Financial Development in Asia: The Way Forward[1]
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One of the familiar lessons of the Asian crisis is that the region needs better bond markets. In this lecture I ask whether this is really the appropriate lesson to draw from the crisis, what benefits will flow from better bond markets, and whether initiatives now being taken will be adequate for achieving this end.

It may be useful to start with the lay of the land. Table 1, based on data from the World Bank and the Bank for International Settlements, shows that domestic bond market capitalization in emerging Asia (the sum of corporate, financial institution and public-sector issues) is 41 per cent of GDP.[2] This is higher than the average for all emerging markets (35 per cent), if much lower than in developed countries, where it is fully 119 per cent of GDP. In other words, at this level of aggregation, Asia is not behind Latin America or Emerging Central Europe in bond market development, although it is considerably behind the developed countries and in particular the United States.[3]

Regional aggregates like these of course disguise very considerable variation across countries. Thus, while corporate bond market capitalization is 46 per cent of GDP in Malaysia and 23 per cent in South Korea, it is only 4 per cent in Thailand. These differences are both actual and illusory. It is a fact that the demand for Thai corporate bonds is depressed by

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[2] The data here are for 2000, and to the EU Center of the University of California and Hong Kong Monetary Institute for supporting the underlying research.
[3] The picture is not much different when we distinguish bond issues by nonfinancial corporations, financial institutions, and governments. Public issues are slightly less important in Emerging Asia than in other emerging markets, reflecting the relatively strong fiscal position of Asian governments, while issues by corporations and financial institutions are slightly more important in Emerging Asia than elsewhere. But the dominant impression is

problems of corporate governance in that country, uncertainty about bankruptcy and insolvency procedures, and the weakness of investor rights generally. But the difference is also illusory to the extent that much of Korean corporate bond market capitalization is in the form of asset backed securities in which the government and its agencies have absorbed the risky junior tranche that accounts for the majority of recent issuance.

Table 2 compares the relative importance of bonds, bank loans, and equity markets in domestic external finance outstanding (as opposed to GDP)[4] In terms of mix, Asia relies less on bond markets than Emerging Central Europe and Latin America and more on bank loans and equity markets; the share of bonds in external finance is only half that of Latin America and 40 per cent that of Emerging Central Europe.[5]

Again, these generalizations disguise considerable differences across countries. Banking is particularly important for external finance in China, South Korea, and Thailand. The stock market is important in Malaysia and Singapore, where the authorities have aggressively promoted its development. But, notwithstanding these differences, the bond market is the least important of these three sources of finance in virtually every Asian country.[6] Within the region, bonds account for the smallest share of external finance in Hong Kong and for the largest shares in Malaysia and South Korea. Data on flows (as opposed to stocks) may offer a clearer picture of recent trends. Table 3 shows that new domestic bank loans were 10 per cent of GDP in Emerging Asia in 2001 but only 4 per cent of GDP for emerging markets as a whole.

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one of similarities across emerging regions.

[4] Again, as of the end of 2000. Strictly speaking, total external finance would include also credit provided by foreign sources, for which we lack information. To avoid double counting, I exclude bonds issued by financial institutions from this comparison. Including them makes little difference for the comparisons with which we are concerned in this paper. The main effect is to further increase the value of bond market capitalization in the advanced economies.

[5] This paints a rather different picture than Table 1; it suggests that the problem is not so much bond market underdevelopment per se as it is excessive dependence on bank intermediation.

[6] Exceptions to this generalization being South Korea and Thailand, where it is roughly the same size as the stock market.

Domestic bond flotations, in contrast, amounted to 8 per cent of GDP in Asia in 2001 but 12 per cent for emerging markets as a whole. This perspective suggests that, compared to emerging markets as a class, Asia may be falling even further behind in terms of bond market development.

These data confirm that Emerging Asia relies less on bonds and more on banks than other emerging markets, and very much less on bonds and very much more on banks than developed countries. Bank intermediation is especially important in China, South Korea and Thailand. Bond issuance is particularly anemic, relative to other sources of finance, in Singapore and Thailand.

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But should we care? What costs, if any, do Asian countries incur as a result of their heavy dependence on bank finance and the underdevelopment of their bond markets?

The conventional wisdom is that the consequences include an inefficient allocation of resources and additional crisis risk. Asian banks and the companies to which they lend tend to be linked by family control. Banks are used by the authorities to extend preferential credit to firms that are favored on political grounds. These banks come to be regarded as too big and politically important to fail, and the guarantees they consequently enjoy weaken market discipline over their lending. The relatively short tenor of most bank loans means that a shock to confidence can leave Asian economies vulnerable to a disruptive credit crunch. And since loans are denominated in foreign currency when banks fund themselves in foreign currency (prudential regulation requiring this), depreciation of the exchange rate can result in serious balance-sheet damage, in the worst case thrusting highly leveraged firms into bankruptcy.

It follows that the development of active and liquid bond markets would lengthen the tenor of debt and facilitate the placement of domestic-currency bonds, limiting the maturity mismatches on corporate balance sheets. Encouraging corporations to utilize securities markets would strengthen the incentives for information disclosure, enhancing transparency and strengthening corporate governance. Borrowers would be distanced from lenders, anonymous and decentralized bond markets being hard to influence, and markets would be better insulated from governments, limiting moral hazard and political interference.

Advocates of this conventional wisdom must come to grips with the fact that Asian countries grew admirably for many years despite the dominance of banks and the underdevelopment of their bond markets. Of course, it can be argued that what was true in the past may not be true of the future -- that bank centered financial systems are less well suited to present circumstances.[7] But how then can we account for the fact that the Asian economies have rebounded impressively from their 1997-8 crisis? Growth is now proceeding more rapidly than in any other region despite the fact that Asian financial systems are not noticeably less bank centered than before.

Neither does recent Asian history obviously support the notion that countries with bank-centered financial systems are particularly crisis prone. To be sure, the 1997-8 crisis was consistent with this point: it was more severe in Korea and Thailand, where banks account for more than half of external finance, than in Malaysia and Singapore, where they account for less

[7] Before the 1990s, Asia was still at the stage of extensive growth, when the main challenge was to import and deploy foreign technologies -- to do known things in known ways. A tightly regulated and controlled banking system that channeled funds to industry underwrote the capital formation that was the vehicle for technology transfer and the engine of extensive growth. The government's influence over bank lending may not have encouraged a culture of arm's length transactions, but this mattered little so long as both international and domestic financial markets and transactions were tightly regulated and repressed, appropriately for a period when the main task of financial markets was to mobilize resources for capital formation, not to help choose among alternative investment projects or provide corporate governance services.

than a third. But everything else was not equal across these countries. It is not clear, in other words, that the bank-based nature of financial systems was to blame.[8] And crises have not recurred in Asia, despite the persistence of bank-based financial systems and a volatile global financial environment that has, at various times, brought Brazil, Argentina and Turkey to their knees.

Why, then, should we believe the conventional wisdom pointing to the importance of developing better bond markets? One reason is theory. Recent contributions to the theoretical literature have explained how countries benefit from well diversified financial systems.[9] A well diversified financial system facilitates risk management: equity finance encourages risk taking, since holders of equity stakes share in super-normal returns whereas their losses are truncated on the down side, while debt holders, who do not share in exceptional profits, encourage risk aversion. A well diversified financial system also facilitates the development of a balanced economy, since banks have a comparative advantage in providing external finance to information-impacted sectors, which are typically made up of smaller, younger firms, while securities markets do the job most efficiently for large, well established companies. The implication is not that countries should rely either on bank loans or bonds but that they should develop markets in both.

Theory also suggests why bank-based financial systems may be particularly crisis prone.[10] Banks specialize in lending to information-impacted segments of the economy. This, together with their role in providing maturity transformation services, is one way of understanding why they exist. But it is precisely because information about their clients is not

[8] Other observers would blame, inter alia, the exchange rate regime or the nature of capital account regulation for the Asian crisis.
[9] e.g. Boot and Thakor (1997).

widely held and because their assets are less liquid than their liabilities that they are prone to runs and crises.[11]

This in turn creates the need for a government safety net to prevent banks' problems from destabilizing the economy. But the safety net is a source of moral hazard. It encourages risk taking that further heightens the likelihood of crises. Strong prudential supervision and regulation can mitigate these dangers, but regulation has its limits.[12] Supervision and regulation can be usefully complemented, the implication follows, by the provision of external finance through bond markets, where runs and maturity mismatches do not give rise to comparable problems.[13]

Another reason for believing the conventional wisdom is the results of empirical studies for a large cross section of countries (not limited to Asia). There is a substantial body of work, using both aggregate and firm-level data, showing that the depth and breadth of financial markets have a positive impact on growth. But there is less evidence that the *composition* of finance matters for growth. Early studies purporting to show that that bank- or market-based financial systems were favorable for growth, either in countries at particular levels of economic development or generally, have not withstood scrutiny. A variety of subsequent authors found no correlation between the structure of financial intermediation and economic growth.[14] Recent work (e.g. Levine and Zevos 1998) suggests instead that growth is fostered by the existence of a

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[10] See for example Caprio and Honohan (2001), p.82 and *passim,* for discussion.
[11] Contagion is an implication of asymmetric information and of the existence of an interbank market, which creates links between balance sheets.
[12] This is the so-called bloodhounds and greyhounds problem: the regulated seem always to be one step ahead of the regulators.
[13] To be sure, analogous risks are not entirely absent from bond markets (contrary to the assertions of bond market advocates like Phuvanatnaranubala (2003). Russia's default and the LTCM crisis illustrate the danger of a self-fulfilling run on bond markets, with dire repercussions for institutional investors. The basic point still stands, however, that the risk of such problems is less for debt markets than banks.
[14] See for example Demirguc-Kunt and Levine (1999), Levine (200), and Demirguc-Kunt and Huizinga (2000).

diversified financial system in which both banks and securities markets play a role. Pleasingly, this is the same conclusion that flows from theoretical analyses. The implication is not that Asian countries should have bond markets instead of banks, but rather that they should have both.

While empirical studies of the causes of financial crises have proliferated, I am not aware of any that include the share of external finance accounted for by bonds or banks as an independent variable. This would seem like a useful direction for research. There have been a few studies of the connections between bank credit and GDP volatility: for example, Denzier, Iyigun and Owen (2000) find that consumption and investment volatility is less in countries in countries where banks are a relatively important source of private credit. In contrast, Beck, Lundberg and Majnoni (2001) find that private credit (claims on the private sector by financial intermediaries, scaled by GDP) has no overall impact on volatility. This is because the direction in which financial intermediation affects volatility depends on the source of shocks. Real shocks are damped by the existence of a well-developed banking system, which lets firms (small firms in particular) insure themselves against disturbances. In contrast, monetary shocks are magnified, since an unexpected tightening of monetary policy not only makes such insurance more expensive but also interrupts its provision.[15] The implication is that Asia's dependence on banks was important for its crisis if we see the latter as a result primarily of monetary and financial disturbances (the Furman-Stiglitz and Sachs-Radalet view).[16]

[15] This is the so-called credit channel of monetary policy transmission.
[16] The opposite implication follows if we instead view the Asian crisis as resulting from real shocks like the intensification of Chinese competition or the slump in the global electronics industry.

On balance, I am convinced by this combination of theory and evidence that Asian countries would be better off with well developed bond markets to complement their banking systems.

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Efforts to develop bond markets in Asia are ongoing. First, there is the long, hard slog to build better clearing and settlement systems that will make financial markets more attractive to investors.[17] There is the laborious effort to improve the regulation of markets so that insider trading, market manipulation and other abusive practices do not discourage participation. There is the hard work of encouraging transparency and disclosure on the part of the issuers of debt securities through the adoption of international accounting and disclosure standards to eliminate the lemons problem.[18] There is the need to create reliable benchmarks by having the government regularly issue a suite of bonds by public auction, off of which corporate credits can be conveniently priced. There is the need to reform tax and regulatory policy to encourage mutual funds, pension funds, and insurance funds to hold risky as well as investment-grade credits.[19] This is where Asia really falls down: the same data I showed you earlier suggest that institutional investors hold only 17 per cent of domestic debt in Asian countries, compared to 28 per cent in Latin America and 33 per cent in Central Europe.) An adequate market structure, which is what I have just described, is essential for the existence of deep, liquid and active bond markets.

[17]Clearing and settlement of government bonds is generally centralized at the central bank, but the problem of building an adequate clearing and settlement infrastructure for corporate bonds remains.
[18] Indeed, one popular explanation for why banks have traditionally dominated the bond market in the provision of external finance to corporations is the extent of information asymmetries (Yoshitomi 2002).
[19]More generally, there is the need to fund, privatize and further develop pension funds in Asia, where pension fund assets under manage account for only 7 per cent of GDP (end-2000 data), compared to 14 per cent in Latin America and 11 per cent in Asia (Mihaljek, Scatigna and Villar 2002, p.36). Malaysia and Singapore, where publicly run pension funds are important, are the exceptions to this rule.

Efforts along these lines are proceeding at the national, regional, and global levels. Globally, we have the Financial Sector Assessment Program and Reviews of Standards and Codes of the IMF and World Bank. The IMF has also made securities market development in developing countries a focus of its capital markets surveillance, devoting a chapter in its spring 2003 *Global Financial Stability Review* to the topic. The Financial Stability Forum, while primarily concerned with stability issues (as its name implies), focuses on market infrastructure, market functioning, and prudential regulation, which are important for market development was well as stability risk.[20] The OECD has cooperated with the World Bank on workshops to discuss strategies for developing fixed-income securities markets in emerging economies.

At the national level, Asian governments have similarly sought to put in place the infrastructure for better bond markets. Thailand illustrates their responses. The government and central bank have introduced a quarter-ahead calendar of government bond issues and developed a benchmark yield curve for government bonds that extends from one to 15 years. They have authorized banks to participate actively in the secondary market. They instituted a code of conduct for participants and a Market Committee to settle disputes. They enhanced the predictability of trades and reliability of settlement by installing a real-time delivery-versus-payment system.

Regionally, Asian countries have sought to use peer pressure and knowledge sharing to facilitate the upgrading of financial infrastructure. The 17 Asian governments participating in the Asia Cooperation Dialogue have set up a Working Group on Financial Cooperation to establish 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

[20] See for example Financial Stability Forum (2003).

bond markets, including credit guarantee markets and markets in a variety of new products (bonds denominated in a basket of Asian currencies being the most attractive candidate). ASEAN+3 has established a Study Group on Capital Market Development and Cooperation under the leadership of Thailand, Japan, Korea and Singapore. Some years ago EMEAP (the Executives' Meeting of East Asia Pacific Central Banks) established a working group on financial market development, which has been meeting ever since. Another EMEAP working group on payment systems has focused its discussions on the development of financial market infrastructure.

Last June, in addition, EMEAP announced the launch of the Asian Bond Fund, which is designed to catalyze transactions (both supply and demand) by investing $1 billion in Asian sovereign and quasi-sovereign bonds issued by EMEAP member countries other than Japan, Australia and New Zealand. The ABF will be managed by the Bank for International Settlements, which already provides reserve management services for a variety of central banks, and its performance will be monitored by an EMEAP Oversight Committee. An ABF-II is in the works.

The idea is that the ABF will render regional bond markets deeper and more liquid and hence more attractive to both potential issuers and investors. But it is not clear that $1 billion will in fact be sufficient to "catalyze" the market.[21] None of the initial investment will be allocated to domestic-currency-denominated securities or corporate issues, which is presumably the part of the market most urgently in need of development. And it is not clear that the buy-and-hold strategy practiced by the BIS will contribute much to market liquidity.[22] Officials have

[21] I first encountered this use of the word set off by quotation marks during my stint at the IMF, where one might say that it was utilized to refer to policies whose anticipated effects were larger than plausibly believed.
[22] Some, like Fernandez and Klassen (2003), suggest the opposite.

signaled their commitment to expanding the ABF, to extending it to domestic-currency instruments and corporate issues and managing it more actively.[23] But it is unlikely that they will in fact invest the precious reserves of governments and central banks in speculative-grade corporate bonds. As a result, they will only end up competing for the small stock of high-grade issues. This will do little to solve the problem of mismatched supply and demand.

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But even if policy makers do follow through, will the reforms now being contemplated in fact produce bigger and better bond markets? It is hard to say with confidence that they will provide the solution precisely because there is no agreement on the nature of the problem. We know, from the data presented at the beginning of this lecture, that Asia has unusually small bond markets. But we don't know why. And without a better understanding of the causes, it is hard to assess the suitability of these solutions.

I would distinguish four broad classes of explanation. The first one emphasizes structural characteristics of the region=s economies. A number of Asian economies are small, for example, and small countries find it more difficult to develop bond markets insofar as these have a certain minimum efficient scale.[24] In addition, long-standing institutions influence the riskiness of saving and investment and, thereby, financial development. Endowments shape institutions, in the currently fashionable view, and endowments are hard to change. Thus, Beck, Demirguc-Kunt and Levine (2002) argue that countries with less favorable geographical and disease

[23] See for example Phuvanatnaranubala (2003).

[24] For example, creating an automated payment and settlement system may entail substantial fixed costs; these may be economical to sink only when the secondary market has a critical mass. In addition, a small market may mean a small investor base, allowing a few dominant players to engage in collusive practices that discourage participation. It may also require the central bank to act as a market maker in ways that conflict with its mandate for price stability. For arguments

environments (as measured by settler mortality or distance from the equator) should have less well developed financial markets. The strength of bondholder protections may depend on a country's legal system, which is a function of tradition as much as conscious decision (see LaPorta et al.1998). A Singaporean audience will be less impressed than most by these explanations. This country has shown quite clearly how any handicaps of small size, tropical climate and colonial inheritance can be overcome.[25]

The second group of explanations focuses on the structure and management of the financial system. Relevant dimensions include the intensity of competition from the banking system, the quality of market supervision, the presence of a government bond market, the absence of institutional investors and rating agencies, and the adequacy of trading, settlement and clearing systems. This view emphasizes that the government, by putting in place the necessary market infrastructure and official oversight, can reduce the riskiness of saving and investment and thereby do much to encourage bond market development.

A third group of explanations focuses on macroeconomic policy.[26] The currency risk created by flexible exchange rates may limit the market for domestic-currency-denominated securities. The interest rate volatility associated with unstable policies can make it unattractive to hold long-term debt securities. Again, a Singaporean audience will be less impressed by the first than the second of these arguments. It will probably say that exchange rate variability per se is no handicap so long as variability does not mean instability.

A fourth and final explanation for bond market underdevelopment is history. Banks dominated Asian financial markets for many years. Once upon a time there may have been good

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along these lines see Turner and Van't dack (1996).

[25] See however the less optimistic account in Jin and Loh (2002).

[26] See for example Harwood (2000), p.21 and passim, and Conway and Zhang (2001).

reasons for this. The information and contracting environment gave bank intermediation a strong comparative advantage. Banks were a particularly convenient vehicle for advancing governments= industrial policies. But while the circumstances have now changed, banks retain their first-mover advantage. Institutions have adapted to their dominance, locking in bank intermediation and locking out debt markets.[27]

I have tested these hypotheses using annual data for 1990 through 2000 for 41 countries for which the BIS gathers and publishes information on bond market capitalization. The Asian countries are China, Hong Kong, India, Japan, Malaysia, the Philippines, Singapore, South Korea, and Thailand. The dependent variable is bond market capitalization as a share of GDP.

I find that the underdevelopment of Asian bond markets has multiple explanations. To some extent the problem is one of size: larger countries have better capitalized bond markets (recall that capitalization is measured relative to GDP).[28] This lends some support to the Asian Bond Fund initiative insofar as the ABF is designed to relax market-size constraints.

But market size is not the entire problem. In addition, the failure of countries to compel firms to follow internationally recognized accounting standards, which is a signal of poor corporate governance, has slowed the development of debt markets. Corruption and poor bureaucratic quality, which are signs of unreliable securities market regulation, have worked in the same direction. When I disaggregate private and public debts, I find that these variables matter for private debt market capitalization but not public debt market capitalization, which is intuitive. In contrast, countries that rate high on indices of law and order have larger domestic public debt markets, indicative of the greater willingness of residents to hold claims on the

[27] This is essentially the argument of Sharma (2000).

[28] In addition to being supported by my econometric analysis, this fact is evident in Europe's experience, where the advent of the euro has relaxed the constraint of market size at the national level and greatly enhanced the liquidity of the

official sector, which is again entirely logical. In addition, there is evidence that countries with competitive, well-capitalized banking systems appear have larger bond markets.[29] It appears, then, than a healthy, well-regulated banking system is good rather than bad for bond market development.

Macroeconomic policy plays both a supporting and impeding role. Asia's strong fiscal balances, while admirable on other grounds, have not been conducive to the growth of government bond markets. Relatively tight capital account regulation has also limited the need to issue government securities in order to sterilize capital inflows. These conditions are now changing, of course. On the other hand, high interest rates and volatile exchange rates, factors which have impeded bond market development elsewhere, have not been particular problems in the region.[30] This suggests that the emphasis of the multilaterals on macroeconomic stability as a precondition for financial development is well taken.

Over time, markets, institutions and social conventions have adapted to the status quo, which in the case of Asia is the dominance of bank finance. Taken to an extreme, this argument about path dependence suggests that Asian countries will not be able to develop bond markets as well capitalized as those of the advanced industrial countries. In this respect my results are somewhat reassuring: I find that the region's structural characteristics and macroeconomic and financial policies fully account for differences in bond market development between Asia and the rest of the world. Once one controls for these characteristics and policies, in other words, there is no additional "Asia effect."

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bond market, the corporate bond market in particular.

[29] Jiang, Tang and Law (2001) and Mihaljek, Scatigna and Villare (2002) find similar results.

[30] Although high interest rates may have been more of a problem for Latin America than for Asia, their impact on bond market development is a reminder of the importance of maintaining monetary and sound fiscal policies going forward. Similarly, the importance of exchange rate volatility speaks to the well known dilemma of choosing an

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What are the implications for cooperation in East Asia? My analysis suggests that the most publicized form of cooperation, the Asian Bond Fund, is likely to go only a limited way toward solving this problem. The ABF can address the small size of some Asian economies and financial markets that is a factor in bond market development, but inadequate scale is only one factor among many and by no means the most important, and it is not clear that the ABF can be an effective mechanism for addressing the others.[31] My findings suggest that the effects of size are dwarfed, as it were, by those of policies toward financial transparency, regulation, corruption, contract enforcement, and competition. Creating a benchmark government bond and a well-defined yield curve for treasury securities will help. So too will prompt and reliable clearing, payment and settlement systems. But the real problem is the inadequate supply of investment grade corporate securities and limited demand for speculative-grade issues. If Asian countries are serious about bond market development, this means upgrading accounting standards, corporate governance, and local rating agencies to enhance the supply of higher-grade corporate securities and reforming tax and regulatory policies to broaden the demand for corporate issues.

Where the current state of affairs is an obstacle to bond market development, the initiative for changing them must be taken first and foremost at the national level. In addition, however, there is a role here for regional cooperation. As I have suggested elsewhere (Eichengreen 2003), there are three arguments for cooperative responses to this problem. First,

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exchange rate system for Asia in the 21st century.

[31] Park (2003) suggests that the ABF can be a mechanism for keeping alive "the momentum for reform crated by the 1997 crisis." It is not clear to me why the pace of reform is best accelerated by a scheme to purchase $1 billion of

Asian countries have similar financial characteristics and problems as a result of shared historical experience. National histories differ in their particulars, but bank-centered financial systems, high levels of corporate leverage, and close bank-government connections are widespread. Pooling information, analysis, and expertise on these problems has obvious advantages. Insofar as Asian policy makers and bureaucrats understand these problems better than the employees of multilaterals located in Washington, D.C., information sharing at the regional level is likely to be more efficient.

Second, insofar as the Asian model is distinct (something that needs to be established rather than asserted), there is a case for cooperation in the design of financial regulations that differ from those developed in other regions. Given the close connections between banks and industrial conglomerates, there may be a case for different regulatory standards for portfolio concentrations than those promulgated by the Basle Committee of Banking Supervisors. Given Asia's continued reliance on family control, there may be a case for different standards for corporate governance, which rely less on outside directors but give minority creditors other (legal) means of protecting their rights. In principle, there is a case for regional cooperation in the design and implementation of such standards.

Third, there is a case for regional cooperation insofar as the leading national financial firms compete with one another. With the intensification of cross-border competition, there may be more pressure on regulators to race to the bottom -- or at least it will become more difficult to race to the top. It will be harder for the regulatory authorities in one country to increase capital requirements for fear that doing so will cause domestic institutions to lose business to their foreign counterparts, since capital is a cost of doing business. The same argument that motivated

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bonds.

the negotiation of the Basle Capital Accord in 1988 thus provides a motivation for regional cooperation on capital and other financial standards. Insofar as proximity matters for the intensity of international financial competition and the structure of efficient regulatory standards differs in Asia, the Basle Committee=s Capital Standards and Core Principles for Effective Banking Supervision are imperfect substitutes for regional cooperation.

My own idea is to establish an Asian Financial Institute on the platform of ASEAN+3. The AFI would provide technical assistance to national agencies seeking to strengthen prudential supervision and regulation. It would run training programs for bank inspectors, securities and exchange commissioners, and accountants, exploiting economies of scale and scope by enrolling students from all of its members, and encouraging the efficient pooling of knowledge and expertise. It would provide reserve management, clearing and settlement services to member central banks, not unlike the central banking services that the Bank for International Settlements provides to its members. Many financial market participants in Asia clear, net and settle their transactions using U.S. and European payments systems; liquidity and technical support for a pan-Asian payments and settlements system would obviate the need for traders and investors to go through third markets.

The AFI could be a venue for the negotiation of regional agreements on capital and liquidity standards and regulatory processes intended to promote the stability of banking systems, and of standards for information disclosure, securities listing and corporate governance designed to promote the development of regional financial markets. Such standards and codes are already being promulgated at the global level, by inter alia the Basel Committee of Banking Supervisors (in the case of capital adequacy for international banks), the Financial Stability Forum (in the case of prudential supervision and regulation), the IMF (in the case of data

dissemination, transparency, and codes of conduct for monetary and fiscal policies), and the OECD (in the case of corporate governance). But having the AFI organize negotiations on the design of a separate set of regional financial standards appropriate to Asia's special circumstances would address concerns that global standard-setting initiatives are not sensitive to the special features of the Asian model.

ASEAN+3 is the logical grouping to back this initiative. It includes the three large Asian countries and can build on an already extant institutional infrastructure. Not only heads of state but also finance, economics, and foreign ministers as well as central bank governors and senior officials already meet regularly under its aegis. ASEAN+3 is already in the business of providing technical assistance: at the Fourth ASEAN Finance Ministers Meeting (in March 2000), ASEAN+3 finance ministry and central bank deputies agreed to establish a network of research and training institutions. They have engaged in peer-review exercises and policy dialogues at finance and central bank deputies' meetings and finance ministers meetings, which typically in May at the time of the ADB annual meetings and can be seen as the precursors of a full-fledged surveillance process. As discussed earlier, the existing network of swap arrangements among this grouping of countries has already begun to stimulate efforts to establish a unified policy dialog or surveillance group that would meet on a more regular basis than is now the case of finance ministers or deputies. Thus, ASEAN+3 already possesses an infrastructure of regular meetings, a pool of financial resources, and a presumption that national policies are a matter of common concern.

Basing this initiative on ASEAN+3 would have the further benefit of removing ambiguity about the purposes of the Chiang Mai Initiative (CMI). The goals of the CMI would be defined as fostering financial stability and development, not stabilizing exchange rates.

Whether fixed or flexible exchange rates were more conducive to financial stability and development would then be recognized as a separate question. The focus of the bilateral swaps made available to partner countries under the CMI would be to provide assistance in the event of exceptional disturbances to national financial systems B a stock market collapse, banking panic, or exchange-rate meltdown that threatened to inflict serious balance sheet damage on financial markets and institutions and to thereby set back the process of financial development. Acting as a group, ASEAN+3 would in effect act as a collective lender of last resort to countries whose financial systems were at risk (countries with limited capacity to engage in LLR activities themselves), while linking financial assistance to the relevant financial conditionality.

Such an arrangement is better attuned to the context for cooperation than an exchange-rate stabilization agreement. It does not require open-ended financial commitments of a sort that are unlikely to be credible given the light touch characteristic of regional surveillance exercises. It does not require Asian countries to pretend that they can make blunt public pronouncements about the inadequacies of their neighbors' policies. It does not require them to tie down market expectations by committing to the unrealistic goal of a single currency. What is required, rather, is sharing information and expertise and coordinating national responses to those problems. What is required is collaboration in the design of regional financial standards and regulations, supplemented by limited financial assistance for countries that encounter difficulties in adjusting to those standards.

Thus, if Asian countries are to cooperate in the promoting the development of their bond markets, as they should, this is the form of cooperation on which they should focus.

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Table 1
Total Outstanding External Finance as a Percentage of GDP

Country	Domestic credit provided by banking sector (% of GDP)	Stock Market Capitalization (% of GDP)	Outstanding Domestic Debt Securities by Corporate Issuers (% of GDP)	Outstanding Domestic Debt Securities by Public Sector (% of GDP)	Outstanding Domestic Debt Securities by Financial Institutions (% of GDP)
Emerging Markets	**84.90**	**60.89**	**5.27**	**22.45**	**7.68**
Asia	**124.68**	**83.47**	**8.55**	**21.09**	**10.99**
China	132.73	53.80	0.96	23.58	8.31
Hong Kong	141.42	383.30	3.01	10.21	13.28
Malaysia	149.07	130.42	45.51	31.56	6.25
Singapore	89.61	165.66	4.66	27.10	14.96
South Korea	103.03	37.18	23.03	15.88	19.44
Thailand	121.60	24.12	4.01	21.18	0.25
Latin America	**39.51**	**37.79**	**1.62**	**23.67**	**4.41**
Argentina	34.45	58.40	2.64	11.64	2.29
Brazil	50.18	38.09	0.57	41.88	7.78
Chile	74.71	85.62	5.10	30.05	14.18
Mexico	26.78	21.58	1.78	10.14	0.81
Central Europe	**43.52**	**21.38**	**1.34**	**25.78**	**1.10**
Czech Republic	57.28	21.67	5.32	35.25	5.51
Hungary	55.91	26.34	1.53	33.97	0.00
Poland	35.51	19.85	0.00	20.37	0.00
Developed Countries	**175.06**	**119.67**	**15.84**	**71.17**	**31.92**
Australia	91.72	95.56	10.59	17.82	15.71
Canada	89.25	122.32	9.75	60.96	14.81
Japan	310.45	65.21	16.01	93.89	15.85
New Zealand	117.83	37.80	0.00	28.46	0.00
United States	161.45	153.54	24.10	82.02	42.37
Europe	123.07	112.59	6.71	48.44	31.25

Source: WDI and BIS

Table 2
Composition of External Finance (in Shares of Total)

Country	Domestic credit provided by banking sector	Stock Market Capitalization	Outstanding Domestic Debt Securities by Corporate Issuers and Public Sector
Emerging Markets	**48.93%**	**35.09%**	**15.98%**
Asia	**52.43%**	**35.10%**	**12.47%**
China	62.89%	25.49%	11.63%
Hong Kong	26.29%	71.25%	2.46%
Malaysia	41.81%	36.58%	21.61%
Singapore	31.22%	57.72%	11.07%
South Korea	57.52%	20.76%	21.72%
Thailand	71.15%	14.11%	14.74%
Latin America	**38.51%**	**36.84%**	**24.65%**
Argentina	32.16%	54.51%	13.33%
Brazil	38.39%	29.14%	32.48%
Chile	38.22%	43.80%	17.98%
Mexico	44.43%	35.81%	19.76%
Central Europe	**47.30%**	**23.23%**	**29.47%**
Czech Republic	47.93%	18.13%	33.94%
Hungary	47.48%	22.37%	30.15%
Poland	46.89%	26.21%	26.90%
Developed Countries	**45.86%**	**31.35%**	**22.79%**
Australia	42.53%	44.31%	13.17%
Canada	31.62%	43.33%	25.05%
Japan	63.94%	13.43%	22.63%
New Zealand	64.01%	20.54%	15.46%
United States	38.34%	36.46%	25.20%
Europe	42.32%	38.72%	18.96%

Source: See Table 1

Table 3
New External Finance in Emerging Markets (as percentages of GDP)

	1997	1998	1999	2000	2001
Emerging markets	**22.47%**	**27.03%**	**18.69%**	**23.20%**	**20.28%**
Domestic	**18.05%**	**24.47%**	**15.77%**	**19.56%**	**17.33%**
Equities	1.00%	0.92%	1.26%	0.67%	0.54%
Bonds					
Private	0.30%	0.33%	0.30%	2.59%	3.25%
Public	10.45%	17.73%	11.50%	10.25%	9.09%
Bank loans					
Private	4.55%	4.49%	2.25%	5.29%	2.72%
Public	1.74%	1.00%	0.46%	0.76%	1.72%
International	**4.42%**	**2.56%**	**2.93%**	**3.64%**	**2.95%**
Equities	0.50%	0.16%	0.46%	0.84%	0.25%
Bonds					
Private	1.12%	0.56%	0.64%	0.58%	0.88%
Public	1.12%	0.81%	1.01%	0.86%	0.83%
Bank loans					
Private	1.14%	0.61%	0.65%	1.04%	0.79%
Public	0.54%	0.42%	0.18%	0.32%	0.20%
Asia	**12.63%**	**15.88%**	**16.77%**	**19.72%**	**22.20%**
Domestic	**8.46%**	**14.38%**	**14.57%**	**16.21%**	**19.03%**
Equities	1.49%	0.99%	1.93%	1.03%	0.60%
Bonds					
Private	0.00%	0.00%	0.05%	2.12%	3.00%
Public	0.36%	2.52%	2.49%	2.78%	5.28%
Bank loans					
Private	6.70%	7.56%	8.54%	9.08%	7.53%
Public	-0.09%	3.31%	1.56%	1.21%	2.61%
International	**4.16%**	**1.50%**	**2.20%**	**3.51%**	**3.16%**
Equities	0.55%	0.24%	0.76%	1.32%	0.43%
Bonds					
Private	1.04%	0.20%	0.45%	0.62%	1.21%
Public	0.74%	0.35%	0.54%	0.39%	0.57%
Bank loans					
Private	1.18%	0.27%	0.26%	0.81%	0.80%
Public	0.65%	0.43%	0.21%	0.37%	0.16%
Central Europe	**20.88%**	**30.19%**	**24.52%**	**24.30%**	**33.47%**
Domestic	**17.52%**	**26.81%**	**21.49%**	**21.67%**	**31.08%**
Equities	0.54%	2.52%	1.30%	0.51%	0.34%
Bonds					
Private	0.21%	0.11%	0.13%	0.07%	0.11%
Public	17.69%	18.03%	23.07%	22.35%	22.85%
Bank loans					
Private	1.46%	4.50%	-1.48%	0.45%	4.24%
Public	-2.38%	1.66%	-1.53%	-1.71%	3.54%
International	**3.36%**	**3.38%**	**3.03%**	**2.63%**	**2.39%**
Equities	1.07%	0.56%	0.45%	0.15%	0.00%
Bonds					

Private	0.52%	0.82%	0.69%	0.33%	0.66%
Public	0.52%	0.96%	1.05%	0.50%	0.78%
Bank loans					
Private	0.73%	0.55%	0.49%	1.49%	0.43%
Public	0.52%	0.50%	0.35%	0.17%	0.52%
Latin America	**34.52%**	**38.45%**	**20.20%**	**27.59%**	**15.35%**
Domestic	**29.63%**	**34.89%**	**16.31%**	**23.60%**	**12.55%**
Equities	0.50%	0.60%	0.33%	0.23%	0.50%
Bonds					
Private	0.67%	0.72%	0.68%	3.61%	4.17%
Public	21.44%	33.98%	21.50%	18.05%	11.08%
Bank loans					
Private	2.46%	1.19%	-5.56%	1.12%	-3.47%
Public	4.56%	-1.59%	-0.65%	0.59%	0.27%
International	**4.89%**	**3.55%**	**3.89%**	**3.99%**	**2.80%**
Equities	0.34%	0.00%	0.05%	0.33%	0.08%
Bonds					
Private	1.32%	0.91%	0.89%	0.56%	0.52%
Public	1.67%	1.27%	1.64%	1.54%	1.17%
Bank loans					
Private	1.15%	0.98%	1.21%	1.27%	0.84%
Public	0.41%	0.39%	0.11%	0.28%	0.19%

Notes: Dollar amounts are from Tables 4.2 and 4.3 in IMF's Global Financial Stability Report: Market Developments and Issues (March 2003) GDP are from Worldbank's World Development Indicators. Emerging markets include China, Hong Kong SAR, Korea, Malaysia, Singapore, Thailand, Argentina, Brazil, Chile, Mexico, Czech Republic, Hungary, and Poland.