The banking industry in the emerging market economies: competition, consolidation and systemic stability - an overview

John Hawkins and Dubravko Mihaljek

I. Introduction[1]

The banking industry world wide is being transformed. The global forces for change include technological innovation; the deregulation of financial services at the national level and opening-up to international competition; and - equally important - changes in corporate behaviour, such as growing disintermediation and increased emphasis on shareholder value. In addition, recent banking crises in Asia and Latin America have accentuated these pressures. The banking industries in central Europe and Latin America have also been transformed as a result of privatisations of state-owned banks that had dominated their banking systems in the past. The implications of these developments were considered by a small group of senior central bankers at the BIS during a two-day meeting in December 2000. Key data on banking systems in the emerging and advanced economies confirm these trends. In particular, the tendency towards a reduced number of banks and other deposit-taking institutions is evident from Table 1.

Table 1

Trends in banking systems

	East Asia[1]		Latin America[2]		Central Europe[3]		Advanced[4]	
	1990	1999	1990	1999	1990	1999	1990	1999[5]
Number of deposit-taking institutions[6]	10,100	11,761	1,344	1,741	2,087	1,154	39,766	30,361
of which: banks	1,148	1,059	323	302	1,819	929		
Concentration[7]	44	43	47	59	70	55	39[9]	42[9]
Employment in DTIs[6] ('000s)	303[8]	344[8]	943	773	…	252	5,638	5,477
Assets of DTIs ($bn)	835	1,917	364	766	105	188		
Branches of DTIs ('000s)	17	24	26	24	…	15	275	286
Banks' return on assets (%)	0.9	– 1.6	1.4	0.5	2.5	1.8		
Banks' simple capital ratio	4.9	10.9	9.0	8.8	8.2	7.6		
Banks' risk-weighted capital ratio	…	11.7	…	12.6	9.0	13.9		

[1] Sum or simple average of Korea, Malaysia, the Philippines and Thailand. [2] Sum or simple average of Brazil, Chile, Colombia, Mexico and Peru. [3] Sum or simple average of the Czech Republic, Hungary and Poland. [4] Sum or simple average of Australia, euro area, Hong Kong, Japan, Singapore, Switzerland, the United Kingdom and the United States. [5] 1998 data, other than for Hong Kong and Singapore. [6] Including commercial, savings and various types of mutual and cooperative banks, and similar intermediaries such as building societies, thrifts, savings and loan associations, credit unions, postbanks and finance companies but *excluding* insurance companies, pension funds, unit trusts and mutual funds. [7] Percentage share of DTIs' assets held by five largest institutions. [8] Excluding the Philippines. [9] Excluding Singapore.

Sources: BIS questionnaire; British Bankers' Association; Building Societies Association; national data.

Yet the summary statistics on the banking systems in individual economies (shown in Table A1 of Annex 3) strongly suggest that there is much potential for further bank consolidation. Many emerging economies, notably in Asia, still have vast numbers of small deposit-taking institutions. And the banking systems in Latin America and some central European economies remain relatively underdeveloped, a legacy of the lack of confidence in the currency or the banks.

[1] This overview has benefited greatly from the cooperation, comments and statistical input of the central banks invited to the meeting and central bankers and private sector bankers interviewed before the meeting. Special thanks go to Philip Turner for extensive comments and Marc Klau for statistical assistance, to Emma Warrack and Edith Sutton for secretarial assistance and to Nigel Hulbert, Tom Minic and Liliana Morandini for editorial assistance. Background work on Asian economies was partly carried out by George Pickering, Robert McCauley and Ben Fung of the BIS Representative Office for Asia and the Pacific. Agustin Villar contributed to the discussion of developments in Latin America. Helpful comments were received from Palle Andersen, John Heimann, Masanori Ishizuka, Phil Lowe, Setsuya Sato, Kostas Tsatsaronis and Bill White. Opinions expressed are those of the authors and are not necessarily shared by the BIS or the central banks involved.

Against this background, the paper first reviews the main forces for change in the emerging economies' banking industry (Section 2), and then analyses how these forces are affecting the structure of their banking systems through privatisations (Section 3), domestic mergers (Section 4) and entry of foreign banks (Section 5). As discussed in individual sections, these structural changes raise a number of microeconomic questions about economies of scale and scope, competition within the banking market, and the business focus of domestic and foreign banks. In addition, bank consolidation raises some important macroprudential issues - in particular, about the impact of consolidation on supervisory structures and systemic stability in an industry dominated by a small number of institutions (Section 6).

2. Forces for change

This section provides an overview of some of the main forces shaping the banking industry in the emerging market economies in recent years.[2] The approach followed is eclectic and no attempt is made to assign weights to the different forces for change that are identified. The reason for such an approach is simple: banking, like other economic activities, is in the midst of rapid - many would argue historic - structural change driven by the development and application of new information technology (IT). Because the core area of this technology is information processing - which also lies at the heart of financial intermediation - and because the development and use of IT are bound to continue (regardless of the movement in new technology stock indices), it is still far too early to grasp where exactly the banking industry is headed. At least three other forces underlie recent changes in the emerging economies' banking industry: domestic deregulation and external opening-up of financial sectors, changes in corporate behaviour and banking crises.

Deregulation and opening-up to foreign competition

Banking in the emerging economies was traditionally a highly protected industry, living off good spreads achieved on regulated deposit and lending rates and pervasive restrictions on domestic and foreign entry (see Section 3). For many years, there was little pressure to disturb this cosy and wasteful world. However, global market and technology developments, macroeconomic pressures and banking crises in the 1990s have forced the banking industry and the regulators to change the old way of doing business, and to deregulate the banking industry at the national level and open up financial markets to foreign competition. As a result, borders between financial products, banks and non-bank financial institutions and the geographical locations of financial institutions have started to break down. These changes have significantly increased competitive pressures on banks in the emerging economies and have led to deep changes in the structure of the banking industry. As discussed in the sections that follow, these changes include the establishment of many new institutions, privatisation of state-owned banks, mergers and consolidation, and a large increase in the presence of foreign banks.

One of the main catalysts for increased competition at the domestic level has been the removal of ceilings on deposit rates and the lifting of prohibitions on interest payments on current accounts. These deregulation measures have reduced sources of cheap funding for many banks and put pressure on their profits. Intensified competition has made it harder for banks to cross-subsidise different activities and has forced them to price risks more realistically and to charge explicitly for previously "free" services. This has been unpopular and poses considerable public relations challenges for banks. Banks also increasingly face competition from the non-bank financial industry, especially for lending to large companies (see below). Accompanying deregulation has been greater emphasis on capital adequacy, which has encouraged banks to securitise some assets, generate more fee-based income, and try to improve efficiency. In some emerging economies, higher required capital ratios have been an important spur to mergers (or sales to foreign banks) for poorly performing banks, which would have had trouble raising new capital to meet such standards (see Sections 4 and 5).

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2 The causes of financial consolidation in the advanced economies are similar; see Group of Ten (2001).

At the international level, the easing of restrictions on foreign entry and the search by global institutions for profit opportunities in the emerging economies have led to a growing presence of foreign-owned financial institutions in domestic banking systems. As a result, most emerging economies now increasingly look to foreign banks to provide the capital, technology and know-how needed in banking (see Section 5). But most international banks are investing through local vehicles and local brand names, seeking both to exploit customer loyalty and to avoid antagonising local nationalist sentiments. Another reason for this approach is that it enables international banks to focus their "brand name" activities on large financial centres and reduce the number of locations in which they are present.

Technology

According to conventional wisdom, new information technology is not at present likely to impinge much on the development of the banking industry in the emerging economies, which remain technologically behind the industrial countries. For example, the low level of penetration in most emerging economies (Table A2 in Annex 3) means that the internet is not seen as a threat to traditional banks. Given the signs of a possible bursting of the e-banking "bubble" in the United States and Europe, some have also argued that the issue of electronic banking may go away before the emerging markets need to worry about it.[3]

This conventional view can be challenged on several grounds. As noted above, the major issue about new IT is its impact on the processing of information, which is the very essence of the banking business. Perhaps the most significant innovation has been the development of financial instruments such as derivatives that enable risk to be reallocated to the parties most willing and able to bear that risk, thereby inducing more investment in real assets and fostering the development of banking and financial markets in general.[4] The use of such instruments is not the preserve of industrial countries: with their increasingly sophisticated IT applications, banks in the emerging economies use new financial instruments daily in their transactions. Their banking systems and financial markets are thus in a position to advance much more rapidly from a rudimentary to a fairly advanced stage of development of risk management and other commercial banking functions. Such potential skipping of financial development stages would not have been possible in the past, when information processing technology was not readily available, and when the development of futures markets and other domestic financial institutions that enable unbundling and shifting of risks on a large scale was much more time-consuming and costly.

Likewise, the potential for rapid development of commercial banking functions offered by alternative delivery channels such as ATMs, debit cards, telephone, internet and electronic banking should not be underestimated.[5] Despite the still low level of usage of such channels (with the exception of ATMs, which are now very widespread), the vast majority of banks in the emerging economies see such channels as a must for their industry. Banks fighting for some important part of the retail market believe that they have to offer such services as an essential marketing tool, although the true demand for them has so far been limited.

As in advanced economies, new technology is affecting the structure and performance of the banking industry in the emerging markets mainly through its impact on the costs and the determination of optimal scale. Branch-based transactions are much more expensive than alternative delivery channels (Table 2). This cost advantage would seem to favour smaller institutions, as investments needed to attract deposits or provide banking services via the internet are in principle lower than the costs of setting up a traditional branch network. At the same time, investments needed to develop adequate back office and risk assessment systems are very high, creating considerable cost advantages for larger institutions. Moreover, branch networks are not expected to shrink as a result of the

[3] However, just because share prices of internet stocks fall, this does not mean that the impact of new technology on banking will disappear.

[4] See Greenspan (2000).

[5] For example, Brazil's Banco Itaú reports that 1.2 million of its 7 million customers use PC banking. See Sato, Hawkins and Berentsen (2001) for an overview of developments in e-finance.

development of alternative delivery channels, although branches are generally expected to become smaller.

Table 2

Costs of banking transactions (in US dollars)

	USDC[1]	BAH[2]	GSBCG[3]
Physical branch	1.07	1.07	1.06
Phone	0.52	0.54	0.55
ATM	0.27	0.27	0.32
PC-based dial-up	0.11	0.02	0.14
Internet	0.01	0.01	0.02

[1] Estimates by US Department of Commerce, 1998. [2] Estimates by Booz, Allen & Hamilton in 1997. [3] Estimates by Goldman Sachs & Boston Consulting Group.

Sources: Sato, Hawkins and Berentsen (2001); Group of Ten (2001).

More fundamentally, banks are increasingly losing their privileged access to information about investment opportunities, and are thus under pressure to merge or build alliances with domestic or foreign-owned banks and technology companies in order to share the costs and exploit the benefits of the development of new IT applications.[6] For example, Hong Kong has a number of small family-owned banks that are currently well capitalised and at no imminent risk of failure, but may not have sufficient size to undertake major upgrades in computer capacity to meet competitive challenges in the medium term. While unwilling to force mergers, the authorities have clearly indicated they see them as desirable (see Section 4).

One source of concern related to new banking technology is the emergence of a "digital divide" in the access to banking services. According to this view, better educated and more affluent customers will be able to obtain improved service from banks through the internet over the medium term, while the services provided to poorer and older customers will deteriorate as branches are closed, particularly in remote areas. These concerns have led some policymakers to seek a continued role for the state-owned commercial banks that maintain traditional, nationwide branch networks (see Section 3).

Changes in corporate behaviour

The spread of information technology has affected the banking industry both directly, through IT applications in risk management and marketing of financial products, and indirectly, through its impact on corporate behaviour and the development of financial markets, especially in the area of financing new capital investments. This impact is most clearly felt in the case of technology firms, which are more or less forced to turn to capital markets to finance their projects because banks are not prepared to deal with the high level of uncertainty associated with the development of new technologies. However, disintermediation is not limited to new economy firms; it is also beginning to be felt in the more traditional "old economy" sectors. Bonds outstanding (in domestic and international markets combined) have risen strongly in almost all emerging economies over the past few years, and are now more important than borrowing from domestic banks in some of them (Table A3 in Annex 3). Many large firms can now raise funds by issuing securities more cheaply than they can borrow from banks. Indeed, many large companies can borrow more cheaply in the capital markets than the banks themselves, given their better credit ratings.

Non-bank funding sources are not open to all companies, in particular small and medium-sized firms. In addition, deep and liquid markets for non-bank funding are not developed in many countries - only the United States has, for example, a large market for high-yield corporate bonds. Nonetheless, banks

[6] For example, Banco Itaú is building an alliance with America Online to advance its e-banking business, while Mexico's Banamex has put substantial resources in a joint venture with Commerce One to develop a B2B project.

are under increasing pressure to keep their customers, and to the extent that more and more creditworthy firms turn to alternative funding sources and the proportion of higher-risk bank customers increases, banks, especially in the emerging economies, are forced to develop techniques for better pricing and provisioning of credit risks. Because of economies of scale in the management and diversification of credit risks, banks have an incentive to merge with other institutions, including foreign banks, which in turn leads to consolidation and a growing presence of foreign banks in the banking industry.

Another implication of these developments is that commercial banks in bank-centred financial systems can no longer maintain their traditional, close relationships with corporate customers. Because of pressure from alternative funding sources and other domestic and foreign banks, there is growing emphasis on shareholder value as the sole commercial objective of banks. Banks in industrial countries such as Germany and Japan and in many emerging economies with bank-based financial systems are therefore increasingly divesting their non-financial shareholdings, establishing arm's-length relationships with their traditional corporate customers, cutting operating costs, and concentrating on core activities where they can generate the highest rate of return. As with new IT applications, risk management and risk diversification, the achievement of these cost benefits often provides incentives for privatisation, mergers and the entry of foreign banks.

The new emphasis on shareholder value is apparently beginning to be reflected in the data on total bank profitability (Tables 1 and 3). Latin American banks steadily improved their relatively high profitability during the 1990s, although net interest revenue has been stable. Their high operating costs (as well as high interest rate spreads) are in large part the legacy of the high-inflation period of the 1980s and the early 1990s, when the float generated easy profits for the banks and there was little pressure to cut costs. Central European banks have also improved their profitability in recent years, but mainly by cutting their operating costs. In Asia, however, banks suffered large losses in 1998 as a result of the financial crisis, but already in 1999 these losses were considerably reduced by cutting loan losses through better management of credit risks.

Table 3

Banking sector performance

as a percentage of total assets

	East Asia[1]			**Latin America**[2]			**Central Europe**[3]			**G3**[4]		
	1992-97	**1998**	**1999**	**1992-97**	**1998**	**1999**	**1992-97**	**1998**	**1999**	**1992-97**	**1998**	**1999**
Net interest revenue	2.6	1.8	2.2	5.2	5.3	5.4	3.1	2.8	2.5	2.0	1.8	2.0
Other income	0.7	1.2	0.8	2.3	2.0	1.8	2.3	2.1	2.0	0.7	0.8	1.0
Operating costs	1.6	2.4	2.3	5.5	5.5	5.7	4.1	3.5	3.1	1.7	1.6	1.8
Loan losses	0.6	6.3	1.8	1.2	1.1	1.7	0.6	0.6	0.4	0.2	0.4	0.3
Pre-tax profits	0.8	– 5.5	– 0.7	1.4	1.3	2.4	0.5	0.7	1.0	0.7	0.6	0.8

[1] Simple average of Indonesia, Korea, Malaysia, the Philippines and Thailand. [2] Simple average of Argentina, Brazil, Chile, Colombia, Mexico, and Peru. [3] Simple average of the Czech Republic, Hungary and Poland. [4] Simple average of Germany, Japan and the United States.

Source: Fitch-IBCA.

Some commentators have expressed concern about the adverse impact on stability of the pressure to boost (short-run) shareholder value. In this respect, a norm of a return on equity of around 15-20% appears to be expected. Given an 8% capital ratio, this norm would translate into a 1-2% return on assets. This expectation may not fully reflect the transition to a world of lower inflation, and may be based on growth assumptions that are not likely to be sustainable. It also seems relatively ambitious compared with risk-free returns. To the extent that shareholder expectations of returns are too demanding, the emphasis on shareholder value could thus push banks into riskier areas in the future. Alternatively, the shift to fee-based services could continue, and banks could become more involved as asset gatherers and active intermediaries in the capital markets.

Banking crises

There were many banking crises during the 1990s, often occurring shortly after the external and banking systems were deregulated. Despite all the attention given to complicated derivative products that have led to the high-profile collapses of some individual banks, most systemic banking crises are still caused by poor lending (see Annex 1). The proportion of loans that have become impaired during banking crises in the emerging market economies has generally been much greater than that in the industrial world, implying also higher economic costs, especially in the relatively large, bank-centred, financial systems in Asia (Table 4).

Table 4

Banking crises

		Peak non-performing loans as % of total loans	**Cost of restructuring: as % to GDP**
Chile	1978-83	19	41
United States	1984-91	4	5-7
Norway	1988-92	9	4
Finland	1991-93	9	8-10
Sweden	1991-93	11	4-5
Mexico	1995-97	13	14
Argentina	1995	…	2
Brazil	1995-	15	5-10
Thailand	1997-	47	24
South Korea	1997-	25	17
Indonesia	1997-	55	58
Malaysia	1997-	25	10
Philippines	1998-	12	7

Sources: IMF, *World Economic Outlook*, May 1998; JP Morgan, *Asian Financial Markets*, 28 April 2000; World Bank, *Global Economic Prospect* and *Developing Countries*, Table 3.6; Barth, Caprio and Levine (2000), Table 12; central banks.

One of the most important consequences of the banking crises in the emerging economies has been changes in the structure of bank ownership. Fears of bank runs and a vicious circle of credit contraction (as a first-round contraction of bank credit weakens aggregate demand, lowering asset prices and borrowers' cash flows, leading to more delinquent loans and a further credit contraction) led most governments to intervene, either by nationalising the banks in trouble and subsequently returning them to private ownership (Section 3), or by encouraging bank mergers and foreign takeovers (Sections 4 and 5).[7]

3. State banks: privatisation

The role of state-owned commercial banks (SOCBs) has diminished considerably over the past decade. In the late 1980s and early 1990s, the SOCBs often accounted for over half of total banking system loans and deposits in emerging economies. A decade later, the average share of state banks' assets had declined to 20% in central Europe and 15% in Latin America (Table 5). In Indonesia, Korea and Thailand, an opposite shift took place as a result of temporary bank nationalisations during the 1998-99 crisis, but governments in the region are committed to divesting their shares in nationalised banks as soon as circumstances permit. State ownership of banks remains dominant only in China,

7 Methods of bank restructuring in emerging economies are summarised in Hawkins and Turner (1999).

India and Russia. India has, however, exposed banks to greater competition in recent years, and a draft law has been submitted to parliament to reduce the government's shareholding in the nationalised banks to 33% from 51% at present. In China, the listing of SOCBs is part of a three-stage bank reform plan adopted in 1999 that aims at building a modern, competitive banking system.

Table 5

State-owned banks

	Assets as a percentage of total bank assets			Return on assets	Capital ratio: risk-weighted
	1980	1990	2000	1998	1998
China	100	100	99[1]	…	…
India	91	91	80	0.4	11.2
Russia	…	…	68	…	…
Hong Kong	0	0	0	–	–
Singapore	0	0	0	–	–
Indonesia	…	55	57[2]	– 19.9	– 21.4
Korea	25	21	30	– 5.2	6.9
Malaysia	…	…	0	…	…
Philippines	37	7	12	0.5	13.3
Thailand	na	13	31	– 12.1	8.7
Argentina	na	36[3]	30	– 0.0	18.7
Brazil	33	64	43[2]	– 0.1	12.9
Chile	23	19	12	1.7	13.3
Colombia	27	45	13[2]	– 10.0	6.9
Mexico	0	100	0	–	–
Peru	65	55	3	0.1	11.4
Venezuela	…	6[4]	5[2]	1.5	15.8[5]
Czech Republic	…	78[3]	28	– 0.4	12.0
Hungary	…	81	9[2]	– 27.1	23.5
Poland	…	80[4]	23	1.0	8.8
Israel	…	…	45[2]	0.5	9.8
Saudi Arabia	0	0	0	–	–
South Africa	…	5[3]	2[1]	…	…

Note: State-owned banks are defined as those where the government has a majority of the equity.

[1] 1998. [2] 1999. [3] 1994. [4] 1993. [5] Simple ratio.

Sources: World Bank; Hawkins and Turner (1999), p 79; central banks; Barth, Caprio and Levine (2000), Table 1.

Up to the early 1990s, most developing countries took state ownership of commercial banks for granted. As with utilities, telecommunications companies, railways and airlines, commercial banks were considered to be too important for the national economy to be completely in private hands, and financial markets were regarded as too thin to exert effective discipline, especially given capital controls and the prevalence of prohibitions on foreign ownership.

What factors account for this remarkable turnaround? Why has privatisation of banks apparently been so successful - especially in central European transition economies - when the privatisation of state-owned enterprises has often failed? Is this trend likely to continue in the future, or is there a residual role for some state banks? In addressing these questions, first the available data on the performance of state-owned banks are reviewed, then some issues and lessons concerning SOCB privatisations are considered, and finally the future role of SOCBs is discussed.

Performance of state-owned commercial banks

The main reason for privatisation of the SOCBs was their poor performance and frequent costly bailouts, resulting from inadequate systems of governance under state ownership. A second reason was a widely held perception that the presence of state-owned banks tends to hold back the development of the financial sector. Several empirical studies have indeed established that the presence of state-owned banks generally is associated with a lower level of financial development.[8]

Although lending by SOCBs was subject to numerous controls, bank managers never knew exactly who was the real owner of the SOCB and to whom the management was accountable: the central bank, line ministries, or central or local governments. The SOCBs found it difficult to evaluate the feasibility of projects they were asked to finance and the value of the collateral their customers had to offer. Many problems of the SOCBs could be further traced to the obligation to lend to governments (local as well as central) and to the poor performance of public enterprises, which were the banks' main customers. These enterprises often received extensive credit privileges, being allowed to roll over bank loans and accumulate arrears.

This state of affairs had left the SOCB-based banking systems weak and vulnerable, and many SOCBs succumbed to the banking crises of the late 1980s and the early 1990s. In response to the disruptions caused by these crises, many emerging economies introduced reforms, first to improve bank governance systems, and ultimately to privatise the SOCBs. Thus, most SOCBs gained autonomy in formulating their business plans; their boards of directors were reorganised; and new, professional senior management teams were brought in.[9] These measures, complemented by fiscal adjustment, have helped restore banking stability, in particular in Latin America and central Europe. In these regions, the authorities also put in place a "second generation" of reforms in the late 1990s, focusing on the implementation of prudential regulations, the improvement of risk management, and finally the privatisation of the SOCBs.

Industry surveys in general confirm that considerable improvements in SOCB governance took place over the past decade (see eg Euromoney, 2000). However, the available data do not allow a reliable comparison of the performance of state-owned banks over time, given that so many banks were privatised and those that remain in public hands either are problem cases or are having their balance sheets cleaned up in anticipation of future privatisation. In addition, the SOCBs were much more involved in various forms of directed lending in the early 1990s, when banking and fiscal sector reforms were just starting. Nonetheless, the fragmentary data that are available indicate some improvements: Indian banks improved their return on assets from a negligible level in 1990 to 0.4% in 1998, and their capital ratio rose from a low level to 11.2% (Table 5). The return on assets of the remaining Polish state-owned banks was almost the same in 1998 as in 1994, but their capital ratios improved substantially.

Another comparison is that of the performance of state-owned, foreign-owned and domestically owned private banks. State-owned banks typically have lower return on average assets (with the exception of

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[8] In particular, Barth, Caprio and Levine (2000) established a negative, statistically highly significant relationship between state ownership of bank assets and several measures of financial development, including bank credit to the private sector, stock market capitalisation, and lending to the private sector by non-bank financial institutions. In addition, the degree of industrial competition was found to be lower, and net interest margins higher in countries with a large presence of state-owned banks, although these relationships were not statistically highly significant. These results were obtained after controlling for differences in the level of economic development (measured by real per capita GDP) and the quality of government (measured by a composite index of expropriation risk, the law and order tradition of the country, and the level of corruption). The same study also showed that state ownership of banks increased the probability of a banking crisis in the period from the late 1970s to 1999, although this relationship was not found to be statistically significant.

[9] The main vehicles for fostering bank governance were memoranda of understanding between a high representative of the state as the owner of the SOCBs (usually the Ministry of Finance) and the banks' boards of directors, and performance-related management contracts, which specified the responsibilities and incentives of top management teams in charge of operational restructuring.

the Asian economies), lower operating costs, and high interest expenses (although not as high as foreign-owned banks) (Table A4 in Annex 3). Lower return on assets is not surprising in view of the SOCBs' involvement in various directed or subsidised lending operations. However, one would have also expected the SOCBs' funding costs to be lower: since they are typically backed by the full resources of the government, the SOCBs offer greater security of deposits, and therefore should be able to offer lower deposit rates than other categories of banks without losing customers (discussed below).[10] There are also some remarkable differences in funding costs and operating efficiency within regions. In Asia, the interest expenses of domestically owned banks are half those of foreign-owned banks, but there are practically no differences in return on assets and operating costs among the three types of banks. In Latin America, the state-owned banks are less profitable but cheaper to operate than either domestically or foreign-owned banks.[11]

Another feature of state-owned banks can be gleaned from the approach used by rating agencies in assessing the credit risk of these institutions (Table 6).[12] In terms of intrinsic financial strength (ie before allowing for government guarantees), only a third of state-owned commercial banks in the sample, compared with two thirds of private banks, were rated D or higher (adequate or good financial strength)[13] In Latin America, 79% of private banks were rated as having adequate or good financial strength, compared with 59% of Asian and 54% of central and eastern European private banks. Among state-owned banks, 44% of Asian and only 14% of central European banks were rated as having adequate or good financial strength. Most banks rated E in this sample (very weak intrinsic financial strength, requiring periodic outside support) were from Russia and Indonesia.

Table 6

Bank ratings and government guarantees

	Moody's long-term bank deposit rating				
Moody's BFSR rating[1]	**State-owned banks**	**Other banks**		**Large banks[2,3]**	**Small banks[2]**
B	–	A		A	–
C+	–	Baa		Baa	Baa
C	Baa	Ba		Baa	Ba
D+	A	Baa		Baa	Ba
D	Ba	Ba		Ba	Ba
E+	Baa	Ba		Ba	Ba
E	Ba	B		Ba	B

[1] Moody's Bank Financial Strength Ratings measure the likelihood that financial institutions will require financial assistance from third parties; they do not incorporate the probability that such support will be forthcoming. Hence a bank with a low BFSR will have a higher deposit rating if third-party support is expected to be available. Note that some banks may have been evaluated more recently than others and some ratings are unsolicited and hence based only on public information. [2] Relative to the size of banks in their country of incorporation; only private banks. [3] Top five.

Source: Fitch-IBCA.

[10] In the past, many SOCBs had more or less unrestricted access to cheap central bank credit, but in the 1990s virtually all countries adopted legislation requiring central banks to lend to commercial banks only against collateral through the discount window, or for emergency liquidity support.

[11] These results should be interpreted with caution because the data used are of relatively poor quality, and the comparison assumes that the different classes of banks do similar types of business within each economy.

[12] Bank deposit ratings measure a bank's ability to repay punctually its foreign and/or domestic currency deposit obligations, whereas bank financial strength ratings (BFSR) measure the likelihood that a bank will require assistance from third parties such as its owners, its industry group, or official institutions. BFSRs do not take into account the probability that the bank will receive such external support, nor do they address risks arising from sovereign actions that may interfere with a bank's ability to honour its obligations.

[13] The sample referred to in Table 6 consists of 235 banks operating in the 23 emerging economies covered in this paper.

In terms of deposit ratings, half of the state-owned banks in the sample were rated Baa or A (adequate to good credit quality), compared with only a third of privately owned banks. Regionally, nearly half of Asian and central European private banks had deposit ratings of Baa or higher, compared with only 7% of Latin American private banks.

Combining the two criteria confirms the widely held view that the state-owned banks offer greater safety of deposits: for the same inherent financial strength rating, state-owned banks' deposits were on average rated one notch higher than other banks' deposits (eg among banks rated C in terms of financial strength in Table 6, state-owned banks' deposits were rated Baa, and other banks' deposits were rated B). In other words, if the SOCBs were actively issuing bonds, government ownership alone would have helped them cut the borrowing costs by 100-700 basis points.[14]

Privatisation experiences and issues

Although each emerging economy had its own motives for privatising its state-owned banks, the desire to enhance competition and efficiency in the banking sector, and the lack of capital, formed a background to virtually all privatisation programmes. The experiences discussed in this section can be tentatively summarised as follows:

- The most successful method for privatisation of SOCBs in recent years appears to have been sale to strategic partners, usually reputable foreign banks. Most successful sales were conducted through open competitive bidding processes to ensure transparency in the divestiture of the government's equity holdings. Some privatisations through the sale of shares on the local stock exchanges were also successful (Hungary's OTP Bank is one example). But this method could not be applied to the majority of state-owned banks in a given country because of the lack of solid bank governance systems and experienced management teams who could run the banks efficiently. In addition, the lack of private domestic savings, especially in the aftermath of a crisis, would severely constrain the demand for bank stocks.
- The experiences of Hungary (positive) and the Czech Republic (partly negative) indicate that it pays to clean up the SOCBs' balance sheets and make their operations transparent before they are privatised. Serious investors are not interested in turning to the government after the privatisation, and need to know in advance what assets and liabilities they are buying. Privatisation should therefore be contemplated as the last - not the first - transaction in the process of restructuring a SOCB.
- A particularly thorny question is the treatment of hidden liabilities (various off-balance sheet items, unfunded pension obligations, tax arrears) and loans that could turn bad at some future date. Potential buyers usually request some form of guarantee or a mechanism that would allow buyers to sell back assets found to be bad during a specified initial period of ownership. Virtually all the emerging economies (with the exception of Poland) were forced to offer some form of guarantee to pay the cost of any deterioration in selected existing liabilities, a practice known as "ring fencing".[15] But even with government guarantees, it may take years to cleanse the SOCBs' balance sheets of all their past sins.[16]
- Another difficult issue is how banks nationalised during a crisis should be run on commercial lines while sustaining efforts to collect on bad loans. The best approach seems to be the implementation of governance reforms that clearly specify the responsibilities and incentives of the boards of directors and the top management teams. Increasing globalisation of financial services and continuing development of new financial products suggest that banks

[14] In the US corporate bond market, bonds rated BAA on average had a yield 110 basis points lower during 1990-2000:Q3 than bonds rated BB, which in turn had a yield 670 basis points lower than bonds rated CCC.

[15] Hungary did not offer any guarantees but, as noted above, the government spent large sums to clean up the banks' balance sheets before the privatisations.

[16] During 1994-2000, the government of Brazil spent $15 billion (6% of GDP) in order to privatise seven SOCBs; so far, it has received $6 billion from privatisation of these banks.

need to cope with an ever more competitive environment: temporarily nationalised banks should therefore be returned to private ownership as soon as possible.

- SOCB privatisations also raise the issue of mechanisms for the residual influence of the state in these large institutions. Some countries have resolved this issue by reserving a certain percentage of shares for the state (eg the proposed 33% in India). In other countries, the state has kept a “golden share” in some large privatised retail banks, ie a share giving the state the right of veto over some strategic decisions (Hungary’s OTP Bank is one example). In Israel, the government set up a public committee to nominate managers of two banking groups that were privatised in the late 1980s. The latter two approaches seem attractive as they potentially provide both the benefits of private (in particular foreign) ownership and protection from possible disruptive changes in the banks’ business orientation. On the other hand, such arrangements could be potentially disruptive for the shareholders, and raise questions about continued non-market influences on the commercial decisions of private institutions.
- In some countries, bank privatisations have led to concerns about misalignment of private incentives and public interests. These concerns often stem from excessive concentration of ownership in the hands of rich individuals or families (as in Israel), foreign banks (as in Chile, Poland and Hungary), foreign non-bank financial institutions (as in South Africa and the Czech Republic) or non-financial corporations. However, with few exceptions, there is little evidence that such changes in ownership structure have made privatised banks unsound, or that foreign banks have siphoned off domestic deposits and crowded out small borrowers (see Section 5).

Central Europe: role of strategic foreign partners

In central and eastern Europe, bank reforms did not focus on privatisation in the early stages of the transition. Pressing issues at the time were the resolution of a large stock of inherited bad debts and recapitalisation of the financially very weak SOCBs. However, the authorities in the region quickly realised that the development of an efficient banking system was not possible without the active cooperation of foreign banks.

Polish policy provides an interesting case study. Since the mid-1990s, foreign banks have set up many subsidiaries or have participated in the privatisation of the Polish banks by taking up equity shareholdings as strategic investors, sometimes in stages.[17] Some banks were sold through the Warsaw Stock Exchange without gaining a strategic investor. Such banks were subsequently subject to takeovers, which left the government with lower budget revenue and no influence on the choice of the final owner. As a result, this method was dropped in recent privatisations.

Hungary privatised most banks through sales to strategic foreign partners in the second half of the 1990s. Having cleaned up the banks’ balance sheets, the Hungarian authorities did not ask foreign investors to pay an “entry fee”. A total of 10 banks were sold through tenders during 1995-2000. The shares of the largest bank (OTP) were introduced on the stock exchange and subsequently sold to small foreign financial investors, with the state holding only one gold share in the bank, which gives the state veto power over the shareholders’ appointment of one executive board and one supervisory board member.

In the *Czech Republic*, the prevailing mood at the outset of transition was that private sector was far more efficient than the public sector. Privatisation of the SOCBs and licensing of a large number of private banks were therefore foregone conclusions. However, after the disappointing results of voucher privatisation, the Czech authorities also started looking for strategic foreign investors for their four large SOCBs. The first such privatisation - of the Czech Republic’s third largest commercial bank IPB - ended up in a bank run and bank closure in June 2000. IPB’s problems were partly inherited (its balance sheet was not cleaned up prior to its sale) and partly acquired (corporate governance at IPB was weak following its sale in 1998 to a Nomura Securities’ subsidiary in London, which saw itself as a

[17] The remaining shares were sold through IPOs or to institutional investors, with 10-15% of shares being offered to the bank’s employees at a discount, and 5% remaining as the government’s “privatisation reserve”.

portfolio investor, not a strategic owner). The Czech National Bank acted swiftly and decisively, however, selling IPB to a rival Czech commercial bank just two days after forced administration was implemented, thus calming depositors and investors.

Latin America: privatisation as part of structural reforms

Latin American countries launched bank privatisation programmes at different stages during the 1990s. These programmes in general formed part of longer-term public sector reforms, which also involved privatisation of major public enterprises with the aim of consolidating the public finances and cutting borrowing requirements. Deepening the role of the market and of the private sector was also a major motive. This task was seen not only as a question of making banks more efficient in their own operations, but also of strengthening banks' allocative role in a market economy.

In *Argentina*, substantial progress has been achieved in the privatisation of the provincial banks and the national mortgage bank. The number of SOCBs fell from almost 40 to 15 in 2000, leading to higher deposit concentration and, reflecting greater penetration of foreign banks and stiffer competition, to a substantial drop in interest margins. However, the two largest banks, Nacion and Bapro, which hold almost 25% of deposits nationwide, remain publicly owned and are often seen as serving a social purpose, including lending to farmers and possibly to small businesses in the future.

In *Mexico*, commercial banks were nationalised by a presidential decree in 1982 in the context of a major macroeconomic crisis. The nationalised banks were subject to strict government controls, and were forced to concentrate their business on the public sector. In the late 1980s, the government embarked on an ambitious financial liberalisation and deregulation process; new commercial banking laws were introduced in 1992 and banks were sold to the private sector. After a decade of strict controls, however, the banking system was left without experienced managers and supervisors: financial deregulation and increased availability of funds contributed to the 1994 crisis. To contain the crisis and prevent a generalised run on the banks, the deposit insurance fund took over 15 banks and subsequently restructured their balance sheets over a period of years or sold them. In some cases, the branches and portfolios of banks were carved out and sold to different entities. Other banks were placed under the administration of potential buyers, who acquired the institutions after restructuring their balance sheets.

In *Brazil*, the share of state-owned banks has fallen markedly. Major state bank privatisations in 2000 included two large regional state banks (Banestado and Banespa), which were sold to a leading domestic bank (Banco Itaú) and Spain's BSCH, respectively. As with many other state-owned banks in Brazil, Banespa has a strong retail network but high overhead costs. An attraction of such banks is that they may bring in new customers, such as the payroll of a provincial government. On the other hand, many SOCBs have large unfunded pension obligations (which can reportedly reach $5 billion in some cases), tax arrears, and strong and militant unions. When the programme for restructuring of the state-owned banks is completed in about two years, only six banks are expected to remain in public hands, compared with 30 banks in mid-1996. The speed of this change has been attributed to the federal government's commitment to finance all of the costs of restructuring provided that the state-owned banks are either privatised, converted into development agencies, or liquidated. As in Argentina, however, there are no plans to privatise the two largest SOCBs, which compete with each other across the country, but find it politically difficult to close branches because they are partly used for social purposes and remain a major source of financing for state and local governments.

Public ownership of commercial banks in Peru reached 50% in the early 1990s. By 1995, after the liquidation of eight institutions and the sale of two banks, the financial system became fully private. The banks were sold through public auctions, in which both domestic and foreign bidders (including banks) participated. The only restrictions were those imposed by the prudential rules in place in the market. Before the auctions, the banks underwent a restructuring process and the Treasury assumed a part of the bad loans.

Crisis-hit Asian countries: how to re-privatise nationalised banks?

The Asian emerging economies have faced a different privatisation challenge in recent years: when and how to return to private ownership the banks that were nationalised during the 1997-98 crisis, and how to run such banks on a commercial basis in the interim. In a period of extreme banking system distress, bank nationalisations enabled the governments to force shareholders to write down their equity and share the burden of writing off NPLs. Nationalisations also increased the capacity to negotiate debt forgiveness and restructuring deals with foreign creditors and local borrowers, and to change management. However, the traditional risk of nationalisation - that of weakening banks' commercial orientation by allowing official/political/employee considerations too much influence - is ever present.

In *Thailand*, seven out of 15 commercial banks were taken into public ownership following the outbreak of the crisis in July 1997. One of these banks was merged with an existing state-owned bank (Radhansin Bank), and along with two other nationalised banks sold at auction to both Thai and foreign investors.[18] Another state-owned bank existing before the crisis (Krung Thai Bank) took over two of the intervened banks. The authorities are planning to sell the existing state-owned banks in the medium to long term only. In the meantime, these banks are being run on commercial lines outlined in MOUs between the Ministry of Finance and the banks' boards of directors, while the management teams are bound by performance-related contracts. Unlike banks in Korea and Malaysia, Thai banks kept non-performing loans on their books for almost three years. In September 2000, the authorities decided to transfer a large portion of NPLs from Krung Thai Bank to a government asset management company to accelerate the process of debt restructuring and the new government plans to extend this process. Thai privatisations are more cautious than other such efforts in the region: although foreign banks are allowed to hold more than 25% of a domestic bank's shares, after 10 years they will not be allowed to take up additional equity unless their equity share is below 49%.[19] This limitation may partly explain the relatively lukewarm interest of foreign banks for acquisitions in Thailand thus far.

To forestall systemic risk, the *Korean* government and the Korea Deposit Insurance Corporation at the outset injected large amounts of public funds into the banking system. Banks with a capital adequacy ratio below the required 8% had to sell their NPLs to a government-owned asset management company at a significant discount and accept government equity, after writing down their shareholders' equity to near zero.[20] In addition, several relatively sound private institutions received capital support to take over some banks that were closed (see Section 4). In December 1999, after lengthy negotiations, the government sold its majority stake in Korea First Bank to Newbridge Capital, a US investment fund, which represented the first foreign acquisition of a Korean commercial bank. A new chief executive officer was appointed for Seoul Bank, which is being prepared for privatisation by foreign investors. The government plans to sell off its shares in other temporarily nationalised banks in steps from the first half of 2002, once these banks have had an opportunity to demonstrate their ability to earn an attractive return on equity.

Indonesia nationalised four banks in 1998 and seven banks in 1999, adding to the existing seven state-owned banks, all of which were taken over by the Indonesian Bank Restructuring Agency (IBRA), along with 67 private banks that were closed during 1997-2000. Public capital injections into private banks, which form part of the bank recapitalisation programme introduced in 1999, resulted in further de facto large-scale nationalisations. Owners who wanted to keep managing these banks had to inject about 20% of new capital requirements after writing down their doubtful and bad loans, and were given the first right to buy back government shares within three years. The government plans to divest its ownership in nationalised banks within five years.

The *Malaysian* government set up in 1998 a special agency (Danamodal) to recapitalise and strengthen the banking industry affected by the crisis and to help consolidate and rationalise the banking system in the medium term. Danamodal has injected the equivalent of about 14% of the banking sector's total 1998 Tier 1 capital into 10 banking institutions so far. In 1999, several banks began repaying capital injections. The divestment of the government's ownership in the sole institution with a government presence (Bank Bumiputra Malaysia Berhad) was carried out through a merger with a private bank in October 1999, with bad assets of the state-owned bank being transferred to a subsidiary of the national asset management corporation. Danamodal's investments in the remaining

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[18] In late 1999, Nakornthon Bank was sold to Standard Chartered Bank and Radhansin Bank was sold to United Overseas Bank. In late 2000, Bangkok Metropolitan Bank was sold to HSBC after a lengthy approval process.

[19] Foreign banks will not be forced to sell any shareholdings above the 49% limit.

[20] Before the Korean government nationalised Korea First Bank and Seoul Bank, the two largest private banks, it wrote down each bank's existing capital from Won 820 billion to Won 100 billion. Then it raised each bank's capital to Won 1.6 trillion by injecting public capital, raising the government's share in each bank to 94%.

five banks are expected to be fully divested in the next few years through strategic sales of Danamodal's equity stakes to third parties, in line with the ongoing consolidation exercise.

Is there a residual role for state-owned commercial banks?

Policymakers in general no longer see a useful role for the SOCBs. Even for development banks, there is a strong preference for institutions pursuing a clear function in an area of market failure. Such banks are increasingly asked to finance themselves by issuing bonds rather than taking deposits. Sometimes, commercial banks are used on a contract basis as distribution channels for state housing and agricultural programmes (as in Mexico). Private banks often find this intermediary role profitable, as they assume no credit risk on their own. Nonetheless, there are a few special cases where the SOCBs are seen as institutions playing a useful role.

- In large countries (Russia, Brazil, Argentina), only state-owned banks are willing to serve customers in remote areas.[21] Even the UK and New Zealand governments are in the process of establishing new banks to be run by the post office to deliver banking services to the poor and to rural areas. Some countries (including Poland and China) see cooperative banks and credit unions as a better alternative to banks in serving customers in remote areas, however.
- Some countries (eg Thailand, Brazil and Argentina). also see a continued role for the SOCBs as a conduit for lending to farmers and small and medium-sized enterprises outside large cities. The reason is that the government is often better able to administer specific lending programmes if it owns the banks that provide subsidised loans. In Chile, however, private banks have performed better than the SOCBs in supplying credit to the small and medium-sized enterprises.
- There are some indications that lending by the SOBCs is less procyclical than lending by the private domestic and foreign banks. During recent recessions in the Asian countries, Brazil, Chile and Colombia, state-owned banks expanded credit faster (or cut credit to a smaller extent) than domestic and foreign-owned private banks (Table A7 in Annex 3). This finding could have policy implications for small open economies, where policies for dealing with the question of cycles were generally limited.
- In smaller economies domestic capital is limited, so there is a tendency for foreign capital to dominate the privatisation of banks. This may create a backlash against foreign ownership and privatisation in general. There are also cases where the SOCBs' balance sheets need to be cleaned up in order to attract serious foreign investors (as in Brazil, the Czech Republic and Hungary). Therefore, continued (but temporary) state ownership of banks may in some cases be preferable to quick privatisation.
- In some less developed countries the lack of basic market and legal infrastructure may be so severe as to make market failure pervasive and the SOCBs the only viable alternative. In Russia, private banks are financially weak and small, so only state-owned banks are in a position to provide loans of meaningful size and offer security for household deposits.

While accepting the state ownership of banks as a second best solution, policy makers have nonetheless found it useful to subject the remaining SOCBs to market discipline and treat them like all other banks from a supervisory perspective, requiring, for example, full monthly disclosure of their operations (as in Thailand).

[21] In Russia, about 40% of the territory is in permafrost regions. Private banks have shown no interest in serving some 20 million people living in those areas.

4. Domestic mergers and consolidation

The banking systems of many emerging economies are fragmented in terms of the number and size of institutions, ownership patterns, profitability and competitiveness of banks, use of modern technology, and other structural features. Very often, three or four large commercial banks coexist with a large number of smaller urban and rural banks, many of them family-owned (especially in Asia) or under the influence of the public sector (as in Latin America and central Europe). In general, few commercial banks, even larger ones, are listed on a stock exchange. Profitability varies widely, with some banks earning high returns but operating very inefficiently, and other banks competing fiercely for a narrow segment of the market. Likewise, while some commercial banks in the emerging economies are at the cutting edge of technology and financial innovation, many are still struggling with the basic operations such as credit risk assessment and liquidity management. Finally, recent banking crises have weakened banking systems in a number of countries, and banks in some countries remain on the brink of insolvency.

In this environment, it is natural to consider bank mergers as a possible vehicle for improving the structure and efficiency of the banking industry. As bank consolidation in the emerging economies often involves foreign banks and government intervention, this section covers a broader range of issues than domestic mergers per se. Evidence on various motives for bank consolidation is reviewed along with an examination of recent experience with bank consolidation in the key emerging economies. The issues that arise include the following:

- Is there a regulatory role for encouraging bank mergers?
- How can institutions with different governance structures or not subject to the same degree of market discipline (family-owned or foreign-owned banks, banks with no dominant shareholder) be merged without undermining public confidence in the banking system?
- How does one address the trade-off between reaping the benefits of economies of scale and maintaining competition, which is more acute in the emerging economies given the lower level of financial development and greater prevalence of market distortions?
- What constitutes contestable markets in the emerging economies' banking industry?
- Is there a role for large, regionally (or internationally) competitive banks ("national champions") in the emerging economies?

Potential for bank consolidation

Empirical studies on mergers and acquisitions in banking (see Annex 2) have concentrated on the US banking market, where a long history of restrictions on inter-state banking has left a large number of banks. Mergers of western European banks have attracted more attention recently, but there are still only a handful of studies referring to emerging economies.[22] This is surprising, given that there was an upsurge in mergers and acquisitions in the emerging economies in the 1990s, even before the 1997-98 crisis (Table A5 in Annex 3).

Some of the motives and modalities of this merger activity are described in the next section. But first a simpler and more basic question has to be addressed: What is the potential for bank mergers in the emerging economies based on the traditional criteria identified in the literature? Three simple tests are considered.

To test for the potential for mergers stemming from inefficient banking structures, Table A6 in Annex 3 compares some crude indicators of efficiency in the emerging economies and industrial countries.[23] In terms of the number of banks, Hungary, Indonesia, Korea, Malaysia and Thailand seem "overbanked"

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[22] See Berger et al (1999) for references. Group of Ten (2001) concludes that only relatively small banks in the advanced economies could generally become more efficient from an increase in size, and many of these efficiency gains could also be achieved by outsourcing some functions rather than by merger.

[23] Note that geography, population density, and the role as international financial centres should be taken into account in interpreting the results for Australia, Hong Kong, Singapore and the United Kingdom.

relative to industrial countries but, in terms of the number of branches per capita, most emerging economies still appear “underbanked” (only Hong Kong, Korea, Singapore, Poland, the Czech Republic and Israel have well developed branch networks). Banks in most emerging economies also tend to be small: even in the upper-middle income economies in Latin America and central Europe (ie those with per capita GDP of $5,000-10,000), banks on average hold assets worth under $3,000 per capita. In terms of the number of staff per branch, most emerging economies are similar to industrial countries (with the exception of Hong Kong, Singapore, South Africa and Peru).

The relationship between profitability (measured by return on assets) and the size of banks in the emerging economies is further explored in Graph 1. Judging by the slope of the estimated regression lines, smaller rather than larger banks were more profitable in all three emerging market regions in 1998, mainly because larger banks, in contrast to smaller institutions, included a greater number of loss-making institutions (especially in Asia).[24] Larger banks, however, have an advantage in terms of return on capital, because they are generally able to operate with smaller capital relative to the size of assets. One interesting implication of these data is that medium-sized banks in Asia have essentially lost their role in the market.

Some evidence on economies of scale in the emerging economies’ banking industry is shown in Graph 2. In Latin America, the average large bank does have lower operating costs relative to assets, but there are many small banks that are just as efficient as the large banks.[25] (Note, however, that the vertical scale for the Latin American panel is smaller, indicating much higher operating costs - due to a history of high inflation - than in other regions.) In Asia, large banks also tend to have lower operating costs, but there is also a significant cluster of small banks that operate efficiently. In the other emerging economies, there appear to be diseconomies of scale, with the larger banks being less efficient.

Country experiences: market-driven versus government-led consolidation

Although the evidence reviewed above suggests some potentially significant cost and revenue benefits from bank consolidation, *market-driven* consolidation is a relatively new phenomenon in the emerging economies and has mainly been observed in central Europe. Most mergers have instead resulted from *government* efforts to restructure inefficient banking systems (as in many Latin American countries), or from intervention following banking crises (as in Korea and Southeast Asia). However, as competition in a growing number of market segments has intensified through deregulation, privatisation and entry of foreign banks, consolidation is becoming more market-driven. In addition, some economies with mature financial markets (Singapore, Hong Kong) are increasingly looking at consolidation as a broader competitiveness issue in a regional or even global context.

In addition to economic factors, legal and judicial considerations often play a major role in determining the outcomes of bank consolidation. In some countries (eg the Czech Republic), governments have ended up in court in cases where they forced bank mergers. In others, governments have ended up in courts in cases where they did not allow mergers to take place (as in South Africa). Finally, there are countries where government efforts to consolidate the banking system cannot be challenged in courts (eg Malaysia), but banks can nonetheless undermine these efforts by other means.

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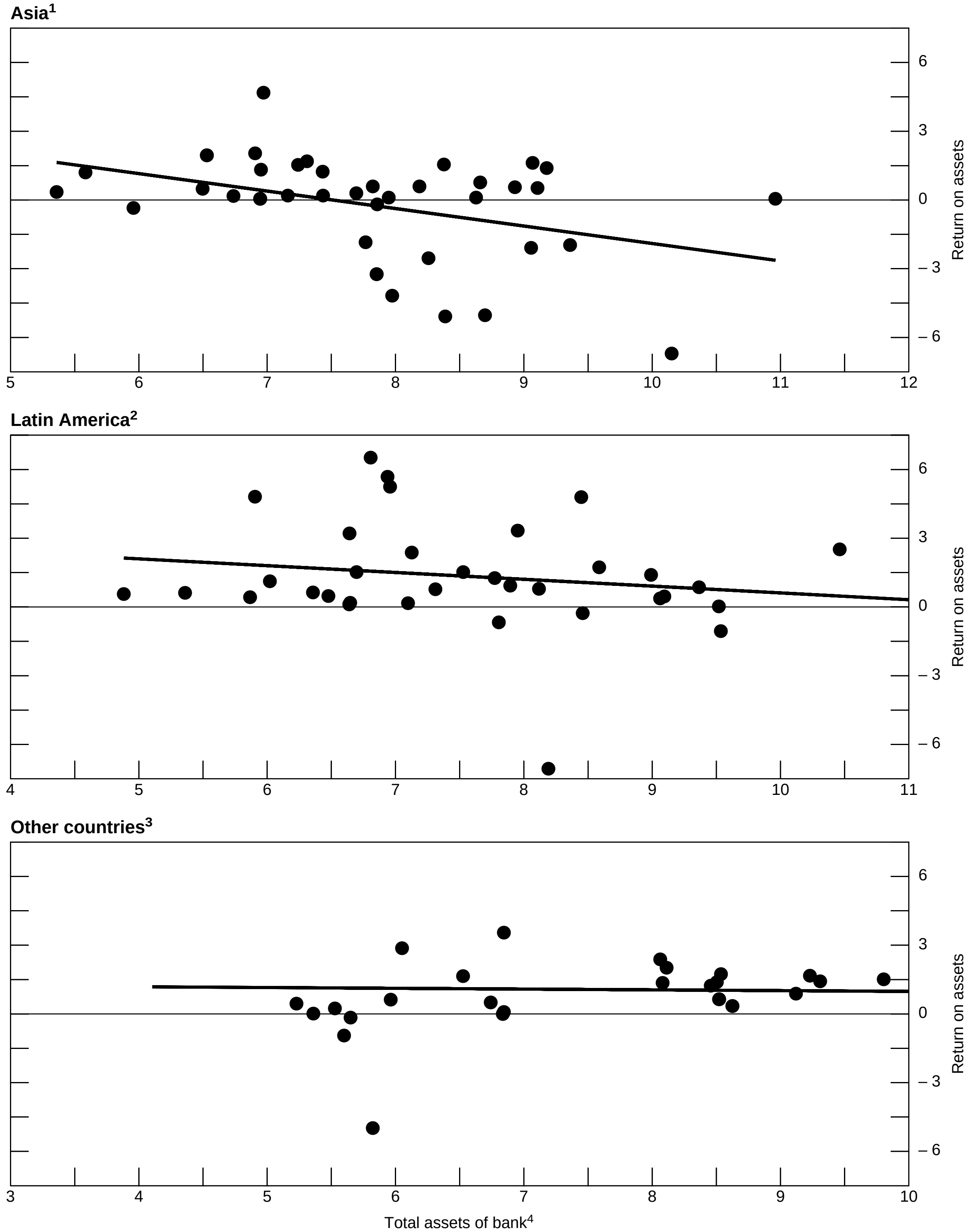
[24] Many Asian banks were making extraordinary losses in 1998.

[25] These results are in line with Burdisso’s (1997) study of the Argentine banking industry.

Graph 1

Return on assets and asset size of banks in 1998



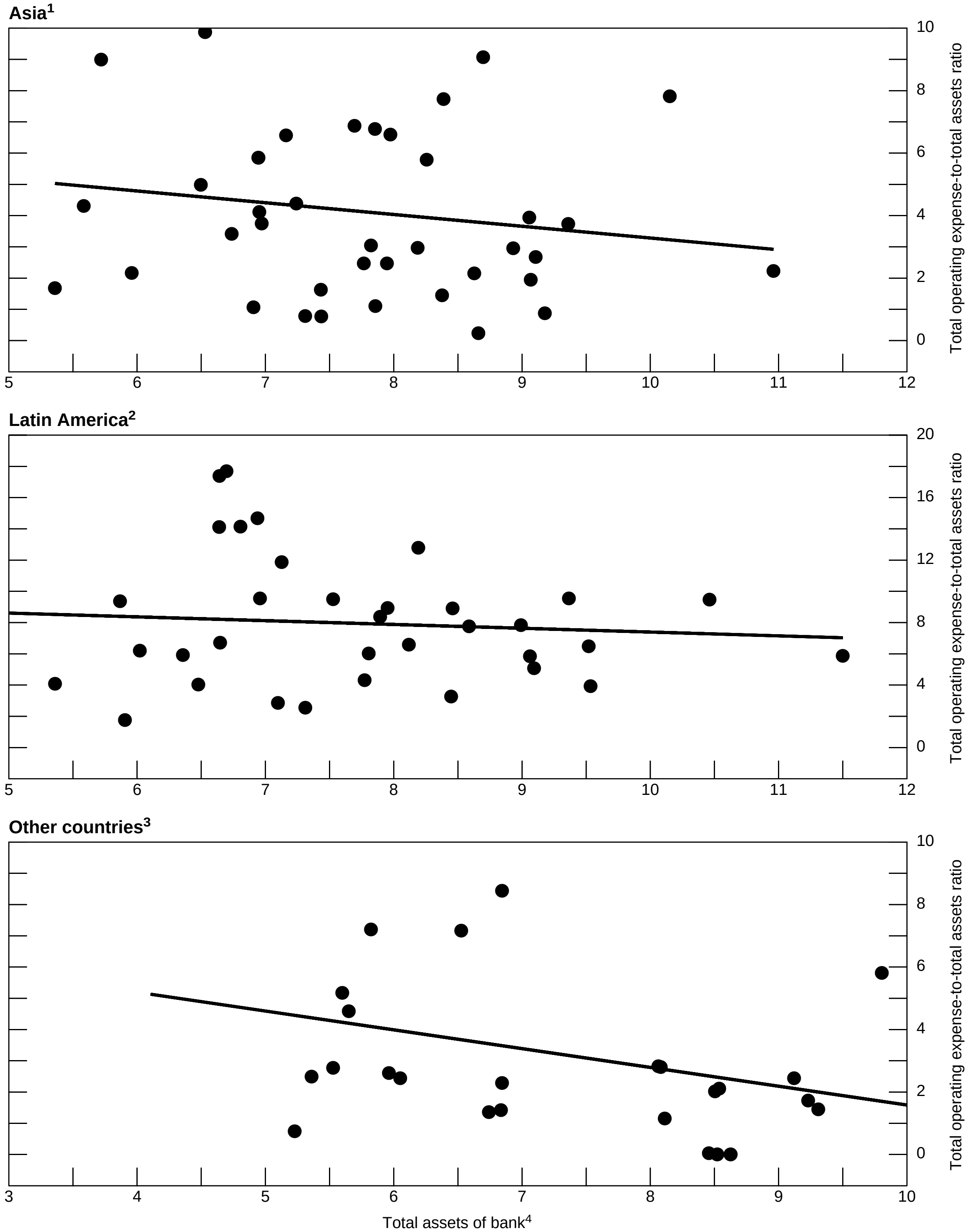
Note: Bank sample based on the five largest private domestic banks in the respective regions.

[1] China, Hong Kong, India, Korea, Malaysia, the Philippines, Singapore and Thailand. [2] Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela. [3] The Czech Republic, Hungary, Israel, Poland, Saudi Arabia and South Africa. [4] In US dollar terms expressed logarithmically.

Source: Fitch-IBCA.

Graph 2

Expense to assets ratios and asset size of banks in 1998



Note: Bank sample based on the five largest private domestic banks in the respective regions.

[1] China, Hong Kong, India, Korea, Malaysia, the Philippines, Singapore and Thailand. [2] Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela. [3] The Czech Republic, Hungary, Israel, Poland, Saudi Arabia and South Africa. [4] In US dollar terms expressed logarithmically.

Source: Fitch-IBCA.

Central Europe: market-driven consolidation has only started

At the outset of transition, central European economies licensed a large number of private banks, often under very easy conditions. At the time, it was widely believed that liberal licensing rules would promote competition, speed up the development of financial markets, and provide an important counterweight to the large state-owned commercial banks spun off from the monobanks. But after a large number of bankruptcies of private banks, the Czech Republic, Hungary and Poland have ended up with 40-80 commercial banks each, with no dominant bank in the corporate sector, and usually one large retail bank with a market share of 20-25%. As building a new branch network has become very costly, a wave of market-driven consolidations has started recently. The authorities in the region sometimes promote mergers to strengthen domestic banks (a 15% market share is generally viewed as a threshold for profitable operations), or to restructure ailing banks, especially ahead of privatisation. Increasingly, mergers between parent banks in EU countries are a factor behind bank mergers in central Europe. The upcoming privatisations of the remaining large savings banks are expected to lead to further consolidation.

In *Hungary*, some 40 institutions are currently competing for the retail and corporate markets of a population of just 10 million, with the former monopoly lender OTP Bank still a dominant player. Last August, ING Bank sold its 12 branches to Citibank, after reportedly realising large losses from its organic growth strategy. At the same time, Belgium's KBC and ABN-Amro merged their Hungarian operations to exploit market synergies.

Competition to acquire local banks is also intense in *Poland*, where there is more room for expansion due to the larger size of the economy (38 million people) and the relatively low level of financial development.[26] Locally owned Kredyt Bank rose from 19th to fourth position in the country after a series of acquisitions and mergers in the second half of the 1990s that were aimed at creating more efficient structures by cutting costs and competing more successfully with foreign banks. Meanwhile, foreign banks are targeting the few remaining independent banks to achieve a greater market share.[27] The government has often actively promoted bank consolidation. In the first half of the 1990s, it encouraged smaller banks to merge because many of them were weak and there was no deposit insurance system. Recently, the government has in several cases asked foreign banks to merge their "greenfield" operations and newly acquired banks.

It is still too early to assess the potential risks from bank consolidation in central Europe. So far, both Hungary and Poland seem to have benefited from increased competition and a greater foreign bank presence: interest rate margins have dropped significantly and in some market segments (eg corporate customers) are below the EU average; banks are increasingly focusing on lending to small and medium-sized enterprises and households; and total deposits and lending are growing at healthy rates. Recent bank failures were not related to excessive competition: in Hungary, the failure of a major retail bank (PostaBank) in 1998 was due to fraud while in Poland recent bank failures occurred mainly in the relatively inefficient and poorly supervised cooperative bank sector. One concern, however, is that the acquiring (ie foreign) banks often expand the activities of merged institutions into non-bank financial services, including insurance, portfolio management and investment banking. To the extent that domestically-owned institutions are under competitive pressure to follow such moves, there is a risk that they will make mistakes, as few of them have extensive experience with such products. Indeed, one such case in the Czech Republic has already ended up as a costly failure (see Section 3).

Latin America: consolidation as a response to inefficient banking structures

Latin American countries have more varied experiences with bank consolidation. In *Argentina*, bank consolidation has been largely driven by the domestic and external financial liberalisation launched in

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[26] A third of Poles have no bank account, and total bank debt is only 32% of GDP, compared with 95% in the Czech Republic and 120-130% in most industrial countries. Polish banks have twice as high operating costs relative to assets as banks in industrial countries. Interest margins are also higher (4%) than in western Europe (usually 2-4%) and Hungary (about 2%), but are declining.

[27] Citibank Poland, which is already strong in both corporate finance and high-end retail banking, has recently acquired the old foreign trade bank (Handlowy) for around $1 billion.

the early 1990s, and by the progressive tightening of prudential regulations. Mergers involving overlapping operations have been rare but painful. Reducing staff was politically difficult (especially in a recession), and many customers were lost to competing banks when attempts were made to rationalise overlapping branches. Most mergers took place between banks having complementary strengths in different regions. As a result, the number of banks has dropped considerably (from 180 in 1994 to 102 in 2000), but the number of branches has shrunk much less.

In *Brazil*, bank consolidation has been driven by the privatisation of state-owned banks. Once these privatisations are over, many of the 170 medium-sized banks that are still family-owned are expected to become takeover targets. These banks are generally poorly managed and unprofitable, but mergers between them are rare and hard to organise because of the family ownership structure. Only a few of these banks are expected to continue to operate as small but profitable niche players. The rest will have to merge in order to survive, in part because lower inflation has eliminated a major source of their traditional revenue (ie the float).

In *Mexico*, consolidation has taken place in response to the lack of capital after the 1995 banking crisis. Thirteen private domestic banks that survived the crisis were recapitalised by the government through a scheme that bought their non-performing loans. As further capital infusions were needed, and domestic players were not in a position to provide the funding, regulations governing the entry of foreign banks were eased. Most observers believe that the Mexican banking system will go through one more round of mergers among the top five banks, which control almost 80% of total banking sector assets. After that, further mergers could become difficult for the authorities to approve, as they could threaten competition.

There have also been a spate of mergers in *Venezuela*, prompted by new legislation and a banking crisis. The number of financial intermediaries fell from 167 in 1993 to 75 in 2000, and was expected to drop to 60 in 2001. It was hoped the mergers would strengthen the capital base and improve the capacity of banks to adopt new technology. The banks had requested incentives for further mergers, but the authorities were reluctant to provide them.

Despite considerable merger activity, analysts believe that there are still far too many banks in Latin America, and that takeover activity is likely to intensify in the future. In particular, the recent purchase of Brazil's large state-owned bank (Banespa) by Spain's BSCH is expected to accelerate the purchases of the remaining SOCBs and middle-sized family-owned banks by large private domestic banks, which have so far successfully competed with foreign banks but now risk losing that advantage. As a result, only a few medium-sized banks that can refocus their business strategy as niche players are expected to remain independent.

Government-led consolidation in the crisis-hit Asian economies

In the crisis-hit Asian economies, bank mergers have for the most part been a government-led process, motivated by the need to strengthen capital adequacy and the financial viability of many smaller, often family-owned banks affected by the 1997-98 crisis.

The clearest example of the government-led approach is *Malaysia's* Danamodal, a special purpose institution with the twin objectives of recapitalising the banks (see Section 3) and facilitating consolidation and rationalisation in the banking system. The government initially tried to persuade banks to merge voluntarily, providing certain incentives to larger institutions. However, these efforts were unsuccessful. In 1999, the central bank therefore selected 10 "anchor" banks to lead the consolidation of smaller institutions from 54 groups into large, financially viable groups, and the government has offered tax concessions as part of a package of incentives for bank mergers. By the end of 2000, the mergers were for the most part completed. The promotion of mergers was deemed justified because the structure of the banking industry was considered inefficient, and because the government provided guarantees for bank deposits.

In *Korea*, recent mergers were for the most part initiated by the government in order to resolve unsound banks. Mergers usually involved banks with overlapping operations and were supported by large injections of public funds. The government provided capital support to several private banks in 1998 to take over, through purchase and assumption operations, the assets and liabilities of five commercial and 17 merchant banks that were closed. In 2000, the government devised a new plan to establish financial holding companies as a vehicle for additional bank mergers. Healthier banks are being induced to merge through government buyouts of non-performing loans and the prospect of increasing their market share. Weaker banks are expected to be joined up under a separate holding company umbrella that would enable them to share in IT, internet and securities ventures. Although larger banks were better placed to introduce new technology and eliminate duplication, strong labour unions made it harder to realise efficiency gains from mergers.

In the *Philippines*, a range of incentives is being offered to the merging banks, including better access to rediscount facilities and temporary relief from certain prudential requirements. In Thailand, the government has been involved in only one merger so far, but is supportive of private merger initiatives, especially among non-bank finance companies.

In *Indonesia*, four of the seven state banks existing before the crisis were consolidated into a new state bank (Bank Mandiri), which now controls about a quarter of total commercial bank deposits. In addition, eight private banks that had been taken over by IBRA were merged during 2000 into a new institution (Danamon). As a result of these mergers, 90% of the staff are expected to be laid off and 80% of the branches closed. Such high retrenchment costs have naturally raised questions about the fundamental purpose of mergers. Some policymakers have argued that mergers were useless if they led to the near extinction of banks, while others have observed that the policymakers should be concerned exclusively with the safety of bank deposits and not the job cuts.

Government involvement in mergers during banking crises is often inevitable, as viable but distressed institutions are rarely in a position to attract potential buyers without moving some non-performing loans to an asset management company and/or receiving temporary capital support. Such intervention may still be more cost-effective than taking the bank into public ownership. However, while a large well capitalised bank can readily absorb isolated small banks and improve the quality of their management, it is unlikely that merging two weak banks can quickly create a single strong bank. Moreover, forcing a healthy bank to assume a heavy burden of bad loans may make it even less willing to lend, particularly if such action is taken when the banking system as a whole faces difficulties. This has been one reason behind the slow growth of bank credit in Mexico since 1994.

When and how to promote mergers therefore requires a delicate balancing act on the part of the authorities. One example of successful intervention is the 1980s crisis in Hong Kong, when financial assistance in the form of guarantees and liquidity support was provided to four troubled banks to facilitate their takeover by private sector entities, and three were taken over by the government itself. This uncharacteristically activist approach was used because it was judged that allowing these banks to fail might have had systemic implications, and could have had an impact on the value of the Hong Kong dollar at a time of political uncertainty. But the authorities did not rescue any of the 20 smaller intermediaries that experienced severe difficulties, as failures of such institutions were not considered to have systemic implications.

Bank consolidation dilemmas in the mature emerging economies

In the emerging economies with mature banking systems (eg Hong Kong and Singapore), bank consolidation raises a new policy challenge: how to foster development of major domestic institutions whose long-term interests are aligned with the local economy, and that are at the same time able to compete on a wider regional basis with the best international banks? The challenge does not come from the viability and soundness of local banks, but from the structure of ownership in the domestic banking industry. Most local banks in Hong Kong and Singapore started as family banks and are still run by their controlling shareholders, and so find it difficult to compete with the best international banks in areas such as size, technology, expertise, range and quality of service, and shareholders' returns.

Singapore has taken a proactive approach to this challenge. In 1999, the Singapore market was further opened to foreign banks, with the hope that this would spur efficiency and innovation among the local banks, and push well run banks to seek scale and expand not only at home but also abroad.[28] The Development Bank of Singapore has thus taken control of banks in Hong Kong, Indonesia, the Philippines and Thailand. At the same time, the authorities did not want liberalisation to weaken domestic banks and destabilise the financial system, so the market is being opened up only gradually, first to financially strong, committed foreign banks. To motivate the local banks to strengthen themselves, disclosure and corporate governance standards were raised to international norms, and

[28] See Lee (2000).

banking groups were asked to establish a clear separation between their financial and non-financial businesses by divesting all control of non-financial businesses and removing all cross-shareholdings.

Hong Kong has a similar structure of family ownership in the banking industry, although it has also served as a base for some large, internationally active banks (HSBC, Standard Chartered). As local banks have traditionally derived a large proportion of their revenue from net interest income, especially mortgage lending, the growth potential of such smaller banks is increasingly seen as restricted given a more competitive domestic and regional environment. The authorities have therefore publicly advocated the desirability of mergers in the banking industry, but have so far taken a less proactive approach than Singapore. Nevertheless, some remaining barriers to competition (such as interest controls on current and savings accounts) are being removed so as to encourage innovation and greater efficiency in the provision of deposit products, and foreign banks have been allowed to open more branches (up to three instead of just one). The Hong Kong authorities also agreed to review whether foreign banks should be allowed to set up subsidiaries. Although less ambitious, the aim of these measures is the same as in Singapore: to retain a strong indigenous element at the core of the banking system, and at the same time to encourage local institutions to improve their competitiveness.

It remains to be seen which approach proves more useful. As incentives to mergers under both approaches are essentially market-based, it would be hard to dismiss them as industrial policy in disguise. But one risk is that encouraging domestic banks to enter foreign markets might stretch the managerial capacity of the domestic banks too far. Furthermore, large banks that are active abroad may lose small customers at home if personalised, relationship-based banking services are discontinued. However, such risks would seem minor compared with the potential benefits of reinvigorating the more traditional domestic banks.

Besides Hong Kong and Singapore, the authorities in *Korea* have also advocated bank mergers on the grounds that domestic banks had to be large enough to compete effectively with foreign banks, especially in the domestic market given the size of the Korean economy. Yet it is not clear that large banks are automatically stronger and more competitive (see Graphs 1 and 2). Moreover, even if the domestic market consisted of a single bank, it would still have fewer assets than those controlled by each of the large global banks (Table 7).[29]

Table 7

Capital (Tier 1) of selected banks and banking systems

Global banks	**(US$ billion)**	**Banking systems**[1]	**(US$ billion)**
Citigroup	54	Argentina	7
Mizuho Financial Group[2]	51	India	8
HSBC	35	Malaysia	10
Crédit Agricole	26	Poland	2
Deutsche Bank	20	South Africa	8
UBS	19	Thailand	6

[1] Only includes banks ranked in the world's top 1,000. [2] Formed from merger of Fuji Bank, Dai-Ichi Kangyo Bank and Industrial Bank of Japan.

Source: *The Banker,* July 2001.

[29] If foreign banks are present as subsidiaries, then their capital base is probably comparable to the domestic banks' capital. However, if foreign banks operate via branches or the lending is done directly by head office, then the maximum loan size will be related to the global capital base of the parent bank.

5. Entry of foreign banks

As noted in Section 2, banking crises, deregulation and globalisation of financial services led to a dramatic increase in the presence of foreign banks in the emerging economies in the second half of the 1990s. In central Europe, the share of foreign banks in terms of both total assets and capital is now around two thirds or higher, making these countries' banking systems among the most open in the world (Table 8). In Latin America, the market share of foreign banks rose to 40% in 2000 from an average of 7% a decade ago. In Asia, foreign banks have increased their presence in Thailand and the Philippines. Elsewhere, foreign bank presence has declined as a result of expansion by domestic banks (Hong Kong and Singapore) and government-led restructuring (Malaysia). However, there is no doubt that the region has become more open to foreign banks: Indonesia, Korea and Thailand have raised allowable foreign equity levels in local banks to around 100%, the Philippines now allows 50% foreign ownership, and only Malaysia has retained a 30% ceiling on foreign ownership.

The entry of foreign banks reflects the desire of both large international and regional banks to enter profitable markets and of the local authorities to improve the efficiency and stability of their financial systems, as well as to help reduce the cost of recapitalising weak domestic banks.[30] Adopting a liberal approach to foreign bank entry has also been laid down by international trade agreements (WTO, NAFTA), or has been a condition of membership of the OECD or the European Union, or is part of reciprocity requirements for domestic banks to expand into foreign markets.

Greater foreign participation in the banking industry raises a number of important analytical and policy issues for emerging economies. The analytical issues include: the factors determining a bank's decision to expand its activities abroad, its choice of countries to invest in, and the form of participation (branch, subsidiary, ownership of local banks); differences in the business focus of foreign and domestic banks; and the impact of foreign entry on the performance of the domestic banking industry. The policy issues include how much and what sort of foreign participation to permit, and what key supervisory issues arise as a result of greater foreign participation (the latter issue is discussed in the next section).

Expanding abroad

Historically, the pattern of international bank shareholdings followed that of the economic integration between countries: banks extended their services abroad in order to assist their home country customers in international transactions; with a growing understanding of the foreign market (in particular of regulatory and institutional aspects) and a developed network of relationships with local financial institutions, some banks were subsequently induced to increase the range of their operations and provide services to the local population.[31] Following this pattern, foreign banks would first establish representative offices to handle trade credit operations and possibly arrange international private debt and equity placements between borrowers in the host (emerging) country and lenders in the source country. At a later stage, foreign banks would open branches, which are typically involved in the wholesale deposit and money markets. Eventually, they would establish subsidiaries, ie institutions that are incorporated separately from the parent bank (whose financial commitment consists of the capital invested), and use them to enter retail banking markets.

Today, the actual pattern of bank international shareholdings depends on a wider range of factors than just the overall degree of integration between countries. In particular, the profit opportunities in the destination market have become a key factor in determining the pattern of foreign bank shareholdings.[32] As a result, forms of foreign bank participation have become more varied, including

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[30] A cross-country econometric study by Mathieson and Roldos (2001) suggests that a banking crisis during the previous three years raises foreign participation in the banking system by about 10 percentage points. But even after including a number of other explanatory variables, there are still regional differences in the extent of foreign bank involvement.

[31] Pomerleano and Vojta (2001) note that some foreign banks are content to stop at the first stage and just serve multinational firms from their home country.

[32] Focarelli and Pozzolo (2000) identify country-specific variables (degree of trade openness, size of the banking sector, return on assets in the banking sector) and bank-specific factors (equity interest abroad, share of non-interest income, size of the bank) that have a statistically significant impact on the decision to expand abroad.

Table 8

Foreign-owned banks[1]

	Assets as a percentage of bank assets			Return on assets	Capital ratio: risk-weighted
	1980	1990	2000	1998	1998
China	0	0	1		
India	4	5	8[2]	0.9	…
Russia	…	6[4]	9		
Hong Kong	…	89	72	0.1	
Singapore	86	89	76[2]	…	…
Indonesia	…	4	7	0.8	15.6
Korea	6	4	3[2]	1.8	28.6
Malaysia	38	24	18	1.1	13.3
Philippines	8	9	15	0.6	22.0
Thailand	…	5	12[2]	– 5.6	9.3
Argentina	…	10[4]	49	0.4	17.9
Brazil	…	6	23[2]	0.4	17.8
Chile	…	19	54[2]	0.4	15.5
Colombia	9	8	26[2]	– 0.5	10.9
Mexico	…	0	24[5]	– 0.2	14.4
Peru	2	4	40	0.5	11.4
Venezuela	…	1[6]	42[2]	3.5	14.0
Czech Republic	…	10[3]	66	0.8	18.6
Hungary	…	10	62	0.9	15.6
Poland	0	3[6]	70	0.5	15.0
Israel	…	2[4]	9[2]	0.3	11.1
Saudi Arabia	0	0	0[5]	…	…
South Africa	…	1	1[2]	– 21.1	18.7

[1] Banks where more than 50% of equity is held by foreigners. [2] 1999. [3] 1994. [4] Average 1988-95 from Claessens et al (2001). [5] Including those where foreign banks have effective control without holding more than 50% of equity, the proportion would be over 40%. [6] 1993.

Sources: Central banks; World Bank; BIS estimates.

full acquisition, targeted purchases of specific activities, joint ventures or alliances with local banks, and outsourcing of administrative and financial services. As discussed above, in many transition and post-crisis economies, the restructuring of banks and subsequent privatisation have provided incentives to enter markets through the acquisition of local banks rather than the more costly establishment of "greenfield" operations. Even the wholly owned acquisitions are often kept as local subsidiaries rather than as branches of the parent. Major international banks that originally created networks of branches around the world (Citibank, HSBC, ING, ABN-Amro, Deutsche Bank, and Spanish banks operating in Latin America) have gradually moved towards a strategy of making selective acquisitions in key emerging markets and have kept them as subsidiaries.

Business focus of foreign banks

As foreign banks have historically followed their home-country customers to the emerging markets, they are often seen as specialising in servicing large corporate customers, either multinational companies or "cherry-picked" host country corporations. This has led to concerns that in banking systems with a large foreign participation some segments of the market - rural customers, small and medium-sized firms - would be left unattended. As a result, domestic banks could be left with the less creditworthy customers, increasing the overall riskiness of domestic banks' portfolios, and credit markets could become segmented.

One shortcoming of the "cherry-picking" argument is that it does not spell out the assumptions made about the pricing of risk. If risks were properly priced, local banks would be able to balance having less creditworthy customers with higher spreads, and therefore would not be at a disadvantage vis-à-vis foreign banks. Perhaps the implicit assumption underlying the "cherry-picking" argument is that the entry of foreign banks undermines the subsidisation of poorer credit risks by domestic banks. If this is the case, foreign bank entry would actually be welcome since it would discourage much economically wasteful activity. The authorities in some countries may still feel that certain market segments (eg farmers) require special treatment because of institutional and market imperfections or for distributional reasons. In such cases, they may want to ensure at least a minimum of cooperation on the part of banks with a large branch network in the distribution and administration of small grants and subsidised loans from the budget.

Another concern has been that, with foreign banks using the interbank market for much of their funding, local banks could put more funds into that market and make fewer domestic loans. Effectively this would enable large companies to gain better access to loans at the expense of small companies. This concern has been largely unsubstantiated in practice, but is nonetheless persistent in several emerging economies.

Evidence on whether the business focus of foreign and domestic banks diverges is rather mixed.[33] As a result of strong competition and significant penetration, foreign banks in central Europe are increasingly focusing on lending to small and medium-sized enterprises and households. In India, foreign banks have generally followed the guidelines for lending policies towards "sensitive" sectors. In most emerging market economies, however, foreign banks appear very cautious about lending to smaller firms because of their limited knowledge of local industry. In Latin America, for example, Spanish banks reportedly shelved plans to extend their lending activities to middle-market and retail customers following the recent Brazilian devaluation, citing increased credit risk and the lack of credit histories and transparent balance sheets.

Impact of foreign entry on domestic banks

There is widespread agreement on the benefits of foreign bank participation for the emerging economies. Foreign banks usually bring state of the art technology and training for domestic bankers. Moreover, they are familiar with sophisticated financial instruments and techniques, and have faster and cheaper access to international capital markets and liquid funds. Their presence may also

[33] Pomerleano and Vojta (2001) note that foreign banks have gained large market shares in areas such as credit cards but not in lending to small businesses, possibly because the former area is more suited to data processing methods such as "credit scoring".

encourage other foreign firms to invest in the domestic economy. They may add to the stability of the financial system "by allowing domestic residents to do their capital flight at home".[34] Empirical studies have found that foreign bank entry improves the functioning of national banking markets, both by increasing the degree of competition and by introducing a variety of new financial products and better risk management techniques.[35] The efficiency effects of foreign banks appear to occur on entry, and do not depend on gaining a substantial market share. Foreign banks have higher interest rate margins, profitability and tax payments than domestic banks in emerging markets, and significant foreign bank entry is associated with a reduction in both operating expenses and the profitability of domestic banks.[36]

Because foreign banks can avoid the burden of lending to public enterprises, attract better credits with more sophisticated products and marketing and have "deep pockets" to fund early losses, they can put domestic banks at a competitive disadvantage, at least initially, and temporarily stall the development of the local banking sector. This was, for example, the Australian experience in the 1980s. In the longer-run, the influence is rather positive, albeit only for those domestic banks that survive.

Performance indicators for central European and most of the Latin American banks confirm that foreign banks are more efficient than domestic banks (Table A4 in Annex 3). In some countries foreign banks appear less efficient. The latter experience is in line with the results obtained for more mature markets, where domestic banks are generally more efficient.[37] In the Asian countries, performance indicators of foreign banks are also worse than those of domestically owned banks, perhaps because ownership changes have been very recent and because previously weak banks have been taken over by foreigners.

An important issue concerning the relative performance of foreign and domestic banks has been their behaviour during recessions in host countries and the foreign banks' home base.

- One opinion is that domestic banks are more committed to the domestic economy, in the sense of having both longer-term business relationships with customers and a patriotic affinity with the national interest. Foreign banks, by contrast, are said to look at lending opportunities around the world and may neglect the host country economy if its prospects deteriorate or if prospects improve in other countries. Foreign banks are also less likely than domestically owned banks to heed exhortations by the domestic authorities to maintain lending during recessions. In some cases, foreign banks have been less cooperative in rescheduling loans in times of crisis.
- The behaviour of foreign banks may also be driven by events at their home base. One recent example is the pullback of Japanese banks from lending in Asia when they faced difficulties in the Japanese market. In addition, changes in strategy of global banks taken at headquarters - for example, change of chairman or CEO - can have a major impact on markets where these banks have a presence.[38] Such disruptions can sometimes be reduced by avoiding the granting of licenses to too many banks from a single foreign country.

These criticisms apply more to foreign banks with only a small and recent presence in the domestic banking system. Larger, longer-established foreign banks are not in a position to risk their reputation and behave more like the domestic banks. There is also evidence that local management is usually strongly committed to the local operation, and that their business interests are often closely aligned with those of the authorities.

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[34] Mathieson and Roldos (2001).

[35] See eg Claessens and Klingebiel (1999).

[36] See Claessens et al (2001).

[37] See Berger et al (2000). This "home ground advantage" in mature banking markets has been explained by organisational problems (persuading good managers to move abroad and monitoring their performance), better knowledge of local customers (raising cheap deposits and making astute small loans may be much harder for foreigners), and difference of language and culture. Berger and DeYoung's (2001) US study finds that even within a single country there may be organisational diseconomies in operating a long way from head office.

[38] There is some evidence from Asia that smaller subsidiaries of global banks tend to suffer the most in such circumstances.

The contrary opinion is that foreign banks are better placed to ride out domestic recessions because they can more readily access international financial markets or draw on credit lines from their parents. Furthermore, they have better diversified balance sheets. The empirical evidence from Latin America suggests that foreign banks have generally had lower volatility of lending than domestic banks and notable credit growth during crisis periods, and that only offshore lending tended to contract in bad times.[39] Foreign bank operations may also keep international markets better informed about domestic conditions and so help dampen panic withdrawals of international funding (as in Saudi Arabia during the Gulf war), or can help reduce resident capital outflows during crises because they are usually perceived as safer.

The behaviour of foreign-owned banks during recent recessions is compared with that of domestic banks in Table A7 in Annex 3. The data, admittedly of fairly low quality, show no clear difference in behaviour between domestic and foreign banks.

Opening up the domestic banking system

Many emerging market economies have major shortcomings which create a need for foreign bank participation: the lack of capital, the lack of commercial banking skills and an inefficient banking structure. The first two factors have been important in central European transition economies, while the lack of capital and inefficient market structures have played a major role in opening up the banking systems in the Asian crisis economies and Latin America.

Considerations that determine the extent and scope of allowable foreign bank participation are often political. In theory, protecting domestically owned banks may lead to an inefficient financial system. Indeed, for a small economy it may make sense not to have any domestically owned banks at all, as they may not be able to diversify their risks sufficiently.[40] Even in medium-sized economies, there are potentially considerable benefits to be gained from foreign banks (discussed below). Nonetheless, in practice there are only a few fully foreign-owned banking systems, with the degree of foreign ownership lying somewhere between 15 and 80%.[41] While announcing a major liberalisation programme, the authorities in Singapore stated explicitly that they wanted local banks to retain at least half the market. Another example is the Philippines, where existing law provides that the market share of foreign-majority owned banks shall not exceed 30% of the banking industry.

A common argument against selling banks to foreign owners is that one should not sell the "family silver". There may also be a populist objection that domestic savings will be used to fund projects in foreign countries. Political sensitivities may be particularly acute if foreign banks are perceived to be buying local banks at a discount, especially if taxpayers' money has been used to clean up the banks' balance sheets ahead of privatisation. As a result, political resistance to the entry of foreign banks has often had to be overcome gradually, for example as in Poland. In some cases, only a failure of domestically-led privatisation and restructuring has persuaded the authorities to allow foreign bank entry (eg in the Czech Republic). The government of Mexico also restricted foreign ownership to 30% with a 5% cap on individual foreign bidders when it first started selling off the SOCBs in the early 1990s; however, these restrictions were later relaxed and eventually removed.

Governments also face domestic pressure to limit the role of foreign banks because of fears that foreign banks will quickly come to dominate the local market or lead to a lowering of credit standards by increasing competition, especially if they use their deep pockets to subsidise early losses. Until 1995, the government of Brazil required that foreign banks have a minimum capital double that required for domestic banks. Recently, the authorities announced that foreign banks would not be allowed to open new branches or acquire smaller banks unless they purchase one of the troubled government-owned banks. Sometimes, foreign bank entry is restricted in order to maintain the

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[39] See Crystal et al (2001), Mathieson and Roldos (2001) and Peek and Rosengren (2000).

[40] A rare case where this issue is being addressed from scratch is the world's newest nation of East Timor. The economics minister is reported as preferring not to have any domestic banks but another senior politician found it hard to imagine a nation without at least one domestic bank (*The Economist*, 2 September 2000).

[41] Nepal and Swaziland appear to be the only countries where 100% of banking sector assets are owned by foreign banks (Claessens et al 2001). Other countries with a high rate of foreign bank penetration include Greece (77% of assets held by foreign banks), Luxembourg (89%), New Zealand (91%), Botswana (94%), Jordan (95%) and Bahrain (97%).

"franchise value" of domestic banks, which may encourage domestic shareholders to contribute new equity. For example, Mexico used to limit foreign ownership in domestic banks with a substantial market share.

Governments may also be reluctant to have their domestic banking systems dominated by banks from a single country, in case these banks suddenly cut their activities when faced with problems at home (eg Japanese banks in Asia, and possibly Spanish banks in Latin America), or are able to exert political pressure for favourable treatment. For this reason, the emerging economies may seek to "diversify" foreign owners. For example, the Saudi authorities have been selective and have licensed foreign banks from different parts of the world, with different management cultures, systems and technologies. Similarly, the authorities in China have been concerned about the impact of foreign banks on the competitiveness of domestic banks, and have sought to limit their market share by licensing banks from different countries, and by restricting their activities to doing business in foreign currencies only, or to doing business in local currency in only two cities. They have also ensured that banks have more familiarity with the local market by requiring them to have a representative office for two years before commencing banking operations.

6. Issues in systemic stability

The changing structure of the emerging economies' banking systems has implications for systemic stability and in particular the supervisory regime. This section addresses three specific issues that arise in this context. The first is how to license foreign banks - as branches or subsidiaries - and how to monitor their activities. The second is whether official "safety nets" such as deposit insurance should be extended to foreign banks. The third is whether bank consolidation poses risks for systemic stability, and how these risks can be addressed.

Branches versus subsidiaries of foreign banks

The presence of foreign banks generally leads the domestic supervisory authorities to upgrade the quality and increase the size of their staff in order to supervise the more sophisticated activities and new products that are usually introduced by foreign banks. This effect has been observed for example in Brazil and Hungary, and has often led the authorities to merge all financial sector supervisory activities in a single institution. Before they gain sufficient skills, however, supervisors may be exasperated by highly sophisticated foreign bank operations, not knowing what questions to ask, or not being able to convince the courts to withdraw the licences of institutions with suspect operations. This is a particular concern in the cases of rapid expansion of foreign (and increasingly domestic) commercial banks into non-bank financial services, including insurance, portfolio management and investment banking. In the Czech Republic, for example, banks were major actors in the failed voucher privatisation programme of the early 1990s, and often seemed to be at least one step ahead of the supervisors.[42]

From a supervisory perspective, foreign bank branches have some advantages. They are less likely to engage in connected lending; they are subject to additional oversight by foreign supervisors on a consolidated basis with the parent under the terms of the Basel Concordat; they are more likely to obtain financial support from the headquarters; and they may be subject to more rigorous accounting, disclosure and reporting requirements. In case of branch failure, however, foreign creditors would generally have an advantage over domestic creditors.

Local subsidiaries of international banks are stand alone entities with their own capital, and are supervised on a consolidated basis by the parent's supervisory authority only when the subsidiary is part of a holding company or a universal bank. Nonetheless, reputable international banks closely monitor the activities of their subsidiaries so as to preserve the parent's good name and solid standing.

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[42] While trying to understand the structure of IPB, a foreign-owned bank mentioned above that eventually failed, supervisors at the Czech National Bank reportedly drafted a chart that covered an entire wall.

Country practices vary considerably on the issue of branches versus subsidiaries. Many countries in Asia allow foreign bank entry only via branches. Israel allows foreign banks to open either a branch or a subsidiary, while South Africa and central European and Latin American countries are much more flexible and leave the decision to foreign banks, supervising both entities on an equal, consolidated basis. The Reserve Bank of New Zealand recently announced a new regulatory policy under which three significant categories of banks will need to establish locally incorporated subsidiaries instead of operating as branches.[43]

Domestic supervisory authorities in emerging economies often have strong views on their choice of licensing policy for foreign banks. Many Asian supervisory authorities note that branches have the advantage of being backed by the full strength of their parent institution, including financial resources, supervision, and information technology. They also point out that, under the proposed Capital Accord, branches of banks incorporated in less risky countries will be able to obtain cheaper funds because they will be subject to lower capital weights, whereas subsidiaries will be covered by the ratings of their host country. Countries that favour subsidiaries stress their ability to better regulate, supervise and "ring fence" subsidiaries in periods of distress. Branches are more difficult to sell to third parties when problems arise. The countries concerned point out the widespread practice of restricting the operations of branches as a major weakness of branches from a supervisory perspective.[44] To ensure that the parent institution stands behind a subsidiary, host country supervisors often ask parent banks (and sometimes parent country supervisors) to provide "comfort letters".

In summary, as most rules on foreign bank licensing were determined historically, usually under conditions of strict capital controls, they may no longer appear sensible in a world of free capital movement and supervision on a consolidated basis. The issue of branches versus subsidiaries could therefore be ill-posed. What matters most in practice is that, regardless of the legal form of their presence, foreign banks be initially licensed to carry out those activities that host country supervisors are familiar with and are able to monitor properly. At the same time, the licensing rules should not be too rigid, and supervisors should continuously upgrade their capacity to monitor banks' activities on a consolidated basis.

Foreign banks and depositor protection

One of the most important supervisory issues is to determine whether depositors in foreign banks should receive the same degree of protection as depositors in domestic banks. With backing from their parents, foreign banks may have no need for lender of last resort loans and may not want to participate in deposit insurance arrangements. Arrangements for according (small) depositors priority in the event of a wind-up of a foreign bank, or arrangements for empowering the central bank to take over an impaired foreign bank, may be hard to apply in practice. There is also empirical evidence that, regardless of deposit insurance arrangements, foreign banks (especially large ones) are perceived as safer in host countries in times of crisis and this might suggest that they do not need to be subject to formal deposit protection arrangements. On the other hand, a strong argument in favour of extending deposit insurance to all banks is that, if foreign banks are authorised to collect deposits in the host country, their depositors should receive the same degree of protection as depositors of domestic banks. Otherwise, foreign banks could have an unfair advantage over domestic banks (not having to pay deposit insurance premia), and therefore an incentive to finance riskier activities with deposits collected in the host country.

In practice, virtually all emerging economies require foreign banks to participate in deposit protection arrangements on the same basis as domestic banks. Several countries (Israel, Saudi Arabia, Singapore, South Africa) do not have formal deposit insurance arrangements and therefore this issue does not arise. Hong Kong has in place only a priority payment scheme for small depositors, which

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[43] These categories are: (i) systemically important banks, (ii) banks that take a significant level of retail deposits and come from countries with legislation giving home country depositors a preferential claim in a winding-up, and (iii) banks that take a significant level of retail deposits but, in their home countries, fail to publish the full information depositors would need to assess financial soundness (see Reserve Bank of New Zealand, 2000).

[44] These restrictions usually take one of the following forms: restrictions on taking funds from domestic depositors, restrictions on territorial expansion, restrictions on funding in local currency, requirements for capital to be held in the domestic market or in the form of so-called "endowment capital".

applies to all fully licensed banks. Indonesia does not have a deposit insurance scheme either but has nonetheless provided a blanket guarantee to all depositors in domestic banks. Thailand does not extend protection to depositors of foreign bank branches operating in the offshore market. As mentioned above, the need for equal protection for depositors has also prompted the Reserve Bank of New Zealand to require that certain foreign banks re-register as subsidiaries.

Competition, moral hazard and systemic stability

Bank consolidation in most emerging economies has not yet been associated with any marked rise in concentration, as most mergers appear to have involved smaller banks (Table 1).[45] One reason for this pattern could have been reluctance on the part of the authorities to sanction mergers between the largest banks, which can raise both competition and moral hazard concerns. Many industrial countries follow explicit policies that limit the concentration in the banking industry. For example, the Australian government announced in 1997 a "four pillars" policy under which mergers among the four major banks would not be permitted until the authorities were satisfied that competition had increased, especially in the area of lending to small businesses.

Central bankers at the meeting held differing views about the maximum desirable market share for a single bank. Some were uncomfortable about a bank having a market share of over 15% while others would not object to a single bank having a 30% share so long as they were confident it was very well managed and that the banking market remained contestable. In particular, the issue of market power should not be a concern in an open economy, as collusion is virtually impossible in such an environment. It has also been pointed out that the authorities could not prevent banks from growing bigger if there was intrinsic market advantage in size. Larger banks are better diversified, able to hire better managers and deploy better risk management, and therefore may be less likely to get into difficulties. The issue was, then, how to adapt supervisory techniques to large banks, not how to regulate their size.

The possible threat of excessive concentration, arising from risks that banks could exert market power and extract higher interest margins and fees, nonetheless seems to be alive, especially in some large Latin American countries and South Africa.[46] A related concern is the increase in concentration due to mergers of foreign parent banks. Recent experience in Chile, where the Spanish parent banks of two domestic banks with a combined market share of 28% have merged, is particularly instructive.[47] Although the two Chilean operations continue to be run separately, this merger raised three associated issues: Would the new institution become too big to fail? Would it pose any risk to the domestic payment system? Would a 30% market share set a benchmark for future bank mergers? The Chilean authorities adopted several measures to address these concerns. Banks that exceed a 20% market share are required to fulfil any of these conditions: higher capital adequacy ratio (up to 14%), further restrictions on liquidity requirements, and lower exposure to the interbank market. To increase competition, two new bank licences were issued and banks were allowed to offer interest on deposit accounts. Finally, domestic corporations were allowed to access international capital markets, where they can now issue peso-denominated bonds.

There is other evidence that concentration is not necessarily a good indication of whether a market is contestable, and that the more efficient banks both gain market share and earn higher profits. Burdisso and D'Amato (1999) note that in Argentina concentration is generally low in urban areas but very high in the remote rural areas. The banks operating in the more competitive urban markets tend to be more efficient but less profitable while those operating in the rural markets are less efficient but more profitable. But within each market the larger banks do not tend to be any more profitable.

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45 By contrast, Group of Ten (2001) highlights the rise in concentration in the advanced economies, and notes it is particularly prevalent in off-balance sheet activities.

46 South Africa's finance minister recently ruled against a merger between two of the three largest banks on the grounds that the merger would harm competition. See the paper by Marcus in this volume.

47 As noted above, this issue is increasingly arising in central Europe as a result of cross-border mergers of parent banks from the European Union.

In the context of foreign bank entry, the authorities in many countries feel that their banking systems would not be viable without the presence of at least one strong domestic institution. However, if a local bank candidate for such a position was aware of the government's intention to secure a role for one domestic institution, its corporate behaviour could become affected by the perception that it was "too big to fail". In such circumstances, it might be preferable to foster a larger number of domestic banks. How large that number should be is not entirely clear. There are few countries with just two large domestic banks (Switzerland is one example), and an industry with only three large players could be unstable as one of the players would probably be pursued as a takeover target. In many small and medium-sized countries, this creates a dilemma. To try to keep, say, four domestic banks afloat as independent entities (Australia's policy) in order to preserve competition and avoid moral hazard may mean that each bank operates at sub-optimal scale given the size of the local market.

One approach could be to look carefully at any merger that could create a bank big enough to cause systemic problems if it were to fail. But how can one define systemically important banks in practice? One attempt to address this issue is the new policy proposal from New Zealand. This proposal defines systemically important banks as "banks whose failure could have a material impact on the financial sector as a whole and/or the wider economy."[48] The rationale for this approach is that if a systemically important bank were to fail, it is likely that the Reserve Bank would recommend that it be placed under statutory management. If the bank were incorporated locally, the manager would take control of the local bank, and all assets and liabilities on its balance sheet. With a locally incorporated bank, the Companies Act provides some protection from the transfer of assets out of the local bank in the period immediately prior to the failure. However, managing the failure of a bank incorporated overseas could be significantly more difficult, particularly if the statutory manager wished to reopen the bank quickly in order to limit the spillover effects to the wider economy.[49] For this reason, the authorities proposed to require all systemically important banks to incorporate locally.

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[48] See Reserve Bank of New Zealand (2000). In terms of liabilities, systemically important banks are defined as having more than $10 billion in liabilities, or about 7½% of the banking system aggregate.

[49] If the bank was incorporated overseas, the statutory manager would have the power to take control of the assets and liabilities of the bank's New Zealand branch. However, in practice, it may be difficult to ascertain which assets belong to the branch. Furthermore, since there are no constraints on the transfer of assets between different branches of the same legal entity, branch assets could be transferred overseas between the date of the last disclosure statement and the date of failure, even if they are clearly related to the local branch.

Annex 1: Common causes of banking crises

Considerable attention in the financial crisis literature has been devoted to macroeconomic and institutional causes of banking crises. In particular, unsustainably high growth of lending to the private sector during much of the 1990s, poor prudential regulations and bank supervision, the entry of excessive numbers of new banks which spread the available pool of skilled bankers too thinly, and premature capital account liberalisation were identified as major contributing factors. However, some of the most common sources of banking crises are microeconomic in nature, including the following.[50]

- ***Excessive optimism*** about lending to rapidly expanding manufacturing firms and speculative property developers, whose booming output and rapidly rising collateral (ie property) values gave banks a false sense of security and allowed firms to become highly leveraged.
- ***Insufficiently diversified loan books*** made specialist banks overdependent on the particular region or sector served.
- Credit assessment by banks was often very poor, and banks often made loans to related ***companies or state-owned enterprises***, frequently at the behest of governments.
- ***Management incentives*** were often inappropriate: top management was unduly concerned with increasing the banks' overall size, and loan officers typically were rewarded for the volume of loans made rather than repaid.
- The risks from ***excessive maturity and currency mismatches*** were not fully appreciated. While banks' direct ***exposure to foreign exchange risk*** was limited by prudential regulations, banks neglected the exposure of their customers to such risks. As a result, when large devaluations occurred and weakened the ability of the corporate sector to service foreign currency loans, banks were suddenly faced with enormous credit risk.

[50] For a more detailed discussion of the causes of banking crises, see eg East Asia Analytical Unit (1999) or Goldstein and Turner (1996). Banking crises also have a generational aspect: bankers who survive a crisis tend to be more conservative, but their successors gradually seek more risk.

Annex 2: Evidence on the motives for bank mergers in industrial countries

The motives for bank mergers identified in the literature on industrial countries fall under four broad headings: *cost benefits* (economies of scale, organisational efficiency, cost of funding, risk diversification, economising on capital); *revenue benefits* (economies of scope, making large deals, enhancing monopoly rents); *economic conditions* (mergers after crises or during an upswing of the business cycle); and *other motives* (private managerial benefits, defence against takeovers, etc). Besides banking crises, the following merger motives seem relevant for the emerging economies.

Economies of scale. Banks with similar operations often have an incentive to merge in order to eliminate overlapping branches and pool back office, administrative and marketing functions. Empirically, the gains seem to be particularly large from the pooling of marketing functions.[51] There is also evidence of productivity gains from the wider use of new information technology, such as internet and telephone banking, which favours larger institutions because the initial setup costs are too large compared to the scale of operation of smaller institutions.

Economies of scale have historically been the main underlying cause of consolidation in the banking industry.[52] However, merging to realise cost benefits is not always trouble-free: difficulties can (and do) arise in reorganising management, merging institutional cultures, linking computer systems, dismissing excess staff, etc.[53] In particular, the cost of IT expenditures is often underestimated.

Recent empirical evidence on gains from mergers is therefore often weaker than the claims of the merging institutions.[54] Some empirical studies have also found that economies of scale could be exhausted at relatively low levels.[55] The size benefits could also be smaller in the emerging economies as they are less likely to enjoy the same degree of managerial depth and are more likely to face higher communication costs between different sites and branches.

Mergers allow ***diversification of credit risk***, which may be particularly relevant for small urban and rural banks that service relatively narrow segments of corporate customers and households. Larger banks are in a better position to develop and use new, more complex financial instruments such as derivatives, and to put in place sophisticated risk management techniques.

Improving organisational efficiency. Mergers are frequently motivated by the desire to reduce inefficiencies in organisation, staff motivation and other non-market transactions internalised within firms. Such inefficiencies are estimated at about 20-25% of the costs in the banking industry, suggesting that there exists a significant potential for achieving cost efficiencies through mergers.[56] The literature also suggests that acquiring banks tend to be more efficient than target banks, but the spreading of better techniques to less efficient banks is not an easy process.

Cheaper funding costs. Larger banks can generally raise funds more cheaply, partly because markets view such banks as safer (due to better risk diversification), and partly because of implicit beliefs that governments cannot let big banks fail. Data in Table 6, which compares the average "stand alone" credit ratings of large and small banks with the same inherent strength, suggest that the larger banks tend to be rated more highly than their inherent strength would justify. In other words, markets do believe that large banks are more likely to obtain government assistance in a crisis than small banks.

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51 Kane (1999) argues that economies of scale (as well as scope) in marketing far outweigh those in service production and operations, and cites Citigroup as a global brand name on a par with Coca Cola and McDonald's.

52 See Cameron (1991).

53 Rhoades (1998) finds that the most frequent and serious problem was unexpected difficulty in integrating data processing systems and operations.

54 Rhoades (2000) shows that the number of bank branches in the United States has increased over the past two decades despite a large number of bank mergers and the spread of ATMs and e-banking. See also Berger et al (1993), Borio and Tsatsaronis (1996), White (1998), Berger et al (1999) and De Nicolo (2000).

55 McAllister and McManus (1993) found increasing returns to scale up to about $500 million in assets and constant returns thereafter. Berger et al (2000) found that average costs were usually minimised somewhere between $100 million and $10,000 million in assets, considerably lower than the assets of the world's largest banks. IMF (2001) found some evidence of scale economies for banks in emerging economies with assets of more than $1 billion but less than $10 billion.

56 See Milbourn et al (1999), Berger et al (2000) and Allen and Rai (1996).

Economies of scope. Banks with complementary businesses - or banks and non-bank financial institutions - may have an incentive to merge in order to realise synergies from offering a wider range of financial services. For example, banks with a strong corporate customer base may wish to expand into retail business, while retail banks may wish to become a "one-stop financial shop" offering insurance, asset management and other services. In *Mexico*, Banamex has developed a number of strategic partnerships to distribute insurance products, conduct telephone banking and facilitate e-commerce. Cost savings can be expected from using information on existing customers to market other financial products, more efficient use of branches and physical inputs, extending a reputable brand name across a wider range of products, sharing investment departments and account service centres, etc. Merging banks with other financial institutions may also reduce risk through diversification.[57]

Another recent trend has been the development of *alliances of banks*, under which common processes are outsourced to the member of the alliance that can carry out such processes most efficiently.[58] Such an alliance was recently announced in Hong Kong: 10 banks are sharing the costs of developing a pension product which they will market through their branches. This approach seems particularly promising in view of the growing synergies between banking and information technology.

Mergers to explore economies of scope may pose considerable challenges for management, as they bring together staff with different institutional backgrounds and different approaches to risk management. Supervisory concerns are also greater: the health of financial conglomerates is harder to assess; banks face conflicts of interest (eg engaging in underwriting securities issuance for companies already indebted to the banks); and the process of working out a troubled conglomerate can be more disruptive for the markets. Empirical studies have so far found economies of scope to be relatively small.[59] At the same time, countries that impose more restrictive regulations on banks' non-bank financial activities were found to have higher interest margins, less well developed banking sectors and securities markets, lower levels of industrial competition, and a significantly higher probability of suffering a major crisis.[60]

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57 Boyd et al (1993) concluded that mergers of banks with insurance companies in the United States had a potential for reducing risk, but mergers with securities or real estate firms actually increased risk.

58 See White (1998) and Thakor (1999).

59 See Berger et al (2000).

60 See Barth et al (2000).

Annex 3: Additional background tables

Table A1

Summary of banking systems in individual economies, 1999

	DTIs (number)	Large banks[1] (Number)	Assets of DTIs (US$ bn)	Assets of DTIs (% to GDP)	Concen-tration[2]	Banks' capital ratios: Simple capital ratio	Banks' capital ratios: Risk-weighted: actual (required)
China		14			75		(8)
India	300	17	253	60	42	...	11.5 (8)
Russia		5		16[3]	80		12.0 (8)
Hong Kong	285	18	870	550	45[3]	...	19.0 (8)
Singapore	217	5	693	816	...	20.5	20.0 (12)
Indonesia	9,556[4]	4	142	90	62	– 4.0	– 8.1 (4)
Korea	3,738	12	915	225	33	4.5	10.8 (8)
Malaysia	1,448	14	681	861	32	9.8	11.8 (8)
Philippines	1,067	12	74	100	39	15.4	17.5 (10)
Thailand	4,928	6	247	199	94	16.8	12.4 (8.5)
Argentina	116	8	126	45	46	12.9	14.0 (11.5)
Brazil	1,542	14	489	92	51	9.4	15.8 (11)
Chile	30	5	48	71	54	5.8	13.5 (8)
Colombia	81	3	43	49	32	10.8	10.6 (9)
Mexico	36	3	165	34	68	9.1	16.0 (8)
Peru	52	3	21	40	71	9.0	12.0 (9)
Venezuela	78	3	23	22	62[5]	13.6	14.0 (8)
Czech Republic	42	1	70	182	66	5.8	13.6 (8)
Hungary	254	2	31	64	51	8.6	15.0 (8)
Poland	858	6	88	56	48	8.5	13.1 (8)
Israel	45	6	166	172	93	5.1	9.2 (9)
Saudi Arabia	11	10	109	77	75	10.4	21.0 (8)
South Africa	57	7	118	90	85	8.7	11.0 (8)

Note: DTIs: Deposit-taking institutions; see footnote 6 in Table 1 for definition.

[1] Number of banks in the world's top 1,000. [2] Share of total DTI assets held by top five. [3] Banking groups. [4] Includes 9,392 rural banks but excludes finance companies. [5] Share of total DTI assets held by top four.

Sources: Central banks; World Bank; *The Banker*, July 2001.

Table A2

Banking and the internet

	Percentage of bank customers using online banking (late 1999)	Internet users as a percentage of population (1999)	Personal computers per '000 persons (1999)	Internet hosts per '000 persons (July 2000)
China		1	12	0
India	<1	0	3	0
Russia		2	37	2
Hong Kong	<2	36	298	18
Singapore	5	24	437	39
Indonesia	0	0	9	0
Korea	3	23	182	10
Malaysia	<1	7	69	3
Philippines	<1	1	17	0
Thailand	0	1	23	1
Argentina	3	2	49	5
Brazil	4	2	36	4
Chile	10	5	67	3
Colombia	<5	2	34	1
Mexico	4	2	44	5
Peru		2	36	0
Venezuela		2	42	1
Czech Republic		7	107	13
Hungary	<1	6	75	13
Poland	<1	5	62	7
Israel	<10	13	246	26
Saudi Arabia	<1	1	57	0
South Africa		4	55	4
Memo:				
Finland	*29*	*41*	*360*	*136*
Sweden	*31*	*41*	*451*	*70*
United States	*6*	*27*	*511*	*…*
United Kingdom	*6*	*21*	*303*	*35*
Germany	*12*	*18*	*297*	*23*

Sources: Central banks; Claessens, Glaessner & Klingebiel (2000, 2001); World Bank, *World Development Indicators,* 2001, Table 5.10.

Table A3

Rival sources of finance for the non-bank private sector[1]

	Borrowing from domestic banks[2]		**Borrowing from international banks**[3]		**Borrowing from bond issuance**[4]	
	1995	**2000**	**1995**	**2000**	**1995**	**2000**
China	88	125	10	6	15	26
India	23	27	5	5	23	29
Russia	8	12	14	14	1	11
Hong Kong	144	154	368	118	12	23
Singapore	101	100	338	239	55	25
Indonesia	53	21	24	27	2	7
Korea	51	74	17	14	44	73
Malaysia	84	100	21	23	53	75
Philippines	39	45	11	22	3	18
Thailand	98	86	55	23	4	10
Argentina	20	23	13	17	10	25
Brazil	31	30	10	16	1	7
Chile	53	67	21	26	1	11
Colombia	18	19	11	15	1	8
Mexico	37	12	26	10	12	16
Peru	16	26	9	13	0	0
Venezuela	9	10	15	11	4	9
Czech Republic	75	52	15	19	10	19
Hungary	24	36	18	30	57	49
Poland	18	30	6	10	11	18
Israel	70	87	5	8	1	4
Saudi Arabia	25	29	11	16	0	0
South Africa	58	68	10	15	2	4

[1] As a percentage to GDP; end-year data. [2] Domestic credit to the private sector. [3] Liabilities to BIS reporting banks. [4] Domestic and international securities on issue.

Sources: IMF, *International Financial Statistics*; national data; BIS statistics.

Table A4

Performance of banks by ownership

1994-99 average

Return on average assets	**Domestically owned**	**State-owned**	**Foreign-owned**
Korea	– 0.1	– 1.2	– 0.9
Malaysia	0.6	1.3	1.2
Philippines	1.5	1.6	1.4
Thailand	– 1.6	0.7	– 0.7
Argentina	– 1.1	0.6	– 0.5
Brazil	3.2	– 0.5	2.7
Chile	1.2	0.8	1.1
Colombia	– 0.2	– 0.4	– 0.4
Mexico	0.2	–	– 0.9
Czech Republic	– 1.7	– 2.2	0.8
Operating costs[1]			
India	2.4	2.8	3.0
Korea	3.3	3.0	1.7
Malaysia	1.8	–	3.5
Philippines	3.6	4.0	4.1
Thailand	4.1	3.1	3.1
Argentina	7.5	8.1	8.4
Brazil	7.1	4.6	8.6
Chile	8.0	3.6	4.5
Colombia	4.9	7.8	10.0
Mexico	4.3	–	4.8
Czech Republic	5.0	5.7	2.5
Interest expense[2]			
India[3]	7.8	6.2	6.8
Korea	8.2	12.0	33.3
Malaysia	5.8	–	4.9
Philippines	6.2	9.6	9.4
Thailand	8.1	9.3	9.4
Argentina	6.2	9.6	9.4
Brazil	27.0	53.2	51.0
Chile	11.0	9.9	10.8
Colombia	28.5	15.2	14.2
Mexico	14.6	–	27.2
Czech Republic	8.3	8.0	8.8

[1] As a percentage of total assets. [2] As a percentage of total deposits. [3] 1998-99. [4] 1998-99.

Sources: Central banks; Fitch-IBCA.

Table A5

Mergers and acquisitions in banking

	Number		Value (US$ bn)	
	1990-96	**1997-99**	**1990-96**	**1997-99**
India	0	2	0	…
Hong Kong	0	0	0	0
Singapore	1	5	18	146
Indonesia	14	15	…	…
Korea	0	11	0	323
Malaysia	2	21	1	17
Philippines	14	6	na	7
Thailand	1	2	0	39
Brazil	8	38	1	84
Chile	6	6		1
Colombia	3	11	1	4
Mexico	5	7	7	22
Peru	5	8	0	1
Czech Republic	1	6	0	0
Hungary	3	4	4	3
Poland	124[1]	580[1]	…	…
Saudi Arabia	0	2	0	7
Memo:				
Europe	*799*	*427*	*95*	*231*
United States	*1,607*	*970*	*190*	*507*

[1] Mainly between cooperative banks.

Source: Central banks; Group of Ten (2001), Tables A.4 and A.5.

Table A6

Efficiency of the banking system, 1999

	DTIs per million persons	DTI branches per million persons	DTI assets ('000 US$ per person)	Number of DTI staff per branch
India	0.3	68	0.3	16[1]
Hong Kong	42	261	129.0	44
Singapore	69	160	219.2	61
Indonesia	48	76	0.6	10
Korea	80	215	19.7	12
Malaysia	65	127	30.7	34
Philippines	14	90	1.0	…
Thailand	80	76	4.0	26
Argentina	3	119	3.5	24
Brazil	9	11	2.9	28
Chile	2	92	3.3	30
Colombia	2	93	1.0	21
Mexico	0.4	84	1.7	16
Peru	2	10	0.9	94
Czech Republic	4	208	6.8	25
Hungary	256	118	3.1	23
Poland	22	312	2.3	14
Israel	8	177	27.8	32
Saudi Arabia	0.5	60	5.3	18
South Africa	1.4	60	2.8	50
Memo:				
Australia	*18*	*321*		*52*
Euro area	*23*	*557*		*13*
Japan	*5*	*180*		*23*
Switzerland	*56*	*471*		*32*
United Kingdom	*9*	*242*		*25*
United States	*79*	*288*		*26*

Note: DTIs: Deposit-taking institutions; see footnote 6 in Table 1 for definition.

[1] 1991.

Sources: Central banks; Group of Ten (2001).

Table A7

Cyclicality of lending by ownership of banks

Percentage change in total customer loans in the latest recession period (in brackets); in real terms

	Domestically owned	State-owned	Foreign-owned
Korea (1998)	– 2	– 18	– 27
Malaysia (1998)	– 3	– 1	2
Philippines (1997-98)	– 12	2	– 15
Thailand (1996-98)	8	10	7
Argentina (1999)	6	5	8
Brazil (1997-98)	15	24	2
Chile (1999)	17	23	2
Colombia (1999)	– 38	– 8	– 3
Mexico (1995)	– 17	–	6
Czech Republic (1997-99)	6	– 15	23

Note: The selected bank samples might not be representative for the groups.

Sources: Central banks; Fitch-IBCA.

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