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Alternative Frameworks for Providing Financial Services

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The behavior of actors in financial systems depends crucially on the incentives that motivate them. The right regulation, supervision, and incentives — including the scope of permissible activities, degree of contestability, and extent of the safety net — for financial services can make the sector more resilient in the face of adverse shocks.

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Summary findings

Drawing on country experience, Claessens and Klingebiel analyze alternative frameworks for providing financial services.

Scope of permissible activities. The integrated banking model (commercial banking fully integrated with other financial services, including investment banking) benefits both financial institutions and consumers. Potential costs, such as extending the safety net to nondeposit financial services, can be mitigated with safeguards and firewalls, which require regulatory enforcement and monitoring. Internationally, countries are moving toward the integrated model. The wider scope of services appears to improve financial stability and mitigate the risk of a banking crisis.

Degree of competitiveness and contestability (openness to competition). Competitiveness need not require many financial institutions; a concentrated system can be competitive if contestable. Allowing the liberal entry of foreign banks lowers the franchise value of (domestic) institutions, but the evidence suggests that on balance foreign entry provides important benefits. Systems should not be overcompetitive, however. They should allow enough franchise value that future profits give institutions an incentive to behave prudently.

Design of safety net. The design of the safety net is important in the tradeoff between ensuring the safety and soundness of financial institutions and allocating resources efficiently. A well-functioning safety net minimizes regulatory forbearance and gives banks incentives to act prudently. Owners of financial institutions behave more prudently if they have much at risk, in the form of capital, future expected profits, or their own jobs.

The wrong safety net, especially the wrong deposit insurance, entails great moral hazard. Large deposit holders are more likely to provide market discipline if they are not covered by deposit insurance (explicit or implicit), if disclosure is extensive, and if the accounting framework is adequate.

Supervision. Best international practice suggests that supervision of the financial conglomerate should probably be consolidated in one agency. Supervisors should have incentives both to monitor and to take appropriate action. Supervisory salaries should be sufficient, relative to those in the private sector, to attract and retain competent and motivated staff.

This paper — a product of the Financial Sector Strategy and Policy Group — is part of a larger effort in the group to study the importance of the financial sector framework for the stability, efficiency, and accessibility of financial services. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Rose Vo, room MC9-624, telephone 202-473-3722, fax 202-522-2031, Internet address hvo1@worldbank.org. Policy Research Working Papers are also posted on the Web at <http://www.worldbank.org/html/dec/Publications/Workpapers/home.html>. The authors may be contacted at cclaessens@worldbank.org or dklingebiel@worldbank.org. September 1999. (49 pages)

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by

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I. Executive Summary

The framework for financial services provision in a country includes laws governing financial institutions, the deposit insurance law (if an explicit deposit insurance scheme exists), securities markets' laws and regulations, and other regulations and agreements, including those of an international nature. Among others, these laws and regulations define the role and activities of deposit-taking financial institutions (banks) relative to non-bank financial institutions, influence the degree of competition in the financial system (through the setting of minimum capital requirements, and the definition of degrees and modes of permissible entry), define in a significant way the incentive framework under which financial intermediation takes place, and provide for the necessary formal enforcement and exit rules. Ultimately, this framework and the way it is enforced determines to a large degree the structure, stability and efficiency of a country's financial system.

This paper reviews from an economic perspective, and relying on country experiences, alternative frameworks for financial service provision. In particular, it analyzes the costs and benefits of different configurations of permissible activities for financial institutions, the effects of different degrees of competition, and contestability in the financial sector, the design of a proper safety net, and more generally lessons on the design of the framework for financial services provision.

Regarding the scope of permissible activities, the analysis suggests that the integrated banking model (i.e., full integration of commercial banking with other financial services, including securities markets) can offer important benefits to both financial institutions—through the potential of exploiting economies of scale and scope, diversification of revenue generation, informational advantages that increase the franchise value of financial institutions—and to consumers—through reduction of search and transaction costs, and lower cost of financial services. Potential costs of more integrated financial services provision—in particular the extension of the safety net to non-deposit financial services activities—can be mitigated, through appropriate safeguards and fire-walls, which do require enforcement of regulation and proper monitoring by the supervisory authority. Internationally, countries are already moving to more integrated financial services provision and most countries now allow banks to engage in securities underwriting, dealing, and brokering. Furthermore, in countries where banks have more latitude to choose which corporate structure to adopt (i.e., where to locate the securities unit), most banks choose to locate it in a department of the bank, thereby adopting the integrated bank model. There is also evidence that a wider scope of financial services provision enhances financial stability and mitigates the risks of a banking crisis.

The analysis further highlights that competition in the financial sector can not be analyzed in isolation. The optimal degree of competition requires balancing various concerns including franchise value, static and dynamic efficiency, ability to supervise a number of individual financial institutions, and the scope and institutional context for rent seeking in the country. Country experience, and theory more generally, suggests that competitiveness does not necessarily require many financial institutions as a concentrated system can be competitive if contestable (i.e., open to competition). The degree of contestable entry in the financial sector, together with competition from other forms of financial intermediation, has been an important determinant of the performance and efficiency of financial sectors. Openness to foreign banks is an important element in determining the degree of contestability. While liberal entry to foreign banks lowers the franchise value of (domestic) institutions, evidence suggests that on balance foreign entry provides important benefits to a country. A degree of foreign

participation in the financial sector tends to improve the functioning of domestic financial institutions, puts additional pressure on domestic firms to improve their productivity and services, can foster innovation and X-efficiency and allows domestic financial institutions access to foreign technologies and know-how which help raise efficiency. Finally, cross-country experience does indicate that systems should not be “over” competitive, but should allow for adequate franchise value as the existence of future profits will provide incentives for financial institutions to behave in a prudent manner.

As theoretical and empirical analysis has long recognized, there is a tradeoff between assuring safety and soundness of financial institutions and fostering an efficient allocation of resources. The design of the overall safety net is the most important factor in this tradeoff. A well functioning safety net minimizes regulatory forbearance and provides incentives for banks to act prudently, thereby promoting systemic solvency. The scope of the safety net will be defined by a combination of elements, including among others, lender of last resort facilities, explicit or implicit deposit insurance schemes, the access of financial institutions to the payment system, the prevailing regulatory norms and their enforcement, and importantly, the rules for intervention in weak and the resolution process of failed financial institutions.

While some form of safety net is unavoidable, it can create large moral hazard, as many country experiences attest, particularly through explicit and implicit deposit insurance. Cross-country experience shows that the expectation of ex-post recapitalization using government resources has been an important element of safety nets inducing imprudent behavior. Arrangements to reduce these include most importantly a proper regulatory and enforcement framework, especially regarding the capital adequacy of financial institutions. To ensure proper supervision and regulation, the supervisory authority should be free from political pressure. These arrangements can also include an explicit deposit insurance scheme, but this needs to be complemented with specific actions, including clear exit rules and other design criteria (for example, risk sensitive premia).

There is less clarity on a preferred institutional design for the supervisory functions. Cross-country experience shows that countries have adopted different institutional structures depending on the objectives of regulations and the type of regulatory approach taken (single vs. multiple agency). Nevertheless, best international practice suggests that the supervision of the financial conglomerate should be performed on a consolidated basis.

More generally, the costs of the safety net can be minimized and efficiency and robustness enhanced if financial institutions operate in an overall regulatory and incentive framework which is incentive compatible with prudent banking. This incentive framework includes the regulatory and supervisory framework, accounting rules and practices, disclosure requirements, and the existence of a deposit insurance scheme. Owners of financial institutions will behave more prudently if they have much at risk—in the form of capital, future expected profits, or their own jobs. In the same vein, large deposit holders tend to provide market discipline if they are not covered by any implicit or explicit deposit insurance scheme and if extensive disclosure requirements exist and the accounting framework is adequate. Finally, supervisors need to have the incentives both to monitor and to take actions based on this effort, which requires that pay and conditions for supervisors should be sufficient to attract and retain competent and motivated staff. In practice that means closing the gap that usually exists between the pay of regulators and that of private bankers.

The paper is organized as follows. Section II examines alternative structures of financial services provision, often not determined by competition but rather by law and regulations. It discusses the advantages and disadvantages of integrated banking and other structures. Section III focuses on the role of competition in the financial sector, the instruments governments can use to manage competition and the level of franchise value in a banking system, and the tradeoffs between competition on the one hand and safety, soundness and innovations considerations on the other hand. Section IV analyzes the main motivations and components of the safety net, the tradeoff between the scope of a safety net on the one hand and the effects of financial sector efficiency on the other hand. It discusses alternative design features for the safety net, particularly regarding deposit insurance, and the essential pre-requisites for effective supervision. Beyond the basic infrastructure, the behaviors of the actors in the financial system depend crucially on the incentives they face. The concluding Section V therefore discusses some of the latest thinking on the design of an incentive compatible regulatory system, that is a system which encourages prudent behavior and efficient financial intermediation.

II. Determining the Scope of Permissible Activities of Financial Institutions

- This section focuses, from an economic perspective, on the advantages and disadvantages of integrated banking and the various corporate structures under which banking can be conducted. It examines the following questions:
- How does the scope of permissible activities of financial institutions differ across countries?
- What impact do different configuration of permissible activities have on financial institutions' franchise value or what are the gains and risks from allowing broader banking powers?
- What are the costs and benefits of allowing banks to engage in commercial and investment banking, and to have ownership stake in non-financial institutions?
- What types of corporate structures are used for banking organizations and what are their respective benefits and costs?
- How do non-bank financial institutions relate to the rest of the financial system?

1. Introduction – the Structure of Financial Services Provision

In most countries, regulation rather than competition determines a bank's range of products and services it can offer, the types of assets and liabilities it can hold and issue, and the legal structure of its organization. Regulators in countries have allowed for different configurations of permissible activities certain types of financial institutions can undertake and for different types of organizational structures. Two models at the opposite end of the spectrum are a separate financial system, where banks are not allowed to engage in any type of securities or other, non-credit financial service activity, and a completely integrated system, where banks can provide all types of financial services, either directly or indirectly through subsidiaries with involvement in management. The latter is often called "universal banking". As there are other aspects often associated with universal banking—such as the ownership of non-financial institutions (that will be discussed in the next section)—we rather use the term "integrated banking" to refer to a wide scope of financial services provision within a single institution.

Out of 51 industrialized and emerging countries surveyed by the Institute of International Bankers in 1998, only China has a "pure" separate banking system (in the sense that banks are not allowed to engage in any type of securities activities). The majority (36) of countries surveyed, including all EU-countries, allow integrated banking, i.e., banks are allowed to conduct both banking and securities business (including underwriting, dealing and brokering all kinds of securities) within the same banking organization. Finally, in 15 countries, financial institutions are allowed to engage in securities activities (to a varying degree), either through a bank parent (12) or a bank-holding company structure (3). The US is the most prominent country with a bank holding company structure which also has quite restrictive regulations on securities businesses which can be undertaken by commercial banks (see further Annex Table 1 and 2).¹

Historically, that is before the late 19th century/early 20th century, the range of products and services individual financial institutions have offered (i.e., the scope of their financial services provision) has in many countries been determined by market forces. Competition, comparative

¹ According to Section 20 of the U.S. Bank Holding Company Act, revenues that commercial banks derive from their securities subsidiary (underwriting and dealing activities) are restricted to less than 25 percent of their overall profits. Moreover, commercial banks are not allowed to hold an equity stake in non-financial firms (except for trading purposes).

advantage, relative supply of skilled professionals, and other factors determined whether banks would provide a broad or narrow range of financial services. Choices made by financial institutions most often had no adverse consequences on either financial stability, efficiency or access to financial services. Over time, however, countries introduced restrictions on the type of activities of different financial institutions.² The motives for the restrictions, however, not necessarily economic or financial, but often came into play for political reasons. From an economic analysis point of view, it would thus be most natural to first ask the question whether there is a case for restrictions to begin with and then analyze what the consequent opportunity costs are of a particular restriction. Since most countries have restrictions, however, we rather analyze the gains from removing (some of) these restrictions and the risks which need to be taken into account when doing so.

The rationales for not allowing financial institutions full freedom in choosing the scope of their activities have been twofold : (i) potential conflicts of interest, and (ii) risks of financial instability.³ Benefits from allowing a wider scope of financial services provision which have been identified include economies of scale and scope, and risk diversification. We discuss these benefits and costs in the next two sections (the costs and benefits of integrated banking are summarized in Table 1). Important background to this discussion is the global trend of increased substitutability between various types of financial instruments in terms of providing similar kind of services. Bank deposits, for example, compete now in many countries with other liabilities of financial intermediaries, such as money market funds, in the provision of liquidity and payment services. This has implied, on one hand, that the demarcation lines between different types of financial intermediaries have become increasingly blurred from the consumer and producer point of view. On the other hand, the economic costs of maintaining regulatory barriers have risen as these barriers have become less effective, but still impose costs on individual financial institutions.

2. Benefits of a Wider Scope of Financial Services Provision

Three reasons have been identified why allowing for a wide scope of financial services provision (“fully integrated banking”) can increase the franchise value and market value of banks: it allows for the use of informational advantages, it increases profits (through economies of scale and scope), and it reduces the variability of profits.⁴

² It is useful to compare in this respect the American banking system prior to World War I to that of Germany, a period for both countries of large-scale industrialization (see further Calomiris, 1996). German commercial banks provided then (and largely still do) an unrestricted range of services, including lending, underwriting, trusts services and deposit taking. The American banking system, traditionally heavily regulated, was importantly shaped by restrictions on branching and consolidation dating from the 19th century and focussed on financing commerce, rather than industrial firms (the latter became financed by investment banks). The Great Depression in the US further added to restrictions. The motives for the restrictions in the US were, however, not necessarily based on economic or financial problems. Rather, these restrictions emerged on fears of excessive concentration of power, desire to keep savings locally, and concerns to protect individual states’ rights.

³ Another concern has been the concentration of economic power that may come along with commercial banks having a wider scope of activities, including owning non-financial institutions. This has been a highly charged, political economy issue, and some countries care more about ‘excessive’ concentration than others. This issue relates probably more to the concentration of economic power in general, including that of non-financial institutions, and the degree of competition, rather than to the particular banking model adopted.

⁴ The question of scope of financial services is related to the costs and benefits of bank-based versus capital market-based systems, which in turn may have implications on firms’ access and cost of capital and economic growth. For an overview of this literature, see Stulz, 1999.

Informational Advantages

In establishing a relationship with a firm, a bank incurs costs in gathering information about the firm and its investment opportunity before making lending decisions. The longer the expected duration of the bank-firm relationship, the more willing the bank will be to invest in gathering firm-specific information, which in turn can increase the financing to valuable investment projects.⁵ Integrated banks have some advantages over specialized banks in this respect as they can offer a broader set of financial products than specialized banks. This allows an integrated bank to learn more about its borrowers and to lower information and monitoring costs. Information derived, for example, from managing a basic bank account can be used in the supply of other financial services. As if the bank holds an equity ownership, it may have a representation on the board of directors and thus gain information which can be useful for its lending activities. A broader set of services also allows an integrated bank to design financing contracts better suited to the borrower and have more leverage over firms' managerial discretion. Finally, as a firm switches from bank financing to raising money on the capital markets, the firm can continue to be a customer of the same bank if the bank provides both lending and securities underwriting services.

Empirical research on the importance of these benefits is still in its early stages. Preliminary findings, however, seem to confirm that the close bank-firm relationship associated with integrated banking can be a source of important benefits to firms in terms of cost and availability of funding (Berger and Udell 1995; Petersen and Rajan 1994; Vander Venet 1999). Essentially, informational advantages associated with integrated banking can turn advantages for banks into advantages for customers as they get better (and cheaper) services. The degree to which these informational advantages can be realized and passed on depends of course on the degree of informational asymmetries: in economies where information is generally poor, close bank-firm relationships could in principle be very useful. At the same time, weak information on financial institutions may mean that close bank-firm relationships suffer from poor resource allocation due to the weak monitoring of banks themselves. The balance between these two effects will, among others, be influenced by the degree of competition in the financial sector (see further section III).

Economies of Scope and Scale

Economies of scope may arise both from the production of financial services and from their consumption. On the production side, economies of scope exist when the cost of one institution producing several products is less than the costs of several specialized firms producing the same bundle of products. Potential economies of scope arise whenever a significant fixed cost (information acquisition, staff, reputation, distribution facilities) can be shared across products and services (Baumol, Panzar and Willig 1981). Economies of scope on the product side arise from various factors related to informational access, distribution economies (Llewellyn 1996), and access to funding. Several forms of cost advantages have been identified (Saunders 1996):

⁵ Firms generally have information about their own creditworthiness and about relevant features of their investment projects that is not readily available to outsiders and/or can not credibly be conveyed to outsiders. The information gap can in part be corrected by contracting with an independent agent (rating agency, accounting firm, consulting firm) that can credibly convey relevant information to outsiders. Not all firms are able to reduce the information gap completely, however, and not all information can be credibly conveyed by third parties. The production of information may be too costly, for example, or it may require a continuous and extensive relationship with third parties. Financial intermediaries, especially banks, may be able to fill some of this gap.

- ***Information access and managing the client relationship.*** Instead of assessing a corporation on a separate basis for each financial transaction, an integrated financial institution incurs such information cost only once. If fixed costs in managing the client relationship (technology, information bases, etc) can be shared between services, economies may be derived by offering various financial products.
- ***Distribution and marketing economies.*** Technology and delivery channels established by the bank can be used to supply a wide range of services. Given the fixed costs of delivery systems, there is potential for scope economies. Several services can be marketed simultaneously, and the bank may gain both a marketing advantage and a reputational advantage in offering a wide range of services.
- ***Reputational and pecuniary capital.*** As long as there are spillovers in reputation, an integrated bank can use the reputation acquired in one business to enhance another. To the extent that it is easier to gain a reputation in some businesses than in others, and to the extent that there are fixed costs in gathering reputation, there may be advantages for integrated banks.
- ***Risk management.*** To the extent that risks on alternative products or services are not perfectly correlated, economies in risk management can be secured within a diversified portfolio of services and products (see further below). Moreover, an integrated bank that combines asset-intensive, lending business and fee-generating, securities business may be able to fund itself more easily than specialized banks that focus on one or the other.

On the consumption side, economies of scope may derive from lower search costs and lower product prices. These can include the following (Saunders 1996):

- ***Potential for lower search, information, monitoring and transaction costs.*** The consumer may feel more secure dealing with an institution with which it has already an ongoing relationship through the provision of another financial services.
- ***Potential for negotiating better deals.*** A wider relationship with a bank may strengthen a customer's position towards the bank and may enable him/her to negotiate better deals, either for individual or for services.
- ***Potential for lower product prices in a competitive environment.*** If a bank secures economies of scope through diversification, competitive markets should lead to a sharing of these benefits between the bank and the consumer.

Empirical work on economies of scale and scope has been hampered in that separating inputs from outputs for financial institutions is difficult and the “noise” in a bank’s reported costs and revenues may be considerable. In terms of economies of scale, most empirical studies have found that the bulk of scale economies are captured, but not fully exhausted, by the time a bank has \$2 to \$10 billion in assets. Early studies for US banks found that economies of scale were exhausted at relatively small output levels (see Clark 1988 for a review). More recently, studies including larger banks have found evidence of scale economies up to the \$ 2-10 billion asset range (Noulas, Ray and Miller 1990, Hunter, Timme and Yang 1990). Other empirical evidence for US banks actually suggests that economies of scale may start to decline for asset sizes between \$10 to \$25 billion (Berger, Hunter, and Timme 1993). The few tests which have been conducted for other countries largely confirm these results. In a study based on non-US data, Saunders and Walter (1994), and Vander Venet (1994) find economies of scale in loans of up to \$ 25 million. Lang and Welzel (1995, 1996) find scale economies among German universal banks up to a size of \$ 5 billion. Evidence for emerging countries is limited.

While there is some evidence on economies of scale, as of yet, there is little empirical evidence of scope economies, possibly because financial institutions can not or do not choose their optimal institutional structure. The bulk of studies for US banks concludes that economies of scope in banking, if at all present, are exhausted at very low levels of output (Berger, Hanweck and Humphrey 1987; Berger, Hunter and Timme 1993). Empirical studies on European banks have been inconclusive. For example, Lang and Welzel (1995, 1996) report the absence of scope economies in German universal banks, but find such economies in small cooperative banks. Vander Venet (1999) finds that universal banks are characterized by significant higher levels of operational efficiency relative to specialized banks and are also more profit efficient. Evidence for G-10 countries by Barth, Nolle and Rice (1997) suggests that loosening restrictions on banking activities might enhance bank performance—as statistically the return of equity is higher for banks in countries with no restrictions on securities and banking activities—thus suggesting some economies of scope.⁶

Increased Diversification and Lower Risk

An integrated bank may be more stable than a specialized bank because of diversification benefits. These benefits can arise from two sources. First, dis-intermediation—when firms bypass banks and raise money directly from public markets—will affect integrated banks less, because the decline in their lending business will be offset by an increase in their underwriting and placing business. This in turn may reduce banks' incentives to engage in riskier lending to maintain profits when faced with dis-intermediation. Secondly, if profits from different financial services are not highly correlated, then the total profits of an integrated bank will be more stable than that of banks specialized in a single product.

A recent cross-country study found that countries where banks were restricted in their securities and other non-credit activities, had a higher likelihood of experiencing a banking crisis (Barth, Caprio, Levine 1998). A recent study for the US found that, while banking organizations' securities subsidiaries tend to be riskier (higher volatility of profits) than banking affiliates, securities subsidiaries provided diversification benefits to the bank holding company because of the low return correlation between bank and securities subsidiaries (Kwan 1997).

3. Potential Risks Associated with Integrated Banking

Integrated banking can have risks due to too close links between banks and enterprises (John, John and Saunders 1994; Berlin and Saunders 1993). These risks include conflicts of interest, increased financial risks, and greater difficulty in monitoring integrated banks.⁷

Conflicts of Interest

Conflicts of interest are one of the major potential costs of permitting commercial banks to conduct securities business.⁸ As a consequence of the often long-term lending relationship between a

⁶ For a further overview of the different empirical studies see Vander Venet (1995).

⁷ An integrated banking system may also lead to greater market concentration and thus has the potential to reduce competition. This will be discussed in Section III.

⁸ See further Edwards (1979), Saunders (1985), Kelly (1985) and Benston (1990).

bank and a client firm, the bank is better informed than the public investor about a firm's soundness and prospects. This informational advantage may, however, be a double-edged sword. On the positive side, an integrated bank might be better positioned than an specialized investment bank to certify credibly the value of a security offered by the firm. On the negative side, an integrated banks might have a greater incentive and greater ability to take advantage of investors. Banks might abuse the trust of their customers and sell low quality securities to them without revealing risks, or raise lending rates to the same borrowers. Conflicts of interest concerns are important in the context of the banks' proprietary activities (i. e. when the bank acts on its own account), they are of less importance when the bank acts as an agent.

Empirical studies for the German (universal) banking system and for the US (pre- Glass-Steagall) have not found any evidence of abusive practices by commercial banks. Two extensive studies commissioned by the German government in the 1970s (Bueschgen 1970, Gessler Commission 1979) did not find substantial empirical support that banks were using their informational advantage on firms to the disadvantage of securities investors. For the US (pre-Glass-Steagall), if commercial banks had abused their informational advantages and sold low quality securities to investors than one would expect securities underwritten by commercial banks to have performed worse ex-post than similar securities underwritten by investment banks. This is, however, not the case. A study found that securities underwritten by commercial banks performed better than similar securities underwritten by investment banks (Kroszner and Rajan 1994). Their findings confirmed results of Ang and Richardson (1994) and Puri (1994).

Safety and Soundness and the Safety Net

A combination of securities and commercial banking activities can increase the risk of bank failure (for a more extensive discussion of these issues, see Saunders 1994). While this has at times happened in emerging markets as well as developed countries (e.g., Barings), empirical evidence does not confirm this possibility as a general proposition. An empirical analysis of bank failures in the 1920s in the US for example found that banks undertaking securities activities were no more likely to fail than banks with no connection to the securities business (White 1986). More generally, there is no strong evidence that the combination of financial activities increases risk, and they might well reduce risks. For example, Wall and Eisenbeis (1984), using accounting data at the industry level, find that there was a negative correlation between bank earnings and securities broker/dealer earnings over the 1970 to 1980s period.⁹

Nevertheless, safeguards can be necessary to avoid the transfer of explicit and implicit deposit insurance subsidies from the banking part of the institution to the securities part (Kane (1996) and Schwartz (1992) discuss in details how these transfers can occur). These safe-guards can take the form of market value accounting, timely monitoring and disclosure, more risk-sensitive capital requirements, firewalls between different type of operations, strong prompt corrective action procedures, including the closure of insolvent banks, and risk-based pricing of deposit insurance.

⁹ For a review of this literature see Brewer, Fortier, and Pavel (1989) and Benston (1990).

Monitoring and Supervision

Supervision of commercial banks and securities entities aims at different objectives. Supervision of commercial banks is aimed at systemic stability by protecting the net worth of the entity (and thus the rights of creditors, particularly depositors) as primary the bank will be intermediating third party money. In securities firms, regulators' objective is aimed at consumer protection. Regulations are geared to safeguard the investment made by investors through these firms: as long as investors can recover the assets they have invested in, insolvency of a securities firms does not need to present a systemic risk. Therefore, from a systemic stability point of view, supervisors would want to monitor the risks that arise from integrated banking as they relate to the safety net (above).

The combination of securities and commercial banking activities can make supervision and monitoring by the market of integrated banks more difficult as the securities business might have an impact on the banking business while the two activities can not easily be monitored separately.

Table 1: Overview of Benefits and Costs of Integrated Banking

	<i>Specific benefits/costs</i>	<i>Empirical Evidence/Comments</i>
<i>Potential Benefits:</i>		
Informational Advantages	<ul style="list-style-type: none"> • A bank can obtain more information about the firm via its various products offered; • Banks and firms have the possibility of developing a longer term relationship which may result in improved access to bank financing and better financing condition for the borrower. 	<ul style="list-style-type: none"> • Some preliminary empirical findings confirm that enhancement of a bank-firm relationship is a source of important benefits in terms of cost and availability of funding.
Economies of Scope	<p>Cost economies derived from:</p> <ul style="list-style-type: none"> • Information access; • Management of client relationship; • Distribution economies; • Marketing economies; • Reputational and Pecuniary Capital Economies; • Risk Management. <p>Economies on the consumer side:</p> <ul style="list-style-type: none"> • Potential for lower search, information, monitoring and transaction cost; • Potential for negotiating better deals; • Potential for lower product prices in a competitive environment; 	<ul style="list-style-type: none"> • Empirical evidence inconclusive • But there a revealed preference of financial institutions world-wide (e.g., Europe, US) to move toward integrated financial services provision
Economies of Scale	<ul style="list-style-type: none"> • Exploitation of scale economies from overhead in administration, back office operation, information technology and investment banking type operations; • Size may also help in exploiting scope economies; 	<ul style="list-style-type: none"> • Empirical evidence for the US suggests that the bulk of scale economies are captured by banks with \$100 to 200 million in assets; • Additional scale economies perhaps achievable up to \$1 billion. • Global trend toward consolidation suggests economies of scale
Risk Diversification	<ul style="list-style-type: none"> • Provides banks with higher profits in periods of disintermediation. • More stable income streams. 	<ul style="list-style-type: none"> • Some empirical evidence on benefits of risk diversification.
Increase in Revenue Generation	<ul style="list-style-type: none"> • Cross-selling of different services and products should allow banks to increase revenues. 	<ul style="list-style-type: none"> • No know empirical studies on this question. •
<i>Potential Costs:</i>		
Conflicts of Interest	<ul style="list-style-type: none"> • Banks might abuse the trust of their customers by selling low quality securities to them without revealing risks. 	<ul style="list-style-type: none"> • Empirical studies in the US and Germany have not found evidence of conflicts of interests that disadvantaged investors/customers.

	<i>Specific benefits/costs</i>	<i>Empirical Evidence/Comments</i>
<i>Potential Costs:</i>		
Reduction in Competition	<ul style="list-style-type: none"> • Integrated banking may reduce the scope for competition; 	<ul style="list-style-type: none"> • There may be a trade-off between safety and soundness considerations (higher franchise value of integrated banks) and a reduction in competition. A liberal entry policy may be able to counterweigh this disadvantage to a certain degree. Yet from a political economy point of view, it may be difficult to sustain a liberal entry policy if economic power (i. e. the banking system) is concentrated.
Concentration of Economic and Political Power	<ul style="list-style-type: none"> • Integrated banking may more likely lead to a concentration of economic and hence political power. 	<ul style="list-style-type: none"> • No specific evidence.
Monitoring	<ul style="list-style-type: none"> • More difficult to supervise. • More difficult for the market to monitor. 	<ul style="list-style-type: none"> • Some theoretical literature suggests more difficulty to supervise and worse corporate governance of integrated financial institutions.
Expansion of Safety Net	<ul style="list-style-type: none"> • Safety net of deposit taking institutions may be extended to investment banking activities of banks. 	<ul style="list-style-type: none"> • Can be limited with policy-measures such as market value accounting, risk sensitive insurance premia, and capital requirements and by adopting prompt corrective action procedures.

4. The Corporate Structure of Banking Organizations¹⁰

The extent to which the potential benefits of integrated banking can be realized depends largely on the organizational model banks are permitted to adopt for their commercial banking and securities activities. Three models can be distinguished: (i) the fully-integrated banking model; (ii) the bank-parent model; and (iii) the holding company model. A fourth corporate structure is one that forces the complete institutional separation between commercial and investment banking, the separate banking system model.

Integrated Banking Model

In countries where banks have the latitude to choose which corporate structure to adopt, most banks choose to locate the securities unit in a department of the bank, thereby adopting the integrated bank model (see also Annex Table 1).¹¹ Under the integrated banking model both commercial banking

¹⁰ See for a more extensive discussion: Santos (1997).

¹¹ There are, however, exceptions. In the UK, for example, securities markets' business is permitted in banks, but usually conducted through subsidiaries. Moreover, it should be noted that separation between legal entities can be overcome in practice: a separate legal entity can be set up to work actually as a department of the bank (with cost sharing for information technology or support functions for instances). Finally, consolidation of accounts of separate entities can achieve the same level of risk diversification benefits and increase the sources of revenues. Many banks in the US for example avail themselves of these options as they face legal limits to integration.

and securities activities are conducted within a single corporate entity. As a result, the integration of activities can be achieved at the lowest cost and resources can be shared among the organization's various departments with maximum flexibility allowing the bank to realize informational advantages and economies of scope and scale. Moreover, it increases banks' ability to diversify its sources of revenue. At the same time, safeguards for limiting conflicts of interest and extending the safety net are limited (Santos 1997; Saunders 1994).¹²

The Bank-Parent Company Model

In the bank-parent model, the securities business is undertaken by a subsidiary of the bank. As there is a legal separation between the bank and the securities unit, integration of the two activities can only partially be achieved and thus compared to the integrated banking model the potential for economies of scope is reduced. However, this model still allows for risk diversification, and the potential for higher revenues through cross-selling of financial services. The bank-parent model can reduce the potential for conflicts of interest and the extension of the safety net to the securities operations of the bank—provided regulations require firewalls between bank and its subsidiaries and prescribe arms-length transactions.

The Holding Company Model

In this model a holding company owns both the bank and the securities subsidiary, with legal separation between the two units, which limits the integration of commercial banking with securities activities. Different products are offered by separately capitalized and incorporated units of the conglomerate with each unit having its own management team, its own accounting record, and its own capital. This generally limits the exchange of information, personnel, or other inputs among the conglomerate's various units, thus reducing economies of scale and scope and weakening the bank's ability to exploit informational advantages synergies. At the same time, the holding company can act as a source of financial strength to the bank subsidiary. Finally, the holding company structure can limit risk diversification potential (as revenues generated by securities activities accrue to that unit and then to the holding company).¹³

An advantage of the bank holding company structure is that the potential for conflicts of interest is reduced. A further plus is that the extension of the safety net to the securities unit may be limited. The critical difference between the integrated bank and holding company models is that in the latter the securities subsidiary's capital is owned by the holding company, while in the former it is owned by the bank itself. The bank unit is thus insulated to a certain degree from the failure of securities business under arms-length transactions and firewalls as the holding company's liability is (theoretically) limited to its investment (capital) (see further Santos 1997).

These choices do, however, impose costs on the financial institution as these corporate structures may not necessarily coincide with the individual bank's preferred choice of corporate structure.

¹² Helfer (1997), Greenspan (1997), and Whalen (1996) discuss in detail the existence of a safety net subsidy through integrated banking.

¹³ Here the diversification gains are achieved at the holding company level and the holding company can also act as a source of strength to the bank subsidiary.

Table 2: Potential Benefits and Costs of Integrated Banking Can Be Realized through Various Corporate Structures

<i>Potential Benefits/Costs</i>	<i>Integrated Banking Model</i>	<i>Bank-Parent Model</i>	<i>Holding Company Model</i>	<i>Separate Banking System</i>
Informational Advantage	Can be realized to full extent.	May be reduced if bank-parent do not share information;	Severely reduced as units are restricted from exchange of information.	None.
Economies of scale and scope	Can be realized to full extent.	Somewhat reduced as operational separateness is introduced and activities are not fully integrated.	Reduced as operational separateness requires development and operation of separate units; moreover holding company increases costs of operation.	None.
Diversification of sources of revenue	Can be realized to full extent.	As profits accrue to the bank, revenue diversification can be realized at bank level.	Limited as revenues generated by securities activities accrue to that unit.	None.
Increase of revenue generation through cross-selling of products	Can be fully realized.	Can only be realized to extent that bank can use its outlets to cross-sell products;	Limited.	None.
Reduction in competition:	Potentially.	Potentially.	Potentially.	No.
Conflicts of interest	Limited safeguards.	Potential reduction in conflicts of interest.	Potential reduction in conflicts of interest.	No potential.
Extension of government safety net	Limited safeguards.	Dependent on existence of firewalls and requirements for arms-length transactions.	Bank unit is insulated to a certain degree from failure of securities business and holding company is limited as to extent of capital infusion it can provide to securities subsidiary.	Government safety net limited to "pure" deposit taking institutions.

5. The Role of Non-Bank Financial Institutions

Most corporations engage in some financial activities. These can involve trade financing, provisions of working capital, consumer finance, and other forms of financing. Most countries do not subject these types of financial activities to prudential regulation and supervision as long as the corporation does not take any deposit from the general public, but rather funds itself in wholesale and other markets where there are well-qualified and informed investors. Leasing companies, for example, are generally not regulated from a prudential point of view. Nor are corporations extending credit to their customers supervised. This can work satisfactorily, provided that financial information is abundant and properly disclosed, and the corporations engaging in the provision of financial services are properly governed and monitored. However, most countries do regulate some of the activities of these companies from a consumer protection and market-integrity point of view. Leasing companies and credit card corporations, for example, will typically have to satisfy certain disclosure rules to the consumer on each lease or credit.

There is a legitimate role for non-regulated, non-bank financial institutions, including finance companies. Most governments exert less oversight over non-bank financial intermediaries since these organizations do not directly participate in the payments system or are covered by deposit insurance. Nevertheless, there have been cases where failures of non-bank banking organization have led to an extension of the official safety net because authorities were concerned about systemic repercussions. Moreover, banks may engage in regulatory arbitrage (if non-banks deposit- or deposit substitute institutions face less stringent capital to asset regulations) and conduct their “riskier” business through these entities.¹⁴ Several financial crises, such as in East Asia and Japan, begun outside the commercial banking sector, but then spread to banks. Thus, some regulation and supervision of non-banks can be important. But, is important to distinguish different causes for concern.

Concerns often arise from the difficulty in distinguishing the functions of normal commercial banks from those performed by the type of non-bank financial institutions; in many countries, non-bank financial institutions emerged as a response to regulatory restrictions on commercial banks or banking activities. As a result the distinction between deposit-taking banks and these types of non-bank financial institutions may have become blurred in the eyes of the public and the authorities may consequently feel compelled to extend the safety net in case of financial uncertainty. Since the general motivation for the safety net is based on systemic consequences and degree of vulnerability to runs, it should be limited to deposit taking financial institutions. This in turn requires that there is a clear legal separation between deposit-taking financial institutions and other type of non-banking, non-deposit-taking financial institutions and that any deposit-taking financial institution is subject to the same prudential regulation and supervision as banking institutions. Regardless, “non-bank” financial institutions that take any type of deposits or deposit substitutes and make loans should be either subjected to banking regulation or forced to drop one of these activities, such as by converting to mutual fund status. Non-banks may be active in securities markets, in which case they will be covered by securities market legislation, or by the industry standards or regulations given the function they perform (e.g., insurance, contractual savings, etc.).

III. Competition/Contestability

The following subsection focuses on the role of competition in the financial sector and the tradeoffs between competition on one hand and safety, soundness and innovations considerations on the other hand. In particular it focused on the following questions:

- What is the preferred degree of competition in the financial sector?
- What instruments can be used to manage the degree of competition?
- What will the current process of consolidation in the financial sector globally mean for competitiveness and efficiency?
- What are the specific benefits and costs of foreign entry?
- What is the best framework for licensing new financial institutions?

¹⁴ Thailand is one recent experience where non-banks, i.e., finance companies, engage in riskier activities as they faced higher funding cost against the background of lower capital requirements.

1. Introduction

The issue of competition in the financial sector can not be looked upon in isolation, different perhaps from other sectors where unfettered competition is often the first best from efficiency, stability and growth perspectives. In the financial sector, the degree of competition requires balancing, among others, the following concerns: (i) franchise value, (ii) static and dynamic efficiency, (iii) ability to supervise a number of individual financial institutions, and (iv) rent-seeking.¹⁵

2. Instruments to Manage Competition and Influence the Level of Franchise Value

Cross-country experiences and theory show that there is a tradeoff between competition and safety and soundness considerations. Systems should not be “over”-competitive, that is, there needs to be adequate profitability for financial institutions, that is franchise value, in the system as the existence of future profits will help induce financial institutions to act prudently now. It has been found, for example, that the Mexican banking system after the large-scale privatization of 1991-2 was over-competitive (Gruben and McComb, 1996). Marginal costs exceeded marginal revenue during the 1992-1994, thus weakening capital positions and increasing incentives for risk-taking of banks, and thereby contributing to the financial instability resulting in the 1994/5 crisis.

Cross-country experience, and theory more generally, suggests that entry policies (not actual entry) matter most in determining the level of competition in a banking system (Vives, 1998). Next important is the degree of competition from all forms of financial intermediation (banking and non-banking) and through other forms of external finance. A competitive financial system thus does not necessarily require many financial institutions. A concentrated system can be competitive if contestable (it should be noted that contestability alone is not necessarily sufficient to achieve competition).¹⁶ Many European, the Canadian and other countries financial systems are considered quite competitive, yet they have a limited number of banks. But, competition from other financial institutions and through other forms of financial intermediation is strong in these markets. Moreover, financial institutions in these markets are faced with a credible threat of new entry as entry is allowed, subject to certain conditions, and the licensing process is a transparent one.

While entry policies are one important instrument to achieve the desired level of franchise value/competition and assure other safety and soundness objectives, using entry barriers alone to manage the level of competition can have important negative drawbacks (see Honohan and Stiglitz 1999). Specifically, limited entry may come with: (i) large rent-seeking; (ii) limited incentives for cost reduction and other efficiency improvements; and (iii) limited incentives for technological and other innovations. Moreover, entry has to be considered in relationship to exit. Inside and outside investors need to face the loss of their investment, and they and their managers need to see the possibility of bank failure, or exit from the industry, to encourage efficient and prudent behavior. Bank exit should

¹⁵ In many market-oriented economies, government restrictions upon economic activities give rise to rents (i. e., extra profits) of a variety of forms and often people are willing to compete for the rents. The term rent seeking describes the fact that economic agents are willing to put efforts into securing a monopoly or other government restrictions on market activities (as, for example, minimum or maximum prices). This rent seeking behavior absorbs large resources, redistributes wealth and imposes social costs. Ceilings on lending interest rates and consequent credit rationing lead to competitions for loans and/or high-cost banking operations. Some kinds of interest groups are more readily organized than others and these will be in a more advantageous position to see their interests protected and monopolies or other impediments to competition maintained.

¹⁶ Stiglitz (1987) has shown that potential competition may not be sufficient to discipline firms in an industry in the existence of sunk costs (costs that once expended cannot be recovered).

not be discouraged, especially not in the expansionary phase of the business cycle: not only will exit then not have systemic implications, but it will also serve to remind others that mistakes will be punished. Weak banks need to be resolved—which should include liquidating non-viable institutions—not only to quickly restore financial intermediation, but also to preserve incentives for prudent and efficient banking (see Section V).

Other instruments that countries have employed to manage competition and franchise value are: (i) minimum capital requirements for existing and new financial institutions, (ii) capital adequacy requirements (as a fraction of risk-weighted assets); (iii) ceilings on deposit rates; and (iv) limits on portfolio composition or lending activities. Each of these instruments has its own side effects, including rent-seeking, dis-intermediation, monitoring costs, etc. Most countries have used a combination of different tools at different times. The preferred combination depends on country circumstances, important among which are the quality of financial information and supervision, the complexity of the financial system, and the degree of recent structural change, including financial liberalization. Country experience suggests that simple tools, such as limits on risk exposures or total asset growth, may be preferable if the quality of financial information is weak, the capacity of the supervisory authority stretched, and the risk management capacity of banks limited. To be sure, limits will only be effective if penalties are enforced in case of violation.

Country experience also suggests limiting entry to allow an undercapitalized (domestic) banking system to recapitalize itself on a flow basis is fraught with many risks. In general, if banks are protected from depositor withdrawals (under an unlimited deposit guarantee) and their capital is close to zero, they will have incentives to gamble by investing in high risk assets as any losses will be covered (ultimately) by the taxpayer while the bank will get the upside. In a closed environment, these incentives to gamble can be greater as depositors have less choice to invest their savings and banks do not feel pressure from other banks.¹⁷ More generally, it risks perpetuating a closed financial system, with associated costs.¹⁸ While entry needs can not be free—and all countries maintain some limits—it would be best to set a firm time-table on opening up the system, made binding through domestic laws and regulations and possibly backed up through the WTO process for foreign banks. This would create a credible threat of entry for the existing banks in the system and leave no room for political wrangling.

3. Evidence on Competitiveness and Effects of Consolidation

Competition in the financial sector matters for static and dynamic efficiency. Empirical evidence indicates that x-inefficiencies (that is, inefficiencies due to poor use of inputs) in banking institutions are large (and actually dominate concerns over too large or too small financial institutions from an economies of scale point of view). This indicates that measures which induce financial institutions to

¹⁷ Moreover, a flow solution can only work if bank spreads can be increased to such an extent that banks have a good chance of regaining positive economic solvency in a relatively short period of time. But allowing spreads to widen runs the risk of increasing real lending rates to a level where even good borrowers begin to fail. If instead the burden is passed on primarily to depositors, in the form of lower negative deposit rates, there is danger of systemic disintermediation. Worse, overall bank efficiency can suffer where high spreads are allowed, since the rent from high spreads can easily be consumed through higher operating costs instead of being used to charge off bad debts and build up capital

¹⁸ If the economy indeed recovers, profitability for existing banks will rise and pressures will arise not to open up. If a quick economic recovery cannot be achieved, banks that have relied on the government safety net to stay afloat will strongly argue against entry as that may adversely affect their profitability and solvency. Either way, existing banks will resist opening up, which, given the often prevailing political economy, is likely successful.

act efficiently from a cost point of view are essential, important among which is the threat of competition.

In the US, allowing interstate branching enhanced competition, lowered costs and increased stability (Jayanathe and Strahan 1998). Studies on the effect of the European Union Single-Market Program (SMP - which harmonized entry and other regulations) on competition, showed that the SMP led to greater competition, both within the banking system, and through greater competition from other financial services providers, inside and outside the country (Gardener, et al., 1999). Financial innovation increased throughout EU-countries.

Increased competition and greater consolidation need not be inconsistent. Empirical evidence for the US, where a great number of bank mergers took place in the last decade, suggests that consolidation in the banking industry does not necessarily result in a reduction in competition (Berger, Demsetz, Strahan 1999). Studies indicate that the general trend towards consolidation in the US banking system in the last decade has been associated with improvements in profit efficiency, and diversification of risk (but so far little or no cost efficiency improvements; see Berger, et al 1999). The US evidence might be considered less relevant for other countries as the US banking system was characterized by many small banks (largely due to regulations) and a different institutional environment.

Evidence for some other countries confirms these results, however. The EU SMP saw both considerable consolidation within countries as well as increased competition. The SMP acted to enhance domestic financial reform efforts and was associated with both liberalization and re-regulation efforts (see Gardener 1999 and Vives 1999). The latter took the form of tighter capital adequacy and other prudential requirements, and more emphasis on supervision.

Reduced access to services as a result of consolidation has been another concern. Empirical work on the effects of bank consolidation on lending to small business is still in its early stages. Strahan and Weston (1998) find that given the existing pattern of mergers (i.e., mergers of the smallest banks), on average small business lending rises after a merger. Peek and Rosengreen (1998) find that the effect of a merger on lending may depend on the relative proportions of small business lending at the constituent banks which are combining. Berger et al. (1997) find that the static effects of consolidation which reduce small business lending are mostly offset by the reactions of other banks in the market, and in some cases also by refocusing efforts of the consolidating institutions themselves. It is not clear whether these results apply to emerging market economies as their institutional setting, laws and regulations differ considerably from those of developed economies.

Table 3: Competition

<i>Countries</i>	<i>Concentration Ratio (Share of 3 largest banks in banking system)</i>	<i>Minimum Capital Requirement</i>	<i>Economic Needs Test for New License (Convenience and needs of community test)</i>	<i>Openness to Foreign Competition (WTO)¹⁹</i>	<i>Openness to Foreign Competition in Practice²⁰</i>	<i>Share of number of Foreign Banks to total Banking System (end 1997)</i>	<i>Share of Foreign Banks' assets as percentage of total Banking System assets (end 1997)</i>
G 10 Countries							
Germany	35.2%	Universal banks: US \$ 5.6 million (Euro 5 million)	No	0.6	NA	30.3%	17.5%
Japan	16.0%	US\$ 8.7 million (Yen 1 billion)	Yes	0.8	NA	1.8%	0.4%
United Kingdom	34.9%	US \$ 5.6 million (Euro 5 million)	No	0.6	NA	35.1%	13.0%
United States	19.7%	NA	Yes	0.6	NA	9.0%	3.1%
Latin America							
Argentina	30.9%	US \$ 15 million	NA	0.8	NA	25.3%	19.4%
Chile	27.8%	US \$ 23.5 million	NA	0.2	NA	35.3%	12.3%
Mexico	37.8%	US \$ 16 million (Ps 160 million)	NA	0.4	NA	21.2%	6.9%
Asia & Pacific							
Hong Kong	55.2%	US \$ 19.5 million (HK \$ 150 million)	NA	0.6	4.58	29.5%	48.1%
India	38.0%	Universal banks: US \$ 23.5 million (Rp 1 billion)	No	0	2.18	17.2%	3.5%
Indonesia	35.2%		NA	0.6	3.10	42.9%	23.3%
Korea	16.3%	US \$ 85 million (Won 100 billion)	Yes	0.4	1.90	10.4%	11.7%
Malaysia	27.6%		NA	0.6	2.45	18.0%	23.0%
Philippines	33.4%	Universal banks: US\$ 115 million (P 4.5 billion) ²¹	NA	0.2	2.88	17.5%	36.8%
Thailand	46.8%	US \$ 270 million (Baht 1 billion)	NA	0.2	2.43	22.2%	10.6%

Source: World Bank data, unless otherwise indicated.

¹⁹ Source: Qian, Ying (1999). Scale: 0 to 1 with 1 most open.

²⁰ Scale: 1 most closed, 5 most open. Index is average of banking and securities indices of degree of openness, in practice.

²¹ Under discussion.

4. The Specific Benefits and Costs of Foreign Entry

Openness to foreign entry is an important element in determining the degree of contestability in the financial system (Levine 1996 and Claessens and Glaessner, 1998). Entry policies for foreign financial institutions are determined by a variety of domestic regulations, some of which can be bound in international agreements such as the WTO Financial Services Agreement of December 1997. Table 3 presents a comparison of the degree to which some key countries have committed themselves under the Financial Services Agreement to permitting foreign commercial presence in the banking system and insurance sector (see further Qian, 1999). On this index (ranging from closed, 0, to 1, completely open), Japan and Argentina score the highest, 0.8, followed by Germany, US, and the UK. At the lower end of the spectrum are Chile, the Philippines and Thailand with a score of 0.2.

While liberal entry to foreign banks potentially lowers the franchise value of (domestic) banking institutions, empirical evidence suggests that foreign entry can provide important benefits to the domestic banking system. A study of 2,000 banks (of which 500 foreign) in 80 countries shows that larger ownership share of the banking system is associated with reduced profitability and lower overall expenses of domestically-owned banks (Claessens, Demirguc-Kunt, Huizinga 1998). These results suggest that foreign bank entry improve the functioning of national banking markets, with positive welfare implications for banking customers. Openness to foreign competition also puts additional pressure on domestic firms to improve their productivity and services, and allows firms access to foreign technologies and ideas to help them raise efficiency.²² Argentina, Colombia, Hungary, Spain, Ireland, Portugal, and others both opened up internationally and deregulated rapidly domestically, and reaped substantial gains.²³

Moreover, cross-country experience indicates that increased foreign entry can bolster the framework for financial services provision: entry creates a constituency for improved regulation and supervision, better disclosure rules, and improvements in the framework for the provision of financial services. Openness also adds to the credibility of rules. EU-acceding countries, for example, consolidated their reform efforts and quickly aligned their regulatory regimes with those of the EU and other international best practice, while opening up to foreign entry (see Pastor, 1999 for the case of Spain).

Opening up to foreign competition need not imply that foreign banks will dominate. In the EU after the opening up of the systems to foreign competition, cross-border banking mergers and acquisitions were limited and the share of assets held by foreign-owned banks has not exceeded more than 15%-20% in many countries (Gardener et al. 1999.) And opening to foreign competition need not be complete to reap some of the benefits of foreign competition. Empirical work shows that it is the number of entrants which matters rather than their market share. This indicates that foreign banks affect local bank competition upon entry rather than after they have gained substantial market share.

Finally, from a stability point of view, it would be prudent to assure that there is sufficient diversity among foreign financial institutions in terms of their country of origin to avoid the risks

²² However, it should also be noted that there have also been cases of "bad" foreign bank entry, for example, the Bank of Credit and Commerce International, and Meridian banks.

²³ For reviews of the Argentine, Colombian, Greece and Portugal country experiences: see respectively Clarke, Cull, D'Amato (1999); Honahan (1999); and Steiner, Barajas, Salazar (1999).

of a shock to single home country affecting many foreign branches, including those operating in International Banking Facilities, in the country.²⁴

5. Licensing Process

The degree and ease of entry is determined by, among others, minimum capital requirements (in absolute numbers); limits on (foreign) ownership; fit and proper test of owners and managers; limits on the scope of permissible operations (e.g., limits on products); and other requirements. Some countries use economic needs test, but these do raise issues of transparency and can violate international agreements.

Licensing Process. Regardless of how entry criteria are defined, the licensing process of entry should be transparent. Many countries go as far as to publish their criteria/process for new bank applications. In any case, decisions made should be properly motivated and documented.

Minimum capital requirements. When using the minimum level of capital as a tool, it is important to explicitly consider the economies of financial intermediation, especially for specialized financial services (e.g., brokerage), but also for banks. Too high capital requirements can unnecessarily limit the number of economically viable financial institutions, which in turn will limit the (threat) of entry, with adverse effects on competition and efficiency.²⁵ Currently, minimum capital requirements in the EU are US \$ 5.6 million (Euro 5 million), in Italy US \$ 7 million (Euro 6.3 million), in Germany US \$ 5.6 million (Euro 5 million) and in Hongkong US \$ 19.5 million (HK\$ 150 million) (see Table 3).

Fit and Proper Test of Owners. Those who own equity in a bank need to have both the ability and the incentives to monitor the actions of their bank. Small shareholders, however, will tend to free-ride, so it is important that there are some large stakeholders, or strategic investors, who will take and bear the responsibility for running the bank. It is essential, of course that the identity of these owners be fully transparent to the market place and that these investors do not face any conflicts of interest. The quality of these strategic investors needs to be assured, especially if it leads to close links between banking and commerce.

Links between Financial and Non-financial Institutions. An aspect often associated with universal banking is the ownership of non-financial institutions by financial institutions. Links between financial institutions and non-financial corporations can have advantages, but also create problems. Ownership by financial institutions of non-financial institutions can enhance relationship banking, which can overcome some asymmetric information problems (see Allen and Gale, 1994 and Aoki 1994). They can however, also lead to conflicts of interest, non-market based lending, and other problems. Extensive ownership of banks and other financial institutions by a limited number of corporations is often not successful, and so-called financial industrial groups are prone to a variety of problems.

²⁴ This happened in Thailand when local branches of Japanese banks which were adversely affected at home reduced the supply of funds to Thai corporations. See also Peek and Rosengreen, 1998 for Japanese Banks in the U.S.

²⁵ The preferable minimum level capital also depends on the organization of financial services provision: where financial conglomerates are allowed, for example, there can be less than optimal supply of some financial services as economies of scope can prevent the emergence of independent suppliers of these services (there can also be over-supply if financial conglomerates cross-subsidize certain financial services). Allowing entry by international, specialized financial institutions can remedy this as they may be able to gain their economies of scale and scope from their operations outside the host country.

As a result, while most countries allow banks to own non-financial companies (only 9 countries out of 51 industrialized and emerging market economies surveyed by the Institute of International Bankers do not allow any investments), they stipulate some limits—related to the capital of the financial institution—and many require supervisory consultations to limit perverse incentives and assure risk diversification.

Many of the problems associated with ownership of financial institutions by corporations and other links arise however, from a lack of competition in the financial sector, lack of supervision, or generally distorted real or financial sectors. Examples include the financial conglomerates in Chile and other Latin American countries in the late 1970s/early 1980s; financial industrial groups in Russia; and the merchant banks in Korea which were owned by chaebols but weakly supervised. Many countries have then also no or few restrictions on ownership of financial institutions by non-financial firms—apart from supervisory review/approval—as they have competitive financial systems and good market and supervisory oversight. Others do but find these restrictions tricky to enforce. Yet in countries with concentrated ownership structures, it may be warranted to break ownership links between non-financial corporates and financial institutions to curb connected lending more effectively (i. e. minimize the risk that non-financial companies use their financial subsidiary as financing mechanisms) and introduce a paradigm shift.

Table 4: Overview of Instruments to Manage the Trade-off Between Competition, Safety and Other Considerations in Banking

<i>Instruments to Manage Competition²⁶</i>	<i>Effect on Level of Competition/ Contestability</i>	<i>Effect on Safety and Soundness Considerations</i>	<i>Empirical Evidence/Comments</i>
<u>Entry policy:</u> Capital requirements	<ul style="list-style-type: none"> • Too high capital requirements can limit the number of viable financial institutions with adverse effects on competition and efficiency. 	<ul style="list-style-type: none"> • As number of banks is reduced franchise value of banks increases. 	<ul style="list-style-type: none"> • In designing minimum capital requirements economies of scale are of importance; • Cross-country experience suggest that using limitation to permit an under-capitalized banking system to recapitalize itself on a flow basis is fraught with problems.
Fit and Proper Tests	<ul style="list-style-type: none"> • If it is used to ensure that strategic owners of banks have the ability to manage the bank, it has no adverse effect on the level of competition. • If it is used to prevent entry, it can have adverse effects on competition and efficiency. 	<ul style="list-style-type: none"> • If used to prevent entry, then franchise value of banks increases. 	<ul style="list-style-type: none"> • Important to ensure that owners are able to manage a bank.
Allowing Non-Financial Firms to Hold Financial Firms	<ul style="list-style-type: none"> • If it leads to non-market based lending than efficiency of system adversely affected. 	<ul style="list-style-type: none"> • If it leads to conflicts of interest and non-market based lending than it increases the risk of failure. 	<ul style="list-style-type: none"> • International experience suggests that financial industrial group structures are fraught with problems and often lead to inefficiencies and safety and soundness problems in the banking sector.
<u>Foreign Entry</u>	<ul style="list-style-type: none"> • Can have positive effects on competition and efficiency of financial institutions. 	<ul style="list-style-type: none"> • Will potentially adversely affect domestic banks franchise value. 	<ul style="list-style-type: none"> • Empirical evidence suggests that foreign competition puts additional pressure on domestic firms to improve their productivity and services and allows access to foreign technologies.
<u>Others:</u> Capital Adequacy Requirements	<ul style="list-style-type: none"> • Higher C/A requirements will have adverse effects on competition as they increase the cost of banking. 	<ul style="list-style-type: none"> • Higher C/A requirements will have positive effects on bank soundness as owners have higher incentive to act prudently since they have more to lose. 	<ul style="list-style-type: none"> • Higher C/A requirements than those recommended under the BIS guidelines may be warranted in countries with more volatile macro-economies and vulnerable to external shocks. • But, in the end, the key is responsible owners and market discipline.

²⁶ For further discussion see Honohan and Stiglitz 1999.

<i>Instruments to Manage Competition²⁷</i>	<i>Effect on Level of Competition/ Contestability</i>	<i>Effect on Safety and Soundness Considerations</i>	<i>Empirical Evidence/Comments</i>
Ceilings on Deposit Rates	<ul style="list-style-type: none"> • Adverse effect on competition. 	<ul style="list-style-type: none"> • Increases franchise value of financial institutions and thus provides them with increased incentives to act prudently. 	<ul style="list-style-type: none"> • May be warranted in countries where the supervisory and regulatory framework is weak and banks are thinly capitalized and have weak management capacity.
Limits on Portfolio composition/ Lending Activities	<ul style="list-style-type: none"> • Adverse effects on competition. 	<ul style="list-style-type: none"> • Increases franchise value of financial institutions and thus provides them with increased incentives to act prudently. 	<ul style="list-style-type: none"> • May be warranted in countries where the supervisory and regulatory framework is weak and banks are thinly capitalized and have weak management capacity.
<u>Other Considerations:</u> Consolidation	<ul style="list-style-type: none"> • Consolidation in the banking industry does not necessarily result in a reduction in competition. 	<ul style="list-style-type: none"> • Can enhance financial sector stability as large financial institutions can better diversify • But, risks leading to banks “too big to fail” 	<ul style="list-style-type: none"> • Empirical evidence in the US and the European Community suggests that consolidation in the banking industry enhanced competition.
Permitting Financial Institutions to Hold Equity Position in Non-financial Firms		<ul style="list-style-type: none"> • May lead to risk diversification which would provide banks with a more stable income stream resulting in an increase in franchise value. 	<ul style="list-style-type: none"> • Cross-country experience and theoretical work indicate that links between the non-financial sector and the financial sector may enhance relationship banking as it can overcome asymmetric information problems.

²⁷ For further discussion see Honohan and Stiglitz 1999.

IV. The Safety Net and Supervision²⁸

The safety net—defined broadly—has a bearing on the size and frequency of financial crises, the efficiency of institutions and general financial development. The design of the safety net relates to its necessary complement, i.e., supervision. The literature on safety nets for developing countries (including Kane (1999); Brock (1998); Garber (1997); Calomiris (1996); and Mishkin 1996) has focussed on the following issues:

- What are the main motivations for the safety net?
- What are the main components of a safety net?
- What are the tradeoffs between the scope of a safety net and the effects of financial sector efficiency and incentives?
- What is the best design of a safety net, particularly regarding deposit insurance?
- What are essential prerequisites for effective supervision and how these can best be achieved?
- What are the supervisory issues arising from multiple financial services being provided through a financial conglomerate versus separate entities?

1. Introduction

There are two main motivations for a safety net: (i) systemic consequences of a run on one or more banks; and (ii) protection of depositors against the failure of individual banks.

The systemic consequences' motivation arise as banks are considered to be special in two ways. First, they provide credit to other firms and manage the flow of payments throughout the economy. Disruptions in the credit supply and a breakdown of the payment system may have large spillover effects for the rest of the economy. Bank failures or losses in capital can lead to contractions in aggregate bank credit with large social costs to bank borrowers outside the banking system. Second, banks are especially prone to failure due to their high leverage, short-term funding structure and the fact that the value of their assets is difficult to discern. This information problem coupled with banks' demandable debt and sequential servicing feature (Calomiris and Kahn) (depositor withdrawals are serviced on a first come first serve basis and not on a pro rata basis), makes banking inherently fragile and susceptible to runs (Diamond and Dybvig 1983) where depositors overreact to information and withdraw funds even from (solvent) banks. Thus, small shocks to solvency may lead to costly systemic runs, where depositors possibly overreact to information and force the closure of solvent institutions.

The protection of small depositors' motivation arises because the combination of asymmetric information and limited liability structures creates room for the abuse of depositors by bank shareholders and managers. As small depositors lack the ability to monitor at low costs, bank supervisors, as the representatives of (small) depositors, will aim to prevent failure of individual financial institutions, which involves the use of the safety net.

The two main mechanisms by which authorities try to deal with these concerns are lender of last resort and deposit insurance facilities (besides the general regulatory and supervisory framework). Lender of last resort facilities are aimed at providing (solvent) banks that face rapid

²⁸ The following section draws heavily on Demirguc-Kunt, 1999; Demirguc-Kunt and Kane 1997; and Scott 1994 and 1995.

deposit withdrawal with the necessary liquidity. Deposit insurance is often put in place to mitigate the runs on (solvent) banks in times of a systemic bank uncertainty and bank failures and in that way protect (small) depositors (Diamond and Dybvig). Note that historically, deposit insurance was not often used as small depositors were often already protected from runs on commercial banks as they kept their savings in specialized financial institutions such as savings banks, postal banks, etc, which did not have the same liquidity risks.

These two motivations have very different implications for the need and design of an official safety net. Empirical evidence suggests—for example, during the banking panic in Chicago 1932 and recent financial turbulence in Mexico, Argentina and Chile—that banks and depositors are very able to distinguish weaker from stronger banks (Calomiris and Mason 1997, and Soledad and Schmukler, 1999). They will, in time of financial stress, provide liquidity only to the stronger ones, thus mitigating the need for official support on the basis of concerns about systemic consequences. Many now developed countries also did not have a safety net in the past. They relied, among others, on measures such as unlimited liability (Scotland), double liability (US) and market disciplining. As households and business were not protected from losses, they required banks to have high capital to asset ratios (capital to asset ratios in US banks were typically about 20 percent in the early 1900s). The general emphasis on systemic consequences might thus be overdone. In principle, countries need to ask whether there is a need for a large safety-net to begin with as it leads financial institutions to act imprudently and allocate resources inefficiently.

Regardless of its size, the existence of explicit and/or implicit deposit insurance tends to weaken market discipline over banks by weakening incentives of depositors and creditors to monitor banks' behavior. The costs are multiple: a subsidy to the owners of weak banks—as they can continue to attract deposits even when the bank is undercapitalized; reduced incentives for bank managers to limit costs and be efficient; and poor resources allocation as bank owners and managers will have incentives to invest in riskier projects. Examples are plentiful—from the S&L crisis in the US to the recent financial crisis in East Asian countries—where large, implicit (or explicit) government guarantees induced excessive risk-taking, and poor resource allocation.

2. The Main Components of a Safety Net and the Tradeoffs in the Scope of a Safety Net

The safety net generally consists of all or some of the following components: lender of last resort facilities, deposit insurance, access to payment systems, regulatory norms, supervisory policies and practices, intervention rules, insolvency-resolution policies and mechanisms, and implicit protection (e.g., through restrictions on competition). Safety nets tend to differ on the specific design of each element, the weight given to each element within the whole, the interaction between elements, and the institutional arrangements that sustain them.

The key objective of designing a safety net is to design it in such a way that its use is minimized, as that will also minimize costs for the tax payers and consumers of financial services. Since it is the overall safety net which determines the tradeoff between assuring safety/soundness and fostering efficient allocation of resources, multiple policies need to be employed. A well-functioning regulatory system for example will help minimize regulatory

forbearance,²⁹ reduce undue risk taking by banks, and foster sound banking practices, and in that way promote systemic solvency and stability at minimum costs (loss of efficiency). Since the expectation of ex-post recapitalization using government resources has been an important element of safety nets inducing imprudent behavior, another aspect is that bank restructuring needs to involve adequate burden sharing, in particular losses need to be absorbed by shareholders and large creditors first.³⁰

Other aspects of the safety net matter too for proper incentives. Access to deposit insurance, the payments system and lender of last resort facilities, for example, is often too wide and entails implicit subsidies. The lender of last resort function should be used only to alleviate short-term liquidity by lending at a penalty rate on good collateral. In most countries, access to these facilities is formally limited to regulated depository institutions, and only some countries allow access by non-bank financial institutions. Yet a number of countries have extended access to these facilities also to other financial institutions with little economic rationale and at very low costs. A better, institutionally isolation of these functions to deposit-taking financial institutions is thus necessary. This is especially the case when information regarding the quality of financial institutions' portfolios and capital adequacy positions is weak; and monitoring by the market—other financial institutions, creditors and depositors—is limited. In such cases, the risks that any liquidity support becomes solvency support is large, and the authorities better refrain from providing any support.

3. The Design of Deposit Insurance as Part of the Safety Net

As deposit insurance is often the most explicit part of the safety net, it is most susceptible to negative costs. There are complementary actions, however, that can reduce the negative side-effects of a government-operated, deposit insurance scheme: (i) the requirement to issue subordinated debt at regular intervals; (ii) private coinsurance requiring depositors to cover part of the losses if a bank fails; (iii) stock-holder bonding (effectively assuring liability of owners beyond that of their direct equity stake); (iv) narrow banking (deposit insurance is only provided to deposits that are invested in “relatively safe” money market securities); (v) capital adequacy requirements which vary by the degree of risk the financial institution undertakes; and (vi) a formally laid down framework for prompt corrective actions in weak banks. The exact efficiency and best blends of these instruments will vary by country depending, among others, on informational asymmetries, difficulty in enforcing contracts, political and other costs of regulators to enforce deposit insurance coverage limits at times of stress, and the nature of the “contract” between regulators and tax-payers. Demirguc-Kunt and Huizinga (1999) provide some empirical evidence of the effects of different financial safety net design features on market discipline; they find that explicit deposit insurance with higher coverage, and government funding reduce market discipline.

Regardless, institutional arrangements will be important in determining the relative costs/benefits of a safety net. Of particular importance here are (i) independence of supervisors, (ii) information-sharing among regulators, (iii) information disclosure to the market, (iv) market-discipline, (v) corporate governance of financial institutions, (vi) prompt corrective action and

²⁹ Supervisors that engage in regulatory forbearance do not apply appropriate disciplinary actions against financial institutions which violate prudential norms in place.

³⁰ Exit of weak banks is generally to be encouraged, but authorities need to use this tool carefully in times of systemic crisis; it may well be that the more it is used in normal times, the fewer will be the systemic crises.

(vi) appropriate funding.³¹ To limit costs, the deposit insurance agency needs to have access to supervisory information on a timely basis and the powers to intervene in weak financial institutions. Thus, the deposit insurance agency needs to be able to invoke sanctions prior to the financial institution running into irreparable insolvency problems. Under the US Federal Deposit Insurance Corporation Improvement Act (FDICIA), the intensity of supervision is linked to the level of capitalization of the banks. FDICIA stipulates a ladder of graduated responses dependent on the capital ratios of a banking organization. If the capital base of the institution falls below 10 percent, but is, above 8 percent, banks can only accept brokered deposits with FDIC approval. If capital falls below 8 percent, but is above six percent, supervisors have to impose the following sanctions/measures: suspension of dividends and management, require capital restoration plan, restrict asset growth, require approval from FDIC for acquisitions, branching and new activities and no brokered deposits. Finally, access to the deposit insurance should in all cases be limited to deposit-taking financial institutions as only the failure of those institutions may have systemic implication in certain situations.

There are many design-features of deposit insurance which are essential, but also country-specific. Some countries, e.g., Germany, have a deposit insurance scheme which is voluntary and privately-run. Private risk sharing arrangements, however, only work, if members can monitor each other and eject those members that jeopardize the provision of sufficient collective protection. If a private insurance scheme insures all banks in the system, and if insolvent banks are not ejected from coalitions that provide liquidity protection for solvent banks, the system cannot be credible in limiting moral hazard. Others, e.g., the Netherlands, have a collective guarantee mechanisms which is compulsory. In the United States prior to the Civil War, three states (Indiana, Ohio, and Iowa) successfully operated mutual insurance systems for member banks. These were later imitated by the New York Clearing House, and by other private clearing houses. Member banks were constrained by rules and credible monitoring arrangements that limited the riskiness of their debts. Enforceable rules requiring the pooling of risks during crises to solve liquidity problems ensured sufficient collective protection. The most effective element of the systems was that insolvent banks were ejected from the coalitions ex-post. All successful historical safety net systems revolved around credible arrangements for limiting moral hazard by clearly defining how losses incurred by members would be allocated and how violators would be punished.

Empirical evidence furthermore indicates that the adoption of deposit insurance in a crisis is unlikely to lead to increases in financial depth or other gains (Cull, 1998). Overall uncertainty tends to dominate during a financial crisis and the introduction of a deposit insurance does not help to reestablish confidence. On the contrary, there is evidence that introducing a deposit insurance in a financial crisis is associated with weak design and a further reduction in financial depth in the three following years. Adopting it when government credibility is high in contrast appears to have a positive effect on financial depth. A better approach might therefore be to introduce deposit insurance not during a crisis but at a later point in time, with if necessary a gradual transition from a general guarantee. And, in any case, the deposit insurance would need to be associated with (increased) powers of the supervisor on insurance agency to intervene in weak financial institutions, which should be developed beforehand.

³¹ The creation of deposit schemes with insufficient resources to deal with the problems can be disastrous as it became obvious during the S&L crisis in the US. If the deposit insurance fund does not have adequate resources to reimburse the losses of all insured depositors, regulatory forbearance instead of prompt corrective action is more likely. At the same time, a well-funded deposit insurance scheme increases moral hazard as bail-outs are more likely (see Demirguc-Kunt and Huizinga, 1999).

4. The Organization of the Supervisory Authority and Framework

Independence as the Most Important Prerequisite

The safety net is importantly determined by the regulatory framework which includes the supervisory authority. International experience, as embodied in the 25 Core principles, suggests that limiting the safety net requires a proper functioning of the supervisory authority, which in turn needs to be insulated against political pressures. Independence of the supervisory authority has in many developing countries been at the core of banking system and other financial crises. Thus, the supervisor need to reside in an agency with a high degree of independence from political interference. In most countries, supervision of credit institutions is part of the central bank, which is normally also the most independent agency. This arrangement is, however, not used everywhere. In about one-third of 70 countries reviewed, supervisory functions of credit institutions are conducted in agencies separate from the central bank (See Annex Table 3). Securities markets are generally supervised through specialized institutions. Regardless of institutional arrangement, the independence of the supervisor and its regulatory functions is key to ensure a proper functioning of the supervisory authority. And adequate information sharing between the monetary authority which has access to bank data and the supervisory authority is necessary.

The Institutional Structure of Supervision of Different Financial Services

The preferred institutional structure for regulation and supervision of different types of financial services involves an evaluation of many issues. These include the accountability of regulatory agencies, the direct costs of agencies, the merit of a degree of competition in regulation, costs imposed on regulated firms by multiple versus one regulator, possible impairment of innovation, regulatory capture, etc.

Countries have responded differently to the associated tradeoffs, and are using a variety of institutional structures. In terms of division of responsibility, for example, out of 70 countries surveyed by the Institute of International Bankers in 1998, 44 use specialist agencies for banking, securities markets and insurance, 19 combine two areas and 7 combine all three areas. Two criteria seem particularly important in determining institutional supervisory structures: (i) the objectives of regulation; and (ii) type of regulatory approach adopted (single or multiple regulatory agency).

Regulation has several dimensions and possible objectives: (i) minimize systemic risk, (ii) prudential, i. e., motivate bank owners and managers to behave soundly and prudently, (iii) consumer protection, (iv) preservation of integrity of financial markets, and (iv) ensure adequate franchise value (competition). These objectives differ by type of financial services and type of financial institutions. Securities markets regulators are often mostly concerned with the conduct of business to preserve the integrity of financial markets—for wholesale transactions—and to assure consumer protection—for retail transactions. Competitiveness issues need not be part of the financial regulator, but could be covered by a competition authority. Furthermore, many regulatory aspects are typically the domain of self-regulatory issues.

Box 1: The arguments for and against a Single Supervisory Agency³²

While there is a growing number of Single Supervisory Agency (SSA), SSAs are still the exception, only 8—Austria, UK, Denmark, Sweden, Norway, Malta, Korea, and Japan—out of 70 countries surveyed. Most SSA are also very recent and in some recent cases, the establishment of a SSA was in part a response to various financial sector problems, such as in Korea, and does not necessarily represent an independent development. The recent experience with SSA make it difficult to judge their costs and benefits.

Nevertheless, there are good arguments for a SSA:

- Blurring of boundaries in financial services, with more sophisticated financial services and various links between capital markets, credit market and insurance instruments and financial institutions.
- The associated emergence of financial conglomerates, spurred by economies of scale and scope.
- Economies of scale and scope in regulation and supervision and avoidance of information sharing and coordination problems.
- Establishing a SSA can be a way of creating an institutional setup which is more independent, professional and politically insulated than existing supervisors.

The above should be balanced against the following arguments:

- The need for supervision and regulation arises from different purposes/objectives: consumer protection; competitiveness/anti-trust; safety and soundness (systemic consequences); and underserved sectors/consumers. The nature, and methods of regulation/supervision are likely to differ by these purposes, making a SSA, at least on the argument of economies of scale and scope, less attractive to cover all objectives. A SSA might create/increase the impression that a large range of financial institutions is covered for systemic reasons.
- A SSA may be too difficult to manage and politically too powerful to maintain its independence. In other contexts, specialization and competition between regulators has been advocated as a means to avoid regulatory capture.

Supervising Financial Conglomerates

Financial conglomerates, defined as any group of companies under common control whose exclusive or predominant activities consist of providing financial services in at least two different financial sectors (banking, securities, insurance), pose special challenges to the regulatory and supervisory authority. The blurring of lines between institutions with different primary regulators and supervisors may mean that similar activities are treated differently or that some activities of the conglomerate remain unsupervised (supervisory gap). That creates incentives for regulatory arbitrage and can thwart the intent for regulation. Conglomerates can also obscure the limits of depositor protection and result in de facto extension of the safety net to other classes of financial sector liabilities (see section II). Moreover, the consolidated position of a financial conglomerate may not be transparent due to complex intra-group exposures which may have adverse effect on the health of the banking entity (contagion). Finally, autonomy of each entity in the conglomerate may be reduced and conflict of interest increased.

The main objectives of conglomerate regulation and supervision have therefore been identified as three-fold (see further Scott, 1994 and 1995): (i) to minimize potential contagion within the group; (ii) to promote transparent group structures and finances; (iii) to promote the accountability of directors and managers of individual regulated entities. The emerging, best practice approach is the consolidated approach to supervision. This means that the components parts of the financial conglomerate are supervised on a separate basis—to the extent that they fall

³² Taylor and Fleming 1999.

under regulation—but a prudential assessment is made from a group-wide perspective to ensure that problems in a group entity will not harm the banking entity.

Consolidated supervision requires a number of separate ingredients: Consolidated financial statements able to adequately capture different financial businesses; consolidated regulations (capital adequacy ratio, single credit limits, concentration, etc.) able to capture very different types of risks; appropriate control structure for the conglomerates, power to "monitor" unregulated entities within the conglomerates, exchange of information among supervisors, and the appointment of a lead supervisor if there are several supervisors.

Table 5: Components of the Safety Net

<i>Components of the Safety Net</i>	<i>Key Design Features/Institutional Arrangements</i>	<i>Empirical Evidence/Comments</i>
Lender of Last Resort facility	<ul style="list-style-type: none"> Limited to liquidity support provided at penalty rates. 	<ul style="list-style-type: none"> LLOR functions need to be housed in an agency with a high degree of independence to avoid liquidity support turning into solvency support.
Payment System	<ul style="list-style-type: none"> An inefficient real time gross payment system operated by the government may turn liquidity support of government into solvency support and expose government to potentially high contingent liabilities. 	
Deposit Insurance	<ul style="list-style-type: none"> Deposit insurance can create perverse incentives that result in increased risk taking by banks. To minimize moral hazard problem linked to deposit insurance: <ol style="list-style-type: none"> Coverage should be limited to deposit taking institutions and amount covered should be limited to small deposits to preserve market discipline by large depositors (generally, coverage should not exceed one to two times per capita income). Risk premia should be risk sensitive, i.e., be in line with risk exposure of financial institution. Can be operated privately and by the government. Institutional arrangement need to be such that (a) deposit insurance agency is independent agency/organization; (b) separated from LOLR function, (c) has access to financial information of insured institutions in a timely manner; (d) tools to discipline and intervene in institutions before capital falls below zero. 	<ul style="list-style-type: none"> There is empirical evidence that large deposit insurance protection has intensified financial sector crises (e.g., S & L crisis in the US). Deposit insurance needs to be designed in such a way to limit these perverse incentives on bank's risk taking and preserve market discipline for some classes of depositors. Empirical evidence indicates that adoption of deposit insurance during crisis is unlikely to lead to increase in financial depth. Complementary actions can reduce moral hazard implication (besides design features) of a government operated system: <ol style="list-style-type: none"> Requirement to issue sub-ordinated debt in regular intervals. Narrow banking. Coinsurance. Stock holder bonding.
Regulatory Norms	<ul style="list-style-type: none"> Prudential regulations that limit banks' risk taking for example capital adequacy, exposure limits, limits on lending to certain sectors (i. e. real estate). Limits on deposit interest rates. 	<ul style="list-style-type: none"> Cross-country experience suggests that deposit rate ceilings can play a role in countries where (implicit or explicit) deposit insurance exists but where the supervisory and regulatory framework is weak and market discipline non-existent as depositors (correctly or incorrectly) expect to be bailed out in case of failures. In such a case, weak banks can adversely affect healthy banks by bidding up deposit rates to attract depositors.
Supervisory Policies/ Enforcement/Exit Mechanism	<ul style="list-style-type: none"> Independent supervisory agency that has the legal means and the capacity to enforce the regulatory framework. Enforcement only credible if supervisory authority has authority and means to intervene in and ultimately close weak institutions before capital base of bank has been completely eroded. 	

<i>Components of the Safety Net</i>	<i>Key Design Features/Institutional Arrangements</i>	<i>Empirical Evidence/Comments</i>
Market Discipline	<ul style="list-style-type: none"> • Existence of explicit or implicit deposit insurance scheme weakens market discipline. Nevertheless, adverse effects on market discipline can be limited by <ul style="list-style-type: none"> • Exposing certain classes of depositors to losses, and • Implementing a disclosure regime that require banks to issue in a timely fashion information on their financial standing and risk exposure to certain sectors and off-balance sheet activities. 	<ul style="list-style-type: none"> • Empirical evidence suggests that even with incomplete information depositors can distinguish correctly between sound and weak banks and can enforce market discipline by shifting their deposits to the institutions that they perceive as more sound.

V. The Incentive Framework for Financial Institutions³³

Beyond the basic infrastructure, the behavior of the actors in the financial system—the providers ultimate users of funds and the intermediaries—depends crucially on the incentives they face. This in turn influences financial institutions' efficiency, productive role in the allocation of resources, impact of growth and overall financial sector stability. Levine, Loayza, Beck (1999), for example, have recently linked the broader operating environment of financial institutions (the legal and accounting framework) to economic growth and show that reforms in the broader framework boost financial development and accelerate economic growth.

The following section reviews how the authorities should think about installing and operating a regulatory system that is incentive compatible, that is, encourages prudent behavior, and which financial sector entities should be subject to that framework. In particular it attempts to answer the following questions:

- What are the main pillars of the incentive framework in which financial institutions operate and how can the robustness of the financial system to adverse shocks be increased?
- To what type of financial institutions should that regulatory framework be applied and why?
- Does the combination of commercial and investment banking activities make it harder for market participants to monitor the performance of financial institutions?

1. Introduction

The regulatory and supervisory framework, along with accounting and auditing rules, disclosure requirements and the existence of a deposit insurance scheme, plays a crucial role in defining the incentive framework in which financial institutions operate. In particular, the extent to which excessive risk taking is curbed by regulation, penalized by the supervisory authority as well as by the market greatly influence the behavior of financial institutions. There are three potential groups that can monitor bank managers, namely the owners, the market, and supervisors. What can the government do to ensure that each exerts pressure on managers to engage in prudent risk taking? In industrial economies, authorities erect some entry barriers; enforce modest capital requirements, usually above the BIS minimum of 8% (capital to risk-weighted assets); intermediaries face market discipline in money and capital markets, which usually are uncovered by explicit government guarantees; and are supervised by one or more government agencies. Industrial country authorities have tended to permit bank exit, though banks still have engaged in excessive expansions that have caused systemic difficulties.

In developing and transitional economies, where risks are greater due to the small and often more concentrated economies, where shocks often are larger and volatility is greater, and where the market's ability to monitor banks is hampered by poor information, governments need to enhance the ability and incentives of these three potential groups.

³³ This section draws heavily on World Bank, 1997.

2. The Regulatory and Incentive Framework as a Means to Increase the Financial Sector's Resiliency to Adverse Shocks

Incentive Structure of Owners, Creditors and Other Claim-holders

Those who own equity in a bank in principle have both the ability and the incentive to monitor the actions of their bank. They tend to provide effective self-regulation when they have much at risk, either in the form of capital and/or future expected profits. Moreover, well capitalized banks are usually better monitored by their shareholders. Small shareholders, however, will tend to free-ride, so it is important that government make sure that there are some large stakeholders, or strategic investors, who will take and bear the responsibility for running the bank. Inside and outside investors need to face the loss of their investment, and they and their managers need to see the possibility of bank failure, or exit from the industry, to encourage prudent behavior.

Some emerging economies have raised minimum capital ratios above that for most industrial economies to take into account the riskier environment in which bank operate and the difficulty in measuring the economic net worth of a bank using back-ward looking accounting measures. In Argentina, for example, the minimum capital adequacy requirement is 11.5%, with higher requirements for banks engaging in riskier activities and weaker risk management capacity; the average actual capital adequacy ratio in Argentina for example was close to 16% in 1997. Furthermore, banks in Argentina are subject to high liquidity requirements. Singapore also has higher capital adequacy requirements (12%). Moreover, most banks in countries with 8% capital adequacy requirements have capital adequacy ratios which greatly exceed those: the average capital adequacy ratio in the US, for example, is about 12%.

Table 6: Regulatory Framework

Countries	Level of Minimum Capital Adequacy requirements (percentage end 1998)	Of which tier 1 and tier 2 (%)		Loan Classification Requirements – (Number of Days after which loan has to be classified as NPL)	Provisioning requirements for loans classified as non-performing			Limit on Risk Exposure: Liquidity Ratio (% of assets to be held against deposits)	Limit on Risk Exposure: Forex (% of forex assets to be held)	Single Exposure Limit (% of capital)
		Tier 1	Tier 2		Sub Standard	Doubtful	Loss			
<i>G 10 Countries</i>										
Germany	8%			At bank's discretion						25% of tier 1 capital
Japan	8%	4%	4%	At bank's discretion	a.b.d	50%	100%	No legal limit	Part of market risk	20% of tier 1 capital
United Kingdom	8%	4%	4%	At bank's discretion	At bank's discretion			No legal limit	No limit	25% of tier 1 capital
United States	8% (strongly recommended to go beyond)	4%	4%	90	At bank's discretion, with input from OCC			3% for deposit accounts deemed as net transaction accounts, 0% for all other liabilities	Not a practical concern, given predominance of US\$ in US banking activity	Not secured: 15% of capital and surplus. An additional 10% for loans fully secured by readily marketable collateral
<i>Latin America</i>										
Argentina	11.5%	No limit	Not more than 100% of tier 1	After 90 days, considered problem loan. After 180 days considered high risk /difficult recovery	25%	50%	100%	20% on liabilities up to 89 days, 15% for 90-179; 10% for 180-365; and 0 for over 365 days. Approx. 9.7% additional as Repos.	Watched closely	25% of tier 1 capital
Mexico	8%	No fixed ratio. Subject to supervision of the Supervisory Authority (Comision Nacional Bancaria)		90 days for commercial loans; 180 days for mortgages	20%	60%	100%	Liquidity ratio determined as percentage of total bank liabilities to total banking system liabilities multiplied by 12 billion pesos. (Aug. 1998).	15% in US\$ plus an additional 2% in any and all other currencies	10% of capital for a single person and 30% for corporate indebtedness.
Chile	8%	5.75%	2.25%	90	20%	60%	90%	9% on demand, 3.6% on time	Net open position must not exceed 20% of capital	5% of capital and up to 25% of capital in cases of creditworthy bank guarantees

Countries	Level of Minimum Capital Adequacy requirements (percentage end 1998)	Of which tier 1 and tier 2 (%)		Loan Classification Requirements – (Number of Days after which loan has to be classified as NPL)	Provisioning requirements for loans classified as non-performing			Limit on Risk Exposure: Liquidity Ratio (% of assets to be held against deposits)	Limit on Risk Exposure: Forex (% of forex assets to be held)	Single Exposure Limit (% of capital)
		Tier 1	Tier 2		Sub Standard	Doubtful	Loss			
Asia & Pacific										
Hong Kong	8%	4%	4%	90	At bank's discretion			25% of liabilities	Watched closely by HKMA	25% of capital base
India	8%	No limit	Not more than 100% of tier 1	210	10%	20 to 50% of sec.	100%	Minimum cash balance of 11% of time, demand deposits; statutory 25% of time, demand deposits.	Not allowed, must square daily.	Individual loans: At bank's discretion. Corporate: 25% of capital funds. Group: 50% of bank's capital funds
Indonesia	8%	4%	4%	90	15%	50%	100%	5%	Net open position less than 20% of capital; 25% maximum exposure limit for individual currency	85%
Korea	8%	No limit	Up to 100% of tier 1 capital	180	20%	75%	100%	5% on demand, 2% on time	20% of capital	45% of capital
Malaysia	8%	8%	Not eligible	180	No	50%	100%	15%	No restrictions	
Philippines	10%	10%	Not eligible	180	25%	50%	100%	15%	No more than 15% of equity	25% of capital, plus 15% provided the loan is adequately secured by real estate mortgage or the assignment of readily marketable bonds or other high grade securities
Thailand	8.5%	4.25	4.25%	90	20%	50%	100%	6%	Net long 20% of tier 1 capital. Net short 15% of tier 1 capital	25% of tier 1 capital

Source: World Bank Data.

Even then, capital adequacy will, by nature, always be a back-ward looking accounting indicator of the true solvency of the financial institution. Some banks with high measured capital have become insolvent in short periods of time³⁴, even in economies with good accounting standards and practices. The increased incentives to engage in excessive risk-taking when the capital adequacy position is weakened make it all the more important not just to rely on accounting capital adequacy alone. Countries have applied one or more of the following measures (see Table 5 for an overview of prudential regulations across countries): limiting entry or otherwise raising franchise value (future profitability), which can be collected only by banks that remain open; enhancing the liability of directors and shareholders, as the New Zealand authorities have undertaken; and requiring the issuance of sub-ordinated debt. Some countries have also enhanced liability beyond current capital levels by applying stiff penalties when bankers violate regulations or agreements with supervisors as to how they will take and monitor risks.³⁵ Developing country authorities need to choose (at least) one of these additional methods for improving the incentives confronting bank owners to behave prudently. While some of these methods may be relatively blunt, the costs of not using them can be quite high.

Incentive Structure of Market Participants

Market participants, principally those who enter into a creditor relationship with a bank, will serve to monitor and discipline it if they have the ability and the incentives. The ability to monitor banks depends on the reliability and range of information available. The starting point therefore is adequate accounting standards and practices. Authorities in some countries recently have put in place extensive disclosure requirements backed up by enhanced liability (New Zealand), mandatory ratings by at least two private rating agencies (Chile), and an online credit reporting system (Argentina). Beyond information, creditors need incentives to monitor, in the form of the assurance that they will be allowed to suffer losses. Although small depositors are unlikely to be good monitors of banks, large debt holders have a much greater potential to fulfill this role. At the very least, large debt holders need to be reminded that they are not covered by any explicit or implicit deposit insurance scheme. Mandating that banks periodically issue large blocks of uninsured, subordinated debt, as recently instituted in Argentina, could in some circumstances further enhance market monitoring (Calomiris 1997), and also creates a class of future bank owners; if the current owners fail in ensuring a safe and sound bank, the subordinated debt holders can take over the bank. The incentives of subordinated debt holders may thus be appropriately balanced.

Incentive Structure of Supervisors

Although owners and markets can be motivated to provide oversight, banks, given their special nature, also are subject to government supervision. Historically, bank supervision in developing and transitional economies was oriented to ensuring compliance with government directives on credit allocation. Though lagging relative to other parts of financial reform programs, authorities in most developing countries have moved to engage in prudential supervision.

³⁴ In a world of derivatives, balance sheets can be altered in minutes.

³⁵ In evaluating market risk, recently, supervisors around the world have moved to assessing the quality of the risk management tools bank use, rather than the actual positions. Banks are then fined if they violate risk management arrangements ex-post.

Less attention has been devoted to providing supervisors the incentives both to monitor better and to take actions based on this effort. If there are no incentives to monitor, and thus no consequences for banks for violating a regulatory framework, then it will be completely ineffective. One way to promote better supervision is to give authorities better incentives. In many countries supervisors are paid poorly relative to their counterparts in banks. At the very least, low pay makes it difficult to attract qualified personnel, and may negate the effects of even the best training programs as skilled supervisors move to the banking sector. Moreover, the lure of eventual high paying jobs leaves open a form of corruption: less rigorous supervision now in exchange for a lucrative salary later. This disincentive for effective supervision can only be reduced by raising supervisory pay reasonably close to private sector limits.

Another approach is to create a 'bonded regulator,' that is paying supervisors a high salary, with a large part of compensation deferred and held as a bond, out of which deductions could be taken depending on the outcome in the banking sector.³⁶ Although this system worked successfully in the United States (the Suffolk banking system, 1820s to the 1850), there is no recent experience to cite.³⁷ Another complementary policy can be to limit the possibility of supervisors to switch to the private sector: in the US, for example, bank supervisors above a certain level can not take a job with the commercial bank they have supervised until a period of 12 months or more after they leave the supervisory agency.

Another model is to tie the hand of supervisors and lay down the course of action to be followed. In the context of dealing with weak banks, it has become increasingly common to recommend that countries adopt the 'prompt, corrective action and structured, early intervention' approach analogous to that embodied in U.S. legislation. Structured early intervention calls for (i) higher capital; (ii) structured, pre-specified, publicly announced responses by regulators triggered by decreases in a bank's performance (such as capital ratios) below established numbers; (iv) mandatory resolution of a capital depleted bank at a pre-specified point when capital is still positive; and (v) market value accounting and reporting of capital. While this approach appears to have yielded promising results in the U.S. so far it is by no means certain that this model either works at all times or can be exported to other countries. Even if enacted, governments may be tempted to re-write the rules in tough times, as in Japan in 1997-8 (deferring scheduled deregulation) and in the U.S. in the early 1980s (replacing GAAP for S & Ls with less stringent accounting standards). And opponents of these rules argues that authorities could be hampered by a loss of discretion.

³⁶ Bank officers were also routinely bonded in mid-19th century US.

³⁷ See for information on the Suffolk banking system: Rolnik, Smith and Weber (1998) and Calomiris and Kahn 1996.

**Table 7: The Incentive Framework for Financial Institutions
As a Means to Safe and Sound Banking**

	<i>Tools</i>	<i>Empirical Evidence/Comments</i>
Owners	<ul style="list-style-type: none"> • Capital adequacy requirements. • Liability, including civil and criminal penalties for violations and inadequate governance • Future profitability, franchise value 	<ul style="list-style-type: none"> • As developing countries face greater (macro)-risk and are more vulnerable to external shocks, countries need to go beyond industrialized countries' frameworks. These can be done by: <ol style="list-style-type: none"> i. Raising c/a requirements beyond those in industrialized countries (i.e. Argentina uses 11.5%). ii. Credible threat of facing stiff penalties for violations of regulations. iii. Enhancing liabilities of directors and shareholders (double liability).
Market Participants	<ul style="list-style-type: none"> • Requirements for financial institutions to disclose information on their financial situation and exposure to risks. • Mandatory ratings by rating agencies. • Online credit reporting system. • Requirements for financial institution to issue in regular intervals subordinated debt. 	<ul style="list-style-type: none"> • Market participants need incentives to monitor financial institutions. Thus, to preserve market discipline, a group of depositors (i. e., large deposit holders and creditors) needs to credible face the threat of losses if an institution fails.
Supervisors	<ul style="list-style-type: none"> • Independent supervisory agency. • Prompt corrective action and structured early intervention which limit supervisory discretion and is aimed at establishing clear criteria when and how a supervisory agency has to react to violation of the prudential framework by financial institutions and ensuring that financial institutions are being intervened in before their capital base is completely depleted. 	<ul style="list-style-type: none"> • To attract qualified personnel and ensure that supervisors have proper incentives to monitor financial institutions, their pay scale need to be close to that prevalent in the banking industry. Relative similar pay structures will also limit the potential for conflicts of interest from the banks supervisors point of view: less rigorous supervision now in exchange for a lucrative salary later.

Annex Table 1: Permissible Activities for Banking Organizations in Various Financial Centers

Country	Securities ¹	Insurance ²	Real Estate ³	Bank Investments in Industrial Firms ⁴	Industrial Firm Investment in Banks
<i>G-10 countries</i>					
<i>Belgium</i>	Permitted	Permitted through subsidiaries	Generally limited to holding bank premises	Single qualifying holding may not exceed 15% of bank's own funds and such holdings on an aggregate basis may not exceed 45% of own funds	Permitted, but subject to prior approval of authorities
<i>Canada</i>	Permitted through subsidiaries	Permitted through subsidiaries	Permitted through subsidiaries	Permitted up to 10% interest in industrial firm	Permitted to hold up to 10% interest
<i>France</i>	Permitted	Permitted; usually through subsidiaries	Permitted	Permitted, but limited to 15% of the bank's capital; in the aggregate limited to 60% of the bank's capital	Not prohibited
<i>Germany</i>	Permitted	Permitted, but only through insurance subsidiaries	Permitted, but subject to limits based on the bank's capital; unlimited through subsidiaries	Permitted, but limited to 15% of the bank's capital; in the aggregate limited to 60% of the bank's capital	Permitted, subject to regulatory consent based on the suitability of the shareholder
<i>Italy</i>	Permitted	Limited to 10% of own funds for each insurance company and 20% aggregate investment in insurance companies	Generally limited to holding bank premises	Permitted, up to 15% of the bank's capital, subject to approval of the Bank Italy	Permitted, up to 15% of shares of the bank, subject to the approval of the Bank of Italy
<i>Japan</i>	Permitted through subsidiaries, but not for equity securities for the time being ⁵	Not permitted ⁶	Generally limited to holding bank premises	Limited to holding 5% interest ⁷	Permitted, provided total investment does not exceed investing firm's capital or net assets

Country	Securities ¹	Insurance ²	Real Estate ³	Bank Investments in Industrial Firms ⁴	Industrial Firm Investment in Banks
<i>Netherlands</i>	Permitted	Permitted through subsidiaries	Permitted	Subject to regulatory approval for voting shares in excess of 10%	Subject to regulatory approval for voting shares in excess of 5%
<i>Sweden</i>	Permitted	Permitted	Generally limited to holding banking premises	Limited	Not prohibited, but such investments are generally not made
<i>Switzerland</i>	Permitted through specific license as securities dealer	Permitted through subsidiaries	Permitted	Permitted	Not prohibited, but such investments are generally not made
<i>United Kingdom</i>	Permitted; usually conducted through subsidiaries	Permitted through subsidiaries	Permitted	Permitted, subject to supervisory consultations	No statutory prohibition, but controlling investments by industrial firms in major firms in major banks are not favored
<i>United States</i>	Permitted corporate securities underwriting and dealing activities must be conducted through affiliates, which must limit such activities to 25% of gross revenues	Generally not permitted except for insurance sales activities	Generally limited to holding bank premises	Permitted to hold up to 5% of voting shares through a holding company	Permitted to make non-controlling investments up to 25% of the voting shares
Emerging Markets:					
<i>Argentina</i>	Permitted	Permitted through pension fund affiliates	Limited; based on bank capital and investment	Limited	Permitted but subject to prior approval of authorities
<i>Chile</i>	Permitted	Insurance brokerage permitted	Not permitted	Not permitted	Permitted, but only up to 10% of a bank's shares and the Superintendent's prior approval

Country	Securities ¹	Insurance ²	Real Estate ³	Bank Investments in Industrial Firms ⁴	Industrial Firm Investment in Banks
<i>Hong Kong</i>	Permitted, subject to limits based on the capital of the bank	Permitted, subject to limits based on the capital of the bank	Permitted, subject to limits based on the capital of the bank	Permitted, subject to limits based on the capital of the bank	Permitted, subject to regulatory consent based on suitability of the shareholder
<i>Indonesia</i>	Permitted through subsidiaries	Permitted through subsidiaries	Not permitted	Not permitted	Permitted
<i>Korea</i>	Permitted through affiliates	Permitted through affiliates	Generally limited to holding bank premises and to 100% of bank capital	Subject to prior approval for investments in excess of 15%	Permitted, up to 100% of the bank's capital, but subject to prior approval based on suitability of the shareholder
<i>Singapore</i>	Banks may hold equity participation in stockbroking firms with MAS approval	Locally incorporated banks may own insurance companies with MAS approval	Limited in the aggregate to 40% of bank's capital (excluding premises used for banking business)	Limited in the aggregate to 40% of the bank's capital	Acquisitions of 5% or more requires regulatory approval
<i>The Philippines</i>	Permitted; expanded commercial banks may engage in securities activities directly or through a subsidiary; regular commercial banks may engage in securities activities through subsidiaries only	Insurance agency and brokerage permitted for unibanks through subsidiaries	Permitted for unibanks through subsidiaries	Permitted for unibanks with limitations	Permitted with limitations

1. Securities activities include underwriting, dealing and brokering all kinds of securities and all aspects of the mutual fund business.
 2. Insurance activities include underwriting and selling insurance as principal and as agent.
 3. Real estate activities include real estate investment, development and management.
 4. Including investments through holding company structures.
 5. Restrictions on the business of securities subsidiaries will be abolished by March 2000. Selling of securities investment trusts (mutual funds) by banks was permitted on December 1, 1997.
 6. Banks will be permitted to enter the insurance business through subsidiaries by 2001. Selling of insurance policies by banks will also be permitted by 2001 with some restrictions.
 7. Bank holding companies and their subsidiaries are allowed to hold in the aggregate up to 15% of the total shares of non-financial companies.
- Source:* Institute of International Bankers. Regulatory and Market Developments. Global Survey 1998. New York, September 1998.

Annex Table 2: Forty-seven Nation Survey of Firewalls* Applicable to Securities Underwriting and Dealing Activities

Securities Activities Permissible Without Firewalls		Securities Activities Subject to Firewalls	
<i>Securities Activities Permissible in the Bank</i>		<i>Securities Activities Permitted Only in a Nonbank Affiliate</i>	<i>Securities Activities Permitted Only in a Nonbank Affiliate</i>
Argentina ¹	Luxembourg	Bolivia	Czech Republic
Australia	Netherlands	Brazil	Japan ⁵
Austria	New Zealand	Canada	Korea ⁶
(Bahrain)	Nigeria	Colombia	Philippines ⁷
Belgium	Norway	Indonesia	
Bermuda	Pakistan	United States ⁴	
Cayman Islands	Peru		
Chile	Poland ²		
Denmark	Portugal		
Estonia	Romania		
Finland	Singapore ³		
France	Spain		
Germany	Sweden		
Greece ¹	Switzerland		
Hong Kong	Turkey		
India ¹	United Kingdom		
Ireland	Uruguay		
Italy	Venezuela ¹		
Latvia			

***These “firewall” restrictions do not include so-called “chinese walls” which restrict the dissemination of non-public, confidential information between banking and securities operations.**

¹ Trading securities on the exchange limited to stock brokerage subsidiary.

² Dealing in publicly traded securities limited to subsidiaries.

³ Local banks are encouraged to conduct their nonbank business, whether financial or non-financial, through separately incorporated subsidiaries for better control, monitoring and accountability. Banks, however, are permitted to engage in securities activities directly without firewalls.

⁴ Firewalls have been removed and replaced by eight “operating standards”.

⁵ There are number of firewalls in Japan, the most significant being that a securities subsidiary is prohibited from being a lead manager for a company with assets less than 500 billion yen if the bank is or has recently been the trustee on that or similar issues. In addition, loans by the bank to purchase securities underwritten by the securities subsidiary are prohibited, tie-in-sales are prohibited, sharing space in the same building is regulated, joint sales visitations are restricted (unless requested by the customer) and director and personnel interlocks are restricted.

⁶ Personnel interlock restrictions.

⁷ Expanded commercial banks can engage in securities dealing directly and indirectly through a subsidiary, while regular commercial banks can engage in securities activities only through a subsidiary.

Annex Table 3: Regulators of Banking, Securities and Insurance Activities

	Banking	Securities	Insurance
<i>Belgium</i>	Banking and securities regulator		Specialist insurance regulator
<i>Canada</i>	Banking and insurance regulator	Specialist securities regulator	Banking and insurance regulator
<i>France</i>	Specialist bank regulator	Specialist securities regulator	Specialist insurance regulator
<i>Germany</i>	Specialist bank regulator	Specialist securities regulator	Specialist insurance regulator
<i>Italy</i>	Central bank/monetary agency	Specialist securities regulator	Specialist insurance regulator
<i>Japan</i>	Central bank/monetary agency/Government department	Government department	
<i>Netherlands</i>	Central bank/monetary agency	Specialist securities regulator	Specialist insurance regulator
<i>Sweden</i>	Combined banking	Combined banking	
<i>Switzerland</i>	Banking and securities regulator	Banking and securities regulator	Specialist insurance regulator
<i>United Kingdom</i>	Central bank/monetary agency/ Specialist bank regulator	Specialist securities regulator	Government department
<i>United States</i>	Central bank/monetary/ Specialist bank regulator	Specialist securities regulator	Specialist insurance regulator
Emerging Markets:			
<i>Argentina</i>	Central bank/monetary agency	Specialist securities regulator	Specialist insurance regulator
<i>Chile</i>	Specialist bank regulator	Specialist securities and insurance regulator	
<i>Hong Kong</i>	Central bank/monetary agency	Specialist securities regulator	Specialist insurance regulator
<i>Indonesia</i>	Central bank/monetary agency	Specialist securities regulator	
<i>Korea</i>	Central bank/monetary agency	Specialist Securities regulator	Specialist insurance regulator
<i>Singapore</i>	Central bank/monetary agency		
<i>Philippines</i>	Central bank/monetary agency	Specialist securities regulator	Specialist insurance regulator

Source: *Financial Regulation: Why, how and where now?* Routledge Publisher 1998.

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10/7