Developing bond markets in Asia: experience with ABF2

Julia Leung[1]
Hong Kong Monetary Authority

1. Introduction

The second phase of the Asian Bond Fund (ABF2[2]) represents the collective efforts of central banks and monetary authorities that are members of the EMEAP[3] (Executives' Meeting of East Asia and Pacific Central Banks) group. These efforts were geared to identify and remove the impediments to the deepening of the domestic and regional bond markets. Towards this end, the implementation of ABF2 has made some inroads. The purpose of this note is to highlight some salient observations made during the process in implementing ABF2 which may promote further understanding as to the key set of issues relevant to the development of bond markets, in particular the corporate bond[4] sector, in Asia. It should be noted that the points discussed here do not represent the collective view of the EMEAP Group, which is currently conducting a comprehensive review of the ABF2 initiative.

ABF2 consists of nine component funds that invest in sovereign and quasi-sovereign local currency-denominated bonds in EMEAP markets. While the ABF2 funds do not involve corporate bonds, it is believed that the experience gained can still shed some light on the development of corporate bond markets in Asia.

This note is structured as follows: Section 2 briefly discusses the major challenges in developing bond markets, particular those for corporate bonds, in Asia. Section 3 explains in what ways ABF2 has attempted to address the challenges, namely widening investor base, enhancing market liquidity, raising price transparency and improving market infrastructure. The issue on credit rating is also discussed. The last section discusses the role of the central bank and regional cooperation in market development.

2. Challenges in developing corporate bond markets in Asia

Following the Asian financial crisis, Asian policymakers have widely recognised the importance of a deep and liquid bond market in providing a reliable source of long-term finance to corporates and in mitigating risks of currency and maturity mismatch. In particular, the bond market's financial intermediary role becomes critical in times of crisis when the other two financing channels (ie bank and equity) falter or fail. Diversity in the channels of financial intermediation is beneficial as it enhances efficiency of financial intermediation and promotes economic growth and development. Indeed, the size of the Asian bond markets has grown substantially after the financial crisis of 1997-98. However, it still lags behind developed economies in terms of breadth and depth.

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1 Executive Director (External), Hong Kong Monetary Authority (HKMA). The HKMA chairs the EMEAP Working Group on Financial Markets, which has developed the ABF2 initiative. This note was prepared based on a presentation in the BIS/PBC Seminar on Developing Corporate Bond Markets in Asia held in Kunming, China, on 17-18 November 2005.

2 Background information on ABF2 is set out in the Box on the next page.

3 The EMEAP Group comprises 11 central banks and monetary authorities, namely Reserve Bank of Australia, People's Bank of China, Hong Kong Monetary Authority, Bank Indonesia, Bank of Japan, Bank of Korea, Bank Negara Malaysia, Reserve Bank of New Zealand, Banko Sentral ng Pilipinas, Monetary Authority of Singapore and Bank of Thailand.

4 For the purpose of this note, corporate bonds are defined as bonds with maturity of one year and longer and not issued by sovereign or quasi-sovereign entities.

Background on ABF2

The Asian Bond Fund (ABF) is an initiative developed by the EMEAP that aims at broadening and deepening the domestic and regional bond markets in Asia. In June 2003, the EMEAP launched the first stage of ABF (ABF1), which invests in a basket of US dollar denominated bonds issued by Asian sovereign and quasi-sovereign issuers in EMEAP economies (excluding Australia, Japan and New Zealand). Building on the success of ABF1, the EMEAP has worked to extend the ABF concept to bonds denominated in local currencies and launched the second phase of ABF (ABF2) in July 2005. ABF2 comprises a total of nine component funds: a Pan-Asian Bond Index Fund (PAIF) and eight single-market funds. PAIF is a single-index bond fund investing in sovereign and quasi-sovereign local currency-denominated bonds issued in the eight EMEAP markets.[5] Each of the eight single-market funds invests in sovereign and quasi-sovereign local currency-denominated bonds issued in the respective EMEAP market. All nine funds are by design passively managed funds that seek to track the performance of pre-determined and transparent bond indices provided by iBoxx. Passively managed bond funds are a relatively new asset class in Asia.

The EMEAP group has invested a total of US$2 billion of seed money in ABF2: US$1 billion in PAIF and US$1 billion in the eight single-market funds. The EMEAP group has given careful consideration to the size of its investment such that it would neither be so large as to crowd out private sector investors nor so small as to be unable to benefit from economies of scale in terms of supporting the necessary infrastructure for the funds.

To ensure the broadest participation from all levels of investors, the component funds of ABF2 are structured either as exchange-traded funds (ETFs) or open-ended funds, depending on the regulatory and market conditions of the respective markets.

As of end 2005, PAIF and three single-market funds in Hong Kong SAR, Malaysia, and Singapore were listed, with the remaining five single-market funds to be offered in the next few months.[6]

The following factors are often cited as impeding the development of corporate bond markets in Asia:

– *Low investor participation*. With ample liquidity in the banking system, it is true that Asian banks and financial institutions have increased their appetite for bonds in recent years. Institutional investors other than banks, such as pension funds or provident funds, have also played a more active role as the amount of funds under management is growing alongside an aging population. However, retail investors' participation is still low, while in some markets, restrictions on cross-border investment in individual markets have discouraged foreign investors.

– *Low liquidity*. There is a lack of liquidity in the secondary markets for corporate bonds. Such a low degree of liquidity is often associated with the relatively small size of issues and infrequent issuance. In Asia, where there are a large number of small and medium enterprises, corporate issues are commonly constrained by the size of the balance sheet of the company. Furthermore, the buy-and-hold strategy of most bond investors further reduces the liquidity in the secondary market.

– *Low price transparency*. There is a lack of price transparency in the trading of bonds in the secondary markets. This is because the majority of bonds, particularly corporate bonds, are traded over-the-counter (OTC). This opaqueness in pricing has contributed to wide bid-ask spreads, making transactions unnecessarily costly and inefficient to investors.

– *Low credit ratings*. It has generally been observed that corporate bond issuers in Asia receive low credit ratings from the international rating agencies — below "A" for most of them. But many Asian institutional investors and official reserve managers are required to invest in bonds not lower than an "A" rating. This implies that there may exist a considerable gap between the credit ratings of the issuers and what the Asian investors, in both the public and private sector, are prepared to accept. Thus, the great majority of potential corporate issuers have been denied access to the huge pool of savings in the region.

5 The eight EMEAP markets are: China, Hong Kong SAR, Indonesia, Korea, Malaysia, Philippines, Singapore and Thailand.

6 For further details on the background of ABF2, please see: G. Ma and E Remolona, 2005, "Opening markets through a regional bond fund: lessons from ABF2", *BIS Quarterly Review*, June, pp 81-92.

– *High taxation*. Withholding taxes and taxes on financial transactions remain prohibitively high for non-resident investors in some markets. For instance, in Korea, the withholding taxes on interest income applicable to non-resident investors and taxes on capital gains derived from holding of bonds can be as high as 27.5%, discouraging foreign investor participation in the local bond market.

3. Experience with ABF2

The component funds of ABF2 invest in sovereign and quasi-sovereign local currency-denominated bonds in EMEAP markets. Notwithstanding the fact that ABF2 is concerned with bond funds, we faced similar issues, as mentioned above, in taking forward the initiative. As such, the experience gained from the implementation of ABF2 may be helpful as we consider how to further develop corporate bond markets in Asia. In particular, we discuss below how ABF2 addresses such challenges as widening investor base, enhancing market liquidity, raising price transparency and improving market infrastructure. The issue of credit ratings is also discussed.

A. Broadening the investor base

A primary question in the ABF2 initiative is how to design a bond fund that would appeal to a broad investor base (whether retail or institutional) and facilitate access by investors including local and foreign investors. Specifically, we compare below the experience gained from the two funds listed in Hong Kong SAR, namely PAIF and the Hong Kong Bond Index Fund, to highlight factors that may affect investor interest. This is followed by a discussion of the removal of regulatory and market impediments to facilitate foreign access in various economies, and also of efforts to adopt best international practice in the ABF2 funds as part of the attempt to appeal to foreign investors.

(i) Acceptance of PAIF and the Hong Kong Bond Index Fund

PAIF and the Hong Kong Bond Index Fund have made some inroads in gaining investors' acceptance as reflected by the decent growth of the two funds in terms of the asset size (Table 1) since their listing in Hong Kong SAR.[7] Notwithstanding the rising interest rate environment, the Hong Kong Bond Index Fund has grown by 49% although PAIF has grown more moderately by 13%.

There are three main factors which have contributed to the impressive growth of the Hong Kong Bond Index Fund: a) low cost of participation, b) appeal to retail investors through the launch of a savings plan, and c) appeal to institutional investors with Hong Kong dollar liabilities.

The entry threshold for investing in ABF2 is intentionally kept low so as to encourage participation of individual investors. The trading board lot size applicable to PAIF is 10 units while that for the Hong Kong Bond Index Fund is 100 units only. That means the minimum amount of investment can be as low as US$1,000 for PAIF and US$1,300 for the Hong Kong Bond Index Fund. As they are ETFs, the brokerage commissions (generally 0.25%, charged at brokers' discretion) and other charges for trading PAIF and the Hong Kong Bond Index Fund are as low as that for the trading of stocks, hence enhancing their attractiveness to those individual investors who are experienced stock market participants. The cost advantage of ETFs is most notable when compared with other bond funds currently available on markets. For PAIF, there is no subscription fee. The management fee is about 16 basis points per annum and the total expense ratio is approximately 30 basis points per annum. But for most actively managed bond funds, the subscription fee varies from 3% to as much as 5%. The management fees range from 0.75% to 1.25%, with total expense ratios exceeding 1.5% per annum. Such high transaction costs for actively managed funds deter investor participation.

[7] The Hong Kong Bond Index Fund on 21 June and the PAIF as listed on 7 July 2005.

Table 1

Performance of PAIF and of the Hong Kong Bond Index Fund

As at end-November 2005 (in thousands of USD)

	PAIF	Hong Kong Bond Index Fund
Net asset value	1,126,359	270,900
- Growth in amount*	127,789	88,900
- Growth in percentage*	13%	49%
Daily average turnover	93	813

*The difference between the net asset value and the initial seed money contributed by the EMEAP Group.

Source: Bloomberg.

To further facilitate investment at retail level, the fund manager of the Hong Kong Bond Index Fund has worked with commercial banks to introduce a savings plan which allows individual investors to invest as little as US$130 monthly in the Hong Kong Bond Index Fund. Two of the largest commercial banks in Hong Kong SAR have participated in the scheme, which offers to automatically deduct a pre-agreed amount of deposits from the client’s bank account for investment in the Hong Kong Bond Index Fund. Such an averaging method of investment not only allows a further reduction in the effective entry threshold for investment but also helps minimise the cost to poor market timing decisions by retail investors.

Much of the increase in the asset size of the Hong Kong Bond Index Fund was contributed by institutional investors, eg pension funds or provident funds. The Hong Kong Bond Index Fund seems to provide a good match to their Hong Kong dollar liabilities.

PAIF, despite its low cost features similar to those of the Hong Kong Bond Index Fund, seems to be taking a slower start. PAIF which offers access and exposure to eight markets in Asia in one go is a brand new asset class. Feedback from State Street Global Advisors, the fund manager for PAIF which has conducted numerous roadshows in Japan, Europe and the US to market the fund, suggests that this asset class is gaining more acceptance among Japanese investors (such as Japanese banks), but less so among traditional pension funds and other institutional investors in US and Europe. This is not helped by the low management fee embedded in the passively managed fund. The 15 basis points in management fee for PAIF’s fund manager have meant that the budget for marketing is limited. There is also little room for providing incentives to distributors in individual markets. It is useful to note that Standard & Poor’s Depository Receipts (commonly known as “spiders”), the first ETF offered in the US, took three years since launch before they took off to become a success phenomenon in the 1990s.

(ii) Removal of cross-border impediments

ABF2 was instrumental in the lifting of cross-border restrictions to allow greater participation of foreign investors in several markets.

PAIF was the first foreign investor that obtained permission to invest in both exchange-traded bonds and interbank traded bonds in Mainland China, and to enjoy flexibility in the repatriation of proceeds. Qualified Foreign Institutional Investors (QFII), for example, may only invest in exchange-traded renminbi bonds, subject to various limits on investment and repatriation.

In Malaysia, the foreign exchange administration rules have been liberalised to facilitate cross-border investment, including the access by PAIF. The Malaysian authorities have also lifted all restrictions on non-resident hedging activities. Companies controlled by non-residents now enjoy full access to onshore credit facilities in local currency. In Thailand and Malaysia, domestic bond markets have been opened to issuance by multilateral agencies and non-resident investors are now exempted from withholding tax.

(iii) Adoption of international practice

Observance of best international practice would likely encourage greater foreign investor participation. The PAIF-related documents such as trust deed and prospectus were carefully drafted in line with international standards and best practices. They serve as a model in the drafting of fund documents for other ABF2 Funds, therefore helping to promote the adoption of international standards among the EMEAP markets.

That said, the work on documentation of the component funds of ABF2 is extremely taxing, given the diverse regulations and standards required in individual EMEAP markets. One illustrative example is the valuation of the component funds of ABF2. To protect investors, the EMEAP suggested having the trustee conduct the valuation of the funds since the trustee, unlike the fund manager, should not have a vested interest in the fund performance. This is also a common practice in developed markets. But, in most EMEAP markets, there are local regulations requiring fund mangers to perform the valuation instead. After lengthy discussions with relevant regulators, the EMEAP finally determined that the fund managers might perform the valuation as required by local regulation but, as an additional safeguard, the verification of the figures by trustees would be required.

B. Enhancing market liquidity

The lack of liquidity deters investors as they are likely to face high costs of transaction. To enhance market liquidity of the ABF2 funds, a market-making mechanism, which is common in the trading of government securities, has been adopted where possible to ensure the tightness of bid-ask spreads in the trading of the ABF funds on the stock exchanges. In implementing ABF2, we found out that it was not at all an easy task to sign up financial institutions as market-makers since they would need to make system changes and bring together two different profit centres, namely the equity team (with access to the exchange) and the fixed income team. Both monetary incentives (eg waivers of dilution levies) and non-monetary incentives (eg the right to do partial in-kind creation) have been provided, which helped sign up two market-makers for each of PAIF and the Hong Kong Bond Index Fund.[8] For PAIF, securities lending facilities for its units are available so as to facilitate market-makers to manage their position.

The market-making arrangements have proved to be effective in maintaining tight bid-ask spreads. For instance, the average bid-ask spread for PAIF was roughly US$0.16 (compared to a traded price of US$98.30 per unit[9]) and for the Hong Kong Bond Index Fund it was HK$0.08 (compared to a traded price of HK$98.76 per unit[10]). Such spreads were narrower than that commonly observed for Asian corporate bonds.

In considering ways to enhance liquidity for corporate bond markets, a relevant question is whether a market-making mechanism may be instituted in the trading of corporate bonds. One reason why financial institutions are even more reluctant to be market-makers for corporate bonds is precisely the illiquidity of corporate issues. As many investors adopt a buy-and-hold strategy, there may not be sufficient liquidity to develop a repo or security lending market for market makers to manage their exposures. Consideration should therefore be given to encouraging the development of a repo or security lending market.

C. Raising price transparency

Transparency enhances market efficiency and fosters investor confidence. Numerous studies in the US have shown that increased transparency about traded price has led to narrower bid-ask spreads for corporate bonds.[11] The structuring of the ABF2 funds as bond ETFs would indeed raise the

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[8] HSBC and Deutsche Securities Asia.

[9] Reference price as at 30 November 2005.

[10] Reference price as at 30 November 2005.

[11] Edwards, A K, L S Harris and M S Piwowar (2005) “Corporate Bond market transparency and transaction costs”, US Securities and Exchange Commission.

transparency of trading, with order flows and trade information made available to participants, to the regulatory authorities and to the public. Also as the ABF funds are passively-managed bond index funds, transparency and representativeness of the benchmark bond indices are critical to ensure accurate valuation and replicability of the index performance. The ABF2 funds have chosen the iBoxx ABF family of indices because its platform is considered better than that of the single-firm index providers. iBoxx uses multiple sources for valuation of bond prices and adopts transparent construction rules to ensure that the benchmark index performance can be tracked closely by fund managers. Notwithstanding its multiple-pricing structure, iBoxx is faced with many technical issues, one of which is the valuation of bonds that hardly trade at all.

D. Improving market infrastructure

The iBoxx ABF family of indices was considered an important piece of infrastructure introduced in Asia. In addition, a number of single-market funds are structured as bond ETFs, and as such, the supporting market infrastructure is very demanding. For example, the clearing and settlement system for equities and that for debt securities must be linked up to facilitate in-kind creation and redemption of fund units. The ABF2 funds have thus accelerated the linking up of these two systems in some markets. Moreover, the global custodian for PAIF and the eight single-market funds has successfully established Asia's first custodian network linking up all eight markets.

E. Credit ratings

Credit ratings are an area where ABF2 hasn't done much to address. Due to various practical reasons, PAIF has not been rated. Instead, the weighted average rating of the debt securities in PAIF is computed and disclosed so as to assist investors in determining the level of credit risk that they may take.

The computed rating is "A-" for PAIF's basket of sovereign and quasi sovereign issues, the best quality assets in Asia. Even so, feedback from the marketing of PAIF indicates that the "A" rating is still not satisfactory enough for large institutional investors with rather conservative investment strategies. For example, multilateral development banks with exposures in the region can only invest in credits rated "AA" or above.

The problem would be even more acute with corporate bonds, the credit ratings of which would be even lower than those of sovereigns. In this connection, it is important to examine ways such as credit enhancement and guarantee mechanisms (currently studied by the ASEAN+3 forum) which may help overcome this barrier.

4. The role of central banks and regional cooperation

One of the questions often asked about ABF2 is why central banks should be involved. Some might argue that the private sector's involvement in the market would suffice without central banks being present. However, one should note that market may fail from time to time. Where there is a gap, there may be a need for the public sector to come in. Moreover, regulatory and market reforms are a public good, and the chance for the private sector to initiate costly and lengthy lobbying efforts for regulatory and market reforms is rather slim.

That said, the ABF2 experience represents cooperation between the public and private sectors. It has drawn not only on the experts within the central banks but also on the private sector fund managers, independent index provider, custodians, all of them were selected in a competitive process. ABF2 provides a model of cooperation between the public and private sectors on a project of this scale.

The ABF2 initiative thus marks an important milestone in central banking cooperation. While the initiative has yielded many practical results in deepening and broadening the Asian bond market, many more impediments have been identified in the process but not yet addressed. As the EMEAP group reviews its experience with ABF2 and considers implications for the corporate bond market, I am certain that the momentum for cooperation will not be lost in exploring new ways to collectively tackle the barriers to development.