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GOVERNMENT INSURANCE AND FINANCIAL INTERMEDIARIES: ISSUES OF REGULATION, EVALUATION, AND MONITORING

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Establishing appropriate financial sector policies is of paramount importance to policymakers, because financial intermediaries provide services that are necessary for economic growth. If inherent characteristics of the market for financial intermediary services suggest that unregulated markets will inadequately supply these crucial services, then governments have a responsibility to consider interventions to improve the provision of financial services. These government interventions themselves, however, often deleteriously distort the behavior of participants in financial markets, so that a delicate balance must be achieved between interventions that ameliorate market failures and the negative effects of these government interventions. This balance will depend on legal, political, and historical conditions and especially on the abilities of the private and public sectors to monitor intermediaries.

After reviewing why financial intermediary services are essential for economic growth, the paper discusses characteristics of financial markets—often termed “market failures”—that imply that unregulated markets will not produce a socially optimal supply of financial intermediary services. Although unrestricted markets may create mechanisms to ameliorate the negative effects of these market failures, the inherent characteristics of financial interactions plus the institutional, legal, and political arrangements in many countries strongly suggest that these market failures remain important.

The paper evaluates controversial financial policies in terms of whether these policies mitigate the negative effects of these market failures. Specifically, the paper analyzes government insurance of financial intermediary liabilities and regulatory restrictions on the activities of banks in terms of how these financial policies affect intermediary monitoring of firms, private and public sector monitoring of financial intermediaries, financial stability, competition in financial markets, and the availability of financial services.

Each financial policy tends to have positive and negative effects. Moreover, economic analysis alone does not provide unequivocal answers to financial policies regarding government insurance of financial intermediary liabilities or the proper range of powers that should be granted to banks. Country-specific legal, historical, and political characteristics will and should shape financial policy choices. Therefore, selecting a proper mix of regulatory and supervisory strategies to maximize the provision of crucial financial services is not unambiguous. Nevertheless, evaluating financial policies in terms of the issues emphasized in this paper allows thorough analyses of financial policies in any country.

The paper offers some conclusions regarding government insurance of intermediary liabilities and the powers and latitude that should be granted to banks. These conclusions are conditioned on legal, political, and institutional considerations.

Intermediaries and Financial Services

Government supervision and regulation of financial intermediaries need to be reviewed in the context of services provided by financial intermediaries. The pivotal importance of these services in generating economic growth suggests that governments should focus on enacting financial policies, including potentially laissez-faire policies, that encourage financial intermediaries to supply a sufficient quantity of these services.

A basic service provided by financial intermediaries is that they facilitate transactions, so that businesses and individuals can engage in a broader set of mutually beneficial trades; put succinctly, financial intermediaries encourage commerce. Second, financial intermediaries ease the trading, sharing, and pooling of risk, which stimulates more efficient resource allocation and faster economic growth. Third, financial intermediaries mobilize resources from disparate savers. Some worthwhile investments require large capital inputs and some enjoy economies of scale. By agglomerating savings from many individuals, financial intermediaries enlarge the set of projects available to society and thereby enhance economic efficiency and development. Fourth, after researching firms, managers, sectors, and business trends, financial intermediaries invest societies savings. The better financial intermediaries are at obtaining and processing information, the better will be the allocation of capital and the faster will be the rate of economic growth. Finally, financial intermediaries evaluate and monitor firm managers and thereby compel managers to act more in the interests of stock and debt holders than would a disparate group of individual shareholders none of whom would find it worthwhile to undertake the large monitoring costs individually. By facilitating the ability of principal claim holders to monitor managers, that is by ameliorating the principal-agent problem, financial intermediaries encourage more efficient resource allocation. Also, by mitigating the principal-agent problem, financial intermediaries encourage greater diversification, since ownership will not have to be concentrated in the hands of a few owners that find it worthwhile to

monitor the managers. These five financial services are crucial for economic development. Therefore, if there exist fundamental economic reasons why a free market will not adequately and appropriately supply these services, the government should consider interventions in the financial sector to improve economic development.¹

Reasons for Government Intervention

This section describes inherent characteristics of the activities of financial intermediaries that create a potentially positive role for government intervention in financial markets. Put differently, there exist good economic reasons for believing that free financial markets—financial markets that are unregulated and unrestricted by the government—will frequently not produce an optimal quantity of financial services, so that government supervision and regulation of financial market activities can sometimes improve social welfare. Financial regulations, and financial policies more generally, should be evaluated and compared in terms of whether they ameliorate or aggravate the negative effects of these five market failures. Specifically, financial policies can be evaluated in terms of how they affect the financial intermediaries regarding the degree of financial stability, the degree of competition among financial intermediaries, and the spectrum of available financial arrangements. It is also important to determine how financial intermediaries evaluate and monitor firms, the borrowers; and how the regulators evaluate financial institutions, the creditors.²

Financial policies typically involve tradeoffs among these issues. For example, as argued below, government organized deposit insurance schemes often reduce the probability of bank runs while also reducing incentives for depositors to evaluate and monitor banks. Constructing or reforming a financial regulatory regime, therefore, involves a complex process of choosing a mixture of policies that maximizes the provision of financial services. As will become clear, the appropriate mix of policies depends importantly on the efficiency of the country's legal system, as well as on the country's institutional, political, and historical character.

1. Conceptually, any study of the role of government in financial markets owes a great debt to Joseph Stiglitz. This paper relies heavily on Stiglitz (1993). On the empirical and theoretical links between financial services and growth, see Caprio (1994) and King and Levine (1993a,b).

2. The terms "evaluating" and "monitoring" should be interpreted broadly to include assessing the quality of management, the performance of the intermediary, the accuracy of disclosed information, the connections between management and firms or other intermediaries, the quality of the business plan, and changes in the character of the intermediary without the consent of creditors.

Externalities in Monitoring and Allocating Resources to Firms

Financial intermediaries are heavily involved in evaluating firms before they invest in firms. Furthermore, intermediaries monitor firm managers after funding the firm. These evaluation and monitoring activities are valuable and costly to undertake. These activities are also easily observed by other investors or intermediaries, who can use and benefit from these evaluation and monitoring activities without paying for them; expenditures by one financial intermediary on selecting firms and monitoring managers create external benefits for other investors and financial intermediaries. Thus, unless the financial intermediaries that actively evaluate and monitor can design mechanisms to internalize all of the benefits that accrue to these information gathering activities, the externality associated with monitoring firms implies that financial intermediaries will provide a socially suboptimal amount of evaluation and monitoring services since private returns are lower than the social returns.

Inadequate evaluation and monitoring will have negative economic implications for four reasons.

- First, suboptimal evaluation and monitoring by intermediaries of firms imply that resources will be allocated on the basis of a socially suboptimal amount of information about firms.
- Second, suboptimal evaluation and monitoring of firms provide management with excessive independence from firm creditors and hinder the efficient allocation of resources.
- Third, suboptimal evaluation and monitoring of firms may deter investment by potential creditors and thereby retard economic growth.
- Fourth, to the extent that the principal-agent problem is not mitigated by financial intermediaries, firm ownership may become more concentrated (to ease the principal-agent problem) than it would be in the presence of sufficient monitoring services. This could hurt economic efficiency by reducing diversification.

An unregulated market may create methods for internalizing some of the externalities associated with financial intermediary monitoring of firms. For example, a firm may pay higher fees and interest rates to financial intermediaries that carefully monitor the firm if the firm believes that this monitoring will be observed by financial market participants and thereby enhance the firm's access to capital markets and other

intermediaries.³ Through this market mechanism, intermediaries that carefully evaluate and monitor firms will internalize more of the social benefits of this information gathering activity and thereby reduce the undersupply of financial intermediary monitoring of firms. Nonetheless, externalities associated with monitoring firms are unlikely to be eliminated, so that financial institutions will tend to undersupply evaluation and monitoring services. Even more important for the purposes of establishing a useful analytical framework, financial policies may affect the incentives and ability of financial intermediaries to evaluate and monitor firms. Thus, analyses of financial policies should consider the effects of financial policies on incentives to monitor firms even in the absence of preexisting externalities.

Given the economic importance of financial intermediary evaluation and monitoring of firms, the effects of financial policies and regulations on incentives for intermediaries to research and monitor firms should be part of the "checklist" of issues to be taken into consideration when evaluating the pros and cons of financial policies.

Two straightforward, though often unachieved, policy strategies for enhancing financial intermediary monitoring of firms are worth noting here. First, make it easier for the private sector to evaluate and monitor firms. Information disclosure laws, competent accounting standards, standardized and transparent financial reporting forms, and an efficient corporate legal system that make the ownership, control, and performance of firms more transparent will facilitate the ability of auditors, creditors, rating agencies, and financial intermediaries to evaluate firms. Second, government supervision and regulation can be carefully crafted to enhance incentives and minimize disincentives for sound financial intermediary monitoring of firms.

Externalities in Monitoring Financial Institutions

Monitoring financial institutions also has external effects. It is costly and time-consuming to research and evaluate the condition and prospects of complex financial intermediaries. Also important, expenditures by one entity on evaluating a financial institution often create benefits for other investors, who do not have to pay the research costs. Instead, the market can observe the behavior of investors and agencies that have carefully evaluated intermediaries.

The externalities associated with monitoring financial institutions suggest that, under many sets of institutional arrangements, the market will insufficiently monitor and evaluate financial institutions because the private returns from monitoring are

3. In the United States, borrowers experience abnormally positive stock returns when they announce that they have renewed loans with their banks. These abnormal returns do not materialize for nonbank debt James (1987) and Lummer and McConnell (1989). This illustrates the importance the market gives to bank monitoring of firms.

lower than the social returns.⁴ This tendency for insufficient monitoring is exacerbated in the case of financial institutions for at least two reasons: one, financial intermediaries frequently have many small creditors (for example, depositors), so that the incentives for any individual creditor to undertake the expensive monitoring costs are small; and two, it is very costly to evaluate financial intermediaries, so that only very large, sophisticated claim holders would monitor financial institutions. Thus, free markets will likely produce a socially suboptimal amount of monitoring of financial institutions.

Unregulated markets may respond to this dearth of creditor monitoring. For example, in the case of banks, small depositors would be wary of putting their savings in banks in which they did not have confidence. Consequently, banks might respond by designing simple, innovative ways to communicate the safety of their portfolios to savers or create capital structures where financial intermediaries have a few large creditors or owners that are respected by the public and that are expected to monitor the intermediary objectively. While these mechanisms may enhance monitoring, they are unlikely to eliminate the undersupply of private sector monitoring of financial intermediaries. Uncertainty about the objectivity of large creditors and the information communicated by the bank would in most cases still imply socially suboptimal monitoring of financial institutions.

Insufficient monitoring of financial intermediaries can negatively effect economic activity for at least five reasons.

- First, insufficient monitoring will worsen the principal-agent problem of intermediaries, so that financial intermediary managers will not act in the best interests of creditors, and financial intermediary services, therefore, will not be appropriately supplied to the economy. As explained above, an undersupply of financial services will tend to slow the rate of economic growth.
- Second, insufficient monitoring of financial institutions tends to raise uncertainty about financial institutions. This uncertainty will tend to deter investors from entrusting their savings to financial institutions. Increased wariness of financial intermediaries will reduce intermediated savings and investment, and thereby lower the efficiency with which society allocates resources.
- Third, poor information about the management and performance of specific financial intermediaries will make it difficult for savers to evaluate and compare

4. Another way to see that free markets will tend to undermonitor financial intermediaries is to note, that to a significant degree, information about the management and solvency of financial institutions is a public good: many people can have this information at the same time, and it is difficult to exclude others from using the information.

financial institutions and funnel their resources to those financial intermediaries best able to allocate capital efficiently.

- Fourth, insufficient monitoring of financial intermediaries may prevent markets and institutions from arising or severely limit their activities. For example, the mutual fund industry in the United States would probably not have blossomed in the last fifteen years unless investors could easily compare funds and have confidence that there are minimal possibilities for fraud.
- Fifth, insufficient monitoring of financial intermediaries by the market may encourage concentrated ownership (or the emergence of a few large debt holders) of financial intermediaries, so that large owners and creditors find it worthwhile to monitor intermediaries. Concentrated ownership may produce suboptimal diversification and thereby alter the products offered by intermediaries and create incentives for financial institutions to behave generously toward large owners and creditors.

Thus, insufficient monitoring of financial institutions can reduce the provision of financial services and thereby lower investment, reduce the efficiency of resource allocation, and slow economic development.

Consequently, the effect of financial policies on the incentives for private investors and institutions to evaluate and monitor financial intermediaries must be carefully considered in evaluating and designing financial regulations and policies.

In general terms, governments should create incentives for—and be sensitive to financial policies that create disincentives for—self-regulatory agencies and private monitoring arrangements.⁵ Legal systems that define and enforce property rights efficiently will help creditors, rating agencies, and other institutions monitor financial intermediaries while also facilitating the emergence and functioning of self-regulatory bodies. Similarly, sound accounting standards and information disclosure laws will facilitate the ability of the private sector to monitor financial intermediaries. If self-regulatory and private arrangements do not adequately monitor financial intermediary activities, the governments should: seek to improve private sector monitoring through legal, accounting, and other reforms; review and reform financial sector policies that are impeding or creating disincentives for private sector monitoring of intermediaries; and help monitor financial institutions directly. Governments often set capital adequacy requirements, monitor the asset quality of intermediaries, establish regulations regarding the liquidity of banks, set limits on large exposures, restrict intermediary financing of intermediary managers, owners, or related parties, monitor trading on insider information, and carefully regulate the entry of new participants. Conducting effective supervision and designing appropriate incentives for self-

5. Regarding incentives for self-regulation of securities markets, see T. Glaessner (1992).

regulation, however, are very difficult. Some of these details will be discussed below. The essential point in the present context is that one critical criterion for evaluating financial policies is how they affect the monitoring of financial institutions.

Externalities in Failure

Failure of an individual financial intermediary may produce negative effects that extend beyond the creditors of that individual institution. There may be contagion: given poor information about the solvency and performance of financial institutions, investors may interpret the financial weakness of one financial institution as a signal of the poor condition of other financial institutions and withdraw their funds from all intermediaries. The potential social costs of this "contagion" are not internalized by individual financial intermediaries when making decisions. Thus, with imperfect information about the financial condition of intermediaries on the part of savers, the social costs of a single financial institution failure will often be greater than the private costs since one failure could reduce saver confidence in other institutions; there will exist external costs to excessive risk taking any single intermediary because of contagion.

Because financial intermediaries stand at the focal point of economic activity, and because they mobilize savings and allocate resources to all sectors of the economy, and form the foundation of the payments system, excessive risk taking by them will have large negative costs:

- First, fears of contagion and financial instability reduce confidence in financial intermediaries and lower intermediated savings and the efficient provision of crucial financial services. This would tend to slow economic growth and impede improvements in welfare.
- Second, contagion disrupts economic activity. For example, bank runs cause banks to demand payment of existing loans and to stop the issuance of new loans, which reduces investment, induces bankruptcies, raises unemployment, and slows growth. In addition, contagion, by inducing a contraction in credit and the medium of exchange, can often disrupt a country's payments system and thereby impede all forms of commerce. Similarly, runs on mutual funds depress assets prices, while runs on insurance companies reduce risk sharing.
- Third, given the pivotal role of financial services, financial intermediary failure on a large scale can negatively influence long-run, overall economic performance by disrupting the flow of financial services. These disruptions are particularly acute in the case of financial institutions, because bankruptcy of financial institutions is different from bankruptcy of most other entities.

Financial intermediaries are primarily involved in the production, assessment, and dissemination of information. This information capital is not easily transferred. Thus, bankruptcy of financial institutions will entail the loss of a very valuable resource—information—because it cannot be transferred in bankruptcy court. The loss of financial intermediary information on a large scale through bankruptcy will significantly diminish the ability of society to allocate resources efficiently for an extended period.⁶

Thus, if risk taking by individual financial entities has external negative costs because of contagion, governments should be concerned that financial intermediaries will undertake socially excessive levels of risk. Note, individual financial intermediary failures per se will have very positive effects if failure, or the fear of failure, encourages privately organized insurance and crisis management systems, self-regulation, and better monitoring by creditors. The external social costs of an individual financial intermediary failure stem from potential contagion: poor information may induce individual failures to spread to otherwise healthy intermediaries.

The importance of contagion and financial fragility to economic activity suggests that contagion and financial stability should be part of our select "checklist" of issues to consider when evaluating financial policies.

Potential policy (and market) responses to externalities associated with financial intermediary failure fall into four categories. First, governments may enact financial policies that encourage prudent risk taking by financial intermediaries. This may include restricting the activities and investments of financial institutions, establishing high, risk-based capital requirements, and even limiting competition. Second, governments should be wary of tax systems that create incentives for high debt-equity ratios which may enhance enterprise and financial fragility. Third, governments should avoid financial policies that augment the possibility of contagion.

For example, evidence from the United States suggests that financial policies can encourage the proliferation of an excessively large number of underdiversified banks that are more sensitive to economic shocks and less able to organize private insurance and self-regulatory mechanisms effectively and coordinate constructively

6. Evidence in the United States suggests that bank failure, or bank distress more generally, harms client firms because of the intrinsic, though nontradable, long-run relationships that develop between banks and their customers. Increases in the probability that the bank-borrower relationship will be negatively disrupted reduces the share price of the borrower, while the rescue of a bank expected to fail increases the stock price of client firms. See Slovin, Sushka, and Polonchek (1993).

when faced with problems.⁷ Fourth, governments may insure investor assets in financial intermediaries to prevent contagion.

Imperfect Competition

There are large fixed costs associated with evaluating firms and monitoring activities. The costs associated with obtaining and maintaining accurate information on firms create incentives for financial intermediaries to establish long-run relationships with firms: intermediaries will be able to recoup the costs of spending resources to acquire and update information over long periods, and firms will be able to access cheaper and more secure financing. Indeed, because information is both imperfect and costly to obtain, a firm's current bank will probably have more information about the firm than other banks, so that if the firm seeks financing from a different bank, this search will probably be viewed as a negative signal about the quality of the firm. Thus, an inherent characteristic of many financial arrangements—the high fixed costs of acquiring and maintaining accurate information—implies that financial markets are likely to be imperfectly competitive.⁸

The optimal degree of competition among financial intermediaries is difficult to specify, so that the direct economic implications of imperfectly competitive financial markets produced by the high costs of acquiring information on firms are difficult to quantify. Insufficient competition and contestability will reduce innovation and efficiency. Similarly, to the extent that imperfect competition creates excessively symbiotic links between financial intermediaries and firms, the objectivity with which intermediaries evaluate firms will deteriorate. By contrast to the extent that an oligopolistic financial system reflects the buildup and maintenance of long-run relationships that encourage an efficient exchange of information and more complete monitoring, then apparently lax competition will reflect good monitoring of firms.

One mechanism for limiting competition is through “franchise” value as explained by Caprio and Summers (1994). By restricting entry, officials can create monopoly profits. These monopoly profits increase the value of having a license, the franchise value, and increases the costs of losing that license through bankruptcy.

7. For example, Calomiris (1989) notes that in the 1800s many states in the United States prohibited branch banking. This led to the emergence in those states of many, underdiversified banks. The lack of diversification increased exposure to idiosyncratic shocks. The large number of banks made it difficult for banks: (a) to establish private deposit insurance funds with sound monitoring mechanisms and, (b) coordinate effectively when confronted with a drop in depositor confidence. In fact, states that restricted branching suffered more banking failures than states with fewer, better diversified banks.

8. In a free market, sellers are willing to sell to any buyer at a stated price. Because of informational asymmetries, this is not true in all financial markets. All firms cannot borrow from banks at a stated interest rate. Typically, a firm can only borrow from a single bank at a publicized interest rate. Trying to move to another bank involves a costly and risky process of establishing a relationship with new bank.

Consequently, financial policies that increase franchise value tend to decrease competition while simultaneously decreasing risk taking.

Thus, the effect of financial policies on the level of competition must be carefully considered and therefore forms one of our "checklist" items. Supervision and regulation need to balance the negative and positive aspects of competition in the financial sector so as to maximize the efficient processing of information while minimizing arrangements that thwart innovation and encourage excessive risk taking. While easy to say and hard to accomplish, it is a balance that should be kept in mind when evaluating financial policies.

Incomplete Markets

Financial institutions are in the business of obtaining and processing information, but there are informational asymmetries in their business. Information obtained by evaluators is imperfect relative to the information known by the entity being evaluated. Information asymmetries imply that some financial arrangements will be limited or nonexistent—even though these arrangements would exist in the absence of informational asymmetries. The following examples will help clarify this point.

- *Credit rationing*—If it is difficult for banks to obtain accurate information about the riskiness of firms, raising interest rates may cause firms with the safest projects to drop out of the loan market, so that the mix of firms demanding loans becomes more risky. Thus, raising interest rates may cause an adverse selection of firms in the loan market (without changing the management of projects). Banks may then keep interest rates lower than the rate that would clear the market to maintain a safer mix of firms in the pool of firms demanding credit. This low interest rate will produce an excess demand for loans by firms; the adverse selection problem reduces the issuance of loans below what it would be in the absence of asymmetric information.

If it is impossible to monitor the behavior of firms perfectly, raising interest rates may induce project managers to change their behavior and undertake riskier projects. To mitigate this moral hazard problem, banks may keep interest rates lower than would clear the loan market. Consequently, there will be an excess demand for loans by firms.

- *Equity issuance*—If firm insiders have more information about the firm than outsiders, then the issuance of new shares by insiders will be perceived as a negative signal by outsiders: insiders willing to sell shares to outsiders must think the price is high. This informational asymmetry between insiders and outsiders will discourage the raising of capital through equity issuance and

therefore reduce the usefulness of the stock market as a vehicle for raising capital and diversifying risk.

- *Incomplete insurance*—Insurance creates incentives for the insured to do less to avoid the insured-against event. If information were fully available and monitoring were costless, the insurance agency could prespecify a comprehensive, complex list of actions and behaviors for the insured that would eliminate this moral hazard problem. But, all actions cannot be monitored. Thus, insurers will provide less than complete insurance to enhance the incentives for the insured to avoid the insured-against event. The result is incomplete insurance because of information asymmetries.

Voluntary deposit insurance schemes will be difficult to organize because of informational problems inherent in evaluating and pricing the riskiness of banks. Good banks may not want to join deposit insurance schemes because they are unsure about the asset quality of other banks; good banks do not want to subsidize bad banks and it may be too difficult and costly to evaluate other banks and set risk-based deposit insurance premiums. This adverse selection problem induces a deterioration of voluntary deposit insurance schemes.

The above examples illustrate cases of incomplete or missing markets that involve a reduction in financial intermediary services from the level of services that would exist in the absence of information asymmetries. Thus, investment and resource allocation may be suboptimal because of credit rationing and built-in incentives against the raising of capital through stock offerings. Similarly, moral problems created by insurance may imply incomplete insurance markets that yield less risk reduction opportunities. Finally, because of adverse selection problems, certain types of private insurance, like voluntary deposit insurance and other self-regulatory insurance schemes may be provided at a suboptimal level.

For these reasons, policymakers should consider the effects of financial policies and regulations on the types of financial contracts and services offered by financial markets to the public.⁹

There are market mechanisms that rely on the legal infrastructure to help reduce these asymmetries and their negative economic effects. Intermediaries and firms build long-run relationships that facilitate information exchange. The ability to use collateral in loan contracts helps extract information from borrowers that reduces informational asymmetries and expands the availability of financial services. Also, efficient legal systems and registries permit creative financial contracting to service the needs of

9. Caprio (1992) analyzes the interactions of financial reform and asymmetric information. He concludes that the long-run relationships that form between financial intermediaries and firms to mitigate informational asymmetries must be carefully considered in designing financial reforms, so that the negative economic implications of asymmetric information are not unnecessarily aggravated by reform.

clients, and sound bankruptcy courts enable intermediaries to seize and dispose of assets of delinquent borrowers quickly and confidently, which further promotes the provision of financial services. Finally, financial systems that allow a single financial intermediary to engage in different financial contracts, like issuing loans and buying equity, may be able to establish relationships with firms that maximize information exchange, thereby reducing the negative effects of asymmetric information. Nonetheless, these informational problems frequently cannot be eliminated.

Market Failures—A Summary

By studying important characteristics of financial markets, two general points emerge. First, from a policy perspective, the existence and economic importance of market failures suggest that governments should consider selective interventions in financial markets. This conclusion is based on the following argument: the market failures analyzed above suggest that free markets will not produce a socially optimal amount of financial services; and these market failures have negative economic implications. Although the market may respond to these market failures by yielding contractual and financial arrangements that mitigate the negative consequences of the five market failures, the inherent characteristics of financial markets imply that some of these market failures are important in all countries.

Second, regardless of the hypothetical importance or unimportance of these market failures in an unregulated environment, countries typically have a complex network of financial policies and regulations. Thus, changes in any particular policy or regulation must be carefully studied. The checklist outlined in this section will help organize analyses of financial policy reforms by providing analysts with a vehicle for comprehensively considering the effects of policy changes on the provision of crucial financial services. Analysts should evaluate whether policy changes on balance aggravate or ameliorate the negative effects of market failures. Specifically, financial reforms should be evaluated in terms of how they affect (a) financial intermediary monitoring of firms, (b) private and public sector monitoring of financial intermediaries, (c) the possibility of contagion and financial stability, (d) the degree of competition, and (e) the spectrum of available financial arrangements.

Insurance and Financial Intermediaries

A basic economic rationale underlying government organized insurance of financial intermediary liabilities stems from externalities associated with financial

intermediary failure (for example bank runs).¹⁰ Government insurance, however, then creates an entirely new economic rationale for further government involvement in the financial sector: government insurance of investor assets in financial intermediaries reduces the incentives for investors in financial intermediaries to monitor the health of those intermediaries and for intermediaries to self-regulate one another to prevent failure and contagion. This tends to increase the incentives for and the ability of financial intermediaries to undertake more risky activities. This is the moral hazard problem.

Frequently, this moral hazard problem cannot be avoided because the public believes that the government would insure their savings in the case of a financial crisis. This expectation alone, even in the absence of explicit government insurance, creates the moral hazard problem, because expectations of government insurance reduce incentives for investors to monitor financial intermediaries. The extent of this moral hazard problem in each country, therefore, depends on public expectations on the role of the government. Since financial sector policy choices depend on the extent of the moral hazard problem, financial sector policies should contain country-specific elements that reflect these differing expectations.

Government Insurance

There are many different ways to organize government insurance. Governments may insure all assets, a percentage of assets, or only relatively small asset holders. The design of insurance schemes may also differ. For example, governments may attempt to charge a market price for the insurance they provide based on the riskiness of particular financial institutions. Or, governments may charge a simple fee that is not market or risk based. Furthermore, governments may require financial institutions to insure themselves with private insurers that are authorized and monitored by the government. The exact nature of the insurance scheme will have important implications for the behavior of financial intermediaries.

For simplicity, first consider complete government insurance in the absence of risk-based premiums or risk-based capital requirements to get the blunt, first-order effects of government insurance on the five market failures defined above, and then broaden the discussion to more sophisticated schemes. This paper, however, does not comprehensively review the design of insurance schemes. It identifies a few features associated with insuring saver assets, noting a key political economy issue associated with insurance, and extracting some important strategic considerations concerning the linkages between insuring saver assets and the expansion of banking powers.

10. Talley and Mas (1993) provide an excellent analysis of deposit insurance. The discussion here draws liberally from their insights.

Contagion and Financial Stability

Insurance of assets in financial intermediaries will tend to reduce the probability that the failure of one institution will spread to other institutions; credible government insurance lowers the probability of contagion. Nonetheless, insurance of intermediary liabilities increases financial fragility by generating incentives and capabilities for excessive risk taking on the part of intermediaries. This is discussed below while considering the effects of insurance on the monitoring of intermediaries.

Evaluation and Monitoring of Intermediaries

The most important consequence of insuring investor assets is that it increases the incentives for risk taking by financial intermediaries, a socially suboptimal monitoring system. If investor assets are credibly insured, they will have fewer incentives to monitor the intermediary, and will provoke risk taking by financial institutions. For example, the capital strength of banks is a way of signaling depositors about the security of the bank. Deposit insurance lowers the benefit of maintaining high capital standards to reassure depositors. Thus, banks with deposit insurance have incentives to reduce capital/asset ratios. Furthermore, banks with deposit insurance have greater incentives to lend to riskier clients than banks with no deposit insurance. Bank owners keep most of the benefits from lending to clients with very risky but potentially high return projects, but if the risks do not pay off and the bank fails, some of the losses will be passed to the government insurance fund. This incentive to gamble with insured deposits is intensified as the capital position worsens. Thus, the combination of greater incentives for financial intermediaries to assume risk and lower incentives for private creditors to monitor financial intermediary behavior implies that government insurance dramatically augments the need for mechanisms to intensify monitoring of intermediaries.¹¹

As an aside, it is worth noting that governments can promote better monitoring of financial intermediaries through a combination of mechanisms. Governments can monitor financial intermediaries directly. The government can restrict the activities and investments of financial intermediaries to promote prudent behavior; require intermediaries to hold well-diversified portfolios to reduce exposure to idiosyncratic shocks; review the owners, management, and organization of intermediaries to enhance the soundness of financial institutions; and use risk-based capital requirements and risk-based insurance premiums to create appropriate incentives for intermediaries. Also, governments may insure only small investors, which would maintain incentives for

11. See Dowd (1993).

large investors to monitor intermediaries.¹² Besides direct government supervision and regulation, governments may require and use audits from internationally reputable accounting firms and assessments by rating agencies to engage a diverse network of financial experts to evaluate financial institutions. Furthermore, by increasing the franchise value of insured intermediaries through reduced competition, governments reduce incentives for risk taking and thereby counterbalance enhanced incentives and opportunities for risk taking created by government insurance. Finally, the government can also encourage or even require greater private sector participation in monitoring financial institutions to bolster oversight of financial institution activities. Some aspects of private insurance will be discussed below. The literature on deposit insurance is enormous and advances a myriad of schemes. This paper only mentions a few approaches and focuses instead on the first-order effects of government insurance on financial market behavior. Most important, government insurance tends to reduce private creditor monitoring of intermediaries.

Evaluation and Monitoring of Firms

Government insurance tends to reduce the intensity with which insured financial intermediaries monitor firms.¹³ One way in which intermediaries compete for funds is by having a reputation of carefully monitoring the firms in which they invest. Careful monitoring by the intermediary lowers the probability that the intermediary will experience losses. Thus, in the absence of insurance, safe intermediaries should be able to raise funds less expensively than intermediaries who do not monitor firms intensively. Investors with assets in insured intermediaries, however, are less concerned about losing their savings than if these savings were not insured. Therefore, in the presence of insurance, intermediaries have less of an incentive to monitor firms carefully, invest in a diversified portfolio of relatively safe firms, and communicate this information credibly to savers.

Competition Among Financial Intermediaries

Insurance will also influence the level and form of competition. For example, with deposit insurance, depositors view banks as closer substitutes than without deposit

12. Incomplete insurance, however, will not eliminate contagion under all conditions. For example, the best informed and biggest investors may still view imperfect signals of financial weakness in any particular institution as sufficient information to withdrawal funds from other financial institutions.

13. This assumes that insurance premiums and capital requirements are not risk based and that regulations and supervision of intermediaries do not fully compensate for the incentives created by insurance.

insurance. Banks will compete in terms of services and interest rates, but banks will have fewer incentives to transmit information to depositors about the quality of their loans. In the absence of insurance, however, intermediaries would need to convey information about the quality of their assets to attract investors. Insurance may also change the overall level of competition. For example, in an oligopolistic banking system with a few large, well established banks that are able to self-regulate each other and self-organize a deposit insurance system that excludes other banks, the introduction of government deposit insurance for all banks may increase the level of competition for deposits in the system. Thus, it is difficult to draw clear conclusions about the effect of government insurance on the level and form of competition.

Incomplete Markets and Available Financial Services

Mandatory government insurance may be a mechanism for overcoming a market failure. As discussed above, missing insurance markets often exist because of adverse selection: if the costs of acquiring information and monitoring other intermediaries and designing risk-based insurance fees are very high, safe financial intermediaries may opt out of privately organized, voluntary insurance schemes because they do not want to subsidize more risky intermediaries. The existence of a large number of banks, for example, will tend to aggravate the adverse selection problem by making monitoring of banks and coordinating a voluntary, private insurance system more difficult. Thus, voluntary insurance systems will tend to deteriorate when adverse selection is particularly acute, which would not occur with mandatory government insurance.

Political Economy and the Fallacy of Choice

While reducing the potential for contagion, insurance of intermediary liabilities tends to aggravate the suboptimal evaluation and monitoring of insured financial intermediaries. This negative consequence has led some analysts to argue that the costs of insuring investor assets in intermediaries are greater than the benefits, and many recommend abolishing or avoiding government organized insurance. This is typically not an option.

Given the huge macroeconomic implications of financial failure, governments will typically act to prevent individual financial intermediary failures from spreading and becoming systemic failures. Many governments have insured assets when faced with financial failures even in the absence of preexisting commitments and even after stating beforehand that the government would not insure assets in the case of financial failure. Thus, most governments cannot credibly commit to not interfere in the presence of financial failure. The belief by the public that the government insures their

investments creates the moral hazard problem: there is a reduced incentive to monitor financial institutions on the part of the public because people expect the government will insure their assets in the case of failure. Thus, the policy choice between government insurance and no government insurance is generally irrelevant. The more useful concerns are explicit and implicit insurance and the level and design of the coverage.

Different societies expect different levels of government insurance. Some societies expect governments to protect the assets of small savers in banks, others expect deeper coverage (for example, insuring large bank accounts), while some societies expect the government to insure a broader set of institutions such as insurance policies, private pension accounts, and even the returns on investment company assets. The extent of the moral hazard problem produced by insurance is a by product of these expectations and therefore also depends on political and historical ingredients that vary from country to country.

Public expectations about the coverage of government insurance may also change systematically with financial development and even respond to changes in financial policy. Two examples will help illustrate these points. As a country's financial system develops, households may shift their assets out of insured demand deposits into uninsured, relatively unregulated money market accounts. As this shift occurs, public expectations concerning government responsibility toward money market accounts may change. Specifically, expectations may expand to include money market accounts under the umbrella of government insurance. Thus, the understanding between the public and government is critical in designing financial policies, because this understanding, or social contract, between the public and the government concerning what saver assets are insured by the government determines the depth and scope of the moral hazard problem.

Using financial regulation to limit the scope of government insurance is a complex task. For example, some analysts propose the creation of "narrow" banks.¹⁴ These narrow banks would enjoy 100 percent deposit insurance and would be the only institutions tied to the nation's payments system. These narrow banks would also be very restricted and tightly regulated. They could only make loans that were almost risk free; they would not be permitted to assume interest rate risk; and they would face high capital requirements. Thus, households would have a safe place to save with correspondingly low returns. If savers seek higher returns, they could invest in uninsured financial institutions. This would limit the moral hazard problem created by insurance, because the intermediaries receiving government insurance would be tightly restricted and supervised. One problem with this scheme is that it may not be compatible with public expectations. While in some contexts the population may adjust its expectations of the scope of government insurance to this new regulatory structure, this may not occur in all countries. For example, savers may believe the government

14. See the discussion and citations in Talley (1993b).

would also insure intermediaries that are not narrow banks if faced with a financial crisis. This expectation would lower incentives of private creditors to monitor non-narrow bank financial intermediaries carefully. Thus, the narrow bank scheme may not control the moral hazard problem.

One generic conclusion that emerges from this analysis is that in countries where relatively broad and deep coverage of financial assets under the umbrella of government insurance is expected, there will be correspondingly greater undersupply of monitoring of financial intermediaries by investors. Therefore, the greater are public expectations of a government safety net, the greater is the need for financial policies that strengthen incentives for monitoring of insured intermediaries.

Government Insurance: Implicit or Explicit?

Authorities could forgo a formal government operated insurance system. Instead, the government could intervene following a financial failure. This "implicit" insurance has been used in many countries. It must be emphasized, however, that implicit insurance does not avoid the moral hazard problem created by public expectations of government insurance; using implicit instead of explicit insurance does not circumvent the reduction in monitoring of intermediaries by creditors created by public expectations of government insurance. Implicit insurance provides flexibility in terms of the amount and form of protection since preexisting rules and procedures restrict decisionmaking. Nonetheless, on balance, explicit insurance generally has advantages over implicit insurance.

Implicit insurance will often not offer the same stability as explicit insurance. Implicit insurance implies ad hoc, unsystematic procedures for coping with failures, does not foster the buildup of an insurance fund that could withstand potential financial crises, and therefore will not significantly enhance public confidence in the safety of their assets. Thus, implicit insurance will not mitigate the probability of contagion to the same degree as explicit insurance.¹⁵

Explicit insurance seems to offer greater opportunities and encouragement for government to enact forward-looking financial policies that bolster private and public sector oversight of financial intermediaries than implicit insurance. Although proponents of implicit insurance argue that greater uncertainty concerning government insurance enhances incentives for (a) private creditors to monitor intermediaries and (b) intermediaries to form private insurance and self-regulatory bodies, this argument relies on the assumption that uncertainty surrounding the extent and form of government insurance creates positive incentives for private sector monitoring of intermediaries that

15. It should also be noted the public expenditure effects from financial failure can be very large (as the savings and loan experience in the United States demonstrates). Therefore, building an insurance fund prior to a failure may mitigate the macroeconomic implications of a systemic financial failure.

are greater than the negative incentives for private creditor monitoring of intermediaries generated by expectations of government insurance.

More important, under the premise that the public expects the government to insure assets in the presence of a financial crisis, governments will be able to counteract the moral hazard problem better with explicit insurance than with implicit insurance. By explicitly recognizing a social responsibility to insure some class of saver assets, governments will be able to design and enact forward-looking financial regulations that augment the monitoring of financial intermediaries and enhance financial stability better than could be achieved with an implicit insurance system. For example, governments could use risk-based insurance premiums with explicit insurance, while this would send confusing signals with implicit insurance. Moreover, credible, explicit insurance system may be able to limit public expectations regarding the size and set of financial instruments insured by the government. For example, with explicit insurance and universal banks, it may be possible to limit the government safety net to small checking accounts. It may be impossible to draw this line *ex post* with implicit insurance.

As mentioned above, insurance tends to reduce the intensity and the incentives with which intermediaries monitor firms. Although choosing explicit or implicit insurance does not appear to affect firm monitoring incentives differentially, explicit government insurance encourages better regulatory strategies. Specifically, in the absence of explicit government insurance, governments may believe there is not a moral hazard problem. Therefore, officials may not design financial policies appropriately, because they will ignore, or insufficiently weight, the distortions created by expectations of government insurance. Explicit recognition of public expectations, and therefore government responsibilities, will permit and spur more prescient policies. Thus, explicit insurance would have a higher probability of generating regulations to impel intermediaries to effectively monitor firms than implicit insurance.

For similar reasons, explicit insurance may prompt government to consider raising the franchise value of insured intermediaries. This would reduce risk taking and further work to counterbalance the moral hazard created by government insurance. This would be recommended only if there was sufficient competition to spur innovation and efficient provision of financial services.

Finally, in terms of the effects on the availability of financial arrangements, there does not appear much difference between explicit and implicit insurance. But using this paper's criteria for assessing the advantages and disadvantages of explicit and implicit insurance, there seem to be substantial advantages to explicit insurance. Most important, explicit insurance entails prior recognition of the problems created by public expectations of insurance. Therefore, explicit insurance encourages forward-looking financial policies to mitigate these problems.

Vignettes on Private Insurance

An alternative or complement to government organized insurance is private insurance. For example, a group of banks could create a deposit insurance fund. If credible, private insurance will limit the probability of contagion, stimulate self-regulation, and encourage financial stability. Private insurance also has advantages with respect to government insurance. Edward J. Kane has noted that, in the United States, government officials are slow to recognize the existence of a problem and also slow to take action to cope with the problem once it is recognized. Kane argues that the interests of government officials often differ from those of taxpayers. Taxpayers want to cope with bank problems in the least expensive way, while government officials want to project a favorable image of their capacity. Government officials, therefore, focus on minimizing the number of failures recorded on their watch and assigning the blame for failures to others rather than focusing their energies on expeditiously minimizing the aggregate expense to the insurance fund. Private insurance may reduce some of these problems by establishing better incentives for the owners and managers of private insurance funds.

Private insurance funds that eliminate fears of contagion will be difficult to organize, however, for a number of reasons. First, losses in a crisis could be larger than the reserves of the private insurance fund, in which case members would face two difficult options: to inject more capital, which could weaken otherwise healthy institutions and contribute to the contagion; or not inject more capital, which could reduce public confidence in the private insurance scheme and precipitate a spread of the crisis. Thus, in many cases, private insurance may not be sufficiently credible to lower the probability of contagion substantially. Second, if the public still believes that the government ultimately stands behind these private insurers, the public will not carefully evaluate whether the private insurance system has adequate funding and staff. Under these conditions, private insurance will not substitute for government insurance in the case of a sufficiently large financial failure. Governments will still have to choose between implicit and explicit government insurance and the precise form of the insurance system if they choose explicit insurance. Third, as mentioned above, adverse selection problems in participating in voluntary private insurance schemes will hinder the functioning of these voluntary schemes. For example, safe banks may not want to subsidize risky banks, and it may be very difficult, complex, and costly to set risk-based insurance premiums. Thus, safe banks may opt out of private insurance schemes, which they cannot do with government insurance. Finally, an alternative to having banks (or other intermediaries) form their own private insurance system is to use insurance companies to insure bank deposits. But, in most countries the banking system is larger than the insurance industry, so that the insurance industry may not have the capacity to underwrite bank deposits. Also, if an insurance company canceled

the insurance of an individual bank, this would tend to precipitate a run on that bank. Governments may not wish to give private insurers such powers.

Private insurance, therefore, may only work in special cases. Where a few banks have very good historical reputations and have established sound mechanisms for self-regulation, the public may have confidence in their ability to self-regulate, insure deposits, and screen other intermediaries.

Using examples from different states in the United States in the 1800s, Calomiris (1989) shows that in states where a few banks created self-insurance organizations with strong self-regulatory powers, and where each bank's liability to the insurance fund was unlimited, there was much tighter monitoring of banks and many fewer bank failures than in other states. (see footnote 16 on the next page.)¹⁶

Instead of viewing private and public insurance as substitutes, Kane (1993) views the two methods of insuring saver assets as complements. He proposes that banks with insured deposits should be required to have insurance with a private company. These private insurance companies would have to be authorized, monitored, and reinsured by the government. While not solving all problems, Kane argues that this type of institutional arrangement would make evaluation and monitoring of banks more responsive to market conditions, because private insurers with their financial capital on the line would have incentives more aligned with those of taxpayers than government supervisors who do not have their financial capital exposed. It is important to note, however, that even in Kane's proposal, the government ultimately stands behind the liabilities of financial institutions.

Bank Powers

This section evaluates the costs and benefits of allowing banks to engage in activities that go beyond traditional banking activities, such as taking deposits and making loans.¹⁷ These broader activities include underwriting and dealing in securities, holding equity in companies, operating investment and trust companies, and participating in the insurance industry. The focus will be on securities market activities and holding equity in nonfinancial firms.

16. Another example is West Germany. In 1966, a purely private consortia of banks formed a mutual-type, deposit insurance fund. The Federal Association of German Commercial Banks organized cross-monitoring of banks to ensure stability of the banking system. In 1976, this purely private insurance fund came under public sector regulation, but administration and monitoring are still organized and conducted by the private Federal Association of German Commercial Banks.

17. Conversely, this section could be viewed as evaluating the costs and benefits of restricting the activities of financial conglomerates to only those activities associated with traditional banking and forcing other activities to take place in distinct legal entities.

Monitoring of Firms

Broadening banking powers should have generally positive effects on how the financial system evaluates and monitors firms, though there are reasons for caution. Expanding the array of services provided by a single entity may broaden and deepen the relationship between the intermediary and firm and facilitate the flow of information. Also, banks that hold equity in firms and sit on the boards of directors will tend to exert better corporate governance. On the other hand, intermediaries with broader powers may have a greater tendency than more narrowly defined institutions to become overexposed to a few firms and thereby lose their ability to objectively monitor corporations.

Monitoring Financial Intermediaries

The monitoring of banks will become more difficult as the activities of banks become more complicated. More important, complex financial entities that are engaged in a wide range of activities may be more difficult to monitor than separate entities providing these same services. The complexity of measuring exposure to specific firms, industries, and geographical locations, and of evaluating the riskiness of the intermediary in general may grow more than proportionally as the permitted activities of the intermediary grow.

Similarly, broadening financial intermediary powers may encourage the development of larger, more powerful intermediaries. The political influence that will likely accompany this power may also hinder the ability of officials to force full disclosure of information and supervise intermediaries effectively and objectively.

The potential for conflicts of interest and insider manipulations will grow. Monitoring transactions between the financial intermediary and significant shareholders, directors, officers, and their important and relevant business concerns will be more difficult, because the intermediary will be involved in more transactions and more complex transactions. Similarly, there will be greater opportunities for conflicts of interest. For example, banks with problem loans to a client may try to extricate themselves by underwriting and selling shares to an investment company or trust account run by the bank itself. Or, banks may issue a bridge loan to support a new equity sale being underwritten by the investment banking arm of the bank and thereby use insured deposits to support lucrative but risky investment banking activities.¹⁸

18. See Edwards and Edwards (1991) for examples of the activities of financial and industrial groups in Chile.

Given the inherent additional difficulties associated with monitoring financial intermediaries that are engaged in a broad spectrum of activities, establishing an adequate capital base becomes more important. There must be adequate capital to balance the social costs of intermediaries undertaking risky investments. This will also help maximize the incentives for owners to price risk appropriately and for owners to monitor intermediary managers carefully. Furthermore, this capital must be secure, so that in the event of financial problems owners cannot remove capital surreptitiously. The identity of owners also needs to be clear so that observers can monitor insider trading and investments. Thus, even if industries are permitted to own financial intermediaries, there should be clear documentation of the physical people who ultimately exert control over the financial intermediary.

Thus, policymakers weighing the expansion of banking powers should consider the ability of auditors, boards of directors, and government supervisors to monitor the activities of financial conglomerates. Where (a) external auditors are well-qualified and independent of financial intermediary management, (b) the boards of directors of financial intermediaries exert sound corporate governance over management, and (c) the ownership and capital base of financial intermediaries are clearly defined and secure, broadening the permitted powers of financial intermediaries will have less of a chance of excessively burdening government supervisors.

Financial Stability and Contagion

Broadening banking powers may increase or decrease the riskiness of financial intermediaries. The ability to engage in a broader set of financial activities may permit greater mechanisms for diversification. On the other hand, securities trading and investment banking activities tend to be more risky. If these additional risks are not diversified away, intermediaries may undertake more risk as their permitted powers expand.¹⁹

The emergence of large financial conglomerates through the broadening of bank powers also implies that the failure of any single intermediary may create severe economic disruptions. Thus, stability of each intermediary becomes more important for the stability of the financial system as a whole as financial power becomes concentrated in fewer institutions.

Furthermore, broadening the powers of financial intermediaries may expand the set of financial instruments presumed to be insured by the government and thereby augment financial fragility. In particular, with a compartmentalized financial institution (banks taking deposits and issuing loans, investment companies purchasing equity shares and bonds, investment banks underwriting security issuance, insurance

19. Note, however, that empirical evidence suggests that security affiliates' operations of banks did not deleteriously affect the soundness of banks in the United States prior to the Glass-Steagall Act of 1933 that legally separated commercial banking from securities operations (White 1986).

companies writing and selling insurance policies, and so on.), governments may be able to define the set of financial instruments insured by the government more narrowly than with financial conglomerates with broad powers. For example, governments may be able to credibly insure bank deposits up to US\$100,000 but not returns to investments in mutual funds. When all of these financial services are provided by a single financial institution, the government may find it difficult to isolate and insure only specific assets. Thus, complex financial conglomerates will attempt to extend the social safety net to as broad a set of financial instruments as possible in order to attract investors. This may place more and more risky assets under the government's insurance umbrella. Extending the social safety net and expanding the moral hazard problem may generate avenues for excessive risk taking without a concomitant increases in the ability of governments to monitor intermediaries.

Competition and Markets

Broadening the permitted activities of financial intermediaries should increase competition in the short run but may decrease competition in the longer run. By allowing banks to compete against investment banks, securities companies, and insurance companies, broadening the scope of permitted activities would initially increase competition. On the other hand, if economies of scale and scope are important, decompartmentalizing financial powers may eventually encourage the consolidation of financial power in the hands of a few large financial conglomerates. This consolidation of power could work to reduce competition and contestability. Furthermore, such consolidation would concentrate considerable economic and, therefore, political power in the hands of the few individuals that control these financial conglomerates.

With broader powers, a financial intermediary will have more financial instruments available to serve clients and may, therefore, be able to obtain more information about clients; economies of scope from bundling several services will reduce information acquisition costs. Thus, financial intermediaries that enjoy greater flexibility in servicing clients and with more information about clients should be able to overcome—to a greater degree than compartmentalized financial intermediaries—the informational asymmetries that cause incomplete or missing markets. With more financial instruments and more information, financial intermediaries should be able to provide better financial services, all else being equal.

Conclusions

This paper studied five characteristics of financial markets that imply that free markets will produce an undersupply of financial services. Government interventions to improve the provision of financial services, however, often distort financial markets and hinder financial development. Thus, each country must find an appropriate mix of financial policies that optimally balances the beneficial and harmful effects of government interventions.

The paper proposes a checklist of five issues to consider when evaluating financial policies. Specifically, how will financial policies affect (1) financial intermediary evaluation and monitoring of firms by financial intermediaries, (2) private and public sector evaluation and monitoring of financial intermediaries, (3) financial stability and the possibility of contagion, (4) the degree of competition among financial institutions, and (5) the spectrum of financial arrangements available to firms and individuals. Using this checklist, the paper evaluates two financial policies: insurance of saver assets in financial intermediaries and the powers and activities in which particular financial intermediaries should be allowed to engage. Although country specific legal, historical, political, and institutional traits should contribute to the determination of financial policies, the following broad conclusions emerge from the analysis.

Governments generally must insure some of the public's savings. Historically, governments have insured assets when faced with financial failures even in the absence of preexisting commitments and even after stating before the failure that the government would not insure assets in the case of a failure. The public understands this social contract and therefore has fewer incentives to monitor financial institutions that it believes are insured by the government. These expectations of government responsibility for insuring saver assets are country specific and depend on political, sociological, and historical developments. Thus, instead of debating whether to have or not to have insurance, the more relevant policy questions involve the extent of coverage and whether this insurance should be provided implicitly or explicitly.

Explicit insurance is typically better than implicit insurance. Explicit insurance entails prior recognition that the government will insure some set of saver assets in the case of financial intermediary failure. Thus, explicit insurance encourages forward-looking financial policies to mitigate the undersupply of monitoring of financial intermediaries exacerbated by government insurance of saver assets. The forward-looking policies that may accompany explicit insurance include the buildup of an adequate insurance fund, risk-based capital requirements, risk-based insurance premiums, restrictions on insured intermediary investments and activities, the coordinated use of self-regulatory bodies, private insurance, trustworthy rating agencies, and reputable accounting firms to help monitor insured intermediaries, and

more intensive government supervision of insured institutions. The mix of mechanisms for monitoring insured intermediaries and bolstering their safety depends on the existence and usefulness of self-regulatory bodies, rating agencies, and accounting firms and on the institutional capacity of the government to organize, implement, and enforce particular supervisory strategies.

Explicit insurance can often reduce the set of assets insured by the government. Since public insurance of public assets in financial institutions tends to reduce private sector screening of intermediaries, governments should attempt to limit the extent of this moral hazard by limiting the spectrum of assets insured by the government. Although there is an implicit social contract that some set of saver assets are insured by the government, and although this contract may vary from country to country based on public expectations of the role of government, governments may be able to limit the extent of the coverage by designing and publicizing a credible, simple, and explicit insurance scheme. This cannot be done with implicit insurance.

It is dangerous to combine implicit government insurance plus broad banking powers. If policymakers want to expand banking powers beyond deposit taking and loan making to underwriting and trading securities, buying equity, and managing investment companies and trusts, they should make explicit, and socially credible, commitments about which assets are insured by the government. Broadening the range of financial instruments offered by banks or putting banks into holding companies that offer a wide range of instruments may expand the set of financial instruments that the public believes are insured by the government. Financial conglomerates will have great incentives to exploit and extend the perceived social safety net to attract savers. An expansion in expectations concerning the spectrum of financial assets insured by the government will tend to reduce public monitoring of intermediaries. At the same time, authorities may not feel sufficiently compelled to expand supervisory capabilities because there is no explicit insurance! Thus, unless supervision and regulation of financial conglomerates are particularly comprehensive and effective, broad financial powers combined with an unclear delineation between insured and uninsured instruments will tend to produce incentives that yield great financial instability and suboptimal provision of financial services.

Do not expand banking powers if private and public entities are not capable of rigorously monitoring the new financial conglomerates. Broadening the powers of financial intermediaries makes monitoring intermediaries both more important and more difficult. Monitoring becomes more important because intermediaries will tend to be larger, so that failure of any single institution has bigger macroeconomic implications. Monitoring also becomes more important because complex financial conglomerates will tend to blur the difference between insured and uninsured assets.

This implies that financial intermediary creditors will have fewer incentives to monitor the intermediaries. Monitoring becomes more difficult because the institutions become much more complex. Thus, unless a solid base of private auditors, rating agencies, self-regulatory groups along with government supervision and regulation can adequately monitor financial intermediaries, broadening the legal powers of financial institutions may produce negative results.

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