Identifying impediments to cross-border bond investment and issuance in Asian countries[1]

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1. Introduction

The Asian currency crisis clearly demonstrated the need to develop well functioning local bond markets in Asia. Before the crisis, companies (including banks) in Asia, regardless of whether they had earnings in foreign currencies, often funded their business activities in foreign currencies, taking advantage of the low interest rates at the time. Such funding typically took the form of short-term bank lending, rolled over repeatedly. The funds raised in this way were often spent to finance domestic fixed (long-term) investment producing local currency cash flow, thereby creating the so-called "double mismatch" of maturity and currency on the companies' balance sheets. This system collapsed when foreign lenders ceased to roll over their loans to the borrowers in Asia when market perceptions suddenly changed, aggravating the crisis.

Since then, Asian governments have made great efforts to foster bond markets in their respective countries by conducting a series of market reforms. Many of the reform efforts are concentrated on government bond markets, which is quite understandable given that a well functioning government bond market is considered a precondition for the development of the corporate bond market. Such efforts also reflect an increased need for Asian governments to finance their expanded fiscal spending after the crisis.[3] As a result, the size of local bond markets in Asia in terms of outstanding amounts has more than doubled since 1998 and is now estimated to exceed $1 trillion (excluding Japan).

Nonetheless, local bond markets in Asia have room for further improvement in many aspects. Most notably, secondary markets are not liquid in many countries, which is evidenced by the low turnover ratio of government bonds. While bid/ask spreads are already narrow for some countries, they may be biased given the low trading volume (Table 1). A 1998 APEC study pointed out that inactive secondary markets were attributable to a number of factors such as a lack of reliable benchmark yield curves, a lack of local institutional investors, underdeveloped trading, clearing and settlement systems, a lack of liquidity, a lack of committed market-makers, long settlement periods and the absence of bond lending programmes. Although many of these factors have since seen dramatic improvements, they remain impediments to active bond trading in many countries.

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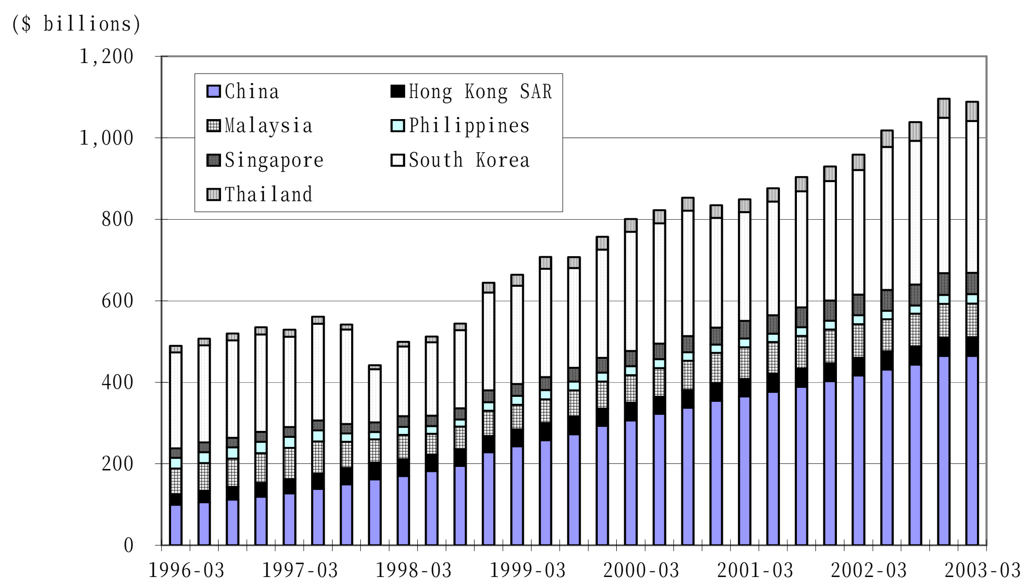
[1] The markets covered in this paper are those of China, Hong Kong SAR, Indonesia, Japan, Korea, Malaysia, the Philippines, Singapore and Thailand, unless explicitly stated otherwise.

[2] The views expressed here are entirely the personal opinions of the author and do not reflect the official views of the Bank of Japan. This paper is prepared for information only. Although the author has endeavoured to provide accurate and timely information, readers are reminded that there is no guarantee that all information provided is accurate and up-to-date.

[3] There are a number of other reasons to develop local bond markets in Asia. Perhaps the most important is that development of the bond market introduces "credit risk culture" into the region, which is necessary for the efficient allocation of resources.

Chart 1

Outstanding amount of debt securities in Asian countries



Source: BIS.

Table 1

Liquidity indicators in government bond markets

	Turnover ratio[1]	**Bid/ask spread**
	(times)	**(bps)**
China	0.4	–
Hong Kong SAR	15.6	5-10
Indonesia	0.5	–
Korea	9.6	1
Malaysia	3.7	3-5
Philippines	–	25-50
Singapore	5.0	5
Thailand	2.5	2-3
Japan	6.9	7
United States	22	3

[1] Ratio of turnover to average outstanding stock in 2002.

Sources: RBA (2003); Mohanty (2002).

A related issue is extremely limited foreign (non-resident) participation. In fact, foreign investors are virtually non-existent in local bond markets in Asia. This constitutes a clear contrast with foreign investor participation in local stock markets (Table 2). Similarly, there are only four bond markets in the region where non-resident issuers are meaningfully present, namely Japan, Korea, Hong Kong SAR and Singapore. Among the four markets, Hong Kong seems to be most able to attract foreign issuers. About one third of outstanding Hong Kong dollar issues belong to foreign entities. Nonetheless, the amount of such non-resident issuance is still limited compared with the eurobond market. For example, the amount of issuance of samurai bonds (1.3 trillion yen) stood at only one tenth of that of euroyen bonds in 2002.

Table 2

Foreign investor participation in local markets

	Bonds[1]	**Stocks**[2]
Hong Kong SAR	<1	41
Indonesia	<1	na
Korea	2	37
Malaysia	1	22
Thailand	1	29
Japan	5.8	32
United States	?	?

[1] Amount of holdings as a percentage of total domestic debt outstanding (end-2000) except Japan (end-2003) and Thailand (as a percentage share of total turnover value during 1999). [2] Percentage share of turnover value for Hong Kong (2001), Japan (2003) and Thailand (1999). Amount of holdings as a percentage of total stocks outstanding for Korea (2001) and Malaysia (1998).

Sources: Mihaljek et al (2002); Daiwa Research Institute (2002); Kadir (2001); Prasarn (2001); Bank of Japan.

After discussing the rationale for promoting cross-border bond investment and issuance in Asian local bond markets, this paper tries to identify the specific factors that are hampering such investment and issuance, taking stock of previous studies and research done by investment banks, academics and public authorities. The paper also offers some suggestions on how to tackle this issue with a view to creating integrated regional bond markets in Asia.

2. Rationale for promoting foreign participation in local bond markets

2.1 Benefits to local bond market

In Asia, local banks continue to play an important role in bond markets. They are the largest bondholders in many countries, though local institutional investors are gradually gaining ground. This concentration of investors is likely to accentuate volatility in the market during times of stress. In this respect, foreign investors can help broaden the investor base and add liquidity to the secondary market. There is a negative image associated with foreign investors in Asian countries. Some believe that foreign investors tend to show herding behaviour because of a lack of information and poor understanding of the market, thereby inducing

volatility in the market. While such a hypothesis is very difficult to verify, past studies and research do not provide any evidence to support it (IMF (2003a)).

Non-resident issuers also contribute to the development of local bond markets by providing an additional supply of bonds. Bonds issued by blue-chip multinational enterprises or international organisations can create a new asset class for such markets, thereby offering diversified investment opportunities to local investors. In addition, foreign market players (both investors and issuers) are often eager to increase the efficiency of local markets and therefore are vocal advocates for market reforms. They are the ones who offer global perspectives when conducting such market reforms and bring internationally acknowledged best practices into local markets.

2.2 Benefits to foreign investors and issuers

Opportunities provided by local bond markets in Asia to foreign investors should not be underestimated. As a general characterisation of emerging local bond markets, JPMorgan (2002) states that "emerging local markets are one of the final frontiers of untapped diversification opportunity". In recent years, Asian local bonds have shown strong performance. A simulation by Consing (2003) shows that the HSBC's Asian Local Currency Bond Index (ALBI)[4] accumulated a return of 35.7% for the period between 29 December 2002 and 4 September 2003, thereby significantly outperforming US Treasuries (with similar duration) with a return of 20.4% (Table 3). This was attributable to an excess return of 11.2% on capital gains and carry income and a 4.1% excess return from currency gains. Reviewing the performance data for the first half of 2003, Barclays Capital (2003a) finds that a basket of Asian local bonds is a more efficient investment than individual bond holdings due to the less than perfect correlation between local bond markets. In other words, the total volatility of a basket of Asian local bonds in terms of standard deviation of daily percentage changes is lower than the sum of individual market volatility.

Table 3

Performance of HSBC ALBI

	Return
ALBI	35.7%
US Treasuries (similar duration)	20.4%
ALBI excess returns over US Treasuries	15.3% point
Of which:	
Attributable to capital gains and carry income	11.2% point
Currency gains	4.1% point

Source: Consing (2003).

There are already encouraging signs that Asian local bond markets are beginning to gain attention from foreign investors. Investment banks now produce reports on Asian local bond

[4] The HSBC ALBI tracks the total US dollar return performance of liquid bonds denominated in local currencies in mainland China (though the current weighting for China is zero), Hong Kong SAR, India, Malaysia, the Philippines, Singapore, Taiwan (China) and Thailand.

markets more frequently than ever. Seminars and workshops dealing with this topic are attracting quite a few participants from the private sector. Furthermore, Deutsche Bank (2003) observes that most of the world's largest bond funds have now set up offices in Singapore and Hong Kong, even though many are satellite offices doing research on hard currency credit only.

Foreign issuers also benefit from bond issuance in Asian local bond markets. The local bond issuance can give multinational enterprises long-term financing for their business activities in the country. In fact, such financing needs are increasing as direct investment in the region continues to grow. In addition, foreign issuers enjoy diversification of their funding base.

3. Overview of impediments

3.1 Impediments to foreign investor participation in local bond markets

There are many empirical studies aimed at explaining the extent and determinants of investors' position in international equities. On the contrary, perhaps due to the lack of available data, only a few studies have been conducted to explore the factors that determine investors' position in international bonds. Burger and Warnock (2003) found that country weights in US investors' foreign bond portfolios were related to the openness of capital accounts and potential diversification benefits as indicated by historical correlations. They also found that emerging market countries with more stable policies as evidenced by price stability and stable exchange rates have greater bond market development and higher US participation.

The following sections focus on structural impediments to foreign investor participation. Capital control is probably the most critical issue, as shown in the above-mentioned study, since it directly limits foreign investors' market access. Availability of hedging instruments (currency derivatives and interest rate derivatives) is another significant factor, given that hedging instruments make it possible to reduce performance volatility. There are also factors that affect foreign investor participation indirectly through an increase in costs and risks for investment. Among others, taxation, market infrastructure (such as the disclosure framework and price transparency), creditor protection and clearing and settlement systems are often cited as determining factors. On top of that, the common problem across the region is the language barrier, which makes it difficult for foreign investors to find accurate and timely regulatory information and costly for them to fulfil documentation requirements. All of the above are interrelated and naturally relevant to the development of local bond markets in general. Hereafter, this paper describes the factors that are of particular relevance to foreign investor participation in Asian local bond markets.

Capital controls

Controls on capital transactions are a broad concept which includes controls on capital and money market instruments, derivatives and other instruments and credit operations. After the 1997 currency crisis, Asian countries adopted various controls on capital transactions and still maintain many of them. The IMF's *Annual Report on Exchange Arrangements and Exchange Restrictions* offers comprehensive information on this subject.

As for control over foreign ownership of local bonds, China is the only country that imposes a restriction (Table 4). The launch of the QFII (Qualified Foreign Institutional Investors) system effective December 2002 was undoubtedly a significant first step toward financial liberalisation. The total quota authorised for 10 QFIIs (as of 19 November 2003) amounts to $1.7 billion. However, there are many restrictions that make this system difficult to use. QFIIs are allowed to invest in government and corporate bonds listed on China's securities exchanges only (ie they are not allowed to participate in interbank markets where secondary

market liquidity is more ample). Furthermore, even though the regulation allows QFIIs to conduct repurchase transactions in government bonds and to trade corporate bonds, the Shanghai and Shenzhen exchange markets announced that such transactions were not to be conducted temporarily due to technical reasons (PricewaterhouseCoopers (2003)).

Table 4

Selected capital control measures in Asian countries (1)

	Foreign ownership of local bonds	Note
China	QFIIs only.	QFIIs must satisfy various requirements. For instance, QFIIs must set up special renminbi accounts with domestic banks and use the services of domestic securities companies. Closed-end QFIIs may only remit capital after three years, in instalments of no more than 20% of the total each time, at intervals of one month or more. Other QFIIs may only remit capital after one year, in instalments of no more than 20% of the total, and at intervals of three months or longer. SAFE must approve all repatriations.
Hong Kong SAR	No restriction.	
Indonesia	No restriction.	No non-resident person may purchase more than 1% of any mutual fund.
Japan	No restriction.	
Korea	No restriction.	In order to invest in listed bonds, foreign institutions must apply for an Investment Registration Certificate (IRC) from the Financial Supervisory Service before investing in the market.
Malaysia	No restriction.	
Philippines	No restriction.	Registration with the BSP is necessary if the foreign exchange needed for capital repatriation and remittance of dividends, profits and earnings that accrue thereon is purchased from the banking system.
Singapore	No restriction.	
Thailand	No restriction.	

Sources: IMF (2003b); PwC (2003); BONY (2002, 2003); JPMorgan (2002).

Whether foreign investors can obtain local currency credit from local financial institutions is another important factor. Foreign investors may find it easier to invest in local bonds if they have free and timely access to local currency credit. As shown in Table 5, most Asian countries set a limit on the extension of local currency credit to non-residents.

Restrictions on foreign exchange transactions are also relevant. Even when foreign exchange transactions for foreign investors to purchase local bonds are permitted, documentation requirements for approval or reporting may be quite onerous.

Table 5

Selected capital control measures in Asian countries (2)

	Local currency credit facilities by residents to non-residents	Other limitations for non-residents
China	Financial institutions authorised by the PBC may lend to overseas institutions or contract overseas credits.	
Hong Kong SAR	No restriction.	
Indonesia	Not allowed, unless it is related to economic activities in Indonesia, such as transactions involving rupiah-denominated securities.	Foreign exchange transactions must be executed through banks incorporated in Indonesia and licensed by Bank Indonesia.
Japan	No restriction.	
Korea	Credit and loans of more than W100 million per borrower denominated in local currency and granted by institutional investor require MOFE approval.	Won purchases by foreign investors must be associated with a special securities purchase transaction.
Malaysia	Banking institutions as a group may extend ringgit overdraft facilities not exceeding RM 500,000 in aggregate to non-residents, provided the credit facilities are fully covered at all times by fixed deposits placed by the non-resident with the banking institutions extending the credit facilities.	Ringgit purchases by foreign investors must be associated with securities transactions. There is no restriction on the conversion of ringgit funds in external accounts (funds belonging to a non-resident individual or corporation, maintained with a financial institution in Malaysia) into foreign currency for repatriation. Investors may bring funds into and repatriate funds out of the country (in foreign currency only).
Philippines	No restriction so long as the facilities do not involve foreign exchange purchased from the banking system.	
Singapore	No restriction except that financial institutions in Singapore may not extend SGD credit facilities exceeding SGD 5 million to non-resident financial entities where they have reason to believe that the proceeds may be used for speculation. Overdrafts are prohibited in all cases.	
Thailand	The BOT does not allow domestic financial institutions to extend direct baht-denominated loans to non-residents. Credit facilities provided by domestic financial institutions to foreign investors are capped at THB 30 million per each baht cash account and THB 50 million per counterparty.	

Sources: IMF (2003b); PwC (2003); BONY (2002, 2003); JPMorgan (2002).

Availability of hedging instruments

In the absence of hedging instruments, foreign investors have no option but to take both interest rate exposure and foreign exchange rate exposure when they purchase local bonds. Therefore, the availability of hedging instruments, for currency risk in particular, is crucial for foreign investors. After the Asian crisis, the offshore foreign exchange derivatives market for Asian local currencies disappeared due to the introduction of capital controls (whereas offshore non-deliverable forwards markets emerged for some currencies). Nonetheless, most countries have onshore foreign exchange forwards and swap markets, although the hedging costs are high (Barclays Capital (2003b)) and tenors are relatively short (Table 6).

Table 6

Overview of currency risk hedging instruments

	Onshore FX forward	**Non-resident access to onshore FX forwards**	**Offshore market**
China	Up to four months	Not allowed	NDF liquid
Hong Kong SAR	Liquid	No restriction	None
Indonesia	Liquid	Allowed to hedge principal and coupon	NDF liquid
Korea	Liquid	Allowed to hedge principal and coupon	NDF liquid
Malaysia	Illiquid	Prior approval required	None
Philippines	Liquid	Prior approval required	NDF illiquid
Singapore	Liquid	Allowed to hedge principal and coupon	Deliverable forward illiquid
Thailand	Liquid	Allowed to hedge principal and coupon	Deliverable forward illiquid

Source: Barclays Capital (2003b).

Taxation

Taxation has a significant impact on the development of bond markets in general. Capital gains taxes create a disincentive to trade bonds frequently, thereby reducing arbitrage opportunities. Moreover, withholding taxes on interest income to foreign investors reduce the returns from holding bonds. They may also create market fragmentation through distortion if the treatment of withholding tax is different depending on the types of bonds or investors. Therefore, it is important to adopt tax policies that are compatible with market development while not seriously compromising the principles of good taxation.

None of the G7 countries charge withholding tax on interest income obtained from government bonds held by foreign investors. On the other hand, withholding tax on interest income is charged in a number of countries in Asia, though the tax rates are not very high (Table 7). Although there are tax treaties among Asian countries that reduce tax burdens, tax reclaim procedures are complicated in many countries.

Table 7

Tax treatment on returns from foreign investors' holdings of local bonds

	Withholding tax on interest income	Capital gains tax	Any other tax
China	No withholding tax on interest rate income.	33%, if bonds are not held until maturity (plus 5% profit tax).	
Hong Kong SAR	No withholding tax on interest income.	No capital gains tax.	
	Withholding tax on interest income.	Capital gains tax.	
Indonesia	20% of income earned.	No capital gains tax.	0.1% of gross sale proceeds is withheld by the broker as income tax for securities transactions executed on the exchange.
Japan	No withholding tax for JGB, if a number of requirements are satisfied.	No capital gains tax.	
Korea	27.5% of income earned.	The lower of 11% of gross sales proceeds or 27.5% of net capital gains.	
Malaysia	15% of income earned.	No capital gains tax.	
Philippines	20-32% of income earned	No capital gains tax.	
Singapore	15% of income earned. Resident investors are exempt from withholding tax.	No capital gains tax.	
Thailand	15% of income earned.	15%.	

Sources: BONY (2002, 2003); JPMorgan (2002).

Clearing and settlement of bonds

Scripless settlement, delivery versus payment (DVP) and short settlement cycles are desirable from the viewpoint of efficiency and risk reduction. In this respect, clearing and settlement systems in Asia are fairly well developed (Table 8). In fact, securities settlement systems in the region satisfy most of the G30 recommendations (IIMA (2003)). A real problem arises from the requirements to appoint a local custodian in order to settle local currency bonds (Table 9). For example, foreign investors complain that documentation requirements for participation in BOJ-NET through a third-party intermediary are onerous (in large part relating to the withholding tax exemption procedure).

Table 8

Selected features of clearing, settlement and custody in Asian countries (1)[1]

	Scripless settlement	Real time gross settlement/DVP	Settlement cycles
China	Yes	No	T+0 or T+1
Hong Kong SAR	Yes	Yes	T+0 or T+1
Indonesia	Yes (paper remains)	Unknown	T+3
Japan	Yes (paper remains)	Yes	T+3
Korea	Yes	Yes	T+1
Malaysia	Yes	Yes (for direct participants only)	T+1
Philippines	Yes	Unknown	T+0 or T+1
Singapore	Yes	Yes	T+1
Thailand	Yes	Yes	T+2

[1] Government bonds.

Sources: BONY (2002, 2003); IIMA (2003).

Table 9

Selected features of clearing, settlement and custody in Asian countries (2)[1]

	International linkage of CSD	Custodian
China	CMU (Hong Kong, planned)	Local custodian
Hong Kong SAR	Clearstream (ICSD), Euroclear (ICSD), KSD (Korea), CDC (China, planned), AustraClear (Australia) and AustraClear (New Zealand)	CMU
Indonesia	None	Local custodian
Japan	None	Local custodian
Korea	CMU (Hong Kong)	Local custodian
Malaysia	None	ADI
Philippines	None	Local custodian
Singapore	Clearstream (ICSD) and Euroclear (ICSD)	MAS, local custodian
Thailand	None	Local custodian

[1] Government bonds.

Sources: BONY (2002, 2003); IIMA (2003); Citigroup (2003a).

3.2 Impediments to foreign issuer participation in local bond markets

Issuance of local bonds by non-residents is allowed in most Asian countries except China and Thailand. Nonetheless, as noted above, actual issuance by non-residents is negligible in several countries. This is attributable to various factors. For instance, local rating or local listing requirements, use of local law as governing law and preparation of documentation in the local language all increase costs of issuance. Furthermore, if the approval process and/or issuance procedure takes a long time, there is a risk that market conditions might change. The availability of investment tools for the funds raised by non-resident issuance of bonds is another factor.

Table 10

Factors affecting issuance of local bonds by non-residents (1)[1]

	Issuance of local bonds by non-residents	Local rating/local listing	Governing law
China	Not allowed	Not required/required	Chinese law
Hong Kong SAR	Allowed	Not required/not required	English law
Indonesia	Allowed	Required/required	Indonesian law
Japan	Allowed	Not required/not required	Japanese law
Korea	Allowed (prior report to the MOFE and FSC necessary)	Required/required	Korean law
Malaysia	Allowed (approval required)	Required/required	English/New York/ Malaysian law
Philippines	Allowed (only after the proper license to do business in the country is secured from the appropriate government agency, provided payment for the sale or issue does not involve the purchase of foreign exchange from the banking system)	Required/not required	Philippine law
Singapore	Allowed (when the Singapore dollar proceeds of an initial public offering are used offshore, they must be swapped or converted into foreign currency upon drawdown by the issuer)	Not required/not required	English/New York/ Singaporean law
Thailand	Not allowed	Required/not required	Thai law

[1] Corporate bonds.

Sources: IMF (2003b); Citigroup (2003b).

Table 11

Factors affecting issuance of local bonds by non-residents (2)[1]

	Documentation language	Time required to obtain approval	Typical duration of issuance process
China	Chinese	2-6 months	2 weeks
Hong Kong SAR	English	A few weeks needed only for retail issues	2-4 weeks
Indonesia	Bahasa	45 days upon completion of documentations	4 months
Japan	Japanese	1-2 weeks	2-3 months
Korea	Korean	na	2 weeks
Malaysia	English	14 days for non-equity linked issue	4-8 weeks
Philippines	English	2 months	8-10 weeks
Singapore	English	None	2-4 weeks
Thailand	Thai	2 weeks	8-12 weeks

[1] Corporate bonds.

Sources: IMF (2003b); Citigroup (2003b); Mitsubishi Securities (2003).

4. Way forward

4.1 Regional cooperation

There are already several regional initiatives dealing with Asian bond market development. Ministries of finance and central banks of ASEAN+3 countries are pursuing the "Asian Bond Markets Initiative (ABMI)", a comprehensive approach to developing bond markets in Asia. Working groups have been created on a voluntary basis for six areas: creating new securitised debt instruments, credit guarantee mechanisms, foreign exchange transactions and settlement issues, issuance of bonds denominated in local currency by multilateral development banks (MDBs), foreign government agencies and Asian multinational corporations, local and regional rating agencies, and technical assistance coordination. Asia-Pacific Economic Cooperation (APEC) has also discussed the harmonisation of bond market rules and regulations across the region. Meanwhile, the Asian Cooperation Dialogue (ACD) aims to promote public awareness of the various initiatives as well as to provide political support for them. The Executives' Meeting of East Asia-Pacific Central Banks (EMEAP), a group of 11 central banks from the region (Australia, China, Hong Kong SAR, Indonesia, Japan, Korea, Malaysia, New Zealand, the Philippines, Singapore and Thailand), launched the Asian Bond Fund (ABF), an index bond fund of US dollar-denominated Asian bonds managed by the Bank for International Settlements, in July 2003, and it was welcomed by the ACD. The EMEAP central banks are now studying the ABF2, a bond fund of local currency-denominated Asian bonds. All these regional initiatives indicate that there is a political will to enact market reforms for the development of bond markets.

Against this background, consideration could be given to the creation of a forum for securities regulators, ministries of finance and central banks of ASEAN+3 countries with a view to promoting regional cross-border transactions in local bonds. Discussion topics could

include harmonisation of rules and regulations, regional tax arrangement and any other issues that are of relevance to cross-border local bond transactions.

4.2 Private sector involvement

It should be noted that private sector involvement is key to the development of regional bond markets, since market participants are the users of such markets. There should be regular dialogue between the public and private sectors on the national as well as regional level. Impediments to cross-border transactions of bonds must be identified specifically through such dialogue. The public sector must carefully listen to the private sector when exploring new infrastructure projects such as a regional credit guarantee mechanism or regional securities settlement system. In particular, the public sector should be mindful of the risk of crowding out the private sector.

In this context, it would be meaningful to conduct a survey among market participants of the impediments to cross-border bond transactions. At the same time, self assessment could be done by public authorities on the same subject. This may serve as a first step toward identifying impediments, thereby forging common understanding of the issues across the public and private sector.

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