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## Guest Commentary

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Measures for Overcoming the Obstacles to Bond  
Market Development**

**Barry Eichengreen  
Revised June 2008**



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## **Field of Dreams: Measures for Overcoming the Obstacles to Bond Market Development**

**Barry Eichengreen**  
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Fostering local bond markets, it is increasingly recognized, is an important part of the unfinished development agenda. Different emerging markets have different reasons for prioritizing bond market development. In Asia, bond markets are seen as a vehicle for reducing dependence on bank finance and limiting the problems that bank-dominated financial systems entail: concentrated power, exploitation of political connections and financial fragility among them. Bond markets, by comparison, are atomistic, based on arm's-length relationships, and less riddled by the information asymmetries that give rise to financial instability. In Latin America, bond markets are seen as a way of reducing dependence on foreign borrowing and foreign-currency-denominated debt. They are a way of more effectively mobilizing domestic saving and channeling it into productive investment without incurring the currency mismatches that have proven so dangerous in light of the region's macroeconomic volatility.

But, in both regions and in the developing world generally, there is a growing appreciation of the advantages of a diversified financial system in which banks, bond markets and equity markets all play a role. More diversified financial systems are more robust.<sup>1</sup> And the different components of the financial system have different strengths. Banks have a comparative advantage in lending to small firms in the information-impacted segment of the economy, where their relationships and dedicated monitoring technologies can be put to use. Bond markets can provide finance more cheaply to large, long-established, relatively reputable firms. Equity markets are best placed for doing so in situations of uncertainty when investors seek to take bets on competing technologies.

Building a deep and liquid bond market with both government and corporate segments is a complex undertaking. Any list of prerequisites is unlikely to be comprehensive. Be that as it may, a minimal list would start with the following ten preconditions.

There should be a stable macroeconomic policy and a well-developed money market so that monetary policy actions can be taken without causing excessive interest rate-volatility that would interfere with the development of a fixed-income market.

The government must adopt a clear issuance strategy and debt management framework so that investors can anticipate a reliable supply of fixed-income securities. This means coordinating government debt and cash management with monetary policy. It means pre-announcing a schedule for debt issuance.<sup>2</sup>

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<sup>1</sup> Although how much more robust is an open question, insofar as banks hold securities as collateral and as positions on their own balance sheets, as well as through structured investment vehicles. This caveat has been pointed up, it will be clear, by the subprime crisis in the United States.

<sup>2</sup> A quarter in advance or even – as in China, Taiwan, Korea, Malaysia and Singapore – a year in advance.



It should establish a benchmark asset and build a yield curve by concentrating government bond issues in a range of standard maturities.<sup>3</sup> The authorities should foster the development of an efficient primary market by holding regular auctions, disseminating information on the outcome, and widely distributing new bond issues through a primary dealer or comparable system. They should cultivate an efficient secondary market on which price information is continuously available, transactions costs are low, and effective custodial and safekeeping services are available.

They should create a reliable settlement infrastructure both to enhance investor confidence and so that failure of one party to a large securities transaction does not cause a cascade of failures. Elements of a reliable settlement infrastructure include automated settlement of transactions and a system for delivery of payment at time of settlement.<sup>4</sup> They must put in place a legal and regulatory framework with clear rules for securities issuance, market conduct, monitoring and reporting, and payment, clearing and settlement.<sup>5</sup> They should foster a large and varied investor base of banks, pension funds, life insurance companies, mutual funds, retail investors, and foreign investors with diverse transactions needs. Moving to the corporate bond market, the authorities must similarly foster a large and diversified issuer base.

Finally, they must establish tax treatment of fixed-income securities such that both issuance and investment are attractive.

At this point it is tempting to succumb to sarcasm and rephrase the earlier statement that a minimal list would enumerate ten preconditions for bond market development by inserting the word “only” before ten.

It is also tempting to play expert by offering quick solutions to these problems. Inadequacies of the distribution system can be solved by enlisting as primary dealers commercial banks with their extensive retail networks. A more diverse investor base can be created by removing restrictions on entry into the mutual fund, pension fund and insurance industries and relaxing restrictive covenants limiting the participation of these entities in certain fixed-income markets.

Supervisors can move to risk-based rather than ratings- or instrument-based regulation. A shortage of investment grade issuers to provide an adequate supply of high-grade corporate bonds can be solved by securitizing receivables and mortgages and developing a monoline bond insurance industry to enhance the appeal of securitized investments. The authorities can facilitate this process by promulgating rules and regulations for the creation of special purpose vehicles to engage in the securitization of assets. They can create institutions like the Hong Kong Mortgage Corporation and Malaysian National Mortgage Corporation (*Cagamas Berhad*) to buy mortgages and issue bonds backed by their cash flows, or alternatively to securitize receivables (like Korea Export-Import Bank). The problem of small market size can be overcome by attracting foreign issuers and investors. Problems of illiquidity and sporadic trading can be addressed by reducing requirements for banks to include among their investments often nonmarketable government bonds. More widespread trading can similarly be encouraged by creating markets in derivative instruments, such as interest-rate swaps, credit default swaps and bond futures and options, useful for unpacking and hedging risks.

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<sup>3</sup> Whether interest-rate swaps and derivatives can substitute for interest rates on government bonds in providing a benchmark is disputed. See Lejot, Arner and Pretorius (2006), p.131 – and the further discussion of the timing of derivatives-market development below.

<sup>4</sup> Ideally a real-time gross-settlement system.

<sup>5</sup> In the case of exchange-based trading, the exchange should be subject to reporting, record keeping, fair access and risk-management rules. In the case of an over the counter market, there should be a mandatory trade-reporting system, record keeping, and audit trail requirements.

The problem is that such measures may have unintended consequences if they are not adequately integrated into the authorities' overall approach to financial development and economic development more generally. Relying on commercial banks as licensed primary dealers means giving power over distribution to financial firms who may see government bonds as creating undesirable competition for their own financial products. Accelerating the deregulation of the mutual fund, pension fund and insurance industries may allow entry by less competent and fly-by-night operators, threatening systemic stability and undermining the regulator's consumer-protection function. Reducing reserve and liquidity requirements for banks may encourage excessive risk taking, especially where there exists an extensive financial safety net and banks are widely regarded as too big to fail. Eliminating this captive source of public funding, while desirable on other grounds, may raise debt service costs, enlarge the budget deficit, and threaten the macroeconomic stability on which bond market development and economic development more generally depend.

Similarly, while securitization and credit guarantees can help to attenuate mismatches between the kind of debt securities that are supplied and demanded, they create additional risks.<sup>6</sup> The resulting securities being complex, less sophisticated investors may not fully understand their properties. Credit guarantees are only as good as the credit of the guarantor, about which little may be known. The growth of derivatives may enable market participants to use additional leverage, take more concentrated positions, and assume additional risks, some of which may be unknown to their regulators and even to the principals. Finally, encouraging the participation of foreign investors and issuers in the domestic market by adjusting tax treatment and relaxing restrictions on capital-account transactions may expose the economy to volatile capital flows before the extensive preconditions for beneficial capital account liberalization are in place.

Such observations suggest that measures for fostering the development of bond markets should be divided into two categories: those that can be implemented immediately because negative side-effects are absent; and those that need to be implemented gradually and sequenced carefully with the larger policy reform agenda. The first category would include securities market regulation adequate to ensure accurate financial disclosure and market integrity. This means eliminating ambiguity about regulatory responsibility. It means establishing a securities and exchange commission with full-time directors and jurisdiction over all firms issuing publicly-placed corporate bonds. Responsibilities of such a commission include requiring corporations issuing bonds to adhere to recognized international auditing and accounting standards.<sup>7</sup> They include defining streamlined but effective documentation standards for primary issuance. There is no reason to go slow on any of this.

Similarly, there is no reason for the SEC, the central bank and the finance ministry to delay in creating an efficient platform for secondary-market trading. Where trading is over the counter, this means establishing and overseeing an association of securities dealers to police dealer activity and ensure transparent trading. Another option is an electronic bond trading platform to

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<sup>6</sup> Thus, in Korea in the late 1990s one of the most widely cited constraints on the development of the corporate bond market was the imbalance between the low credit quality of issuers and the high credit requirements/mandates of investors. This problem was addressed through securitization and credit guarantees – something that also had a downside when securitized credit card debts went bad in 2003.

<sup>7</sup> Perhaps by employing the services of internationally recognized auditing and accounting firms.



display firm buy and sell quotes and facilitate anonymous electronic order matching.<sup>8</sup> Primary dealers, banks and other financial institutions could all participate on this market.<sup>9</sup> A real-time gross settlement system, an electronic fund transfer and settlement system, and a reporting system covering all trades could be created as part of this platform.<sup>10</sup>

In addition, the authorities can immediately initiate measures designed to develop a number of other elements an efficient bond market infrastructure. They can enhance the competitiveness of commercial banking so that banks will not resist marketing bonds for fear of reducing the demand for their existing investment vehicles.<sup>11</sup> They can foster a more competitive investment banking industry so that underwriting and issuance fees are lower. They can put in place transparent bankruptcy laws, fair and speedy court procedures, and reliable enforcement of judgments so that bondholders can recover in the event of default.<sup>12</sup> They can move ahead with pension privatization to enhance the diversity of the investor base.<sup>13</sup> They can encourage entry by rating agencies. They can preannounce a regular schedule of treasury bond auctions, consolidate the public debt, and issue in a range of maturities in order to create a well-defined benchmark yield curve.

Finally, the authorities can move ahead immediately in creating the kind of stable macroeconomic environment in which issuers feel comfortable with issuing floating-rate notes and investors feel comfortable with holding fixed-rate notes.<sup>14</sup>

Some of this advice has a disturbing “Field of Dreams” quality to it (*Field of Dreams* being the movie with the tag line “build it and they will come”). Streamlining documentation and issuance requirements alone will not guarantee that anyone will issue. Building an electronic trading platform does not, by itself, guarantee that anyone will trade. Credit rating agencies will respond to invitations to set up shop only when there is an adequate flow of credits to rate. To bear fruit, measures like these need to be undertaken in conjunction. While there is no need to delay pursuing one because there is a delay in pursuing another, the effects will be most pronounced if they are undertaken simultaneously. Conceptually these may be stand-alone measures, but in practice the benefits will likely hinge on the ability to implement them as an integrated package.

Other measures, though they may be equally important to success in developing a deep and liquid bond market, should come later. Harmonizing regulatory and market standards, authorizing firms to cross list on foreign equity markets, and liberalizing the capital account restrictions to facilitate local-market participation by issuers and investors should wait on the cementing of macroeconomic stabilization, the adoption of a more flexible exchange rate, steps to significantly upgrade financial supervision, and strengthened corporate governance. Theory and history both

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<sup>8</sup> Where securities are infrequently traded, it would be desirable to foster the establishment of price vendors – specialized firms using pricing models to provide price quotes to institutional investors (as in Mexico and South Korea).

<sup>9</sup> Arif (2006) observes that several countries have also succeeded in using electronic trading systems and the internet to circumvent the need for primary dealers.

<sup>10</sup> Certain emerging markets, India for example, have succeeded in moving quite far in these directions.

<sup>11</sup> The more competitive is commercial banking, the greater the likelihood that a bank which successfully markets bonds reduced the demand for someone else’s investment vehicles.

<sup>12</sup> See Rhee, Lejot and Arner (2006), pp.230-231.

<sup>13</sup> The association of pension privatization and bond market development is emphasized in Borensztein, Cowan, Eichengreen and Panizza (2008).

<sup>14</sup> Thus, Eichengreen and Luengnaruemitchai (2004) show that interest rate volatility reduces the attractiveness of long-term fixed-income securities to investors. Similarly, they show that high inflation is not conducive to the market in long-term fixed-income securities.

show that capital account liberalization – which is what we mean when we say open the local market to foreign issuers and investors – in the absence of these other steps is a recipe for disaster. Actively promoting fixed-income derivatives markets should similarly wait on significant steps to first strengthen supervision, upgrade the internal controls and risk management practices of financial institutions, and strengthen corporate governance. Successful deregulation of the banking and mutual fund industries has the same prerequisites. Substituting risk-based regulation for instrument-based regulation is prudent only when supervisors and the supervised both have the capacity to assess and manage risk.

Bond market development is likely to remain gradual if the authorities resist the temptation to proceed with these initiatives until the long process of putting in place the necessary preconditions is complete. But moving more quickly can set the stage for financial disaster and collapse of the nascent market. These are respects in which slow but steady wins the race.<sup>15</sup>

There is always the danger that an analysis like this one will degenerate into a long list of preconditions and obstacles to bond market development to be met by a set of cleverly-engineered financial solutions. True to form, this note emphasizes that the preconditions for successful bond market development and the list of obstacles to be overcome are long. But it resists the idea that clever financial engineering is suitable for overcoming them. It emphasizes that quick fixes to some problems will only create others, not merely for financial development but for the economy more generally. Developing local bond markets in emerging economies requires systematic institution and capacity building, which is necessarily a long, hard slog.

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<sup>15</sup> To be sure, delaying the development of derivatives markets does not diminish the importance of moving quickly to strengthen supervision, internal controls and information systems; such measures are equally important for the development of a primary dealer or similar system.

## References

Arif, Muhammad (2006), “Developing Bond Markets in Pakistan,” unpublished manuscript, State Bank of Pakistan.

Borensztein, Eduardo, Kevin Cowan, Barry Eichengreen and Ugo Panizza (eds), *Building Bond Markets in Latin America*, Cambridge, Mass.: MIT Press.

Eichengreen, Barry and Pipat Luengnaruemitchai (2004), “Why Doesn’t Asia Have Bigger Bond Markets?” NBER Working Paper no.10576 (June).

Lejot, Paul, Douglas Arner and Frederick Pretorius (2006), “Institutional Reform and Economic Development,” in Douglas Arner, Jae-Ha Park, Paul Lejot and Qiao Liu (eds), *Asia’s Debt Capital Markets: Prospects and Strategies for Development*, New York: Springer, pp.119-142.

Rhee, S. Ghon Paul Lejot and Douglas Arner (2006), “Essential Changes in National Law and Regulation: Impediments to Cross-Border Investment in Asian Bond Markets,” Douglas Arner, Jae-Ha Park, Paul Lejot and Qiao Liu (eds), *Asia’s Debt Capital Markets: Prospects and Strategies for Development*, New York: Springer, pp.207-242.

