

The Unintended Consequences of the Asian Bond Fund¹
Barry Eichengreen
University of California, Berkeley
May 2004

The topic I was asked to speak on today is cooperation in developing Asian bond markets. This is a subject on which there has been a lot of talk and a little bit of action. One reason why there has not been more progress in addressing this issue at the regional level may be that there is no agreement on the severity of the problem. Optimists emphasize that there has been very considerable progress in developing local currency bond markets since the Asian crisis. The capitalization of domestic bond markets has roughly doubled since 1997, from about 25 to nearly 50 per cent of GDP.² The relative importance of the bond market has also risen from less than 10 per cent of outstanding Asian credit in 1995 to for more than 20 per cent in 2002. Slowly but surely we can see increasing diversity of issuers and investors characteristic of a efficient and well-functioning market.

Looking forward, there is every reason to expect that Asian bond markets will continue to grow. The region is likely to remain the fastest growing part of the world for the foreseeable future, and its growth will produce an expanding population of firms that will wish to finance some of their operations with debt as well as equity (among other things, in order to avoid diluting control). Asia is a high savings region, and its immense pool of savings will seek new investment opportunities, not least in the bond market. Retail investors will transcend their traditional concentration on equity and real estate

¹ Address to the annual meetings of the Asian Development Bank, Jeju Island, South Korea. This talk draws on collaborative work with Yung Chul Park and Pipat Leungaruemitchai, whose help is acknowledged with thanks.

² As of the end of 2002 (Dwor-Frecaut 2003, p.10).

investments and add fixed-income securities to their portfolios in order to achieve better balance and diversification. Households will purchase larger homes and seek to finance them, as in other regions, with long-term fixed-interest mortgages, which banks will be able to supply by securitizing those mortgages and passing them through to the bond market. Foreign investors will participate more actively in local-currency bond markets as the latter become larger, more liquid, and more transparent. Already there are a number of promising indications of these trends, such as the early signs of a mortgage-backed securities market in Korea and the growing participation of international banks in local-currency bond markets across the region.

Such is the optimistic picture. The pessimists are, well, more pessimistic. On the supply side they see a paucity of high-grade issuers and therefore a shortage of investment-grade credits, which is all that pension funds and insurance companies are permitted to invest in given their mandates. They see a market dominated by banks that buy and hold government securities in order to satisfy statutory liquidity requirements, and by insurance companies and provident funds with little incentive to trade the debt securities they hold, due to the absence of mark-to-market accounting in some countries and the weakness of shareholder rights in others.³ They see mutual funds with little incentive to invest in risky credits because of the absence of high-powered incentives for managers.

The result of this imbalance between supply and demand – a supply dominated by speculative credits and a demand for predominantly investment-grade securities – is a set

³ In fact, in most Asian countries banks have to mark to market bonds held for trading purposes, and in a few countries in the region the same is true of institutional investors. However, in some countries like Taiwan peculiarities of the regulatory framework allow many banks and institutional investors to evade these requirements (Flint 2004).

of undercapitalized, illiquid bond markets. Those markets lack appeal for institutional investors because of restrictions that prevent market participants from shorting debt securities and because of small size and inadequate liquidity that prevent them from putting on and taking off positions without significantly moving prices. Even in some of the region's best-developed bond markets, Hong Kong and Singapore for example, turnover rates are low by international standards, and liquidity is concentrated in a handful of benchmark issues.⁴ In many cases, markets in futures and other derivatives that might be used to hedge currency and interest rate risks remain underdeveloped (since it is hard for derivative markets to be much more liquid than the markets in the underlying assets, and since the development of foreign exchange derivatives markets is restricted by capital controls). Low levels of issuance and turnover also mean that the leading international banks do not include Asian markets in their investment-grade international bond market indices, so there is no derived demand for Asian securities to track the index. This depresses turnover still further, since there is no meaningful index for local fund managers and shareholders to benchmark performance against, and hence even less incentive for managers to buy and sell.

The result of all this, the pessimists complain, is deformed yield curves, volatile yields, and an absence of meaningful price quotes.⁵ National markets are too small to appeal to multinational corporations and other potential issuers from outside the region and too fragmented by heterogeneous regulation, capital controls, and opaque

⁴ See Mohanty (2002), p.49, and Ho (2003), p.12.

⁵ The absence of meaningful price quotes refers to the tendency for market-makers post price quotes but are reluctant to transact significant amounts at those prices. Deformed yield curves refers to the prevalence of significant flat segments as one moves out the maturity spectrum.

withholding tax requirements to appeal to international investors who might otherwise arbitrage the gap between supply and demand.

In reality, of course, there is some truth to both perspectives. Asian bond markets have grown enormously in recent years, and there is every reason to think that they will grow further. At the same time, these markets are still small by the standards of the advanced industrial countries. Their low liquidity and high volatility continue to prevent them from playing a more active role in financial intermediation in the region.

According to the most recent data published by the BIS, the share of bonds in total external finance in Asia is only half what it is in Latin America and 40 per cent that of Emerging Central Europe. In Asia bank finance continues to dominate, with all the risks and potential distortions that this situation has traditionally entailed. Not a few observers worry this situation will persist for some time to come.

The question I have been asked to address is what to do about this, and in particular what can be done at the regional level. You will be familiar with the party line on such matters. At the national level, governments need to move quickly to put in place the infrastructure for better-functioning bond markets. Governments and central banks have introduced quarter-ahead calendars of government bond issues and issued a range of maturities designed to develop a benchmark yield curve for government bonds. They have appointed primary dealers and authorized institutional investors to participate in the secondary market. They have created rating agencies and in some cases, like Malaysia, required all issuers of listed securities to obtain ratings. They have encouraged the creation of self-regulating market committees to settle disputes and render trading more

transparent. They have enhanced the predictability of settlement by creating real-time-gross-settlement and delivery-versus-payment systems.⁶

More gradually, they are also addressing the sources of the supply-demand mismatch that has stymied market growth. They are attempting to augment the volume of investment-grade issuance, which is in such short supply in many countries, by strengthening corporate governance, compelling firms to follow international accounting standards, and tightening the prudential supervision and regulation of financial firms. They are encouraging local currency issuance by foreign firms and multilaterals (with some success in cases like Singapore). On the demand side, they are relaxing restrictive regulations and covenants that have prevented pension funds, insurance companies and other institutional investors from taking positions in speculative credits. They are encouraging the development of markets in asset-backed securities to better enable investors to diversify away some of the associated risks.⁷

Regionally, the 17 Asian governments participating in the Asia Cooperation Dialogue have set up a Working Group on Financial Cooperation to set down guidelines for the development of Asian bond markets. APEC finance ministers are seeking to agree on a comprehensive approach to developing sound and sustainable regional bond

⁶ Some authors have suggested the need for an Asia-wide clearing and settlement system (“Asia Clear”) to encourage cross border fixed-income transactions. The market participants I have spoken with do not suggest that having to go through a number of separate national clearing systems is a problem, so long as those national systems operate efficiently and predictably – although they also favor the harmonization of documentary requirements and procedures across countries.

⁷ I should also emphasize that I do not see credit enhancement schemes as a sensible response to the supply-demand imbalance. Such schemes, following Korean practice, would have the government provide credit subsidies or guarantees for speculative credits to make them attractive to institutional investors. Proposals generally suggest that this be done by having the government collect a portfolio of bonds, divide them into senior (high quality) and junior (low quality) tranches, and then sell off the high quality tranche directly, and do the same for the low quality tranche after providing a credit guarantee. Such guarantees are not a step toward a market-based financial system. They simply reintroduce the same problems of moral hazard and implicit guarantees that plagued the market in bank credit in the first half of the 1990s. And any problems that credit enhancement schemes have at the national level they would have in spades if implemented at the Asian level.

markets. ASEAN+3 has established a Study Group on Capital Market Development and Cooperation under the leadership of Thailand, Japan, Korea and Singapore. EMEAP (the Executives' Meeting of East Asia Pacific Central Banks) has established a working group on financial market development. Another EMEAP working group on payment systems has focused its discussions on the development of financial market infrastructure. Most of these initiatives can be thought of as efforts to use peer pressure and knowledge sharing to facilitate the upgrading of financial infrastructure, which can only be a good thing.⁸

I have more doubts about the other major initiative in this area, the Asian Bond Fund. To be clear, I am not questioning that the problem of small size and fragmentation of regional bond markets that the ABF initiative is designed to address is both real and important. Both potential issuers and potential investors will tell you that the small size of regional bond markets is an obstacle to their more active participation.⁹ Foreign issuers in particular complain that the “all-in cost” is simply too high. Work that Stijn Claessens and his coauthors at the World Bank have done on the government bond market and work that I have done on the corporate bond market both confirm that country size is a significant determinant of market capitalization (where the latter is measured as a

⁸ The effectiveness of these working groups is often contingent on their leadership, and contingent on the leadership of the larger regional organization of which they are part. Often that leadership rotates periodically, which does not make for continuity or rapid progress. This is why I have recommended elsewhere the establishment of a permanent Asian Financial Institute (or AFI) to carry out these regional standard-setting and peer-pressure functions (see Eichengreen 2003).

⁹ The fact that foreign investors find that the fixed costs of entering a small local currency market are often prohibitive is of course simply another manifestation of the problem of “original sin” (the difficulty that emerging markets face when attempting to borrow from foreigners in their own currency), which I have emphasized in my joint work with Ricardo Hausmann (Eichengreen and Hasumann 2004). Our work suggests that country size is the most economically important and statistically significant predictor of the incidence of original sin.

share of GDP).¹⁰ Thus, many Asian countries find themselves in a low-level bond-market trap, where the small size of the market makes for illiquidity, and the illiquidity of the market locks in its small size.

No doubt, then, the problem that the Asian Bond Fund is designed to address is real. Questions can of course be raised about whether \$1 billion of official money (the size of ABF-I) or even several times that amount (about which we will be able to be more precise when we know more about ABF-II, III and IV) will make a difference, relative to a regional bond market capitalization of \$1.5 trillion. Additional questions can be raised about a fund that invests mainly in dollar-denominated sovereign credits (in the case of ABF-I) and high-grade local-currency sovereign and corporate bonds (in the case of ABF-II and its successors), which is of course precisely the part of the market in which there is already no shortage of demand. Yet more questions can be raised about whether the buy-and-hold behavior that is typical of central banks investing their reserve portfolios will be conducive to market liquidity.

You will have heard these questions before. The correct answer to them, in my view, is that the few billion dollars of central bank reserves that have grabbed the headlines are not the most significant aspect of the ABF. In fact, this decision to invest a small fraction of Asian central banks' international reserves within the region is part of a larger effort to integrate Asian financial markets and address the fragmentation problem of which investors complain. Initiatives in this area include harmonizing the laws, regulations, tax treatment and market structure that prevent investors, Asian and extra-Asian alike, from building pan-regional portfolios. They involve measures to make the

¹⁰ See Claessens et al. (2003) and Eichengreen and Luengnaruemitchai (2004).

relevant bond market region-wide and thus of scale sufficient to appeal to both large issuers and large investors.

For example, while every Asian country with a consequential bond market also has one or more rating agency, a BAA rating from a Thai rating agency does not mean the same thing as a BAA rating from a Malaysian rating agency.¹¹ This heterogeneity of rating practice is a deterrent to cross-border portfolio capital flows within the region. Moreover, a yield on one country's benchmark government bond does not mean the same thing as that on another's, since these are subject to withholding at different rates. These statutes and practices will have to be harmonized if policy makers are serious about building a pan-Asian bond market. Some countries (China, Taiwan, India) either prohibit nonresident access to the local bond market, require a license, demand prior approval, or impose pecuniary disincentives to limit flows. Others (China, India, Malaysia, the Philippines, Thailand) restrict or require prior approval for resident purchases of foreign bonds. All Asian countries but Japan, Hong Kong, Singapore and arguably Korea restrict the operation of foreign exchange forward and futures markets.¹² These restrictions will have to be removed in order for investors to build diversified portfolios of Asian bonds.

There is an almost-instinctual tendency on the part of audiences like this one to applaud efforts in this area. But there is also a dilemma. In reality, what we are talking about here is capital account convertibility, and capital account convertibility in advance of the development of regional financial markets. This, of course, is precisely the opposite of what most of us thought that we had learned from the Asian crisis about the

¹¹ International rating agencies like S&P, Moody's and Fitch rate only a small subset of Asian corporate and financial credits, and where they do their ratings often differ significantly from those assigned by local agencies. See Packer (2003).

¹² In some cases (the Philippines, China and Myanmar), the options market is nonexistent. Taiwan, China and most recently Korea also restrict the operation of the market in nondeliverable forwards.

right time at which to liberalize the capital account. Specifically, it is important to have strong, diversified and well-developed domestic financial markets, including bond markets, before liberalizing the capital account. If financial markets are underdeveloped, market discipline will be weak, and banks and firms will be prone to overborrowing. Capital will flow in through the banking system, and we know what havoc can be wreaked by this combination of circumstances.

Thus, macroeconomists tell you that you cannot have capital account liberalization unless you first have local bond market development. And market participants will tell you that you cannot have local bond market development unless you first have open capital accounts.¹³ Thus, Asia would seem to be in a classic Catch-22 situation. Trying to break out of it by removing restrictions on the ability of residents and foreigners to invest across borders could be a risky strategy. That these tradeoffs are implicit in efforts to build domestic bond markets by removing capital controls is widely understood.¹⁴ What is less well understood is that even seemingly benign steps like harmonizing regulations and taxation, or creating an Asian rating agency (or a common standard for national rating agencies), or using central bank reserves to jumpstart private cross-border investment are the equivalent of capital account liberalization, in the sense that they will work to encourage cross border capital flows. And these measures create

¹³ The econometric results in Eichengreen and Luengnaruemitchai (2004) are consistent with this emphasis, in that we find a number of alternative measures of capital controls to be negatively associated with domestic bond market capitalization in a panel of data for 41 countries.

¹⁴ Thus, one sees Lee Hsien Loong, Deputy Prime Minister of Singapore and head of that country's Monetary Authority, writing in the BIS Quarterly Review (2002-I), "There is a trade-off between tightening up the capital account, and developing the bond markets. Measures to restrict offshore foreign currency trading have been effective, in so far as reducing or eliminating offshore markets is concerned. But these safeguards come at a cost – they also hinder the development of capital markets, especially bond markets. Size and liquidity are essential attributes for a market to attract international interest. Already in size and liquidity, we clearly lag behind our counterparts in the West. If Asian markets are fragmented and unable to grow, they risk being ignored by global investors." I owe this quote to Dwor-Frecaut (2003).

risks – as well as conflicting with the conventional wisdom regarding sequencing – insofar as they encourage capital mobility first and only produce stronger markets later.

Moreover, Asia's exchange rate regime is such that the balance of risks and rewards from capital account liberalization is much inferior to that in other regions. Because many countries in the region continue to operate soft pegs against the U.S. dollar and therefore against one another, even if they liberalize the capital account they are going to get less cross-border investment and less bond market development. Because exchange rates are not allowed to vary, yields on debt securities are very similar across Asian countries and very similar with those in the United States. Flint (2004) estimates that changes in the yield of the Korean government's 5 year won bond with U.S. Treasuries reached 35 per cent in the second half of 2003, up from an average of 17 per cent in 2000-2002. The diversification benefits of cross-border investment in debt securities are correspondingly less. Thus, the main thing that opening the capital account facilitates is the scope for capital flight if things go wrong, not bond market development.¹⁵

Another perspective on this problem is provided by the massive international reserves that Asian countries have accumulated as a result of limiting the appreciation of their currencies against the dollar. Because these reserves are invested in the dollar, they contribute nothing to local bond market development. Even if they were invested in Asian government bonds, they would still contribute little, as noted above, because of central banks' buy-and-hold reserve-management practices. But if Asian savings were left in private hands as opposed to accumulated by central banks and governments in the

¹⁵ Thus, Iiyama (2003) notes that Japanese investors will depend a low correlation with bonds issued in U.S. dollars, Australian dollars, and euros in order to be willing to invest in Asian local currency bonds.

form of foreign reserves, which would be the consequence of allowing Asian currencies to fluctuate rather than intervening in order to prevent the exchange rate from appreciating, some fraction of those funds would be actively managed by the private financial institutions in which they were deposited. And some fraction of that fraction would in turn be allocated to cross border investments, creating deeper and more liquid regional financial markets.

Finally, one of the key lessons of recent experience with capital account liberalization is that the balance of macroeconomic risks and rewards can be shaped in desirable ways by sensibly sequencing the transition to greater exchange rate flexibility with the removal of remaining capital account restrictions. We know that countries with completely closed capital accounts should peg their exchange rates. The risk of a speculative attack on the peg is relatively slight when the capital account is closed, and pegging protects banks and corporates from exchange-rate volatility, since hedging opportunities for exporters and importers are essentially nonexistent. We similarly know that countries with fully open capital accounts should float, except perhaps in a few exceptional cases (Hong Kong obviously springs to mind). When the capital account is open, a currency peg offers an irresistible target to speculators, while the private sector can better manage the consequences of exchange rate fluctuations by using foreign-currency-denominated assets and liabilities to hedge their exposures. For both reasons, greater exchange rate variability becomes attractive – and indeed imperative – as the capital account becomes more open.

In addition, we know that an exchange rate peg, as a result of which the government promises to limit currency fluctuations, discourages banks and firms from

hedging their exposures. The false belief that the currency will be pegged indefinitely makes them think that there is no need to obtain costly insurance against its fluctuation in the forward and futures markets. In other words, although a more open capital account makes hedging easier, a pegged exchange rate makes it seem less urgent. The experience of the Asian crisis strongly suggests that the second effect can dominate, with profoundly destabilizing implications. Thus, experts like Stanley Fischer (2003) regard moving to managed flexibility is an essential precondition for full capital account liberalization.¹⁶

And therein lies the rub. The effort to harmonize bond-market regulation and encourage more cross-border flows through the national bond markets of the region means that Asian countries are moving toward full capital account liberalization, whether they realize it or not, before moving to greater exchange rate flexibility. This could be putting the cart before the horse in the most disastrous possible way.

The point of my talk will now be clear. It is to emphasize that in fact domestic bond market development does not, in the end, offer an alternative to capital account liberalization and volatile capital flows like those which destabilized the Asian economy in 1997-8. This becomes obvious as soon as one recognizes that many countries in the region are simply too small to support viable bond markets. Recent policy initiatives are tantamount to capital account liberalization in the sense that they seek to relax this constraint by creating a pan-Asian bond market based on cross-border investment. The costs of sudden stops and capital flow reversals may be less insofar as, in the future, the result is not bank runs but the collapse of bond prices, although even this can be

¹⁶ The alternative, of course, is to move to monetary union as 12 members of the European Union have done. Not only does this limit currency risk to risk vis-à-vis the outside world, but it also facilitates the pooling of liquidity in different national markets (through this same elimination of intra-regional currency risk), helping to overcome problems of minimum efficient scale. But I take it as a given that the countries of the region will not be able to agree on a monetary union anytime soon (Eichengreen 2004).

questioned.¹⁷ The point is that the problem of capital flows is back, whether Asian policy makers like it or not. It is an inevitable concomitant of their strategy of attempting to develop bond markets at the regional level. Given that goal, it is unavoidable.

Governments can do a variety of things to address the consequences. They can tighten prudential supervision and regulation of banks, pension funds, mutual funds, insurance companies and other institutional investors. But these measures, while limiting risks and volatility, will also slow financial market development, since they will discourage market participants from using leverage, stretching for yield, and otherwise experimenting with new forms of market behavior.

The main thing governments can therefore do to tilt the balance away from crisis risk and toward financial development is to shift to more flexible exchange rate regimes, intervening less in the foreign exchange market and accumulating fewer reserves. Because more flexible exchange rates confront investors in the foreign exchange market with two-way bets, further opening the capital account will give rise to less crisis risk. Because more savings will be left in the hands of the private sector, as opposed to being held in the coffers of central banks, there will be less buy-and-hold behavior and more market liquidity. Because the correlation of returns in different Asian bond markets will be less, there will be more incentive for private investors to build diversified portfolios of fixed-income securities.

In Asia, it seems, everything comes back to the exchange rate regime. This is even the case, I have suggested this afternoon, of efforts to promote local-currency bond markets.

¹⁷ As in, for example, Folkerts-Landau and Garber (1992).

References

- Claessens, Stijn, Daniela Klingebiel and Sergio Schmukler (2003), "Government Bonds in Domestic and Foreign Currency: the Role of Macroeconomic and Institutional Factors," Policy Research Working paper no. 2816, Washington, D.C.: The World Bank.
- Dwor-Frecaut, Dominique (2003), "The Asian Bond Market: From Fragmentation to Aggregation," Asian Rates and Credit Research, Barclays Capital (12 September).
- Eichengreen, Barry (2003), "What to Do with the Chiang Mai Initiative," *Asian Economic Papers* 2(1), pp.1-49.
- Eichengreen, Barry (2004), "The Case for Floating in Asia," in Asian Development Bank, *Monetary and Financial Integration in Asia: The Way Ahead*, Volume 2, New York: Palgrave-Macmillan, pp.49-90.
- Eichengreen, Barry and Ricardo Hausmann (2004), "The Mystery of Original Sin," in Barry Eichengreen and Ricardo Hausmann (eds), *Other People's Money: Debt Denomination and Financial Instability in Emerging Market Economies*, Chicago: University of Chicago Press (forthcoming).
- Eichengreen, Barry and Pipat Luengnaruemitchai (2004), "Why Doesn't Asia Have Bigger Bond Markets?" unpublished manuscript, UC Berkeley (February).
- Flint, Simon Mahadevan (2004), "The Development of Asian Bond Markets," unpublished manuscript, Bank of America Singapore (January).
- Fischer, Stanley (2003), [paper delivered in Brazil]
- Folkerts-Landau, David and Peter Garber (1992), "The European Central Bank: A Bank or a Monetary Policy Rule," NBER Working Paper no. 4016 (March).
- Ho, Tiam (2003), "The Singapore Bond Market," Singapore: Deutsche Bank Global Markets Research (June).
- Iiyama, Toshiyasu (2003), "Asian Bond Issues in Tokyo), unpublished manuscript, Nomura Group.
- Mohanty, M.S. (2002), "Improving liquidity in Government Bond Markets: What Can Be Done?" *BIS Papers* no. 11, pp.49-80.
- Packer, Frank (2003), "Mind the Gap: Domestic Versus Foreign Currency Sovereign Ratings," *BIS Quarterly Review* (September).