

**The 3rd Annual PECC Finance Conference**

***Institution-Building in a World of Free and Volatile Capital Flows:  
PECC Perspectives***

Sheraton Santiago Hotel & Convention Center, Santiago, Chile  
June 20-21, 2004

---

**Session II**

The Unfinished Business of Strengthening the Domestic Financial Systems:  
How Much Unfinished and How to Help Finish

**Financial System Reform in APEC Economies:  
What Do We Know and How Do We Know It?**

**Wendy Dobson**

University of Toronto

Conference draft – do not quote

**PECC Finance Forum**  
Santiago Chile, June 2004

**Financial System Reform in APEC Economies:  
What do we know and how do we know it?**

by Wendy Dobson  
Rotman School of Management, University of Toronto

The basic proposition of this paper is that all APEC member economies seek to be part of a stable, wealthy and dynamic APEC economy that is outward-looking and fully integrated with the rest of the world. 2020 is an agreed target date for these economies to be fully integrated into the international economy. To achieve these economic growth and development goals, well developed and innovative financial markets, and strong financial institutions are necessary, as are appropriate policy structures to support them.

Each APEC economy requires well functioning financial markets and institutions that are consistent with its level of development, but that are capable of changing as new and more complex financial and risk management needs of households, firms and governments evolve. East Asian governments since the 1997-98 crises are also determined to develop cooperative financial arrangements to provide liquidity to countries facing future crises. They have begun policy dialogues and surveillance efforts to promote transparency and information sharing as the basis for deeper cooperation in future. A long-term vision for these efforts is a common monetary policy arrangement and consistent exchange rate regime.

The purpose of this short paper is to focus on what we know about one of the building blocks of deeper financial and monetary cooperation: the development of strong, sound and innovative domestic financial systems in APEC member economies. In the first section, I summarize the problems of weak financial systems, drawing heavily on post-crisis East Asian evidence. In the second section, I discuss the case for timely and complete information on financial reforms – both domestic and regional – and evaluate some of the available sources of such information. In the third section, I apply a particular data source to see what we can learn about the state of domestic reform in various (but not all) APEC member countries. The fourth section contains my conclusions.

**1. The problem of immature domestic financial systems**

External financial shocks are largely beyond the reach of individual governments to influence, but ways to reduce vulnerability to such shocks are not. East Asian governments, determined to reduce this vulnerability, have initiated approaches to regional financial architecture. Yet developing such architecture without strengthening domestic financial systems would be like building a structure without firm foundations.

The crisis economies have strengthened their domestic financial systems, but seven years after the onset of crisis these are still potential sources of vulnerability. Traditionally bank-dominated, domestic financial systems rely heavily on debt finance. As economies develop and become more complex, diverse and transparent financial systems are necessary for savers and investors to interact with confidence with borrowers and issuers who are unknown to them. Stronger banks and capital market institutions that supply a greater diversity of financial instruments (such as bonds and securitized instruments), flows of transparent information, payments and settlement systems, all contribute to deep and liquid financial markets that are better able to withstand external shocks. Stronger supervisory oversight and enforcement of prudential standards, adequate infrastructure, and the modern accounting and legal frameworks to promote transparency are also required. At the same time, several constraints – the lack of trained manpower, independent financial supervisors, and pressures from vested interests in existing practices – need to be addressed. While there has been improvement since the crisis, financial systems in the region still trail best international practice.<sup>1</sup>

Issuers and intermediaries are part of the problem. Many corporations became highly leveraged during the high growth years; they also lacked transparency in financial disclosure and in their corporate governance practices (problems not unique to corporations in the region). Opaque relationships among governments, banks and firms in business groups, and family conglomerates marginalized minority shareholders and created asymmetric information problems for investors and lenders. Some firms also borrowed heavily abroad in unhedged foreign currencies. One of the initial consequences of the unanticipated external shocks was that as central banks raised interest rates corporate defaults and increased non-performing loans in financial institutions increased dramatically. By late 2002, indicators of corporate health continued to show that although the high average levels of leveraging have declined from their 1997-98 peaks, reliance on short-term debt remains high and relatively stable. The indicators of leverage, solvency, liquidity and profitability all showed that East Asian corporate indicators of health are weaker than those in other emerging markets (IMF 2002).

By 2004, evidence is beginning to emerge that the debt overhangs left by the crisis are being addressed. Recent independent estimates in Ernst & Young (2004) show that non-performing loans (NPLs) on their stringent definition have been reduced by a billion dollars in gross reductions since the crisis, but three quarters of that amount still remains to be dealt with (Table 1). By these estimates Japan and China have the biggest problems, but China clearly has the farthest to go (Table 1a). In an earlier study of 2002 data by the Financial Stability Forum, Fung et al (2004) find that asset management corporations (AMCs) have played important roles in Indonesia, South Korea and Malaysia in removing nearly all NPLs from the books of financial institutions (Table 1b). Other incentives have also been introduced to encourage restructuring including new bankruptcy codes, changes in the tax treatment of debt and negotiations among creditors.

Domestic financial systems are also diversifying, with capital market institutions beginning to play more significant roles. In 2001, for example, Thailand's Securities and Exchange Commission (SEC) moved to develop corporate and government bond issues as well as a secondary market. Regulations on disclosure on private placements of corporate paper were tightened; requirements for credit ratings of paper were introduced (Bank of Thailand, 2003). As

the government debt market grew following the crisis (budgetary requirements expanded with recapitalization of the financial system) a benchmark was created in 1998 and liquidity in the secondary market increased. Tax obstacles to bond market development were also eased (including reduction of business taxation of capital gains and personal income taxation of interest income).

The Thai SEC also improved infrastructure to facilitate fund raising through the equity markets. While primary listing criteria were relaxed and obstacles to private company restructuring were removed, information disclosure requirements were tightened. Guidelines for foreign investor participation were also changed, and the SEC and Stock Exchange delineated their responsibilities more clearly.

Liberalization of foreign entry requirements is another channel to recapitalize weak financial institutions, introduce modern financial instruments, and provide management and skills training. Both Thailand and South Korea have liberalized entrance requirements. But Thailand's success has been limited by political reluctance; foreign equity participation is regulated although foreign entities are subjected to national treatment with respect to permitted activities. In South Korea, foreign institutions have brought new sources of competition and modernization into the financial sector, as well as new sources of capital.

Among the crisis economies, South Korea seems to have made the most progress in restructuring. The OECD's 2002 Economic Survey of Korea applauds this progress, but concludes there is still a long way to go before the government allows resources to be reallocated from the failing banks and *chaebol* to more profitable new enterprises (OECD, 2003).

### *Regional financial markets<sup>2</sup>*

Regional financial markets are beginning to form, starting with a regional bond market. An Asian bond is one issued by Asian borrowers (governments, corporations and financial institutions) for sale in the respective issuing countries and denominated in foreign currencies. Investors in these bonds could be from anywhere in the world. Bond markets already exist in Tokyo, Hong Kong and Singapore but these markets lack depth and liquidity and, due to capital account and other restrictions, are not accessible to most borrowers in the region. Korea's recent deregulation of capital market activities has permitted foreigners to issue bonds denominated in won and other currencies, but few issuers have yet taken advantage of this market.

A regional bond market will contribute to efficiency gains for the region's borrowers. As the recent crises underlined, the problem of double mismatches of currencies and maturities must be resolved (Goldstein and Turner 2004). One obvious element of the solution is to make local currency financial instruments such as bonds more readily available. Asian bonds would provide safer and (perhaps) relatively cheaper sources of finance. The market would also intermediate more of the region's savings within the region. In the past, Asian savers have been risk averse, investing their savings in riskless assets available in the world's money centers, in part because they have not had ready access to risk management technologies and to information needed to make informed choices about local instruments. Park and Bae (2002) note that non-regional financial institutions still dominate East Asia's capital markets. The technical gap between local and foreign technology and expertise is sufficiently large to enable non-regional institutions

readily to penetrate local markets. Indeed these authors suggest the gap will be difficult to close because of the implied need for a rapid and costly build up of human capital and the “backbone” infrastructures of information and telecommunications services, regulatory oversight and modern governance practices.

Nevertheless, on the demand side EMEAP central banks established an Asian Bond Fund in 2003 to invest in US dollar bonds issued by Asian governments. This activity may be diversified into local currency bonds in future. On the supply side, the ADB Bond Initiative is working towards creating well-functioning and efficient local currency bond markets. But progress is slow and the sizes of these initiatives are modest.

For local currency markets to grow, Asia Pacific central banks will have to relax the use of their currencies, which in turn implies reductions in monetary policy control. Unless this reluctance to see their currencies held by foreigners is overcome Asian bonds have to be denominated in one of the three major international currencies, or in the currencies of the region’s international financial centers.

Thus, key local conditions must change to make all this possible. Park and Park (2003) argue that the first step is for governments to undertake sufficient domestic financial liberalization to allow the issuance of bonds in foreign currencies. Another step is to permit competition among domestic bond markets as a stimulus to modernization and change. A third step is to create the essential infrastructure of payments and settlements systems. Government would also have to cooperate in the development of legal, regulatory and accounting infrastructures to support bond markets. Cross-border infrastructure, such as a single securities depository for the region, is one example. Regional credit agencies, cross-border securities borrowing and lending and credit enhancement mechanisms, as well as credit guarantee agencies would also be necessary. The other basic requirement is for governments to strengthen and liberalize domestic financial systems and cooperate in encouraging appropriate but essential regional infrastructural support.

## **2. Evaluating financial reforms**

In this section, I examine the possibilities for systematic and objective evaluation of progress on domestic financial strengthening and reforms, with some attention to regional infrastructure requirements as well. To evaluate such progress, timely and accurate information is needed on both domestic and regional financial reforms.

The list of desirable reforms is well known. Weaknesses in bank-centered financial systems need to be corrected through legislation that clearly mandates supervisors and provides them with the necessary clout and independence to carry out their oversight roles effectively. Training and appropriate reward structures for bank supervisors are also required, as is appropriate training in modern banking practices for bank management and staff. Considerable activity is reported on some central bank websites and by the Financial Stability Forum, World Bank and other institutions. Yet there is still no region-wide publicly available evaluation of domestic reforms against best practice benchmarks and in terms of remaining gaps in implementation that need to be addressed. What do we know about the competitiveness of the region’s banking sectors? What do we know about governments’ progress in regulatory and supervisory reforms? What is the state of banks’ ability to evaluate and monitor risks? Are the weaknesses being addressed?

What are the most effective methods that have been employed for achieving these objectives? Can these be identified and disseminated? Furthermore, as competition increases among the region's financial institutions, regulatory authorities will have to coordinate among themselves or lose capital market activity to those jurisdictions with the least-onerous rules and standards. Diverse tax and regulatory regimes will therefore need to be harmonized to reduce obstacles to intra-regional cross-border capital flows.

There are various forms of data available that can be employed in comparative analysis. Most of these databases have been assembled since the crises and therefore cover a relatively short period of time. Some of the major sources include the following:

- FSAPs (Financial System Assessment Programs): In an initiative to increase transparency the IMF and World Bank have jointly performed FSAPs as part of IMF surveillance. FSAPs evaluate a country's financial system against best practice bench marks. Governments must volunteer for FSAP evaluations and they decide if such evaluations will be made public. By June 2004, the following APEC members have undergone FSAPs which are publicly available at [www.imf.org](http://www.imf.org): Hong Kong, Japan, Korea, Mexico and Singapore.
- ROSCs (Report on Observance of Standards and Codes): are reports prepared by the IMF as part of its Article IV surveillance missions that monitor the implementation by national authorities of internationally recognized standards. "Core" standards apply to data, fiscal and monetary policy and to banking. "Noncore" standards apply to securities and insurance, payment systems, audit, accounting and deposit insurance. ROSCs are made public.
- Ernst & Young "Global Nonperforming Loan Report 2004" contains independent estimates of reductions in NPLs in the East Asian economies and India and assessments of country-by-country progress.
- Financial Stability Forum: Uses *Occasional Papers* to monitor progress. Fung (2004) contains a country-specific comparative study of the history, legal environment, supervision, governance structures and performance of 6 asset management corporations (AMCs) in East Asia.
- World Bank database on the regulation and supervision of banks in 107 countries (available at [www.worldbank.org/research/interest/intrstweb.htm](http://www.worldbank.org/research/interest/intrstweb.htm)). Information is available from two surveys (the first in the 1998-2000 period and the second in 2003) on regulatory variables relating to bank activities, competition, capital, supervisory actions and resources, private monitoring, deposit insurance, and market structure.
- Stock exchanges and securities markets: IOSCO has published numerous guidelines and standards. (Work still needs to be done to determine whether systematic surveys have been undertaken). The ADB has recently introduced a website at <http://asianbondsonline.org> that contains detailed information on regulations, markets etc. for ASEAN+3 economies on a country-by-country basis.

### **3. What can we say about the state of reform in APEC member countries?**

The purpose of this section is to explore the use of available data to evaluate progress in the APEC economies in strengthening and diversifying domestic financial systems. The data comes from surveys by World Bank staff of bank regulators and supervisors in 107 countries. The latter responded to 175 questions on national regulations governing bank activities, competition,

capital definitions and requirements; supervisory powers and resources; transparency indicators available to private market participants to monitor bank performance and accountability; deposit insurance design; and market structure. The questionnaires and responses to the two surveys are available on the World Bank website.

The primary purpose of the surveys is described in Barth, Caprio and Levine (2001) which I will refer to as BCL. They aim to provide a systematic database on how countries regulate and supervise their banking systems in order to “provide stylized facts for banking on a global basis” (BCL: 2). From their preliminary research on the relationship between bank performance and stability and bank regulations and supervision they draw two main conclusions. First, regulatory and supervisory strategies to promote private sector monitoring are associated with better bank performance and more stability. Countries with generous deposit insurance schemes tend to have poorer bank performance and more problems with fragility (BCL: 31). Second, the more diversified banks’ sources of income and loan portfolios the better are their performance and stability.

Focusing on an APEC economy subset of BCL data, it is possible to use the indicators to compare progress by governments in strengthening domestic banking systems. For example, summary data can be developed for a “scorecard” by which it is possible to compare different economies. Scorecards have both advantages and disadvantages. One advantage is that they can provide a comparative basis for tracking progress towards best practice, assuming that best practices are positively associated with economic growth and stability. A disadvantage is that score cards are necessarily summaries of complex processes and information and may even be misleading. Another possible disadvantage of the BCL data is that the responses are provided by the authorities themselves and may provide somewhat self-serving ratings.

With these caveats in mind, I use the BCL data to compare certain aspects of bank supervision and performance in the APEC economies. The data used in this section are summarized in Tables 2-5. Table 2 provides the Scorecard which rates Capital Soundness (with details summarized in Table 3); Supervisory Stringency (summarized in Table 4) and an index of Private Monitoring variables compiled by BCL. Table 5 provides a qualitative check on supervisory independence. Each of the variables is described in Annex I. A number of other indicators are available in the database, such as banking activity, competition and industry structure, but in the time available, the focus was chosen on supervision, capital soundness and outside monitoring. It should be recalled that the responses on which the indexes are based were supplied to the World Bank by national regulators and supervisors themselves in the 1998-2000 period.

Table 2 summarizes these three variables. Higher scores denote greater stringency and higher standards. The highest APEC country score for Capital Soundness is 7, found in Mexico (and possibly Japan), followed by the United States and Korea. Malaysia has the lowest score. Supervisory Stringency is scored highest by the United States, but also by Indonesia, Japan, and the Philippines at 14 or 15, with Korea and Mexico following at 11. Information for private sector monitoring is considered most readily available by Taiwan, Singapore and Malaysia, each of which score 9. Hong Kong did not respond to the survey. India, while not an APEC member,

is nevertheless of interest and is included as a memorandum item. It is not included in this commentary.

Detail on how these scores were arrived at appear in Tables 3 and 4. The Private Monitoring index is based on responses to questions about transparency requirements that banks have certified external audits; information on whether the ten largest banks are rated by international rating agencies; rules on accounting disclosure; the existence of deposit insurance and other questions about disclosure requirements on off-balance sheet items, risk management procedures and acceptance of subordinated debt in the regulatory capital. Malaysia and Taiwan rate themselves highest on this index, followed by a number of other countries including the United States. Korea, Thailand and Mexico have the lowest scores.

Information on Capital Soundness focuses on regulatory requirements relating to the magnitude of a bank's capital and its relationship to total assets on the assumption that these measures are important to an assessment of bank performance and strength. The Capital Soundness score (Table 3) measures four different but complementary variables of the stringency of regulatory capital requirements in different countries. Responses are based on questions that captured the variety of guidelines that aim to limit banks' potential for leveraging their capital bases: conformance to the Basel capital requirements (first variable); relationship of the ratio to market risk (second variable); how the capital base is measured (third variable); are loan losses and unrealized security gains and losses deducted from reporting accounting capital? The fourth variable, capital regulatory index, is a sum of the other measures, and it appears in Table 2. Canada, Thailand, Singapore and Philippines score highest on the minimum capital asset ratio. Japan does not respond to such questions. Korea and Mexico score themselves highest on capital stringency, followed by the United States, Singapore and Japan. Malaysia's low score is puzzling as it suggests low values for capital stringency (putting it at the same level as China) which is not what one might expect.

Supervision Stringency is summarized in indicators in Table 4. The four variables, reported for all countries in the previous tables with the exception of Singapore, include supervisory powers (an index compiling yes-no answers to 16 questions probing the authority supervisors and regulators believe they have to take action to prevent or correct banking problems); prompt corrective action (based on evidence of a legal basis to evaluate bank solvency and take actions when there are certain levels of deterioration); restructuring powers (evidence that supervisory authorities can take actions with respect to shareholders, management and directors in restructuring and reorganizing troubled banks); and insolvency powers (evidence of powers to declare a bank insolvent; suspend ownership rights and supercede shareholder rights). Supervisory powers are generally highly rated (with the exception of Canada). Prompt corrective action is highly scored by Indonesia, Japan, Philippines and Philippines followed by the United States. What is particularly noteworthy is the number of respondents (China, Thailand and Canada) who rate themselves as having no such powers. Restructuring powers are generally highly rated (again with the exception of Canada), as are powers to declare insolvency.

Table 5 is included to supplement Table 4. While supervisory authorities may consider that they have various powers, how much discretion do they think they can exercise? Too much forbearance, for example, can delay prompt corrective action. Expectations of moving to the



private sector can also contribute to forbearance. Thus, in contrast to the other tables, the higher the value in Table 5, the more discretion and the more likely are supervisors to move to the private sector. Malaysia and Chile score themselves as having no discretion which implies strict implementation of rules and exercise of powers. But in Chile, the score on moving to the private sector is high. At the other end of the spectrum lie Canada and Singapore, both with high scores, while China is in between.

Do these indicators tell us anything we don't already know? Does this scorecard approach provoke us to find out what lies behind the variances? Or is it too simplistic (or at worst misleading)? Returning to Table 2, some of the results are what one would expect. The United States scores near the top of the indices, which is what one would expect. Mexico, Chile and Korea also do quite well, which accords with anecdotal evidence. But there are puzzles. Canada scores at the bottom overall, for example. Yet the Canadian banking system is sound; it meets best practice on capital soundness, but supervisors have low estimates of their ability to take prompt corrective action etc. More information might be desirable on the assumptions made by supervisory authorities in their responses. Another surprise that needs further explanation is the consistently high scores accorded to Japan, Indonesia and Philippines where anecdotal evidence suggests that bank oversight lags best international practice, capital soundness is still problematic and private monitoring is still difficult. Again, the explanations for these surprises might be found in supervisors' assumptions used in self-scoring. Might these assumptions change with more experience with such surveys?

What is valuable about the database is the structure and detail in the survey questions. We learn a great deal about bank supervisors' powers and behavior. Bank supervisors no doubt also learn from having to respond to the questions. One of the issues going forward is to determine whether independent assessments would be possible on some of the key variables summarized in this paper.

#### *Surveys and scorecards for capital market regulators?*

Beyond those issues, the question arises whether analogous surveys are needed (and feasible) on supervision and best practice among national securities regulators and capital market institutions in assuring investor protection; fair, efficient and transparent capital markets; and reduction in systemic risk. Data analogous to banking data could be assembled, asking whether securities regulators have the necessary powers for (a) comprehensive inspection, investigation and surveillance; (b) implementing an effective compliance program; and (c) sharing both public and non-public information with domestic and foreign counterparts.

Issuers should also be subject to certain requirements such as: full, timely and accurate disclosure of financial results and other material information; fair and equitable treatment of investors; and internationally acceptable accounting standards. The International Organization of Securities Commissions (IOSCO) approved a series of Objectives and Principles in 1998. These objectives and principles could be used as criteria for judging national systems.

#### *Regional scorecards?*

At the regional level, some of the criteria for assessing national systems would also be relevant to regional securities markets such as bond markets, as discussed in section 1. For example, for

local currency bond markets to grow, central banks will have to relax restrictions on the use of their currencies – what progress is being made on this issue? Is progress being made towards appropriate policy structures providing legal, regulatory and accounting infrastructures? The development of a regional payments and settlement system? A single securities depository?

An online repository of information on national structures, standards and regulations in the ASEAN+3 economies has recently been made available at the ADB-sponsored website <http://asianbondsonline.adb.org>. Information on regional infrastructure and harmonization of standards is minimal as yet on this website, but it is clear that internationally accepted rules and standards are to be the norm.

Some comparative information is also becoming available on regional credit rating agencies in East Asia in Menon's (2004) work for the Asian Development Bank. He assesses the progress that has been made on regional accreditation standards and a regional credit rating agency. Harmonization of national rating standards would enhance the credibility of credit rating agencies (CRAs) and improve the quality of ratings. Menon's survey of domestic CRAs indicates they face several impediments to harmonization, including different levels of market development, infrastructure and regulations, and different stages of domestic CRA development. Since 2001, CRAs have formed a cooperative grouping that might become more formalized and commence training and research initiatives. While no progress has yet been made in establishing regional accreditation standards, some consensus is emerging that it should be market-driven rather than regulator-driven.

#### **4. Conclusions**

This survey of what we know (about reform) and how we know it is necessarily abbreviated. It is increasingly evident that progress has been made, but much more remains to be done. This paper explores the concept of comparative study of domestic financial system reforms. The purpose of independent comparative study is to provide publicly available information that could serve as the basis for several desirable developments in the long term. First, it provides a basis for encouraging authorities to continue their efforts to strengthen and modernize financial systems, particularly banks, in advance of – instead of after – another banking crisis. Second, comparative studies can also illustrate the limitations of fragmented national information bases, and what is possible if information gathering were consolidated in a regional platform. Third, the idea of a regional platform that consolidates information is a logical element, or even a first step, towards a more formalized regional financial institution that promotes capacity building and deeper financial sector cooperation.

At present, information on the supervision and performance of banks is the most readily available; but some encouraging signs of information on securities markets and credit rating agencies also exist. What is remarkable, however, is that each of these developments is taking place in different institutions and under various initiatives. This “thousand flowers blooming” should be seen as a stage of development that evolves towards consolidated efforts to develop domestic and regional financial systems and towards consolidated initiatives to evaluate progress to identify and rectify deficiencies and eliminate inefficiencies in domestic and regional financial markets. In view of the established importance of efficient financial systems to innovation and long term growth, to do anything less would be inconsistent with the 2020 target referred to in

the introduction to this paper. The PECC Finance Forum's mandate allows for independent initiatives, such as the Scorecard illustrated here. It is recommended as an informal, independent, but practical form of surveillance that needs to be further developed as a regional instrument to be shared with policy makers and members of the private sector.

## References

Barth, James R., Gerard Caprio, Jr. and Ross Levine. 2001. "The Regulation and Supervision of Banks Around the World: A New Database". [www.worldbank.org/research/interest/intrstweb.htm](http://www.worldbank.org/research/interest/intrstweb.htm). Accessed May 2004.

Bank of Thailand. 2003. [www.bot.or.th](http://www.bot.or.th). November.

Claessens, Stijn, Simeon Djankov and Daniela Klingebiel. 1999 (September). "Financial Restructuring in East Asia: Halfway There?" [www.worldbank.org](http://www.worldbank.org) Accessed in 2000.

de Brouwer, Gordon. 2002. "The IMF and East Asia: A Changing Regional Financial Architecture". *Pacific Economic Papers*. No. 324. February.

Dobson, Wendy and Gary Hufbauer. 2001. *World Capital Markets: Challenge to the G-10*. Washington, DC: Institute for International Economics.

Dobson, Wendy and Pierre Jacquet. 1998. *Financial Services Liberalization in the WTO*. Washington, DC: Institute for International Economics.

Ernst & Young. 2004. "Global Nonperforming Loan Report 2004". Ernst & Young: Asia Pacific Financial Solutions.

Fung, Ben, Jason George, Stefan Hoht and Guonan Ma. 2004. "Public Asset Management Companies in East Asia". *Occasional Papers* No. 3. Basel: Financial Stability Forum.

Goldstein, Morris and Philip Turner. 2004. *Controlling Currency Mismatches in Emerging Markets*. Washington, DC: Institute for International Economics.

Holland, Tim. 2004. "Lessons From the Fall". *Far Eastern Economic Review*. 38-47. May 20.

International Monetary Fund (IMF). 2002. *World Economic Outlook*. Washington, DC: IMF. September.

Kaufman, Daniel, Art Kraay, and Pablo Zoido-Lobaton. 1999. "Governance Matters". *World Bank Policy Research Department Working Paper* no. 2196.

Menon, Suresh. 2004. "Development of Regional Standards for Asian Credit Rating Agencies: Progress and Changes". Prepared for Asian Development Bank. May. [www.adb.org](http://www.adb.org) Accessed June 2004.

OECD. 2003. *Economic Survey: Korea*. Paris: OECD.

Park, Yung Chul and Kee-Hong Bae. 2002. "Financial Liberalization and Economic Integration in East Asia". Paper prepared for PECC Financial Forum Meeting, Honolulu, August.

Park, Yung-Chul and Daekun Park. 2003. "Creating Regional Bond Markets in East Asia: Rationale and Strategy". Paper presented to PECC Finance Forum, July 8-9.

**Table 1**  
**Working Out Debt Overhangs**

**A. Nonperforming Amounts and Reductions, 2004**  
(US\$ billions)

| Economy      | NPLs in all Financial Institutions | NPLs in AMCs <sup>Ti</sup> | Gross Reductions in NPLs Since Financial Crisis <sup>ii</sup> |
|--------------|------------------------------------|----------------------------|---|
| Japan        | 330 <sup>iii</sup>                 | 112                        | 600   |
| China        | 307 <sup>iv</sup>                  | 107                        | 200   |
| Indonesia    | 16.9                               | 5                          | 37  |
| Korea, South | 15                                 | 45                         | 125   |
| Philippines  | 9                                  | NA                         | NA  |
| Thailand     | 18.8                               | 5                          | 95  |
| Taiwan       | 19.1                               | NA                         | 50  |
| India        | 29.9                               | NA                         | NA  |
| Total        | 746                                | 274                        | 1,107   |

Source: Ernst & Young 2004

**B. Cumulative Transfers of Non-Performing Assets (NPAs) to AMCs**  
(Book Value, US\$, Dec. 31, 2002)

| Economy      | Total | % GDP | % Total Loans | % Total NPAs |
|--------------|-------|-------|---------------|--------------|
| China        | 170   | 14.5  | 20.7          | 40.9         |
| Indonesia    | 35    | 19.5  | 76.4          | 90.4         |
| Japan        | 290   | 7.0   | 8.1           | 46.5         |
| Korea, South | 90    | 19.5  | 29.8          | 85.0         |
| Malaysia     | 15    | 14.3  | 7.4           | 91.6         |
| Thailand     | 17    | 13.7  | 18.7          | 29.0         |
|              |       |       |               |              |
| Total        | 370   |       |               |              |

Source: Fung et al 2004.

<sup>i</sup> Estimate of unresolved NPLs moved to AMCs (asset management corporations).

<sup>ii</sup> Estimated gross reductions due to restructuring, transfer to AMC etc.

<sup>iii</sup> Uses exchange rate of ¥107/US\$1.00 to convert yen amounts.

<sup>iv</sup> EY estimate. No official estimates available.

**Table 2**  
**Bank Oversight in APEC Economies**

|                | 1. Capital Soundness | 2. Supervisory Stringency | 3. Private Monitoring Index |
|----------------|----------------------|---------------------------|-----------------------------|
| China          | 4                    | 7                         | 7                           |
| Hong Kong      | NA                   | NA                        | NA                          |
| Indonesia      | 5                    | 14                        | 8                           |
| Japan          | Approx. 7            | 15                        | 8                           |
| Korea, South   | 6                    | 11                        | 6                           |
| Malaysia       | 3                    | 9                         | 9                           |
| Philippines    | 4                    | 14                        | 8                           |
| Singapore      | 5                    | NA                        | 9                           |
| Thailand       | 5                    | 8                         | 6                           |
| Taiwan         | 4                    | 6                         | 9                           |
|                |                      |                           |                             |
| Canada         | 4                    | 4                         | 7                           |
| Chile          | 5                    | 10                        | 8                           |
| Mexico         | 7                    | 11                        | 6                           |
| US             | 6                    | 15                        | 8                           |
|                |                      |                           |                             |
| India          | 7                    | 5                         | 6                           |
|                |                      |                           |                             |
| Total possible | 8                    | 17                        | 10                          |

Notes: NA = data not available

Source: World bank database on the regulation and supervision of banks at [www.worldbank.org/research/interest/intrstweb.htm](http://www.worldbank.org/research/interest/intrstweb.htm).

**Table 3**  
**Capital Soundness**

|                | 1. Capital<br>Regulatory<br>Variables | 2. Risk-<br>adjusted<br>Capital Ratio | 3. Capital<br>Stringency | 4. Capital<br>Regulation<br>Index |
|----------------|---------------------------------------|---------------------------------------|--------------------------|-----------------------------------|
| China          | 2                                     | NA                                    | 1                        | 4                                 |
| Indonesia      | 2                                     | 1                                     | 2                        | 5                                 |
| Japan          | NA                                    | NA                                    | 4                        | 7                                 |
| Korea, South   | 2                                     | 1                                     | 5                        | 6                                 |
| Malaysia       | 2                                     | 2                                     | 1                        | 3                                 |
| Philippines    | 3                                     | 2                                     | 3                        | 4                                 |
| Singapore      | 3                                     | 2                                     | 4                        | 5                                 |
| Thailand       | 3                                     | 2                                     | 3                        | 5                                 |
| Taiwan         | 2                                     | 2                                     | 3                        | 4                                 |
|                |                                       |                                       |                          |                                   |
| Canada         | 3                                     | 2                                     | 2                        | 4                                 |
| Chile          | 2                                     | 2                                     | 3                        | 5                                 |
| Mexico         | 2                                     | 2                                     | 5                        | 7                                 |
| US             | 2                                     | 2                                     | 4                        | 6                                 |
|                |                                       |                                       |                          |                                   |
| India          | 2                                     | 2                                     | 5                        | 7                                 |
|                |                                       |                                       |                          |                                   |
| Total possible | 3                                     | 3                                     | 6                        | 7                                 |

**Table 4**  
**Supervision Stringency**

|                | 1. Supervisory Powers | 2. Prompt Corrective Action | 3. Restructuring Powers | 4. Declaring Insolvent Powers |
|----------------|-----------------------|-----------------------------|-------------------------|-------------------------------|
| China          | 3                     | 0                           | 3                       | 1                             |
| Indonesia      | 4                     | 6                           | 2                       | 2                             |
| Japan          | 4                     | 6                           | 3                       | 2                             |
| Korea, South   | 3                     | 3                           | 3                       | 2                             |
| Malaysia       | 3                     | 1                           | 3                       | 2                             |
| Philippines    | 3                     | 6                           | 3                       | 2                             |
| Singapore      | 1                     | 0                           | NA                      | NA                            |
| Thailand       | 3                     | 0                           | 3                       | 2                             |
| Taiwan         | 3                     | 2                           | NA                      | 1                             |
|                |                       |                             |                         |                               |
| Canada         | 2                     | 0                           | 1                       | 1                             |
| Chile          | 3                     | 2                           | 3                       | 2                             |
| Mexico         | 3                     | 3                           | 3                       | 2                             |
| US             | 4                     | 5                           | 3                       | 2                             |
|                |                       |                             |                         |                               |
| India          | 3                     | 0                           | 2                       | 0                             |
|                |                       |                             |                         |                               |
| Total possible | 4                     | 6                           | 3                       | 2                             |



**Table 5**  
**Supervisory Discretion**

|                | 1. Forbearance | 2. Move to private sector |
|----------------|----------------|---------------------------|
| China          | 2              | 3                         |
| Indonesia      | 1              | 2                         |
| Japan          | 1              | 0                         |
| Korea, South   | 1              | 1                         |
| Malaysia       | 0              | 2                         |
| Philippines    | 1              | 3                         |
| Singapore      | 2              | 3                         |
| Thailand       | 2              | 2                         |
| Taiwan         | 1              | 2                         |
|                |                |                           |
| Canada         | 3              | 2                         |
| Chile          | 0              | 3                         |
| Mexico         | 1              | 1                         |
| US             | 1              | 1                         |
|                |                |                           |
| India          | 3              | 1                         |
|                |                |                           |
| Total possible | 4              | 3                         |
|                |                |                           |

## **Annex I. Notes to Tables 2-5:**

### **Table 2: Bank Oversight**

Scores for Capital Soundness are based on indicators summarized in Table 3. Supervision stringency is based on indicators summarized in Table 4. Private monitoring index, a 0 - 10+ index, uses information on the degree of professionalism in the external audit, availability of independent ratings for large banks, financial information available to market participants, and the existence of deposit insurance. The higher the score the greater the private oversight.

### **Table 3: Capital Soundness Indicator**

is a composite of four variables measured as follows:

1. *Minimum capital/asset ratio scored as*
  - 1 if less than 8%
  - 2 if 8 - 11%
  - 3 if greater than 11%
2. *Risk-adjusted capital ratio*
  - 1 if less than 10
  - 2 if 10 -20
  - 3 if greater than 20
3. *Capital stringency* is 0 - 6 index measuring regulatory requirements that limit a bank's ability to leverage its capital through eg, accounting for loan losses, unrealized securities gains. The higher the value the tighter the guidelines requiring prompt corrective action.
4. *Capital regulation index* is also an index ranging from 0 - 8 that reflects capital stringency plus guidelines on sources of funds that can be counted as regulatory capital. The higher the value the stricter the guidelines.

### **Table 4. Supervisory Stringency**

is made up of 4 indicators defined as follows:

1. *Supervisory powers* is an index, 0 to 16, that reflects a weighted average of yes - no replies to 16 questions put to supervisors to ascertain their powers to encourage appropriate conduct (and sanction if necessary) of external auditors, management, directors and shareholders.
2. *Prompt corrective action* is an index, 0 to 6, based on an average of yes - no responses to 6 questions on supervisory powers to require board and managers to take remedial action on management and financial issues.
3. *Restructuring powers* is an index, 0 - 3, measuring supervisors' powers to restructure and reorganize a troubled bank.

4. *Declaring insolvent power* is an index, 0 to 2, measuring supervisors' powers to close an insolvent bank.

**Table 5. Supervisory discretion**

is based on two indicators:

1. *Forbearance* is an index, 0 to 4, that captures supervisors' discretionary powers when confronted with evidence violations of laws or regulations. The higher the value the greater the discretion.
2. *N = Moving to the private sector* measures the likelihood supervisors move to the private sector upon retirement. The higher the index value (extending from 0 - 3) the more likely such a move will be made.

---

**Notes**

<sup>1</sup> See Dobson and Jacquet 1998; Claessens et al. 1999; Dobson and Hufbauer 2001.

<sup>2</sup> See Park and Park 2003.