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*Deposit Insurance:
Do We Need It and Why?*

by
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Deposit Insurance: Do We Need It and Why? ¹

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Abstract: Depository institutions play a crucial role in an economy. They create assets to finance a portion of government spending, i.e. deficits, and to support private sector expenditures for everything from plant and equipment to consumer durables. They also and simultaneously serve as a repository for savings, providing a positive return as well as payment services to liability holders. However, these two functions create instability in the financial sector, because illiquid assets are financed by liquid liabilities. For this reason, governments throughout the world have established a financial safety net to insure the stability and integrity of the financial system. A central piece of any regulatory structure aimed at ensuring financial stability is the existence of some sort of deposit insurance structure.

However, deposit insurance has its own set of problems. It encourages: (i) risktaking by insured institutions; (ii) neglect by depositors; (iii) intervention by regulatory agencies. Each can be explained as a rational response to the existence of government deposit insurance aimed at the lofty goal of financial stability. Depository institutions are encouraged to take risk because the costs of financing risky assets are unrelated to the probability of fault. With the government guarantee, some or all depositors are insured and care little about the assets their institutions hold or their likelihood of failure. Knowing this, regulators are forced to take on a more active role. In essence, they act as a proxy for the market in disciplining risk and encouraging prudence. In the end, the system diverges from its free market counterpart even as it attempts to obtain a socially desirable end.

The problems associated with deposit insurance are even greater for Europe as it moves closer to financial integration. With continued movement toward a single currency and a single financial market, the difficulties associated with weighing and minimizing the cost of deposit insurance to achieve its desirable attributes becomes even more difficult. This is because the willingness of different societies to absorb the costs of such a system in order to obtain the benefits of financial stability and the willingness of financial institutions to bear risk will vary. Therefore, in isolation they would have had different types and levels of deposit insurance. However, in a united Europe a convergence will be forced upon them. Where this will all end is still a very open question. But, the potential for discord and financial dislocation is considerable.

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I. Introduction

Throughout the world, financial institutions are in crisis. To be sure, the nature of the crisis is different in different places, but there is a crisis nonetheless. In the emerging markets of Eastern Europe, the old regime has been swept away, along with the financial institutions that never really provided the service they were supposed to perform. In their place a new structure is emerging, but ever so slowly¹. The developing world is equally in disarray. With the advent of deregulation in places as far apart as India and Brazil, each of these economies is struggling to find a balance between the directed credit system of the past, and a laissez-faire model proposed by advocates of free entry and an expanded financial sector². Then, there is the developed portion of the world economy. In the U.S., consolidation has dramatically contracted the number of institutions, with major players garnering an expanded market share. In Japan, the major institutions have been struggling with bad debt from the bubble economy, and their housing banks are in shambles. In Western Europe, financial integration and the Second Banking Coordinating Directive have participants scrambling for market share, even as some markets are just emerging from credit problems. Here, Scandinavia is a case in point, as is the ongoing French situation. In short, the financial sector is in turmoil everywhere we look.

Regulators realize this. They know that the sector that they are charged with overseeing has been subjected to substantial stress, and they are constantly reevaluating their role in the process. Should they, for example, allow the process of restructuring to continue unabated and unhindered, in the hope that the resultant financial structure will be more efficient in providing financial services? Should they establish, at least, some standards and controls in

¹ See Santomero (1997) for a discussion of these issues.

² On the issues of proper regulation for developing countries, see Santomero (1996).

the new deregulated global financial market? Do they have a responsibility to stop the turmoil that this change is causing, in an attempt to return to a stable financial structure? Should they, indeed, return to an era of directed credit in the name of stability and the attainment of social goals?

These are not easy questions. In fact, knowing where and when to intervene in the financial markets has always been a difficult issue for regulators to address. This is because public policy makers have a dual objective in the interventions. They seek both efficiency and financial stability, even though these objectives are often at cross purposes.

When determining the best course of action in such circumstances, it is often useful to approach the problem from first principles; to address the issue of proper regulation only after the role of institutions - banks, if you will - in the financial sector is understood and the proper place of the regulation of these firms is firmly established. This is the aim of the current paper. It is an attempt to review the place of financial institutions in the economy and explain why and how they add value to the financial market. It next explains why, in the very provision of these services, the sector is vulnerable to instability and a crisis of confidence. It then explains how regulators, all over the world, have attempted to remedy this instability problem by erecting a financial safety net to protect the sector, even as it is allowed to function in a competitive manner.

A crucial part of this safety net is implicit or explicit deposit insurance. The paper will go on to explain why it exists and why it causes problems. It offers insight into what can be done to remedy the problems without losing the benefits. But, in truth, the existence of deposit insurance will always be a balancing act. Policy makers rely on it to insure the stability

of the system; yet, they lament the problems that insurance introduces into the smooth, efficient operation of the financial sector. Nowhere is this more true than in the financial sector of Western Europe. With the move toward convergence and integration comes unique problems that result from balancing opposing views of gains and losses from a deposit insurance structure. Winners and losers are almost certainly from different geographic regions and have very different objectives. Yet, the release of the Deposit Insurance Directive in 1994 makes it clear that facing these conflicting pressures is essential to the emergence of a robust financial sector. The European Union will have a common view of the deposit insurance issue even if differences in both form and substance of coverage will survive. In the last section of the paper, this difference in perspective on the issue of optimal deposit insurance coverage is discussed in some detail.

II. The Role of Institutions In the Financial Sector

The role of institutions in the financial sector has been heavily studied in academic circles recently. This is, in no small part, the result of the expanded role they play in the developed financial markets, as Allen and Santomero (1997) illustrate. But, it may also be due to the evolution, perhaps revolution is a better word, that has occurred in these firms. The once staid financial sector has been growing and innovating since the 1960s in nearly every economic environment³. In any case, the examination has led to a consensus as to what services these institutions perform⁴

The consensus view of academics on the role of financial intermediaries is that they serve at least two primary functions. First and foremost, they are generators or creators of

³ See Santomero (1989), DeCecco (1987), Litan (1991).

⁴ See Bhattacharya and Thakor (1993) for a review, as well as Allen and Santomero (1997) for a critique of the current intermediation theories.

assets. These assets are obtained from either the government, to finance deficits, or from the private sector. In the latter case, they are expected to screen the set of borrowing opportunities presented to them, using an expertise and specific-capital that is unique to this sector⁵. In fact, their value to the economy rests primarily on their ability to screen and finance wealth enhancing projects in the economy. Projects found worthy are financed and monitored until repayment. During the later phase of the lending process, on-going servicing and monitoring becomes critical for a number of reasons. Once the loan is made, it is frequently illiquid and difficult to value without substantial effort⁶. In addition, such oversight by firms who are responsible for financing the investment project often leads to higher returns from the endeavor, as investors respond to on-going monitoring by increasing effort and by making operating decisions which are in closer adherence to the proposed purpose of the loan⁷. In both cases, the existence of a monitoring institution improves the performance of the project returns accruing to the stakeholders of the intermediary itself.

The second role normally enumerated is the channeling of savings resources to a higher purpose. This is achieved in two distinct ways. For transaction balances, the financial sector has developed the capacity to use idle balances, even while the payment system functions efficiently. From the perspective of the institution, it provides depository services as a mechanism to finance the lending activity outlined above. To the economy as a whole, the payment system that results from this process is a central part of the financial infrastructure. By extension, therefore, the fact that financial institutions are central to the clearing process suggests a need for regulatory concern and oversight of these institutions to assure the

⁵ For a fully developed model of this function, the reader is referred to Diamond (1984).

⁶ For a discussion of this issue, see Gorton and Pennacchi (1990), and Santomero and Trester (1997A).

⁷ See Allen and Gale (1988) for a discussion of the importance of monitoring to project outcomes.

integrity of the payment system⁸. In addition to providing sight deposits, this sector offers deposit liabilities as well, which directly compete with other claims in the financial markets. For these standard savings vehicles, return must be sufficient to warrant the risk and delayed consumption associated with accepting deposit liabilities of the banking firm. In short, the institutions offer standard financial assets to the public which must be priced efficiently. The benefits offered to the economic entity with excess current resources include the expectation of positive returns for deferred consumption, an additional return to risk-taking, and perhaps some minor liability transfer services, i.e., payment-clearing services, as well.

As an intermediary, the financial institution provides both of these services simultaneously, i.e., it makes loans and assumes liabilities. In fact, it often does so while holding assets that have maturity lengths that differ substantially from the average maturity of its liabilities. As a consequence, the standard asset transformation function includes maturity transformation as well as resource mobilization. While these can be viewed as mostly complimentary services, at times the use of relatively liquid liabilities to finance illiquid and longer-term risky investment projects generates an instability in the system⁹. Yet, this activity is central to providing the economy with the value-added activity of mobilizing savings assets into productive real investment.

Recently, the work of Allen and Santomero (1997) has added two additional functions to the menu of services provided by the intermediary sector, namely risk management and access to an increasingly complex financial sector. To illustrate the importance of the first of these additional services, they point out that institutions of today devote much of their efforts

⁸ Goodfriend (1989) makes this case quite effectively.

⁹ The classic references here are Diamond and Dybvig (1983), and Gorton (1988).

to decomposing and repackaging financial claims to satisfy customer needs. This can only be justified if these services of risk management are valued by the market and lead to profit opportunities. Merton and Bodie (1993) make a similar case, as does Crane et al (1995).

The access story is somewhat new, but actually springs from the early work of Blume and Friend¹⁰. These authors, among others, illustrate that direct participation in the financial sector is quite low. This has been the case for some time, and is even more evident outside the Anglo-Saxon financial markets. The authors argue that indirect access through banks and other intermediaries achieves the same end, by delegating the selection and/or monitoring of financial assets for individual investment to the intermediary's expertise. In their view, a key role performed by institutions is providing such expertise, informing their customers about investment options, and reducing the participation costs associated with the use of various financial markets.

Together, these rationales for the intermediary sector form a clear vision of the sector and the services it performs. It enters the market on behalf of both its equity holders and its deposit liability customers. It invests in financial claims that are both illiquid and risky using their specific capital and the resources of various types of claimants to finance their activity.

III. The Instability of the Sector

Given the above description of the role performed by the sector, it should be apparent that some regulatory oversight of the sector is appropriate. Financial institutions, providing the services enumerated above, are structurally vulnerable for any number of reasons. They

¹⁰ See Blume and Friend (1978).

finance the holdings of direct claims, which can be valued only imperfectly, with short-term liabilities that are viewed as redeemable at par. In addition, they provide the valuable service of maturity transformation, which is mutually beneficial to borrowers and savers, but which, nonetheless, may place the financial institution itself in jeopardy¹¹. Imperfections in both the marketability of assets held by the firm and information about their true value are fundamental characteristics of most of the direct claims held by these institutions. At the same time, their depositors and other liability claimants are unlikely to be able to make an accurate assessment of the assets' true values. After all, they purposefully transfer their wealth into the hands of these institutions because of their reluctance or inability to constantly assess the true economic value of projects financed or financial contracts held. Therefore, holders of institutions' debt and/or equity cannot reasonably be expected to readily and accurately evaluate the total value of assets held by these institutions, or even the solvency of these institutions by affirming the fact that the value of assets exceeds the promised value of their aggregate liabilities.

Nonetheless, depositors and many other liability holders place funds in these institutions fully expecting to be able to withdraw their deposits whenever they choose. Frequently, their horizon of investment is uncertain and cannot be clearly established at the outset. Accordingly, the financial institution is left in the awkward position of investing in long-term imperfectly marketable assets funded by liabilities with a perceived short, but uncertain maturity. If withdrawals are purely random, as they are likely to be most of the time, they may be statistically predictable. However, if liability holders become concerned about the solvency of the institution, withdrawals may become systematic and jeopardize the liquidity and solvency

¹¹ See Kareken and Wallace (1978), Jacklin (1987), and Santomero (1991) for a fuller discussion of these issues.

of the entire industry¹². These sudden but dramatic withdrawals are often referred to as banking panics. They not only destroy the specific capital of the institution under pressure, but also diminish the capacity of the financial sector to fund economically viable projects and monitor them to a satisfactory conclusion¹³.

The management of these institutions know that all informed depositors will behave in this way. For this very reason, they may wish to be less than completely forthcoming about the value of their portfolios. They may attempt to exercise control over information critical to estimating the value of their assets, and they may be tempted to conceal information regarding the deterioration of value. This may be done in the hope that delaying the release of information will give assets time to recover and thus avert giving liability holders an incentive to seek early withdrawal.

For their part, investors are aware that the financial institution's management has both the incentive and capacity to conceal a decline in the value of its imperfectly marketable direct claims. They are also aware that these same institutions are usually highly leveraged, so that a relatively small percentage decline in the value of the institution's direct claims results in a much larger percentage decline in its net worth. For this reason, as Calomiris and Kahn (1991) illustrate, many depositors require that much of their deposits be held in demand form. If bad news casts doubt on the value of the institution's direct claims, these creditors have a mechanism to withdraw their resources from the troubled firm. This may be accomplished quickly, as soon as they observe an action which reduces their estimate of the institution's net worth, despite assertions by the institution's management that the firm is solvent.

¹² See the work of Gorton (1988), and Jacklin and Bhattacharya (1988) for an explicit modeling of this issue.

¹³ See the work of Bernanke and Gertler(1989;1990)and Gertler(1988) for two similar models of this phenomenon and a discussion of its generalities.

Such runs, once begun, tend to be self-reinforcing. News that the depository institution is selling assets, sometimes at distressed prices, or is borrowing at very high rates, will further undermine the confidence of current and potential depositors. Even those who believe that the financial institution would be able to redeem all of its liabilities if it is given sufficient time, have a motive to join the run. They have reason to fear that the cost of hurried liquidation of direct claims in response to a run by other creditors might render their claims worthless and the institution insolvent¹⁴. Investors know that liquidity losses tend to get larger as the run continues because the most marketable direct claims are sold first.

Sophisticated participants also know that as an institution's net worth approaches zero, the depository institution's managers may be tempted to take increasingly desperate gambles to stay in business. Kane refers to this as the “go for broke syndrome”¹⁵. Thus, the perception of possible insolvency resulting from a decline in asset quality, whether true or not, can become a self-fulfilling prophecy by inducing creditors to take actions which erode the institution's net worth.

This vulnerability to runs is more than the strictly private concern of an individual depository institution and its customers. It becomes a public policy concern when a loss of confidence in the solvency of the sector, or many of its members, leads to a contagious loss of confidence in other institutions. At this point, a bank run becomes a banking panic. The key ingredient for this transition to contagion is a crisis mentality, affecting the general confidence in the system, not any one institution. Contagion may occur through four channels.

¹⁴ This is the story that Diamond and Dybvig (1983) relate so forcefully.

¹⁵ See Kane (1985) for a full discussion of this phenomenon in the context of the US thrift crisis, or Herring and VanKudre (1987) for a modeling of this behavior.

(1) Troubled financial institutions may begin to lose reserves to other unaffected institutions in a classic “flight to quality.” These banks are reluctant to relend these funds to the affiliated firm.

(2) Financial institutions in general may begin to lose reserves because cash drains from failing institutions are not redeposited in other institutions because of a concern about the entire sector.

(3) Institutions that have or are suspected to have claims against failing institutions may then be vulnerable in the second tier of the crisis.

(4) Creditors at other institutions may suspect that their institutions are exposed to the same shocks as the failing institution and withdraw funds from totally unrelated firms.

In any of these cases, liability holders run without concern about the legitimacy of their suspicion. This is a particularly serious problem when there are a few large institutions with national or international franchises. The larger the institutions, the greater the likelihood that the failure of any one will attract public attention and undermine confidence in the financial system in general, and in other similar large financial institutions in particular.

IV. The Financial Safety Net

It is for these reasons that regulators nearly everywhere have chosen to establish a mechanism to address the problem of weakness in the financial institution sector. The financial safety net, an elaborate set of institutional mechanisms for protecting the financial system, has been constructed, which has largely succeeded in preventing contagious runs in the financial sector. Through this mechanism, most countries have developed a regulatory structure that prevents the amplification of shocks through the financial system. This safety net can be viewed as a set of preventive measures that can and should be triggered at various stages in the evolution of a financial crisis.

Here is how it works. The earliest stage of a financial crisis involves a financial institution's exposure to a shock which could jeopardize its solvency. This may occur because adverse changes in the economy have increased the probability of failure. Alternatively, this may be the result of a sudden decline in the perceived or estimated value of assets which are part of the balance sheet of the institution. In any case, the institution's perceived capital position suddenly declines. If the occurrence of a shock causes creditors to question the solvency of an institution, a run may occur which can lead to the contagious transmission of liquidity problems, and perhaps solvency problems, throughout the financial system as discussed earlier.

An appropriate regulatory structure is designed to stop the sequence of events that follows the disturbance at a number of points, and preserve the integrity of the financial structure and the health of the real economy. The components of a safety net are best described in terms of functions, because the agencies that perform a particular function vary across countries and some functions are shared among agencies within a particular country.

For our purposes the safety net can be seen as consisting of seven separate steps¹⁶

- 1) The Chartering Function is established to screen out imprudent, incompetent or dishonest institution managers who would be likely to take on excessive insolvency exposure.
- 2) In the event that some financial institution managers do attempt to expose their institutions to shocks that could jeopardize their solvency, the Prudential Supervision Function is established to prevent it.
- 3) In the event that prudential supervision does not prevent excessive insolvency exposure and a damaging shock occurs, the Termination Authority should terminate the license of the institution before it becomes insolvent and causes loss to creditors.

¹⁶ This safety net is discussed in greater detail in Herring and Santomero (1991) and Herring and Litan (1995).

4) Even if the Termination Authority acts too late to prevent losses, the explicit or implicit Insurance function provided by official or private sources may prevent creditors, most often depositors, from running.

5) Even if the depository institution closes abruptly, the Insurance function may prevent contagion by sustaining the confidence of the creditors at other institutions which are thought to be similar.

6) Even if runs occur at other institutions, the Lender of Last Resort Function may enable solvent institutions to meet the claims of liability holders, avoiding forced asset liquidations and depressed prices.

7) Even if other failures occur, the Monetary Authority may prevent a shift in the public's demand for cash from reducing the volume of reserves available to the financial system as a whole, thereby confining the damage to the institutions directly affected by the original shock.

In the major industrialized countries, the various circuit breakers that comprise the financial safety net generally have been successful in preventing a problem at one institution from damaging the system as a whole. In the United States, for example, the safety net which was constructed in the 1930s has virtually eliminated the contagious transmission of shocks from one depository institution to the rest of the system. In the crisis associated with the 1987 market decline, the central bank made it clear that this security would also be offered to other members of the financial industry.

However, the safety net works best in its early and late stages. The chartering and prudential functions, so key to the integrity of the financial sector, have been responsible for maintaining a reasonably good reputation for the sector as a whole, worldwide. While crises of confidence occasionally arise, they are the noted exception, not the rule. Likewise, since the 1930s, the last stages of contagion control, using the functions of lender of last resort and monetary neutralization of a crisis, have worked reasonably well. Indeed, many would argue

that it has been used too often, thereby prohibiting the exit of failed institutions and reducing the cost of risk taking by institutions.

However, there is general agreement that regulators and policymakers have had less success with stages four and five above. When an institution, or the industry as a whole, is faced with a solvency crisis, the track record of this portion of the safety net has been quite mixed. Some regulators have been successful in using deposit insurance to navigate through these waters, insuring depositors at bankrupt institutions and assuring depositors in other banks, even as they close troubled institutions early. In rare cases, they use only a small amount of resources to resolve the problem. In such cases it is often argued that the key is to resolve the issue of the troubled institutions and contain the solvency crisis to a subset of the industry. All too often, however, when problems are the result of anything more than idiosyncratic behavior of one institution, the record has been disappointing. Sectors have fallen victim to contagion; governments have been left with large bills associated with the bailout and ex post guarantee of deposits in the system; and the institutional structure has been badly damaged¹⁷. How should it work? This is the issue to which we now turn.

¹⁷ The US savings and loan experience is a good case in point, see Kane (1985).

V. The Role and Use of Deposit Insurance

Given the importance of the banking sector, coupled with its inherent instability, governments and social policy planners have often suggested that deposit insurance has a clear role in the safety net structure. Its presence, designed to protect depositors from a crisis in the bank's balance sheet after it has begun, protects investors and adds systemic stability. Insurance prevents or reduces losses associated with the crisis for less informed depositors, and may be seen as part of a broader consumer protection program in place in many countries.

To the financial sector it adds stability to its funding base and reduces the effect of a crisis. For the troubled institution, deposit insurance is aimed at stabilizing the deposit base of the bank so as to prevent an emergency liquidation of assets and a bank run. For other institutions, the existence of insurance is seen as a mechanism to prevent a panic by assuring depositors in other banks of the integrity of the system as a whole. In short, insurance has a beneficial effect of reducing the likelihood of a bank run and the on-set of a banking panic.

Proponents of deposit insurance note that uninformed - or at least ill-informed - depositors are frequently incapable of knowing the true nature of the bank's balance sheet for the reasons that have been discussed above. Therefore, they warrant protection both because of their limited ability to make economically rational decisions, and because of their imperfect information. These features of the market may lead to needless banking panics and destruction of the sector's lending capacity.

Armed with this rationale, policy makers in the US established the Federal Deposit Insurance Corporation to provide depositor insurance in 1933. The formal system of explicit deposit insurance for small depositors was established in response to the banking crisis of the

Depression, and its attendant bank holidays and closings. However, it is noteworthy that other countries did not follow suit, choosing instead to leave insurance to the discretion of policymakers. European regulators for example have relied on implicit insurance, which has been ruled more by political considerations than law. Deposit insurance in this region has been quite real, nonetheless. Implicit insurance in Europe has led to any number of bank bailouts, and a recent spate of de facto total guarantees. One needs to look no further than the recent crisis in Scandinavia, or France. Likewise, it is reasonable to argue that the Italian banks such as BNL or Banco de Napoli, could not reasonably be in operation without the strong belief of Italian consumers and their corporate counterparts that the national state was prepared to insure the money on deposit.

The net result is that the financial system throughout the world has significant deposit coverage by deposit insurance schemes of one sort or another. Whether implicit or explicit; whether affirmed, as they have been in Europe, or denied, as they were in New Zealand, they are very real. And, it is probably fair to say that the arguments in favor of at least some coverage are legitimate. Deposit insurance has prevented most financial crises, reduced the frequency of bank runs, banking panics, and financial disruption. It has maintained the integrity of the financial system even as bankers finance risky projects, and entrepreneurs invest in projects with risky, but potentially profitable, payoffs.

However, deposit insurance poses its own set of problems. First among these is that it affects the willingness of banks to take risks, making an unstable system even more susceptible to instability. Second is the issue of who should bear the financial burden that is associated with any insurance scheme. We need to know not only who will pay the cost, but also how it

should be priced. Can it be instituted in a way that does not adversely affect the relative seniority of claimants across the insured sector, and without distorting the incentives in the financial sector itself? Third and finally, there are the political issues associated with any government intervention. Here, like elsewhere, once the government enters the scene, it brings with it issues that are distinct from those discussed here, and secondary agendas which must be addressed to understand the real world workings of any government supported initiative.

Let's examine each of these issues in turn, beginning with the incentive effects listed first. It should be quite clear that the existence of deposit insurance alters the landscape facing the banking firm. Depositors are no longer interested in the bank's portfolio risk if they believe that all of their liabilities are insured by a government agency¹⁸. They effectively have substituted the bank deposit with a government deposit. They no longer need to watch or even worry about bank risk or bank solvency, as their claim is on the government, not the bank itself.

Bank management recognizes this fact and its full implication. The bank is now capable of borrowing funds at a risk-free rate as the constraints of market discipline and risk-based liability pricing are reduced. This encourages risk taking by the firm and large commitments to risky project finance. While some may view this as a beneficial outgrowth of the system¹⁹, it clearly alters its behavior. In the limit, it distorts risk taking by encouraging excessive risk on the part of the bank, leading to a negative feedback on bank solvency²⁰

To a large extent, this incentive toward risk is a result of inefficient insurance pricing. If the government's insurance liability could be accurately and efficiently priced, many of the

¹⁸ See Merton (1977) or Sharpe (1977) for a clear discussion of this point.

¹⁹ See Goodman and Santomero (1986) for a discussion of this point.

²⁰ See Keeley and Furlong (1990) and Kim and Santomero (1988).

incentive issues would disappear²¹. However, nowhere in the world has appropriate risk-based pricing of deposit insurance been instituted. There are many reasons to explain why this is the case. First, in those countries where such insurance is implicit, by definition its pricing is infeasible. This, therefore, rules out many of the developed countries, including nearly all of Western Europe, prior to its movement toward explicit systems over the last decade or so. Second, in countries like the US with explicit insurance, an efficient risk-based pricing scheme would require the accurate and dynamic estimation of risk for each asset class. Faced with this difficult task most regulators, including until recently the FDIC in the US, chose to implement insurance based upon a flat pricing schedule. Scholars have often lamented the tendency to price insurance in a manner that ignores risk, but regulators have traditionally resisted change. The former have argued that a flat insurance fee schedule has the effect of substantially transferring wealth from conservative firms to risky ones, and from taxpayers to bank shareholders²².

With recent legislation in the US, a risk-based system has become not only legally feasible but also mandated there. However, the implication of such legislation is not at all clear. As of this date, the implementation of a risk-based insurance pricing has had only a marginal effect. Premium differentials are trivial and set in a rather ad hoc way. In fact, there is not a single case of a scientifically based deposit insurance structure in the world financial sector. This may, however, not be surprising. The work of Chan, Greenbaum and Thakor (1992) argues that, given the inability to truly capture the nature of the portfolio's risk,

²¹ For a discussion of efficient pricing of deposit insurance see both Merton (1977) cited above and Chan, Greenbaum and Thakor (1992).

²² See for example Marcus and Shaked (1984), Pennacchi (1987) and Benston et al (1989) for detailed discussions of each of these points.

variable rate insurance may be technically impossible. At the very least, exact and accurate pricing of deposit insurance coverage is a long way off.

Finally, there is the issue of the effect of government intervention on the workings of the sector itself. Some years ago, Buser, Chen and Kane (1981) argued that, by construction, government programs such as deposit insurance are always underpriced. They point out that government programs come with government intervention of various types, and this is clearly the case for deposit insurance. With a government presence, private decisions are often affected by government concerns or by political factors. This is true to a different extent in each regulatory environment, and the ability of the state to press its will or values on the financial sector will vary over time, as well as across countries. However, the government is usually omnipresent in the financial structure for both the political reasons relevant here and the stability reasons outlined above.

Whether this is problematic is still a matter of debate. Most economists would argue that government intervention has deleterious effects. This argument is quite simple. To the extent that non-economic factors affect economic decisions, these influences adversely affect the economy and the sector being manipulated. Recently, however, Stiglitz (1993) has argued in favor of such intervention, noting that private sector decision making is clearly not optimal in an imperfect market. So, perhaps, the government has an appropriate role to play. If it intervenes to achieve some social goal by directing credit or subsidizing the financial needs of certain sectors, it may enhance the performance of the economy and add to overall social welfare. To be sure, this view has not received uniform approbation. Some, including this author, have argued that political intervention rarely results in macroeconomic gain. Political

forces tend to be too great. In addition, a greater government role reduces management accountability and effort levels²³. In so doing, government intervention causes a feedback effect which reduces intermediation's efficiency and effectiveness.

What, then, is the policy prescription? In short, it is not easy. The need for insurance for at least some of the liability holders appears clear, but the effect is fairly severe. In essence, the solution reduces market discipline and opens up the institution for excessive risk taking. It also introduces non-economic factors into decisions. This has led some to propose altering the system, by reducing insurance or limiting its coverage in various ways. Two changes have received the most attention. One approach is to restrict coverage to only relatively small deposit balance levels, but to eliminate insurance beyond some minimal amount. This would retain the consumer protection aspects of insurance but do little for systemic stability. Proponents argue that depositors with larger balances are capable of evaluating the institution's solvency. Their potential exposure to loss will retain some market discipline in the system, even while stability is enhanced by the presence of insurance for the overwhelming majority of deposit customers. Another suggested remedy to the problems of the current system is to require higher bank capital, which would enhance consumer protection and systemic stability. In addition, proponents argue that owners serve as the key monitors of risk²⁴. The latter approach has been endorsed by international regulatory agencies and is the central theme of Basle capital regulations.

However, since the time of the Basle accord, the issue of deposit insurance has not gone away. In fact, the recent bank crises in Western Europe and Japan have raised concerns

²³ See Santomero (1997) for a fuller discussion of this point.

²⁴ See Benston et al (1989) and Santomero (1991) for a discussion of the full range of options for a discussion.

in both these markets over their respective postures on depositor insurance coverage. The recent experience in Western Europe comes at a good time. Faced with bank problems in several European countries, regulators are reminded that banking is a risky business. By extension, therefore, bank deposit insurance involves risk and can result in large financial exposure. This is why the recent debates in Brussels are both appropriate and interesting.

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