Endnotes

Overview and Summary

2. 5.1 percent excluding China.
3. These included a network of currency swap arrangements (the ASEAN Swap Agreement), bilateral repurchase agreements, the Executives' Meeting of East Asia and Pacific Central Banks (EMEAP), the Four and Six Markets Meetings, and the Asia-Pacific Economic Cooperation Finance Ministers' Meeting for financial cooperation among finance ministers and central bank governors.
4. Their agreement also covers the establishment of a network of contact persons to facilitate regional surveillance, as well as a network of research and training institutions to build up the skills of officials in the financial, banking, and fiscal areas throughout the region.
5. Financial intermediaries and markets tend to perform the core functions of a financial system—resource mobilization, resource allocation, and risk management—in different ways and each may be better at certain aspects of these functions. Hence, they tend to be complementary (or imperfect substitutes). Indeed, financial intermediaries and markets are also complementary in that the former are key participants in financial markets and tend to play a supporting role in ensuring the full functioning of financial markets.
6. In addition to Hong Kong (China) and Singapore, Korea, and Malaysia have developed sizable corporate bond markets.
7. Throughout this report we try to benchmark East Asian economies within the region and with peers within the same income group in other regions. The latter comparison has some disadvantages, since in general the East Asian financial systems are more developed relative to those of countries with the same level of income in other regions. Nevertheless, we include in most tables data on comparator countries, where data are available. The comparator countries, based on 2004 GDP per capita figures (at 2000 prices in U.S. dollars), are divided into six groups: (1) Indonesia (Georgia and Ukraine); (2) China and the Philippines (Albania, Bolivia, and Serbia and Montenegro); (3) Thailand (Peru, Russian Federation, and Turkey); (4) Malaysia (Chile, Latvia, Lithuania, and Mexico); (5) Korea (Greece, Spain, and Slovenia); (6) Singapore and Hong Kong (China) (Japan, United States, and United Kingdom). We also systematically benchmark with regard to industrial countries (Germany, Japan, United Kingdom, and United States), which is arguably a more useful comparison if the region's financial sectors are to position themselves well in the global arena.
8. Based on standard indicators of efficiency such as the ratio of operating costs to assets and the ratio of net interest costs to assets.
9. The Equity Market Efficiency Indicator is a composite measure that captures transaction costs and the quality of information disclosure. Transaction costs are measured by the proportion of zero-return days in a trading year. Since informed traders only trade when the benefits exceed the costs of doing so, a market with higher trading costs (both implicit and explicit) will exhibit more days without trading—hence producing a zero return. The quality of information disclosure is measured by an index of stock-market synchronicity, which captures the co-movement among individual stock returns. A high level of co-movement indicates that there is not much firm-specific information.
10. However, China is currently undertaking major reforms to increase investors' access to shares. First, it has started to convert about US$210 billion of non-tradable "A" shares, essentially state-held equity, into common-stock tradable "A" shares that can be bought and sold on the exchanges. Companies seeking to convert non-tradable stock must obtain the approval of the holders of tradable shares and offer cash or shares to compensate them for the increase in supply. As of end-2005, 421 listed companies had completed their negotiations with shareholders (about 31 percent of the total listed companies, accounting for 35 percent of the total capitalization of China's stock market). The companies that have completed the share reforms are now called "G" share companies. Second, new rules were announced in January 2006 to allow foreign investors to buy strategic stakes in tradable "A" shares. Overseas investors will be allowed to buy "A" shares using RMB, provided they acquire at least a 10 percent stake in a firm and hold the stock for at least three years. Thailand has also recently loosened restrictions on foreign investors.
11. These figures are based on the International Finance Corporation's IFCI (Investible) return index, which includes a subset of the stocks included in the IFCG (Global) index.
12. The stability indicator is a composite indicator, based on measures of volatility and the skewness of returns—i.e. the extent to which markets are more likely to deliver large negative returns.
13. The reasoning is as follows: A corporation has more incentive to hide bad news than good. Thus good news is released to the public promptly, and stock market prices adjust immediately, which makes for more gradual price adjustments. In environments of poor disclosure, bad news can be covered up and accumulated by management. Of course, eventually, even bad news comes out. As a result, bad news is released all at once and has a much greater negative impact on stock prices. Further, the public will inevitably feel that the corporation is still hiding information and thus the reaction to the bad news is usually an

overshooting decline. That is, a firm may deliver large negative returns on some days, but small positive returns most of the time.

14. Assessments of compliance with the Basel Core Principles for Banking Supervision show the need, for example, to further strengthen compliance with the requirements for evaluating asset quality and the adequacy of loan-loss provisions and reserves; rules for identifying the limiting concentrations of exposures to single borrowers or to groups of borrowers; rules for lending to connected or related parties; and policies for identifying and managing country, market, and material risks. Among supervisors, compliance with the requirements for off-site supervision, with on-site examination, and with the conduct of consolidated supervision is still somewhat weak. It is important that these remaining weaknesses be addressed, because they are likely to become more important as banks move into new segments of lending and as the extent of cross-border participation of financial institutions increases.
15. Derivative instruments are financial contracts whose value depends on, or derives from, underlying assets (such as securities or commodities) or indexes. Derivatives can be traded on organized exchanges or in unregulated over-the-counter markets.
16. In general, this is an area that needs to develop further in the region; at present the base of intermediaries that can develop and market financial products that suit different client funding preferences on the one hand, and investors with varying risk profiles on the other, is limited in many of the countries.
17. Restrictions on pension investments exist to varying degrees across the region, except in Hong Kong (China), which essentially follows the "prudent person" rule typical of Anglo-Saxon countries, with ex post controls on strategic allocations contained in scheme bylaws.
18. The Philippines actually has a blend, since the Social Security System is a defined-benefit plan while the Government Service Insurance System is a defined-contribution plan.
19. Just over 60 percent of Hong Kong (China)'s total assets (US$500 billion) and 70 percent of Singapore's total assets (US$355 billion) derives from abroad, whereas generally, most of the money invested in most countries' mutual fund sectors derives from the domestic market. (*Sources:* Fund Management Activities 2004, Hong Kong Securities and Futures Commission, and 2004 Singapore Asset Management Industry Survey, Monetary Authority of Singapore.) Recently, Korea has also announced its long-term vision to become a regional financial hub with special expertise in asset management.
20. Of course, assets under management in investment funds may increase as a result of more sales of fund shares or units, or simply as a result in the increase in the value of the assets held by the funds, or as is most commonly the case, a combination of the two. So the increases discussed are not necessarily the result of more sales of fund shares or units.
21. Securitization sometimes involves the creation of derivative products, such as mortgage-backed securities (which are option derivatives), but it can also involve straightforward schemes of asset-backed securities.
22. There is, as yet, no market in East Asia for covered transactions of the kind that has spread prolifically since the early 1990s from Denmark and Germany. Covered transactions resemble securitized deals, except in particular for a lack of severance of ownership from the asset originator (Arner and others 2006).
23. There are moreover a number of inconsistencies even among the ratings of the international agencies. In particular, a study by the Bank for International Settlements has shown a number of inconsistencies in the relationship between foreign- and local-currency ratings used by a single international rating agency as well as sizable disagreements among the international rating agencies on the relationship between local-currency and foreign-currency ratings. Packer 2003.
24. In many countries, for instance, insurance companies are allowed to offer short-term deposit-like products, while some new types of securities products, such as credit derivatives, in practice bear many of the characteristics of an insurance product.

Chapter 1

25. Investors need considerable expertise to participate in financial markets, which makes their participation costly in terms of time and money. Financial intermediaries can often help reduce these costs. In helping investors to participate in markets, financial intermediaries contribute to the development of markets. Empirically, it has been found that countries with well-developed stock markets also have well-developed banks and non-bank financial intermediaries—suggesting that these are complements in providing financial services (Demirgüç-Kunt and Levine 2001).
26. The U.S. housing market provides an example. In the 1960s and 1970s, the housing market depended heavily on the health of the savings and loan industry, which, at the time, was the predominant source of funds for housing. In particular, when Regulation Q ceilings curtailed the flow of funds into savings and loan institutions, there was an immediate impact on housing. In the early 1990s, however, when the US economy was recovering from the 1990-1 recession, the housing market bounced back strongly even though a large part of the savings and loan industry was being closed down. By this time, both commercial banks and the secondary mortgage market had become important sources of housing funds and were able to continue lending despite the problems in the savings and loan industry. (*Source:* speech by Thomas Hoenig, President, Federal Reserve Bank of Kansas City.)
27. Throughout this study we try to benchmark East Asian economies within the region and with peers within the same income group in other regions. The latter comparison has some disadvantages, since in general the East Asian financial systems are more developed than those of countries with the same level of income in other regions. Nevertheless, we include in most tables data on comparator countries, where available. The comparator countries, based on 2004 GDP per capita figures (at 2000 prices in U.S. dollars) are divided into six groups: (1) Indonesia (Georgia and Ukraine); (2) China and the Philippines (Albania, Bolivia, and Serbia and Montenegro); (3) Thailand (Peru, Russian Federation, and Turkey); (4) Malaysia (Chile, Latvia, Lithuania, and Mexico); (5) Korea (Greece, Spain, and Slovenia); (6) Singapore and Hong Kong (China) (Japan, United States, and United Kingdom). We also systematically benchmark relative to industrial countries (Germany, Japan, United Kingdom, and United States), which is arguably a more useful comparison if East Asia's financial sectors are to position themselves well in the global arena.

28. Although (in addition to Hong Kong [China] and Singapore), Korea and Malaysia have developed sizable markets for corporate bonds.

Chapter 2

29. EMEAP is the region's central bankers' association. It covers Australia, China, Hong Kong [China], Japan, Korea, Malaysia, New Zealand, the Philippines, Thailand, and Singapore.
30. In Hong Kong (China) and Singapore, documentation is not required.
31. One of the working groups under ASEAN+3 studied the pros and cons of establishing a link among the clearance and settlement systems of member countries. But market participants expressed the view that (1) the private sector would not be interested in developing a regional facility for bonds, since there was insufficient volume to make it financially viable at that point, and the timing was not right for the public sector to make a significant commitment for such a facility; (2) market participants were not interested in developing a secure network that could be used by central securities depositories to communicate with each other and for other purposes in the region; (3) current settlement arrangements were not a significant impediment to the development of a regional bond market, although there were areas that could still be improved.
32. There are moreover a number of inconsistencies even among the ratings of the international agencies. In particular, a BIS study has shown a number of inconsistencies in the relationship between the foreign- and local-currency ratings used by a single international rating agency, as well as sizable disagreements among the international rating agencies on the relationship between local-currency and foreign-currency ratings. Packer 2003.

Chapter 3

33. A market is characterized by adverse selection when buyers (or providers of funds) cannot observe directly the quality of the good (project), while the sellers (borrowers of funds) know the quality. Sellers may offer for sale only those goods that they value at less than the market price.
34. Moral hazard is created when the behavior (or actions) of a party to a contract cannot be observed by other parties. In the context of financial contracting and insurance, such behavior could lead to inefficient outcomes. Take, for example, a lending contract: if the lender cannot verify the use of funds, the borrower might be inclined to take actions that reduce the probability of repayment. In an insurance contract, the party that is insured might be inclined to put less effort into reducing the probability of a loss.
35. The specific legal and regulatory elements that are critical to the development, safety, and soundness of particular financial-market segments are discussed in subsequent chapters in the context of the relevant international standards and codes, because the latter include key elements that need to be incorporated into financial sector legislation.
36. Although there is no regulation stating this in Indonesia's Company Law, most companies apply a 50 percent majority vote of attending shareholders.
37. Members of the BOD and BOC are elected at the general shareholders' meeting.
38. This section draws on Arner and others 2006.
39. The World Bank endorsed a first set of Principles and Guidelines for Effective Insolvency and Creditor Rights Systems in 2001. These principles are being revised taking into account further feedback and lessons from insolvency assessments conducted under the Reports on the Observance of Standards and Codes initiative. The draft revised principles are available at <http://www.worldbank.org/gild>. The Bank is also working on a technical paper containing more detailed implementation guidelines to complement the Principles, and the United Nations Commission on International Trade Law (UNCITRAL) is finalizing a legislative guide for insolvency.
40. Secured lending can involve secured transactions using movable property as collateral and mortgages that use land as collateral.
41. At the same time, any system that involves the widespread use of collateral assets to support corporate lending to the point where such secured lending is used as a proxy for uninformed risk appraisal can become inefficient for the economy as a whole, both by encouraging wasteful substitution of credit-risk assessments and by acting as an oppressive force on non-financial-trade creditors. Thus collateral must be available as a security to release the flow of capital, but not such that it unreasonably protects inefficiency or excessively affects other non-financial creditors.
42. Personal property that is less than a freehold.
43. Article 9 of the UCC deals with transactions secured by personal property and applies to any transaction—regardless of its form—that is intended to create a security interest in personal property that secures payment or performance of an obligation.
44. The Philippine Accounting Standards Council adopted IAS and IFRS with a preface that sets forth the effective date of the standards in the Philippines and explanatory guidance, where necessary, relating to the application of the standards to Philippine purposes.

Chapter 4

45. Union Bank, together with twelve finance companies, merged with Khrungthai Thanakit and the merged entity was later renamed Bankthai. Bangkok Bank of Commerce and First Bangkok City Bank were merged with Krungthai Bank in 2000, and the consolidation of Bangkok Metropolitan Bank into Siam City Bank took place in 2002.
46. US$25 billion to the China Construction Bank and Bank of China and US$30 billion to the Industrial and Commercial Bank of China.
47. Tighter loan classification contributed to an increase in the reported NPL ratio of commercial banks to 7.6 percent at end-2005 from around 5 percent in 2004.
48. Note that Bank Negara Malaysia defines the nonperforming-loan ratio in net terms. This ratio is given by (NPL minus interest in suspense minus specific provisions) to total loans, and therefore differs from those in Figure 4.2, which are calculated on a gross basis.
49. However, some market estimates of these NPL ratios have been sizably higher.
50. For example, in Indonesia, loans that have been restructured are classified in the pass (accrual) category. In

Thailand, immediately after the crisis, loans that were restructured were re-classified as substandard once a debt-restructuring agreement was signed, and if three consecutive payments were made they were upgraded to the pass (accrual) category. In the United States, by contrast, the time required is six months.

51. For example, in Thailand, up to 70 percent of land and 50 percent of building revaluation can be included in Tier 2 capital, but no such provisions exist in Indonesia or Korea.
52. Korea's rapid expansion of credit-card financing during 2001-02 resulted in large delinquencies for banks, but more especially for credit companies.
53. There is extensive documentation on how improper real estate financing systems can cause or amplify a broader financial crisis (including as a result of lenders' myopia, collateral-based and loose underwriting standards, inaccurate appraisal methodology, inaccurate information on real estate markets and prices, and a lack of monitoring of key variables such as building vacancies and land prices).
54. The growing demand has also been accompanied by a rapid increase in housing asset prices relative to household income in the largest urban centers in China, although the trend is less visible and less of a concern at the national level. In other countries, in most of the largest cities, housing prices have not exceeded their 1997 pre-crisis levels, although they have been rallying steadily and at a particularly rapid pace since 2002.
55. Since the crisis, there has been a rise of private mortgage markets over specialized public lenders as seen in Korea and Indonesia. The housing banks in the region (mostly Thailand and Indonesia) now operate as commercial banks and are supervised as such. They cater to both the unsubsidized middle income household markets (competing with private banks) but also often lend to lower income households (and distribute the explicit subsidies from the Government for that purpose).
56. The shift in the importance of private banks in the mortgage markets is quite dramatic; for example in Korea in 1998, 85 percent of the housing loans were still made by the public National Housing Fund and the Housing Commercial Bank, while private banks were hardly active in the sector. By March 2005, housing loans to households (mortgage and home equity loans) had become the fastest growing area of lending (showing a growth of 23 percent per year between 1996-2003), and banks now dominate this market; as noted in Box 4.1, over 60 percent of banks' retail loans are housing loans.
57. Although some caution should be exercised with respect to China, since the recent portfolio has not been tested in any recession yet and property registration and foreclosure rights raise concerns, as do banks' underwriting policies and internal risk management capacities.
58. Renaud (2005).
59. Mortgage default insurance mitigates the "lemon" problem as potential good borrowers are no longer penalized by lenders' inability to differentiate between good and bad risks. In economics a lemon is a good whose quality is indistinguishable to the buyer beforehand, and which has major flaws which render it unusable for its intended purpose. It comes from George Akerlof's paper "The Market for Lemons: Quality Uncertainty and the Market Mechanism" 1970, *Quarterly Journal of Economics* 84 (3): 488-500.
60. Most of the portfolio is indexed on prime lending rates or official inter-bank lending indices. The rates have been higher in Indonesia, averaging around 15-17 percent per year) due to the relative macro volatility. This prevents any fast expansion at least through conventional mortgage markets—although CPI indexed loans could significantly increase the affordability of these loans.
61. Prepayment rates in the region are relatively high (for example, around 10 percent in Hong Kong and Korea and 15 percent in Indonesia)—in part because of competition among lenders, and in part due to households' cultural bias against mortgage debt.
62. This situation exposes borrowers to significant credit risks should rates rise in the renewal phase. Risks have been kept low so far through strict equity regulatory rules, albeit to the detriment of the affordability of the housing finance system. With the creation of the public secondary mortgage agency in 2004, fixed-rate long-term mortgage loans—to be funded by long-term MBS—are being promoted.
63. Some Thai lenders do provide partial limits on the future increase in repayments through various caps and extended terms.
64. The matching principle requires that the sums deriving from the issue of mortgage bonds be invested in assets that are capable to at least cover the claims attached to the bonds.
65. In countries where household and/or firm surveys are available, the authors compare the predicted values with survey results. The findings confirm that the aggregate loan and deposit data can be used to predict the micro information with fairly good results. In Indonesia, further corroboration is obtained from the results of the World Bank/Asian Development Bank Investment Climate Assessment, which covered medium and large firms; 49 percent of the firms surveyed stated that they had a bank loan, so a predicted value of 39 percent for small firms seems reasonable.
66. Countries in the region vary in the extent to which they allow banks to undertake other activities such as underwriting, brokering, and dealing in securities markets and aspects of mutual funds, and underwriting and selling insurance. Banks may be (1) unrestricted (all activities can be carried out directly in the bank); (2) permitted (all activities can be carried out but some must be undertaken through subsidiaries); (3) restricted (not all activities can be carried out in the bank or subsidiary); and (4) prohibited (none of the activities can be carried out in a bank or subsidiary). China has the most restrictive policies: banks are not permitted to engage in any way in the provision of securities markets services or insurance services. However, China's new securities law passed in October 2005 leaves room for integrated financial services. Indonesia and Korea allow banks to engage in the full range of activities in both these areas but some of these activities need to be conducted through subsidiaries. Malaysia allows banks to engage in the full range of activities in securities (through subsidiaries) but less than the full range of activities in insurance. The Philippines allows banks to engage in the full range of securities services directly, but to provide insurance services only through subsidiaries. Thailand is more restrictive, allowing banks to undertake only a subset of activities in securities and insurance (both through subsidiaries). Finally, Hong Kong (China) and Singapore allow banks to undertake directly a full range of securities

activities and to provide a full range of insurance activities through subsidiaries.

67. Several studies have found that the cost curve is relatively flat (e.g., Clark 1996; Berger and Humphrey 1991). Other studies have found evidence of economies of scale, but have also found that these are reached at a relatively small size. For instance, Berger, Demsetz, and Strahan (1999) find that the scale-efficient size in the US is reached at $100 million of assets and that the cost curve remains relatively flat after that. However, as noted by Vives (2001), a problem that arises frequently with studies of scale economies and cost efficiency is that they typically do not account for risk. Instead they measure the effect on cost of a joint increase in scale and risk. Noting that the lower cost of risk management in a larger, better-diversified bank may induce that bank to take on more risk, cost savings then may not be detected if taking on more risk is costly.
68. It is impossible to assess the quality of the services provided.
69. At the same time, there can be a tradeoff between these gains from competition and the stability of the banking sector. In particular, it is important that the degree of competition does not excessively erode the franchise value of banks and hence induce banks to take excessive risks to make up for declining profitability. In general, therefore, the appropriate degree of competition is likely to be lower in the banking sector than in other sectors of the economy—and in practice most banking systems exhibit monopolistic competition.
70. In China, restrictions have been loosened since 2002, when the minimum capital requirement for joint-venture banks was reduced to US$10 billion. The revised regulations limit the shareholding of a single foreign investor to 20 percent and the combined shareholding of foreign partners to 25 percent of the total equity of banks. To apply for a banking license to open branches to conduct foreign-currency banking business, a foreign bank needs to have a minimum of US$20 billion in assets. To apply for a banking license to conduct business in local currency, the foreign bank's office needs to have an operating record of not less than three years and two consecutive profitable years. In response to regulations on capital adequacy and risk management, issued by the China Banking and Regulatory Commission in 2004, the second-tier banks have intensified their efforts to replenish capital. The increased appetite for foreign and private capital has provided a new window of opportunity for foreign banks to take equity positions in banks. Thus far, 15 second-tier Chinese banks have received foreign investment.
71. Smaller banks serving local markets tend to develop closer relationships with their customers than larger banks that produce more standardized products. As discussed above, however, lending decisions still need to be based on a systematic evaluation of the credit risks posed by borrowers.
72. These gaps in meeting international standards reflect, among other things, the priority that countries are giving to developing financial sector infrastructure; weak supervision; deficiencies in customer-due-diligence practices, due to lack of resources and skills; inadequate oversight of non-bank money-transfer operators; difficulties in designing and implementing balanced regulations that address AML-CFT concerns while promoting access to finance; and underdeveloped tools for financial institutions to identify specific risks (including potentially exposed persons, activities related to terrorist financing; and inadequate transparency of the final beneficiary, especially in trade financing, affecting corresponding banking relationships).
73. The Basel II Capital Adequacy Framework is designed to both address weaknesses of the 1988 Basel Capital Accord (Basel I) and to help disseminate best practice in risk management within an integrated framework for banks, supervisors, and other stakeholders. For details of Basel II see Appendix 3.
74. There is no set timeframe for the implementation of Basel II by countries whose authorities are not members of the Basel Committee. The assessment of compliance with the Basel Core Principles for Effective Banking Supervision (BCP) by international bodies will be based on applicable capital-adequacy standards, whether these be Basel I or Basel II.
75. The Basel II framework is applicable on a consolidated basis and at every tier of banking groups. Its scope of application includes financial subsidiaries, even unregulated ones, with the exception of insurance companies.
76. For instance, the Hong Kong Monetary Authority has the authority to impose individual capital ratios of up to 16 percent (compared to a 12 percent current upper limit).

Chapter 5

77. At end-1995, stock market capitalization had reached US$213 billion in Malaysia and US$140 billion in Thailand.
78. By comparison, capital raised in the United States amounted to US$54 billion on the New York Stock Exchange and US$12 billion on the NASDAQ.
79. A major advantage of the Herfindhal index over standard concentration measures is that it gives more weight to larger firms. Take, for example, two cases in which the six largest firms account for 90 percent of the market capitalization and ten firms equally account for the remaining 10 percent of market capitalization. In the first case, assume that the six firms account for 15 percent of the market capitalization equally, and in the second case assume that one firm accounts for 80 percent of the market capitalization and the remaining five firms account for 2 percent each. In the former the Herfindhal index will be lower, at 0.1350; in the second, where one firm clearly dominates, the Herfindhal index will be much higher, at 0.6420. Standard six-firm concentration ratios would yield 90 percent for both cases, regardless of the fact that in the first case, six firms are of roughly equal size and hence the market could be said to be less concentrated than in the second case, where one firm clearly dominates.
80. However, China is currently undertaking major reforms to increase investors' access to shares. First, it has started to convert about US$210 billion of non-tradable "A" shares, essentially state-held equity, into common stock tradable "A" shares that can be bought and sold on the exchanges. Companies seeking to convert non-tradable stock must obtain the approval of the holders of tradable shares and offer cash or shares to compensate them for the increase in supply. As of end-2005, 421 listed companies had completed their negotiations with shareholders (about 31 percent of total listed companies accounting for 35 percent of the total capitalization of China's stock market). The companies that have completed the share reforms are now called "G" share companies. Second, new rules were announced to allow foreign investors to buy strategic

stakes in tradable "A" shares (announced in January 2006). Overseas investors will be allowed to buy "A" shares using RMB, provided they acquire at least a 10 percent stake in a firm and hold the stock for at least three years. Thailand has also recently loosened restrictions on foreign investors.

81. These figures are based on the International Finance Corporation's Investible Return Index (IFCI), which includes a subset of the stocks included in IFC's Global index (IFCG), now managed by Standard and Poor's. Stocks in the IFCI are selected using a two-step process: first, S&P determines which securities may be legally held by foreigners, and next, S&P screens stocks according to size and liquidity. Thus, the IFCI is designed to measure the composite stock-market return index of what foreign investors might receive from investing in emerging-market securities that are legally and practically available to them (IFC 1999). Note that the degree of investor accessibility may not be a good proxy for the degree of actual foreign ownership: a stock that is designated as investible may or may not be owned by foreign investors.
82. The index is designed to track the performance of liquid local-currency bonds.
83. Broadly, liquidity is a measure of how easy it is to trade securities. Liquidity has several dimensions—tightness, depth, immediacy, and resilience (Committee on the Global Financial System 1999). Tightness refers to the general costs incurred by market participants in executing transactions and is proxied by the difference between buy and sell prices, such as bid-ask spreads in a quote-driven market (as in the majority of East Asian countries). Depth refers to the size of transactions that can be executed without moving prices and is proxied by quote sizes, volatility, trading volumes, and turnover ratios. Resilience refers to the ease with which prices return to normal after disturbances or temporary imbalances in orders. There can be trade-offs between these dimensions. For instance, competition between market makers or regulation can narrow the bid-ask spread at the cost of less depth, as reduced profitability leads to less capital devoted to market making. Jiang and McCauley 2004.
84. The proportion of zero-return days in a trading year is a basic measure of trading costs. Since informed traders only trade when the benefits exceed the costs of doing so, a market with higher trading costs (both implicit and explicit) will exhibit more days without trading—hence a zero return. For further details see Lesmond and others 1999.
85. This measure is part of a set being developed by the Financial Sector Department of the World Bank. The composite indicators are comprised of sub-indicators, which are standardized by subtracting the median of the distribution and scaled by the standard deviation of the distribution. These standardized scores are then averaged to create the composite indicator.
86. In situations where the rights of minority shareholders are weak, the controlling owners or entrenched managers are usually not pressured to share their private information with outsiders. High synchronicity can therefore be the outcome of firms not reporting timely and reliable information about their real performance. Under such circumstances, outside small investors usually trade on the basis of rumors and sentiment and the stock prices of individual firms are predominantly influenced by the general market sentiment.
87. There is evidence that such skewness is associated with limited information disclosure. The reasoning is as follows: A corporation has more incentive to hide bad news than good. Thus good news is released to the public promptly, and stock market prices adjust immediately, which makes for more gradual price adjustments. In environments of poor disclosure, bad news can be covered up and accumulated by management. Of course, eventually, even bad news comes out. As a result bad news is released all at once and creates a much greater negative impact on stock prices. Furthermore the public will inevitably feel that the corporation is still hiding information and thus the reaction to the bad news is usually an overshooting decline. That is, a firm may deliver large negative returns on some days, but small positive returns most of the time. Jin and Myers 2005.
88. Of course, liquidity in bond markets is limited even in the advanced industrial countries. Even in the United States, a much larger market, liquidity is concentrated in government bonds and the "benchmark" corporate bonds. Most of the other bonds are only traded actively in the first few weeks after issuance as part of the allocation process. After this, liquidity is typically low. Gyntelberg and others 2005.
89. Liquid government bond markets are also important for the development of other financial segments, such as forwards and futures to support risk-management functions.
90. See World Bank and International Monetary Fund 2001, from which this discussion draws.
91. An on-the-run issue is the most recently issued bond for a certain term to maturity. Once a bond ceases to be on-the-run, it becomes a seasoned issue or an off-the-run issue.
92. Policymakers need to pay attention to the proper timing of re-opening and buy-back operations. An on-the-run issue may not always be the most liquid of the benchmarks. Even if the lifecycle of the government security is long enough to maintain its on-the-run status, if the time between issues is too long the security may reach a point where its maturity no longer corresponds to the needs of the investment community. Understanding the limits of continuing on-the-run issues helps the government to decide the timing of re-openings and buybacks. World Bank and IMF 2001.
93. Since 2004, the China Securities Regulatory Commission has introduced on a pilot basis a monitoring system that is available to members.
94. Key agencies are: China—Zhong Cheng Xin Credit Rating, Da Gong Global Credit Rating, and Shanghai Far East Credit Rating Company; Indonesia—PEFINDO and PT Kasnic; Korea—Korea Investor Service (KIS), Korea Ratings Corporation (KR), and National Information and Credit Evaluation (NICE); Malaysia—Rating Agency Malaysia (RAM) and Malaysian Rating Corporation Berhad (MARC); Philippines—Philippines Rating Services Corporation; and Thailand—Thai Rating Service (TRIS).
95. RAM in Malaysia has one of the longest track records.
96. The relationship between liquidity and transparency in the secondary market is complex. On the one hand, if the market is too opaque and they cannot accurately see the current market value of securities, investors may exit the market because it would be too difficult to accurately value their portfolios. On the other hand, if the market is too transparent, and the information on order flows is immediately disseminated, some large investors may be deterred from participating in the market for fear of revealing pri-

vate information. Therefore it may be desirable to protect the anonymity of market participants when disclosing transaction information.
97. Gyntelberg and others 2005.
98. Korea has also recently established bond-pricing companies to help address valuation issues and allow mark-to-market practices for bond-holding institutions.
99. Margin purchase takes place when an investor can borrow money from a broker to purchase a stock. Short selling takes place when a seller can sell a stock that he/she does not own or when any sale is completed by the delivery of a security borrowed by the seller.
100. In a margin purchase, losses are limited to the purchase price × the margin ratio, whereas gains are unlimited, at an unlimited sale price × the margin ratio minus the purchase price. In a short sale, losses are unlimited, at an unlimited purchase price × the margin ratio minus the sale price, while the gains are limited to the sale price × the margin ratio. This section draws on Endo and Rhee 2005.
101. See Endo and Rhee 2005, from which this discussion draws.
102. The margin requirement is the minimum deposit required of an investor and is usually expressed as a percentage of the total of the market value of securities, cash (if any), and the debit balance (credit extended) in a margin account.
103. Lending and borrowing of unspecified stocks is known as equity repo.
104. As discussed in Chapter 2, a key contribution of the Asian Bond Fund 2 initiative is in identifying and addressing some of these impediments.
105. The issue of minority shareholder rights is likely to be particularly important in Indonesia and the Philippines where the percentage of closely held shares among the listed companies amounts to 30 and 40 percent respectively. The percentages of closely held shares in the other countries are: 28 percent in China, 28 percent in Hong Kong (China), 10 percent in Korea, 17 percent in Malaysia, 25 percent in Singapore, and 21 percent in Thailand. This is significantly higher than the U.S. rate at 1.5 percent, Canada, 2 percent, and the U.K. rate 3.3 percent.
106. One of the arguments put forward in the academic literature is that securities laws are needed because contract and tort law alone are insufficient to reduce moral hazard and to prevent promoters (issuers and intermediaries) from cheating investors, because the payoff from cheating is too high and because private tort and contract litigation is too expensive and unpredictable to serve as a deterrent. This hypothesis has also been empirically tested. For example, La Porta and others (2006) have studied the effects of whether the law mandates the disclosure in prospectuses of particular information such as profitability and ownership structure; and whether the law specifies the liability standards that face issuers and intermediaries when investors seek to recover damages from companies that follow affirmative disclosure but fail to reveal potentially material information. Based on an analysis of 49 countries across the world, they find evidence that securities law covering these aspects matters for the development of securities markets. The indexes reported in Table 5.11 are a composite measure of disclosure and liability standards from La Porta and others (2006). A study by Djankov and others (2005) has taken the same approach to test which aspects of anti-self-dealing regulations matter most for the development of securities markets. It too finds that those characteristics in the law that promote private monitoring and enforcement matter more than those of a public nature.
107. See Grose and Friedman (2006) for a full discussion, from which this section draws.
108. Japan has JASDAQ and the Mothers' Market—the second section of the Tokyo Stock Exchange.
109. It is important to distinguish disclosure requirements for making an initial public offering and for subsequent share issues, as well as the ongoing financial and significant-event disclosures that are mandated by law, regulation, or the operating rules of the exchange.
110. The development of the stock exchange promotes venture capital development. This is one reason why venture capital and stock market development tend to be positively correlated. Another is that the infrastructure and the investment culture created with the development of an exchange are also important for venture capital.
111. Thailand reached a different view on the benefits of demutualization. A steering committee set up by the Ministry of Finance recently recommended against demutualization on the basis that the government would more easily be able to implement capital market reforms, including improved governance requirements for the exchange, if the exchange continued to be operated as a national body rather than being controlled by private-sector interests. However, the governance structure was changed by including the appointment/election of non-members to its board of directors.
112. See "Experience of Malaysia in Transitioning from Merit-based Regulation to Disclosure-based Regulation." Paper prepared by the Malaysia Securities Commission, published in Dalla 2006.
113. As in the case of the Basel Core Principles for Banking Supervision, there are certain preconditions for effective securities regulation. Thus the IOSCO principles recognize that securities law and regulation cannot exist in isolation from the other laws and accounting requirements of a jurisdiction. In particular, there must be an appropriate and effective legal, tax, and accounting framework.
114. The Financial Sector Assessment Program (FSAP) is a joint IMF-World Bank effort designed to increase the effectiveness of efforts to promote the soundness of financial systems in member countries. It is supported by a range of experts from national agencies and standard-setting bodies and seeks to identify the strengths and vulnerabilities of the financial system, determine how key sources of risks are being managed, and ascertain the sector's developmental and technical assistance needs.
115. For example, China requires corporate bonds to have bank guarantees. Once guaranteed by a bank, the product is no longer a standard corporate debt but becomes akin to a high-yield deposit at a commercial bank. Investors are less likely to undertake appropriate credit analysis in such a situation.
116. Measured in terms of GDP. In absolute size, Korea and China have larger securities markets than Singapore.
117. Bond markets in China, Korea, and Malaysia are larger in absolute terms; the latter are also larger as a percentage of GDP.
118. As a percentage of GDP they are comparable to those of the United Kingdom and Germany although they are still much smaller than that of the United States.

119. China's equity market, despite the decline since 2001, is still the largest in absolute terms.

Chapter 6

120. The original objective of the CPF was to provide for old age but, over time, retirement savings in the CPF have been used for other needs. The first step in the move to funding other needs came in 1968 when the Public Housing Scheme enabled members to pay for subsidized public housing built by the Housing Development Board. At present there are more than 15 savings schemes including for insurance, home ownership, and other purposes.
121. Readily available information on actual asset allocation by pension schemes is often limited to the main scheme only. Moreover, the information is sometimes only available at a very aggregated level, which does not allow for a detailed analysis of the types of instruments in which funds invest.
122. While an argument can be made for pension funds to have more diversified portfolios, equities should not necessarily form as large a share as they do in Canada or Ireland (around 60 percent). The optimal portfolio composition should be determined by the term structure of the liabilities. The benefit of having stocks in the portfolio is also linked to whether mean reversion exists in equities—an issue that is being hotly debated in the academic literature.
123. Obviously, a decision to increase contribution rates would have to be primarily justified from the perspective of ensuring the sustainability of the pension funds themselves, the benefits for capital market development being a secondary consideration.
124. The statistics also show a marked difference between the number of members and active contributors (only 77 percent of members are active contributors). This is not due to evasion but to the fact that any individual who has ever contributed to the system, including retired individuals, is counted as a member.
125. By contrast, taxed-taxed-exempt (TTE) and exempt-taxed-taxed (ETT) are comprehensive income-tax regimes that tax income equally regardless of source, and treat equally the different uses that income may be put to (whether consumption or saving).
126. Although payments out of some voluntary contributions would be taxable if they were to exceed a prescribed vesting scale.
127. In the OECD countries, the tax treatment of pension savings mainly follows the EET rule: private pension savings are deductible from the income-tax base and the accrued return on investment is exempt from taxation, but pension benefits arising from these savings are taxed.
128. How much of a pensioner's lifetime earnings should be replaced by a pension system generally depends on a number of factors such as access to housing, health, and other basic services, and the average propensity to save, as well as a country's per capita income and overall level of development. An initial target for net-of-tax income replacement from mandatory systems is likely to be around 40 percent of real earnings to maintain subsistence levels of income in retirement. While higher replacement rates might seem desirable, they come at a cost. The direct cost is through higher contribution rates that might compete with other more pressing needs, and the indirect cost is the incentives that high contribution rates may create for evasion.
129. In Hong Kong (China), for MPF schemes, the "prudent person" rule typical of Anglo-Saxon countries is essentially followed, but it is qualified by a number of legislative rules set out in Schedule 1 to the MPF about permissible investments (although no quantitative limits are set). ORSO schemes are subject to fewer restrictions.
130. The Philippines actually has a blend, since the Social Security System is a defined-benefit plan while the Government Services Insurance Scheme is a defined-contribution plan.
131. These reforms aim at: (1) reducing the accounting differences between employer pensions as reported in company accounts and as reported in national accounts; and (2) improving the consistency of national-accounting rules for all pensions in all sectors. Moreover, accumulated public pension rights represent claims on government revenues and/or assets and eventually on future GDP.
132. It is unclear whether mandatory defined-contribution schemes with no explicit guarantees have, de facto, some implicit guarantees. Probably it is fair to say that in any country with a mandatory pension scheme, the policy objective is to maintain adequate replacement rates that are not jeopardized by high volatility of returns or by low performance. Therefore there is implicitly some liability obligation to be met.
133. A laddered bond portfolio is a portfolio of bonds with staggered maturities so that a portion of the portfolio matures every year. It is a way of transforming a stock of assets into a stream of income to follow a similar liability pattern.
134. A credit-default swap requires the seller of the protection (e.g., an insurance company or pension fund) to pay the purchaser of the swap if the underlying corporate bonds go into default.
135. Two main approaches to the regulation of capital and solvency are in common use around the world and in the region. The first approach, modeled largely on the existing European Union "index-based" regime, is applied in China, Hong Kong (China), Korea, Malaysia, and Thailand. The second, modeled largely on the U.S. "risk-based capital" approach, has been applied in Indonesia. Singapore also has a risk-based approach that strikes a balance between the two approaches (see Appendix Table 6.1 for a summary of capital regulations).
136. The asset-management industry is defined as the management of pooled capital on behalf of investors with the objective of providing investors with a rate of return over a certain term in accordance with a pre-set strategy. It includes the activities of professional fund managers managing various funds such as mutual funds, investment trust funds, money-market funds, and real-estate investment trusts.
137. Of course, assets under management in investment funds may increase as a result of more sales of fund shares or units, or simply as a result in the increase in the value of the assets held by the funds, or, as is most commonly the case, a combination of the two. Hence the increases discussed are not necessarily the result of more sales of fund shares or units.
138. Hong Kong (China) and Singapore have set out to become major regional centers for asset management, including investment funds. Just over 60 percent of the Hong Kong (China) total (US$500 billion) and 70 percent of the Singapore total (US$355 billion) derives from abroad.

(*Sources:* Hong Kong Securities and Futures Commission's *Fund Management Activities, 2004,* and Monetary Authority of Singapore's *Singapore Asset Management Industry Survey*, *2004.*) Recently, Korea has also announced its long-term vision to become a regional financial hub with special expertise in asset management.

139. While corporate and trust-form funds are sometimes perceived as offering stronger investor protection, the occurrence of scandals within forms of different legal structures has been found to be broadly similar. Thompson and Choi (2001) conclude that "once a body of acceptable standards has developed and governance structures matured to the point where those assigned an oversight role can compel participants to apply those standards, it becomes very difficult to demonstrate that any particular system provides better investor protection than others."
140. This is sometimes known as a supervisory custodian or a depositary, as in the European Economic Commission's Undertakings for Collective Investment in Transferable Securities (UCITS) Directive, 85/611/EEC, as amended.
141. Another reason is that company law does not permit companies to continuously issue and redeem their own shares, and in Indonesia a corporate investment fund is a company.
142. This is actually an area where problems have been experienced worldwide. A recent example can be seen in Germany where open-ended real-estate funds were able to hold properties on their books at inflated values, causing problems when these assets could not be sold at anything like that value to meet redemptions.
143. This concern may arise anywhere; following the late-trading and market-timing scandal alluded to above, some observers accused the U.S. Securities and Exchange Commission of having been in the thrall of the powerful Investment Company Institute.

Chapter 7

144. By comparison, U.S. Treasury bonds amount to US$4 trillion.
145. A system introduced by the European Community as part of the European Monetary System to reduce exchange-rate variability and achieve monetary stability, as a precursor to the Economic and Monetary Union.
146. This is not to suggest that OTC markets should not be developed before ETD markets—clearly many countries have done this and much depends on country-specific conditions. However, as a general principle, ETD markets are easier to monitor and regulate and it is important therefore that a level playing field is created so as to ensure that the development of ETD markets is not hampered.
147. In August 2004, Bank Negara Malaysia announced revisions in the regulatory treatment of all debt securities issued by Cagamas. Most of the special treatment accorded to Cagamas was removed to accelerate the development of the ABS market and create a level playing field for all market participants.
148. There is, as yet, no market in East Asia for covered transactions of the kind that has spread prolifically since the early 1990s from Denmark and Germany. Covered transactions resemble securitized deals, except for a lack of severance of ownership from the asset originator.
149. In China, major bank sector securitization legislation is expected in 2006-07; trial deals are permitted by banking and securities regulators in 2005-06. Prior to the measures that have been recently introduced, the main barriers were the lack of an issuing vehicle under Chinese law, marketability of trust certificates, and bankruptcy remoteness. The new measures provide the legal framework for executing securitization transactions: the trustee as the issuing vehicle, issuance of asset-backed securities (and not trust securities) with limited recourse to trust assets, and perfection requirements. But the originators can only be financial institutions regulated by the China Banking Regulatory Commission, and no derivatives and hedging are available for securitization transactions. Also, registration does not provide for the registration of real estate, and the tax issues have not yet been addressed.

    Indonesia enacted securitization decrees pre-1997, and securities regulator guidelines in 2002-03.

    Legislation changes in Korea include the 1998 Asset-backed Securities Law, the 1999 Mortgage-backed Securities Law, and the 2003 Korea Housing Finance Corporation law. Korea's Asset-backed Securities (ABS) Act did not address taxation issues: withholding tax, stamp duty, and income tax. The result of the Secured Bond Trust Act is unsecured securities for the domestic market and a double special-purpose vehicle (SPV) structure for the international market. If a securitization transaction involves short-term assets, each sale of assets during the revolving period must be registered with the Financial Supervisory Service. The ABS Act only allows registration of one securitization per SPV, with no use of a master-trust structure, which therefore raises transactions costs for repeated users.

    New legislation in the Philippines includes the 2003 Special-purpose Vehicle Act and the 2004 Securitization Act.

    Thailand enacted a Securitization Decree in 1997, an Asset-backed Securitization Act in 2003, and a Special-purpose Vehicle Act in 2004.
150. A securitization is defined as a structure where at least two different stratified risk positions, reflecting different degrees of credit risk, exist, and where the risk of these positions depends on the performance of an underlying pool of exposures (see paragraphs 539 and 540 of Basel Committee on Banking Supervision 2005).
151. Capital requirements represent 8 percent of the risk-weighted assets, so that, for example, a 20 percent risk-weighted asset will attract a capital requirement of 1.6 percent of the exposure.
152. Gyntelberg and others (2005) mention that "local credit-rating agencies do exist in Asia, and often ratings are mandatory for bond issues. Many such rating agencies, however, are quite new and need more time to develop a historical record on which to build a reputation. While a handful of foreign agencies are active in Asian markets, they often do not provide ratings across the full array of bond issuers in individual countries."
153. "Basel II and Securitization; a paradigm shift." J.P. Morgan 2006.

Chapter 8

154. In Korea, real estate activities are permitted up to 60 percent of a bank's capital.
155. This analysis was done for firms as of end-2003.
156. Common problems resulting from not complying with BCP 20 are: lack of an adequate framework for cooperation, policy coordination, and information sharing among banks, securities, and insurance supervisors; lack of rules for

consolidated accounting and consolidated financial statements; lack of minimum capital requirements and other prudential norms for financial conglomerates (e.g., limits to intra-group and large group exposures); gaps and overlaps in prudential regulation; opaque ownership structure in conglomerates; and weak capacity of supervisors to monitor risks in all entities belonging to a financial group, especially in mixed conglomerates (commercial and financial).

157. A unified supervisory system seems to be better prepared to mitigate regulatory arbitrage, because it is better prepared to develop and apply regulations and the supervisory process consistently. In addition, the information available to the integrated supervisor can be more quickly and effectively utilized.
158. By becoming the only contact point for entities for all regulatory and supervisory issues, a single regulator becomes responsible for preventing gaps in regulation and supervision.
159. Reportedly, the agencies that have completed the transition phase from multiple to a single supervisor, such as the Financial Supervisory Agency in the United Kingdom, have become much more attractive employers than the former regulators, so recruitment has been easier. Briault 2001.

Appendix 2

160. The International Financial Reporting Standards (IFRSs) subsume and update the International Accounting Standards (IASs), which were issued by the International Accounting Standards Committee, the predecessor to IASB. The IFRSs consist of IFRSs, IASs and Interpretations of the Standards. Where the IASB amends rather than replaces an IAS, the IAS number remains. Interpretations of the IFRSs are issued by the International Financial Reporting Interpretations Committee (IFRIC). Interpretations issued by IFRIC's predecessor, the Standards Interpretations Committee (SIC), are termed SICs.

Appendix 3

161. Both Basel I and Basel II require banks to hold capital equal to at least 8 percent of their risk-weighted assets. Thus the capital requirements for a category of risk can be calculated by multiplying the relevant risk weights by 8 percent.
162. It is therefore generally believed that banks' Standardized Approach (SA) computation engines have the ability to support all the approaches simultaneously and to switch between these approaches as necessary.
163. European Union countries will apply Basel II to all credit institutions and investment firms irrespective of size, whereas in Japan and the United States, the new framework should be applied primarily to the large internationally active banks, with alternative arrangements made available for smaller institutions.
164. Both approaches are to be implemented by end-2006 according to the Basel II framework.
165. For instance, Basel II provides that banks using the F-IRB approach will not have capital relief exceeding 5 percent of their Basel I requirement during their first year of implementation, 10 percent during the second, and 20 percent during the third.
166. For instance, in its guidelines on adoption of the Internal-Ratings-Based Approach (IRB), the Monetary Authority of Singapore (MAS) has indicated that it may permit phased rollouts in certain cases. However, MAS will generally not permit a banking group to adopt IRB unless it is able to do so meaningfully from its IRB adoption date. This means that the initial rollout should account for the banking group's most significant portfolios in terms of size and risk profile. At a minimum, MAS expects exposures that attract at least 60 to 70 percent of the capital requirements for IRB to transition to IRB on the IRB adoption date. It also expects a bank to complete the IRB rollout across the entire banking group within two years, unless under exceptional circumstances, such as a significant merger or acquisition. A prolonged or patchy rollout would suggest that the bank's risk management capability has not achieved sufficient sophistication on a group-wide basis. It would blur the distinction between capital and provisioning requirements as intended under IRB. (Under IRB, margin incomes and provisions cover expected loss and capital is expected to cover unexpected loss. The Standardized Approach does not make such a distinction.)
167. For example, small and medium-size enterprises are defined as enterprises having a turnover of up to 50 million euros in the IRB approach, while SA provisioning allows the classification of corporates within the retail portfolio as long as exposures do not exceed one million euros.
168. Validation by the institution is in all cases a prerequisite for an assessment by supervisors.
169. Basel II may assist banks in articulating their capital deficiency and provide a sense of urgency to address the issue. It appears that some poorly capitalized banks have already engaged in fund-raising to address the implications for their capital ratios of adopting Basel II.
170. These results should be taken with a degree of caution since they are based on information gathered in 2002, when most banks were still at a very early stage in their Basel II implementation.
171. Although SMEs belong either to the retail or corporate Basel II portfolios, banks were required to report their SME exposures separately for the third quantitative impact study.
172. These are objectivity, independence, international access/transparency, disclosure, resources, and credibility.
173. Some banks attempt to solve their shortage of data by purchasing published default data from various vendors. If they do so, they must ensure that their portfolio correlates to the external vendor's data, so that they can determine how applicable the vendor's data are to their own customer base.