the credit market in Japan is the significant savings surplus, which has kept credit spreads rather narrow, with the result that the corporate bond market is dominated by domestic investors. The Samurai bond market and cross-

border syndicated loans have allowed Japanese investors to gain exposure to overseas credit risk. Corporate bond issuance has levelled off in recent years, while loan syndication has more than trebled between 2000 and 2005. The BoJ has played a pivotal role in developing the loan syndication market, by publishing statistics, accepting syndicated loans as collateral in its open market operations and assisting self-regulatory organisations in designing standardised contracts. The securitisation market has also expanded considerably in recent years, driven mainly by mortgage-backed securities. Issuance of other types of asset-backed securities and commercial paper has also grown, with half of the underlying asset portfolios comprised of bank loans to small and medium-sized companies. Again, the BoJ has contributed actively to such developments through seminars, facilitating standardised information disclosure, market surveys and dissemination of statistics.

Julia Leung of the Hong Kong Monetary Authority focused on the experience of central bank cooperation in setting up the Asian Bond Fund II (ABF2), and in its subsequent development. She identified five main challenges to Asian bond market development: 1) low investor participation; 2) poor liquidity; 3) lack of price transparency; 4) low credit ratings; and 5) high taxes. ABF2 was intended to confront such challenges and improve market infrastructure. The nine funds of the ABF2 family feature low entry thresholds and the low transaction costs associated with passive index tracking. The funds also enjoy high transparency and diversified exposures, and should appeal to a broad investor base. In particular, the Hong Kong Index Fund has expanded by more than 40% since its listing in July 2005. ABF2 also helps improve liquidity by introducing market-making mechanisms. On the other hand, ABF2 is not rated, thus potentially deterring some investors. Ms Leung raised three important questions: whether market-making can be instituted for corporate bonds; whether listing can improve transparency; and whether there are ways to overcome the relatively low credit ratings of Asian issuers. She suggested that much more can be done to further promote regional cooperation in bond market development.

Simon Tyler of the Reserve Bank of New Zealand addressed three questions related to the roles of different agencies in bond market development: First, which agency or institution should take the leading policy role in advocating the development of the local corporate bond market? Second, what part should central banks play in the development of this market? Third, how should central banks work with other regulators and supervisory authorities? Often there are a number of government agencies involved in capital markets. It would be best that each agency understands its own role. The various agencies should try and identify market impediments, endeavour to remove these impediments and encourage market participants to improve liquidity. However, the role of any government agency will change as the market develops. The government's role as an issuer would serve market development if it could help provide a liquid benchmark yield curve, auction government bonds in a transparent manner, minimise uncertainty by announcing issue schedules and publish user-friendly market statistics. The central bank's role may include collecting and publishing market data, encouraging document standardisation, appointing market-makers, coordinating market committees and ensuring sound custodian and payment systems. Mr Tyler also identified a number of common impediments to bond market development, such as documentation complexity and high taxes.

V K Sharma of the Reserve Bank of India outlined steps to further promote corporate bond markets in India. After a review of the lessons learned from developing bond markets, Mr Sharma discussed the underlying government securities market and its role in the functioning of the corporate bond market. He offered a number of thoughts about what changes are being contemplated for the government bond market in India, and how they will help the development of the local corporate debt market, emphasising the importance of first developing the government bond market.