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Agency Problems and Goal Conflicts

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Abstract: Agency theory is used to evaluate how the European Union (EU) may deal with the resolution of goal and agency conflicts in dealing with failing financial institutions. Experience in the United States suggests that the financial and regulatory structure being put in place, which relies upon country-sponsored deposit insurance funds and home country responsibility for supervision and lender-of-last-resort functions, is not likely to be robust to the failure of a large EU institution that threatens the solvency of the deposit insurance fund or that poses systemic risk. The author concludes that the EU needs a centralized and common approach to dealing with troubled institutions.

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1. Introduction

The importance of establishing goals for financial regulators is recognized by the Basel Committee on Banking Supervision (1997). The first sentence of the Committee's first principle states:

> **An effective system of banking supervision will have clear responsibilities and objectives for each agency involved in the supervision of banking organizations.**

The Core Principle goes on to state the following:

> **Each such agency should possess operational independence and adequate resources. A suitable legal framework for banking supervision is also necessary, including provisions relating to authorisation of banking organisations and their ongoing supervision; powers to address compliance with laws as well as safety and soundness concerns; and legal protection for supervisors. Arrangements for sharing information between supervisors and protecting the confidentiality of such information should be in place.**

Effective design of a regulatory system to ensure financial stability typically includes specification of a set of regulations to ensure that institutions operate in a safe and sound manner, a system of prudential supervision of depository institutions either vested in the central bank or some other regulator, and a system of safety nets in the form of a lender of last resort function coupled with either an explicit or implicit deposit insurance scheme. However, the regulatory systems can often be plagued by agency problems and potential goal conflicts, especially since regulations and financial structures dynamically evolve over time, which may interfere with the objectives of ensuring safety and soundness.[1] Clearly, regulatory design and agency problems have been important contributors to financial crises in the U.S., such as the collapse of the Ohio state deposit insurance fund, and more recently the collapse of the Rhode Island credit union insurance funds, not to mention the problems that contributed to the collapse of the FSLIC (Federal Savings and Loan Insurance Corporation). Similar issues have been equally important in the rest of the world as well.[2] Witness the many incidents of financial crises that have occurred in even the last few years – often at great costs to taxpayers. Because of the importance of a sound, well-functioning financial system to achieving economic growth and improving societal welfare through the promotion of efficient allocation of resources, the potential for goal conflicts and agency problems to arise should be considered in designing a financial regulatory and supervisory system. Moreover, an effective design would consider not only current issues but also be incentive compatible and time-consistent to address new problems as they arise.

The Economic and Financial Committee (2001) of the European Union recently concluded that "…the existing regulatory and supervisory arrangements in Europe provide a coherent and flexible basis for safeguarding financial stability, but recommended that their practical functioning needs enhancement." Furthermore, the Committee put forward the general principle that "…private institutions should be involved as much as possible in both crisis prevention and, if this fails, in crisis management. Each financial institution is responsible for its own safety and soundness. If financial losses occur, the firm's shareholders should bear the costs and its management should suffer the consequences."[3] While such pronouncements sound good, without also providing explicit mechanisms detailing how the private sector will be involved, little has been accomplished, especially if the loss control incentives of the regulators and financial institutions are misaligned.

It has been widely recognized both in the US and elsewhere that goal conflicts and agency problems exist which may frustrate the effective functioning of these loss control arrangements. Without more explicit consideration of these issues in designing a financial regulatory structure, it may be difficult to assure that, should a crisis arise, it will be handled efficiently or that the public (taxpayers) will be adequately protected from losses.

This paper, employing the framework in Wall and Eisenbeis (1999), first discusses the nature of these conflicts and then considers whether the structure being put in place for the European Monetary Union (EMU) raises special considerations that have not yet been addressed and may impact the ability to achieve the objectives put forth by the Basel Committee. In particular, there is an attempt to isolate key features of the "new" system that may be vulnerable to conflicts or problems. In the process, the experience of the US is relied upon to the extent that there are relevant parallels that may provide useful insights as to the potential vulnerabilities in the European design.

Subsequent sections first define and discuss the nature of the goal and agency conflicts. The paper then turns to ways that they typically are resolved in a democratic system. Finally, sections turn to design features that would help mitigate the problems and their application to the European Monetary Union. The last section is a summary and conclusion.

2. Agency Problems and Goal Conflicts

The issues surrounding the appropriate way to structure financial regulatory agencies and how to apportion their responsibilities are long standing but are seldom dealt with in a systematic way before a crisis arises. In the United States, Congress tends to address financial regulatory problems in a sequential and evolving way. It usually responds to weakness or design flaws exposed by financial crises or emerging competitive inequities spawned by innovations of financial institutions designed to take advantage of regulatory arbitrage.[4] When problems appear, Congress often puts regulatory solutions in place in a piecemeal fashion without regard to secondary consequences of subsequent market responses. But more important for this discussion, while at least temporarily solving one problem, the solutions may result in conflicts and imprecise or overlapping mandates to different regulatory bodies that carry with them another set of problems. For example, a staff report of the U.S. Senate Committee on Governmental Affairs (1977) notes that "Where several agencies are involved in a particular regulatory function there is the possibility of omissions, inconsistencies and conflicting policy."

Horvitz (1983) stresses the importance of this problem to financial services by pointing out that Congress has assigned multiple goals to the financial service regulators. Each of the three major federal banking agencies – the Office of the Comptroller of the Currency (OCC), the Federal Reserve System and Federal Deposit Insurance Corporation has a different mix of goals. The OCC, for example, charters and regulates national banks. The FDIC provides federal deposit insurance and supervises state chartered banks that aren't members of the Federal Reserve System and certain thrift institutions. The Federal Reserve not only conducts monetary policy but also serves as the lender-of-last-resort (LLR) and the supervisor of both state chartered member banks and bank holding companies. Because of this differing mix of responsibilities and goals, policies may be applied or implemented differently and jurisdictional conflicts arise between the regulatory agencies over the form, substance, and implementation of regulations.

One clear example of such a goal conflict existed many years ago between the US banking agencies' safety and soundness responsibilities and their requirement to enforce the securities laws when applied to banks. The banking agencies long perceived that providing disclosures to investors of the financial condition of a bank might in some instances trigger a run on the bank to the detriment of depositors and result in potential losses to the deposit insurance fund. This problem was particularly critical to the FDIC that perceived its primary mission to protect the deposit insurance fund, even if it came at the expense of shareholders. For this reason, the FDIC resisted for many years the disclosure of financial information – even a basic income statement - out of fear that accurate information might trigger a run on financial intuitions it was responsible for, even if the information was relevant to investors. It wasn't until the bank holding company form of organization became the dominant form of banking organization, whose disclosure requirements were administered by the SEC, New York Stock Exchange, other securities exchanges and not the banking agencies, that financial institutions were required to expand their financial disclosures. Of course now, we would regard such information as not only relevant to investors, but also important to achieving market discipline, which was an anathema in earlier regulatory regimes.

An additional layer of potential conflicts among the regulators exists beyond just those at the federal level because each of the 51 states not only charter banks and thrift institutions but also promulgate rules and regulations governing their operations and activities within their home states. They also provide overlapping supervision of these institutions. State and federal regulations are not necessarily harmonized and can be conflicting. For example, there is currently a dispute brewing between many state regulators and the OCC who has pre-empted state banking agency enforcement actions for national banks as well as the application of state laws pertaining to mortgage lender/broker licensing laws, escrow account laws, credit score disclosure laws, and anti-predatory lending laws by national banks.[5] As a result, many larger institutions, especially those with significant multi-state operations are now opting for national over state charters. The resulting loss of constituents – that is, institutions to supervise and regulate by state banking regulators not only threatens the agencies' raison d'etra but also depletes their financial base. State regulators typically rely upon examination fees for their funding, a feature of regulatory design that is also fraught with potential conflicts of interest. This trend away from state charters is clearly an example of regulatory arbitrage.

More generally, in the financial regulatory arena, there are several affected parties with stakes in the outcome. These include the Congress and other legislative bodies, the public, regulated and non-regulated financial institutions, shareholders and financial institution customers, and the regulatory agencies themselves. Each of these different parties interact with each other in a dynamically evolving economy in a dialectical process described by Kane (1977). As has been already illustrated, there are many examples where conflicts arise from agency problems, such as the case where the FSLIC used the provision of tax benefits to induce acquirers to take over failed S&Ls. These inducements may have helped protect the FSLIC fund, but shifted risk to the US taxpayer who ultimately ended up paying over 150 billion dollars to resolve the thrift crisis in the late 70s and early 1980s. It has also been illustrated how the assignment of different and possibly conflicting goals to regulatory agencies may lead to problems. In many cases the conflicts can be resolved in a consistent fashion in the public arena only by congressional action or compromise between the agencies. When goal conflicts are resolved external to the agencies, this is termed **external conflict resolution.**[6]

In some cases, these conflicts could be reduced or eliminated by assigning jurisdiction for the conflicting goals to a single agency. However, in most important instances, assigning jurisdiction to a single agency does not eliminate the conflict, rather, it merely transforms the way that the conflicts are resolved, as was the case with the conflict described earlier for the FDIC between the interest of the insurance fund and the interests of investors. Resolving goal conflicts administratively means that the decision will be conditioned by agency's perception and interpretation of the primacy of its responsibilities and mandates. And the resulting outcomes may not necessarily reflect those that would arise if the conflicts were resolved in the political arena. When the resolution process is de facto delegated to a single agency to solve, this process is called **internal conflict resolution.**

While the concerns about financial regulatory structure noted by Horvitz have long existed, the problem has become more acute in recent years. Financial firms have used advances in information processing and financial technology to exploit legal loopholes and to offer ever more products that are functionally equivalent to those offered by differently regulated financial services firms. The result has been that competing institutions offering essentially identical products are subject to different rules, regulations, and regulatory burdens that differentially impact firms' profits and competitiveness in markets. To exploit these differences, institutions now routinely seek the most favorable regulatory climate in which to operate for the products they offer. As a consequence, policies adopted by one regulator intended to achieve a specific public policy goal often have the unintended consequence of shifting market shares either to financial services firms regulated by another agency with different goals or to unregulated firms who perceive a competitive advantage and enter the market. The range of policy areas with possible goals that may be subject to possible conflicts includes: consumer protection (for both retail and wholesale customers), monetary policy, community development, investor protection, market transparency, safety and soundness, ensuring the safety net, reducing systemic risk, and antitrust. The potential problems associated with conflicting regulatory goals are almost certain to increase whenever financial innovations arise to arbitrage regulations or financial modernization legislation is passed to modify the legal barriers separating different types of financial services firms. The question is to how best resolve the conflicts, and this issue is considered conceptually in the next section.

3. A Framework for Optimal Resolution of Agency and Goal Conflicts

At the highest level, design of optimal policies to resolve conflicting policy goals requires policymakers to have information on the trade-offs (costs and benefits) among the available alternatives to achieve their policy goals. Selection of the best combination of policies and methods for their implementation depends on social preferences and requires knowledge of and the ability to measure utility that is aggregated across all of the individuals in society. Because the aggregate social welfare function depends on preferences of the members of society, its parameters are surely not known nor are they directly observable. In the absence of knowledge of the social welfare function, revealed preference exercised through the political process can be used as an indirect mechanism to infer the appropriate goal tradeoffs. To this end a presumption of a representative democracy is that the elected members of the legislature are a microcosm of society whose views and preferences reflect those of society at large. But since voters cannot directly control their legislator's actions, the elected official is essentially the voters' agent.[7] Moreover, these representatives are able to listen to and balance competing special interests. This process reveals preferences for different policy outcomes. For this reason, legislators are better suited to make policy judgments than is a bureaucratic agency, for example, which often has a narrower set of goals and priorities. Because the legislature is explicitly structured so as to reflect society's views and preferences, it could be argued that all goal conflicts should be resolved by the legislature.

But the myriad of issues and lack of time makes reliance upon the legislature to essentially micromanage disputes among competing interests in a timely fashion in financial markets infeasible. One option would be for parties with special interests in particular regulatory outcomes to appeal to the legislature each time there is need for a new regulatory policy or a change in regulation. The legislature would then be faced with two costly choices. One would be to attempt ex ante to gather information and write legislation that covers all contingencies— a task that would generally be prohibitively costly and difficult, and another would be to plan regularly to write new legislation to cover changing circumstances. The alternative would be to legislate a general framework for regulatory decision making and delegates, subject to judicial oversight, to regulatory agencies the responsibility to make case by case decisions and to write specific regulations to achieve specified policy objectives. This, of course, is the option most often selected by the US Congress. For example, in passing the Bank Holding Company Amendments of 1970, there was great debate over what activities would and would not be permitted to banking organizations through the holding company form. In the end, instead of putting forth a laundry list of permissible activities, it listed several activities that presumptively would be permissible and then delegated to the Board of Governors of the Federal Reserve System (Board) the authority to decide what activities would be permissible. The Congress also specified the criteria that the Board would use – that permissible activities would be "... so closely related to banking or managing or controlling banks as to be a proper incident thereto…"[8] This delegation to the Board has resulted in new activities being authorized over time and illustrates how delegation to an agency can work. There has been little need for the US congress to intervene in the authorization of new banking activities. Having said this, some criticism has been levied that the Board has not been pro-active enough in authorizing new activities in a timely fashion.

Agency problems also arise within legislative bodies because of the need to conserve members' time, which is the scarce resource. The committee system, with oversight responsibility over related sets of issues, not only economizes on time through specialization but also creates the potential for members of the oversight and funding committees to obtain control rents from regulatory agencies and their constituencies. Members who are particularly interested in a set of economic goals may be able to exercise substantial influence over an agency's choice of priorities. Indeed, these members may be able to induce the agency to establish priorities among the goals in cases where there is almost no chance the full legislature would agree to such priorities. This ability to influence agencies provides a further incentive for the committee writing legislation to delegate goal conflicts to a regulatory agency especially when that agency will be subject to the committee's jurisdiction in the future. Blinder (1997) offers another reason for delegation of more decisions to government agencies, related to the fact that agencies tend to have longer time horizons than legislators.[9] US congressmen for example, must stand for election every two years, and thus need to demonstrate to their constituents that they have been productive on their behalf before the next election. By definition, this means that they prefer solutions to problems that generate immediately perceivable results or that avoid imposing short term costs on their constituents. In contrast, those regulators who serve at the pleasure of the President likely will have the option of staying in their positions for at least four years, while other regulatory appointees, such as the Comptroller of the Currency serve six year terms and members of the Board of Governors of the Federal Reserve serve fourteen year terms. These longer term serving regulators can afford to take a longer view when assessing regulatory alternatives and this might result in more socially desirable decision making.

Regulatory agencies play two important roles in setting public policy: (1) they provide legislative bodies with information about the set of efficient policies, and (2) they implement the resolution of conflicting goals delegated to them. One consideration is the relative efficiency of different agency structures in producing information. If economies of scope exist in gathering information across different types of financial services, especially when institutions are headquartered in one locality but operate across borders, then internalizing goal conflicts may enhance the efficiency of information production.

Alternatively, there may be diseconomies of scope such that information is more efficiently produced by agencies that specialize in particular problems or industries. This issue may be especially important in situations where regulation is decentralized, as in the EMU, but there is great need for information sharing across jurisdictions when institutions operate across borders.

4. Potential Agency Problems and Goal Conflicts Within the European Monetary Union

There are many areas where the potential for agency problems and goal conflicts may arise within the structure of the regulation of financial institutions within the EMU. Faced with these conflicts, authorities are faced with three choices.[10, 11]

1. Rely upon legislation to hardwire the choices and tradeoffs.
2. Assign the resolution of conflicts to a single agency and rely upon **internal resolution of conflicts** by the agency itself.
3. Assign conflicting goals to different regulatory agencies so that conflict resolution is externalized and ultimately left to the political process.

As a practical matter, the EU did not have the luxury of a clean slate as far as banking supervisory structure is concerned. While the EU did create a central bank, existing financial systems and legal/regulatory structures have been too different to permit the creation of a single banking regulatory agency. Thus, in practice, the choice of goal conflict resolution had to rely upon quasi-legislative solutions. In this case the European Commission, which is the body formally charged with originating and drafting legislative proposals to the Council and the European Parliament, delegated through directives to individual member countries and their respective regulatory and supervisory agencies (external resolution) the responsibility to design their own regimes.

The intent of the European Union was to create a single market for goods and services, including financial services to foster economic growth and to enhance consumer welfare through increased competition. Under the agreements, a so-called "single passport" was agreed to which allowed any financial institution chartered in one member country to operate freely in other member countries. However, having established this principle, the question then was how to shape the regulatory structure?[12] Historical practice had been to rely upon the host country to regulate how firms doing business within its borders would conduct their business. The problem with this in the EU was the concern that the host country would potentially structure regulation in ways that would disadvantage the foreign firms in competing with domestic institutions.[13] But this would be inconsistent with the single market objective, and this was made more imperative with the introduction of the EURO. The alternative selected was to rely upon the home country to provide regulation, supervision and deposit insurance for the depository institutions that they chartered.[14] Furthermore, over the longer run, regulatory competition would likely come into play facilitating the evolution of a single market. Individual country self interest in promoting and their institutions would also be an inducement to compete via deregulation of financial services. Countries offering more attractive charter options or accommodative regulatory regimes would expect to see their institutions gain market share in the EU. The logical consequence of allowing home country regulation would, as the result of regulatory competition, be a less regulated and homogeneous market place.

One consequence of leaving regulation and supervision to the home country is that the member countries in the EU have adopted different structures for financial institution supervision and regulation. Some have split supervision and regulation according to function while others have consolidated supervision and regulation into a single agency. In some instances the central bank is involved and in other countries it is not. Hence, if faced with the same supervisory or regulatory issue, agencies with different mix of functions will potentially choose different sets of policy tradeoffs depending upon their mix of responsibilities and their individual statutory mandates.[15] Some will face external resolution while others will be faced with internal resolution of conflicts. Policies will also differ across countries to the extent that internal goal conflict resolution is required as compared with external goal resolution. These differing tradeoffs will result in different policies and will set up many opportunities for individual institutions to pit the countries' agencies against each other and will foster regulatory arbitrage on the part of financial institutions to seek a competitive advantage.[16] Relying upon regulatory competition to level the playing field carries with it the risk of a race to the bottom and more lax supervision as far as safety and soundness is concerned. The EU has attempted to address this problem by setting minimum supervisory standards to be universally applicable through directives and agreements. In effect, the attempt is at least to set a lower bound as far as safety and soundness risks are concerned.

One of the more important of these directives sets policy towards capital adequacy through the Capital Adequacy Directive, which led to the Basel I capital standards for EU supervisors to follow. Basel I has now been refined by the Basel Bank Supervisors Committee now known as Basel II. Unfortunately, concentration of supervisory efforts on capital standards substitutes supervisory judgment for market-based risk weights to determine if an institution has sufficient capital. Wall and Eisenbeis

(2002) argue that this focus is misplaced and misdirects supervisory attention from prompt corrective action and least cost resolution of troubled institution.

While the EU has attempted to set minimum regulatory standards and promote cooperation and information sharing among the individual country supervisors, there is no EU-wide supervisor responsible for resolving the failures of institutions, and hence any goal conflicts that may arise should a major institution experience financial difficulty must rely upon **external resolution** of those conflicts. With no national supervisor to make the goal tradeoffs, it will likely be left to the European Commission or some similar body to resolve conflicts as they arise. The kinds of conflicts and implications for financial stability are significant and may become more so as the EU evolves. The financial system will become more integrated and more countries with different economic and financial systems at different stages of development are joining the EU. The remainder of this paper will focus on three critical areas where the goal conflicts are likely to be most important: the design of deposit insurance system, the apportionment of supervisory responsibilities between home and host country regulators, and the structure of bankruptcy resolution in the event that institutions get into financial difficulties.

4.1. The Structure of Deposit Insurance within the EMU

The desired structure for deposit insurance in the EU was sketched out in the EU's Deposit Guarantee Directive (DGD) that went into effect in 1995. The DGD endorses a decentralized approach to deposit insurance, despite the fact that depository institutions are authorized to operate within any of the member countries, and delegates to the member countries the responsibility to provide coverage to the depositors in the banks headquartered within the country. Additionally, it is the responsibility of the home country's central bank to serve as the lender of last resort in cases that don't involve EU-wide systemic risk issues.[17] The broad-based systemic lender of last resort function is left to the European Central Bank. In effect, the system bifurcates the responsibilities for controlling banking risk between the micro-risk associated with the operation of single institutions from the macro-risk associated with contagion risk or risk that spreads from one institution to another regardless of where the institutions are headquartered.

The DGD specifies the general features that an acceptable deposit insurance system should have. The most specific features being that the system should provide deposit insurance coverage of 20 thousand Euros, should exclude coverage of inter-bank deposits, and may exclude other liabilities at the discretion of the national government.[18] Co-insurance of liabilities is permitted but not required. Coverage of depositors in branches in countries other than the home country is the responsibility of the home country. Interestingly, there is a provision that permits the branches of a multinational bank to opt to provide top coverage up to those branch depositors through the host country's deposit insurance scheme, when that coverage would be "better" than that provided by the home country's plan.[19] Finally, it is also instructive in terms of what deposit insurance features are not prescribed. These include funding of the plans, pricing of coverage, who should operate the plan (the private sector or public sector), how troubled institutions should be handled, what too-big-to-fail policies might or might not be pursued, or how conflicts would be resolved where two deposit insurance funds might be affected by failure of an institution with top up coverage.[20]

In establishing the minimal requirements for deposit insurance schemes, the attempt was obviously to balance the fact that some EU members already had deposit insurance plans in place and generally, most of the key provisions and features of there programs were different. There was no one obviously optimal structure for deposit insurance plans, and presumably the best that could be hoped for was that the schemes would be harmonized over time. The potential for cross-boarder conflicts appeared minimal since there were few truly multinational institutions in the EU. As might be expected, those plans that were put in place in order to comply with the DGD varied substantially from those already in place.[21] Finally, responsibility for supervision and risk monitoring is apportioned differently across the system and within the different countries.

Going forward, however, the patchwork set of deposit insurance schemes, when coupled with the bifurcated approach to controlling systemic risk, seems fraught with the potential for agency and conflicts of interest problems.[22] These arise from several sources including:

1. Uncertainties about the funding of the deposit insurance plans,
2. Differences in deposit insurance coverage and pricing of coverage,
3. Reliance upon the home country, as opposed to host country responsibility, should institutions get into financial difficulties,
4. Differences in treatment with respect to the lender-of-last-resort function,
5. Differences in approaches to bankruptcy and priority of claims in troubled institutions and
6. Differences in EMU vs non-EMU participants.

Based upon the long history within the United States with multiple decentralized deposit insurance schemes and a fragmented bank regulatory and supervisory structure, there is a very great risk that the system being put in place in the EU will be fraught with conflicts and regulatory competition and that will not be robust to financial crises. Much of the difficulty flows from a fundamental misunderstanding of the role of deposit insurance, the nature of the guarantees being given, and the relationship between deposit insurance systems and the central bank's lender of last resort function in controlling systemic risk. These issues are covered in the next section

4.2. US Experiments with Deposit Insurance that are Relevant to Assessing EU Deposit Insurance Structure

The most transportable of experience between the US and the new EU architecture lies in the efficacy of systems that place reliance upon a decentralized approach to deposit insurance. The US has experimented extensively with decentralized deposit insurance systems that were not creatures of the federal government. These started with the New York State safety fund and culminated with the failure of the Rhode Island Share and Deposit Indemnity Corporation in 1991. Between 1908 and 1917 a total of eight states established deposit insurance systems.[23] Most of these systems failed within a few years. In every case, the insurance systems were unable to meet unusual demands for a payout when either a very large institution got into financial difficulty or many smaller institutions failed at the same time. However, this experience did not deter other states from establishing similar funds; Nebraska even re-established a fund, albeit on a much smaller scale, only to see it collapse again in 1983. The same fate befell funds in Ohio in 1985 and Rhode Island in 1991.[24]

There were several design flaws in these deposit insurance systems (see Pulkkinen and Rosengren(1993)). First, the systems tended to be critically under funded. Second, they tended to be undiversified in one of two ways. Either they were undiversified because the institutions being insured were not geographically disbursed and hence were vulnerable to regional business cycles or economic shocks, or they were undiversified because the failure of one or two large institutions was sufficient to bankrupt the funds. Third, they often had poorly designed governance systems, and this was particularly the case in the privately sponsored plans. Finally, when threatened with collapse, there was not the recognition that what provided the credibility to the plan was not so much the size of the fund, but the willingness of the sponsoring entity – the particular state legislature – to make good on the guarantees the fund offered.

Many of the same design flaws in these state-sponsored systems appear to be potentially inherent in many of the systems being put in place in the EMU. It seems clear that any fund whose insured base is not adequately diversified or that does not have the ability or willingness to use taxpayers resources, should fund resources be depleted, will not likely stand up to the costly failure of a few large banks. At a minimum, this means that reliance upon private deposit insurance systems, which the EU directive permits, seems extremely risky. In addition to insufficient funding, the lack of diversification, which was a major problem for the Rhode Island fund, means that the failure of one institution was likely to be accompanied by others.[25] One wonders about these diversification issues in another way when considering countries with only one or two major institutions, the failure of even one might endanger the entire fund.

What most architects of deposit insurance schemes seem to miss is that it is nearly impossible to determine ex ante whether or not a fund is fully funded. In the case of the US, the coverage ratio for Federal Deposit Insurance Corporation of 1.25% of insured deposits was a political compromise and not based upon any actuarial calculation. More importantly, what gives the fund credibility, especially when the financial problems in one institution threaten to spill over to others, is not the size of the fund per se but rather the willingness to make good on the guarantees should the fund run out of resources.[26] [27]This uncertainty was also a problem in both Rhode Island and Ohio. The state legislatures procrastinated and ultimately failed to promptly provide sufficient funds to make up for losses. Because of this, the credibility of the conjectural deposit guarantees went to zero, resulting in a mass exodus of both depositors and institutions. In essence a dual run occurred on the insurance funds and the institutions they insured occurred. Complicating the funding of the ODGF was that member institutions held a deposit with the fund amounting to 2% of deposits, which they carried on their books as a reserve asset. In effect this requirement tied the health of each member institution to the solvency of the ODGF. When it became apparent that the losses to the fund from the institution whose financial difficulties triggered the crisis - Home State Savings - were large and threatened the solvency of the fund, depositors became concerned about the solvency of other ODFG members. In part, this was due to the perception that the value of the deposits members held as their reserve with the fund had declined in value and thus initiated runs on member institutions.[28]

Kane (1987) argues that waffling and legislative delay was partly a political ploy to embarrass the controlling political party in the Ohio State legislature and partly an attempt to shift the costs of the fund collapse from the taxpayers of Ohio to the federal government. But we have also seen the tendency to delay and avoid recognition of losses applies to federally sponsored programs as well. The events surrounding the eventual collapse of the FSLIC in the US demonstrates the propensity of legislators to avoid facing up to the problem. Their _____ is that if they appear responsible and vote to impose resolution costs on their constituents, then they may risk not becoming re-elected.[29]

The circumstances surrounding the ODGF crisis also points to another problem related to the split of responsibilities for systemic risk between the member countries of the EU and the ECB. Specifically, the longer the delay in attempting to deal with the problem, the more likely it is that runs or systemic problems would develop that would convert what might be a problem in one institution into a problem for the deposit system itself. State authorities, to the extent that they are reluctant to impose costs on their own taxpayers, have incentives to delay and gamble that a broader authority would step in and assume the responsibilities for a crisis. This is clearly what happened in the ODGF situation. As Kane (1987) points out, the Ohio authorities responded to the initial withdrawal of funds from one institution – Home State Savings - whose ultimate failure triggered the deposit insurance crisis, as if it was an irrational run. They attempted to convince the public that all the other ODGF member institutions were sound, despite the lack of hard empirical evidence as to the solvency of Home State Savings. Interesting, Kane (1987) argues that this was not an irrational run at all. He cites evidence that depositors knew fairly precisely which institutions were vulnerable and did not withdraw their funds from either federally insured or even solvent but uninsured institutions.

In Ohio, of the losses to the ODGF, approximately $134 million were attributed to the failure of Home State Savings. Initially, to make up for deficiencies in the fund, the state allocated another $50 million and surviving ODGF members contributed another $40 million. Ultimately, at least another $120 million was ultimately paid by Ohio taxpayers to facilitate the acquisitions of some of the troubled institutions that subsequently failed. The reluctance of the state legislature to appropriate somewhere in the vicinity of $ 170 million to make good on the guarantees implicit in its state sponsorship of the fund, illustrates two facts. First, it is the ability to tap into taxpayer resources as needed rather then the size of the fund that provides the credibility of the deposit insurance guarantee. The initial reluctance of the State of Ohio to live up to its commitment with provides an interesting comparison to many of the countries currently in or entering the EU. Ohio's state gross domestic product (GDP) in 1985 was $176 billion. This is larger than 8 of the original EU countries' GDP including: Austria, Belgium, Finland, Greece, Luxembourg, Netherlands, Portugal, and Spain. It is also larger that the real GDP of all the newly admitted countries to the EU. It is not clear why countries with even smaller resources would be more willing than a relatively richer state like Ohio to honor its deposit insurance liabilities, especially, if payments were to be made to resident depositors in larger EU countries.[30] The temptation on the part of poorer counties and their politicians to gamble, just as Kane (1987) described the behavior of the state officials in Ohio, that they will be bailed out by the ECB or member nations will likely prove to be very strong, should a major crisis arise,. The chief difference, of course, between the ODGF crisis and a potential deposit insurance crisis in the EU is that there is no federal deposit insurance fund in the EU to which losses could be shifted.

In the case of the failure of the Rhode Island fund a poorly designed governance structure resulted in conflicts of interest and agency problems in it administration. The fund was owned and governed by the institutions that it insured. There is evidence that the fund board often traded off safety and soundness concerns of the fund for short-term profit interests of its members (See Pulkkinen and Rosengren (1993). In addition, since the fund's examiners were reporting to the management of the institutions they were evaluating, it was difficult for the examiners to be objective without facing either implicit or explicit resistance to some of their evaluations of member institutions. Competition with a competing fund (the FDIC) also played a role in weakening the insurance fund. Over time, larger insured institutions left the fund for federal deposit insurance whose credibility was greater.[31]

One can envision many of these same problems potentially arising in the EU, especially as the larger institutions begin to take advantage of their ability to establish offices throughout the EU. This expansion will likely lead to deposit insurance arbitrage as institutions seeks coverage from the larger, better diversified insurance funds. In the US experience, attempts by state-sponsored insurance plans to keep insured members, and hence maintain premium levels, led to increases in deposit insurance coverage limits. This would seem to be a natural response by EU country funds as they begin to lose insured institutions to other countries. Fund ownership may also prove to be a problem for several of the EU countries. Industry involvement, either exclusively or jointly with the government may give rise to the same kind of conflicting tradeoffs between profitability and safety and soundness that were manifest in Rhode Island. This may also prove to be a potential problem for EU countries that have privately administered funds.

Barth, Nolle and Rice (1997) document that 15 EU countries had either industry administered deposit insurance funds or funds that were jointly administered by industry and the government at the time of their study.[32]

Another lesson from the US pertains to persistent design problems with the current deposit insurance structure that should be avoided by EU deposit insurance plans. This concerns perverse incentive and monitoring structures incorporated into the system by the Federal Deposit Insurance Corporation Improvement Act. FDICIA explicitly attempts to minimize the losses to the deposit insurance fund. But in addition, is designed to make failures isolated events and to minimize the change for systemic crises. In the event that a failure occurs, FDICIA first requires depository institutions on an ex post basis to cover any losses that the insurance fund incurs, should those losses cause the coverage ratio of insured deposits to fall below 1.25%.[33] In effect, FDICIA created a call on the equity of the banking industry in the event that a systemic or huge problem caused the FDIC coverage ratio to fall below 1.25% or to bankrupt the fund. This provision made the FDIC the agent for the banking industry in terms of requiring it to protect the industry's capital. The chief risk to the banking industry and its capital is the failure of the FDIC and other regulators to close institutions before their net worth becomes negative. Yet the industry has no power to monitor the performance of the regulators.[34] The FDIC is answerable to Congress, and must report to Congress when failures result in significant losses to the insurance fund. But Congress' main constituency is the taxpayer and not the banking industry, who has the most to lose should the FDIC not perform.

This organizational design contains obviously miss-aligned incentives and inadequate monitoring of resolution performance, and should not be copied or modeled by other countries.[35] Unfortunately, this is what has happened in many of those EU countries with private or mixed private and public managed deposit insurance funds.

4.3 Home Country vs Host Country Conflicts in Deposit Insurance and Banking Supervision

The current deposit insurance and banking supervision structure in the EU relies upon "…the principle of home country control combined with minimum standards and mutual recognition."[36] The idea was to permit duly chartered institutions to operate throughout Europe under the supervision of the home country supervisory authority, which was to be recognized by the host country supervisors. While apportioning clear supervisory responsibility for the institution, the structure is still exposed to problems for two reasons. First, many institutions not only operate a parent institution, but also have affiliates and subsidiaries whose financial health, like the situation with bank holding companies in the US, is intimately tied together. But under the EU supervisory model, when affiliates are chartered in other countries, the supervisory responsibility for supervising those parts of the organization devolve to the supervisory agencies in those countries and not the home country of the parent organization.[37] As the experience in the US suggests, it becomes very difficult to separate an organization in this way, because in truly global financial institutions, their operational structures don't parallel their legal structures. They often will establish operational affiliates of subsidiaries to provide services and operational support, for example, across the entire organization, and the health and viability of the entire entity can often hang on the viability of a given subsidiary or affiliate. Hence the home country supervisor can't necessarily rely totally upon the supervisor of the home country or the affiliate. In many instances, US experience has suggested that institutions that become troubled will shift assets and liabilities as well as make payments upstream or downstream within an organization in order to prop up one or more affiliates or subsidiaries, but this might affect the perceived soundness of another entity. This also can shift risk from one country to another and perhaps to different country insurance funds within the EU. To hope that a financial crisis within a given entity can be managed cooperatively, given the complexities of financial institutions and their organizational structures, without clearly delineating primary and secondary roles ex anted, seems an especially risky strategy to use in designing a financial supervisory structure. The experience in managing the problems in BCCI, Diawa and Barings tend to support this concern, and one can't rely on attempting to fix coordination and responsibility for crises in the middle of the crisis. In the US, while there is segmented regulation and supervision of depository institutions at the federal level, and even multiple regulators of multiple banking subsidiaries within a bank holding company, there is a single regulator – the Federal Reserve – of the entity, and it is viewed as a consolidated entity when inspected by Federal Reserve examiners.[38]

Banking organizations in Europe tend to operate more as universal banks rather than rely upon a holding company structure, and to date there are a limited number of institutions that could be considered truly pan-European in their operations. Schoenmaker and Oosterloo (2004a,b) indicate that as of 2001, there were only 7 of Europe's 30 largest institutions that had significant cross-boarder operations. This should tend to mitigate some of the jurisdictional conflicts and coordination problems that may be associated with organizational complexities. However, should an EU institution experience financial difficult, there is every reason to believe from the US experience, that as geographical and economic barriers to expansion decline, expansion and consolidation can take place very rapidly. Often the financial inter-relationships due to derivative transactions and syndicate lending will mean that institutions may be more closely tied together financially due to cross-border transactions, even if they don't have cross-border offices.[39] Furthermore, even though cross-boarder penetration is still not extensive, banking concentration within many European countries is quite high, as compared with the banking concentration within those US states whose state sponsored deposit insurance funds failed.[40] It should also be noted, however, that foreign bank penetration into accession countries is greater than in the original EU countries. Schoenmaker and Oosterloo (2004) indicate that foreign bank share of total banking assets in countries like Czech Republic, Poland, and Slovakia as of 2001 was greater than 80%. This suggests that problems in a "foreign institution," should it experience financial difficulties, might have systemic spillover effects in these accession countries, even though it might not have similar repercussions in other countries or the home country. Hence the failure of even one significant institution may be more likely to precipitate a deposit insurance funding problem within the EU than was the case in the US.

Finally, as financial integration proceeds, differential deposit insurance coverage, terms and pricing will surely create a competition among the deposit insurance funds across the EU. In particular, presumably privately operated funds will be motivated and able to respond to market forces more quickly and will likely begin to offer more favorable terms on insurance. Current EU policies allow institutions who operate across different countries to have their deposits insurance topped off by deposit insurance funds in host countries. If the terms are more favorable than deposit insurance offered by home country plans, then one would expect institutions would opt for the more favorable insurance coverage.

The growth of cross-border insurance where an institution might have its deposits insured under several different plans raises a number of potential problems should the institution get into financial difficulty. First, the moral hazard incentives would suggest that troubled institutions would seek to fund themselves in countries with the healthier plans, thereby shifting the risks to host rather than home country deposit insurance plans. But host countries would still bear primary supervisory responsibilities even though the risks were decreasing for the home country deposit insurance funds at the expense of the host country funds.

Second, there is the risk that a financial crisis in a host country that resulted in either repudiation of deposit insurance liabilities or a run on institutions insured by a vulnerable deposit insurance fund could have spillover effects to other countries through those institutions with cross-border operations. For example, should a problem in a host country result in depositors withdrawing funds from an institution insured by a troubled deposit insurance fund, then withdrawal of funds from a cross-border branch might trigger a liquidity crisis that could result in a bank failure. This increased risk would be transferred to the home country insurance fund, or require lender-of –last resort actions from the home country's central bank. Thus, there could be a systemic spillover from a deposit insurance crises or financial crises from one country's fund to another.[41]

Third, resolution of a problem institution might prove extremely difficult, since one would expect that the various affected deposit insurance funds would seek to grab assets to protect themselves against losses in the event of a failure. These incentives might be especially difficult if the host country were also providing lender-of-last resort support to a troubled institution, but were EU members not part of the European Monetary Union. This would expose both the LLR and deposit insurance funds to exchange rate risks between the Euro and non-Euro currencies, and might be especially a problem for branches in EMU countries whose Euro deposit liabilities might be dependent upon funding and support from funds raised in non-Euro currencies.

Finally, there are the problems that differences in bankruptcy regimes may create, and difficulties that cross-border spillovers may have for deposit insurance funds, which are discussed in the next section.

4.4 Differences in Bankruptcy Policies and Their Implications for Deposit Insurance Risks

Herring (2002) devotes considerable attention to potential conflicts that may arise should a major EU financial institution experience financial difficulties and be forced into bankruptcy.[42] Should European institutions operating branches across borders get into financial difficulties and actually fail, than the coordination of the resolution process will be especially complicated by the existence of different bankruptcy philosophies prevailing in home versus host countries. There are two different bankruptcy approaches that are common in the EU. First, some host countries have bankruptcy laws that require or enable them to "ring fence" or segregate assets in branches of the failed entity within their jurisdiction. Their laws may permit them to seize branch assets located within their jurisdiction and use those assets to settle claims by their citizens against the failed entity. The aim is to protect the host country's deposit insurance liabilities and those of domestic depositors. This has proved to be a major problem in resolving the failure of BCCI.[43] Second, other countries, such as the United Kingdom, treat the failed institution as a consolidated entity and do not segment claims by the location of branches and subsidiaries or by the location of claimants.

When an institution fails that has operations in countries with different bankruptcy laws, then inherent goal and legal conflicts arise with competing and different claims on assets. While the Basel Committee may call for different countries to “cooperate” and “coordinate” their supervisory activities, these pleas are likely to have little effect or substance in actual cases, unless there are specific agreements and procedures for handling institutions in place ex ante.

Other conflicts may arise as well from the fact that different countries have different policies towards the application of bankruptcy laws to financial institutions and banks. In the US, for example, bank failures don’t fall under the standard corporate bankruptcy laws applicable to non-financial corporations.[44] In many European countries, banking organizations are subject to standard corporate bankruptcy proceedings which are determined and controlled by the courts and are outside the control of banking supervisors. Bankruptcy proceedings may also give different priority to the claims of domestic versus non-domestic claimants.

Herring (2002) also notes important differences in country approaches on how claims are settled. For example, in many countries, debtors are permitted to evoke the right of offset to their liability claims.[45] Thus a large borrower, who is also a large depository or liability holder, may apply all deposits regardless of deposit insurance limits against its debts. That is, the institution is permitted to net its exposure. In effect, this gives large depositor/borrowers insurance against loss of their deposits, regardless of the legal limits on deposit insurance coverage. The consequence is that fewer assets may be available to cover the claims that the deposit insurance fund must then absorb. This constitutes a form of collateralization in which borrower/depositors have a priority position in bankruptcy when compared with depositors who are not also borrowers.[46] The Basel Committee (2001) specifically recognized the potential for this problem to complicate the resolution process and contribute to systemic risk by raising the uncertainty of how potential claims might be settled should an institution go into bankruptcy.

The EU has recognized the need to standardize the approach to bankruptcy of financial institutions across the European Union by adopting the single entity model under the aegis of the home country as articulated in the EC Directive 2001/24/EC of April 4, 2001. As Krimminger (2004) notes, however, there is still an opt-out option from the Directive which suggests the possibility of a continuing conflict. Of course, given that the process has not been tested by a significant failure, it remains to be seen how the process will work in practice. Moreover, there doesn't appear to be a resolution yet as to how affiliates and subsidiaries will be treated in all cases.

Finally, there may be other issues that could frustrate the smooth liquidation or resolution of a large failing EU institution, such as the claims that potential legal actions or criminal actions may introduce that would potentially reduce the pool of assets available to the deposit insurance funds to settle claims and cover losses.

5. Summary and Conclusions and Policy Recommendations

Review of the potential for goal conflicts, agency problems and practical legal issues in dealing with failing or troubled institutions suggests that the structure being put in place within the EU, which relies upon country sponsored deposit insurance funds and home country responsibility for supervision and lender-of-last resort functions, is not likely to be robust to the failure of a large intuition that threatens the solvency of the deposit insurance fund. The logical conclusion is that the EU needs a centralized and common approach to dealing with troubled institutions.

If the goal is, and the position taken in this paper is that it should be, to reduce failures of depository institutions to isolated events, then the best way to accomplish this is through a well-functioning and common early intervention and prompt corrective action scheme that closes troubled institutions before they actually become insolvent. Immediate resolution means that policies need to be put in place that let claimants know ex ante exactly where they will stand in the event of bankruptcy or closure of the institution. That is clearly not the case under current rules and policies within the EU.

At the same time, experience within the US with early intervention and prompt corrective action suggests that regardless of the provisions of the statute, there has been no noticeable reduction in losses that the insurance fund has incurred. This suggests that without attention and policies to control the incentive of regulators to engage in forbearance, losses to insurance funds are likely in certain instances to be very large, costly to taxpayers and may even cause state sponsored insurance funds to collapse and/or to trigger a financial crisis.

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Footnotes

1. See Kane (1988).
2. See Honohan and Klingebiel (2003).
3. Economic and Financial Committee (pg. 11, 2001).
4. See Kane (1988).
5. The consumer protection regulations are not harmonized within the EU and represents a similar set of challenges. See Nieto and Penalosa (2004).
6. The most recent example of congressional involvement in resolving a conflict again involves the issue of OCC preemption of state enforcement actions and certain mortgage lender/broker licensing laws, escrow account laws, credit score disclosure laws, and anti-predatory lending laws for national banks. Legislation has been introduced into both the **US** House and Senate which would overturn the OCC's preemption regulations.
7. However, in their role as agents, they not only are charged to act in the best interests of their constituents, similar to corporate executives, they also have incentives to expropriate wealth by engaging in perquisite consumption and attempting to keep their jobs (or in the case of Congress, to get re-elected.) Elections are the mechanism to control, ex post, the agency problem posed by elected officials.
8. Bank Holding Company Act Amendments of 1970 (12 U.S.C. 1972).
9. Kroszner and Stratmann (1998) provide an additional reason why oversight committee members may want to exercise control over an agency. They argue that the Congressional Committee structure supports the development of a reputation equilibrium in which committee members gain a reputation for supporting the views of a particular special interest and the special interest group gains a reputation for providing campaign contributions to the member.
10. See Wall and Eisenbeis (1999).
11. The author is grateful to Larry Wall for insights and suggestions concerning this section.
12. Additionally, concern about being able to respond promptly to crises resulted in the European Commission elected to invoke comitology by creating special regulatory committees – the Banking Advisory Committee and the Committee of Banking Supervisors – to advise the Commission on banking and financial stability issues and to suggest policies and procedures for dealing with financial crises and supervisory issues (Nieto and Penalosa (2004)).
13. Part of the motive for protectionism was to protect national champions from being takeover targets. Any number of central banks have actively intervened to thwart take over attempts of a national champion by a foreign institution. The Bank of Italy, for example, intervened in an attempted takeover of UniCredito Italian by the Spanish institution Banco Bilbao Vizcaya Argentaria. Protectionism of champions has also led to government forbearance and bailouts. The French Government on three separate occasions intervened to prop up the economically insolvent Cerdit Lyonnais at great cost to the French taxpayer. Most recently, the European Commission ordered the French government to recover funds it had provided to an insolvent subsidiary before selling it back to Credit Lyonnais.
14. Schoenmaker(2003) has described the current supervisory structure within the EU in detail as well as focused on many of the issues surrounding choice of the optimal regulatory and supervisory structure.

15.Barth, Nolle, and Rice (1997) Table 12 compare different supervisory and deposit insurance structures across EU and G-10 countries as of 1995. In the EU, the structures are far from uniform, and the powers and policies clearly differ.
16. Kremers, Schoenmaker and Wierts (2003) recognize the importance of the existence of certain of these conflicts involving systemic supervision (the lender-of-last resort) and prudential supervision in comparing the supervisory structure adopted in the Netherlands and the United Kingdom. While recognizing the issues, the consolidated option was adopted in the Netherlands for resolving the supervisory issues while conflicts between supervision and conduct of business are left to be resolved externally.
17. See Kane (2003a).
18. This represents a kind of depositor preference.
19. This raises the interesting question of what assets the host country may access in the branch should the institution fail, and it also sets up a conflict in terms of the status of claims in bankruptcy if the countries have different bankruptcy statutes.
20. See Dale (2000).
21. See Demirguc-Kunt and Sobaci (2000).
22. See Kane (2003b).
23. These included Oklahoma, Kansas, Nebraska, Texas, Mississippi, South Dakota, North Dakota, and Washington. See Thies and Gerlowski (1989).
24. For discussions of these failures see Kane (1987) and Pukkinen and Rosengren (1993).
25. Fraud was a major contributor to the failure, but the lack of diversification in terms of institutions insured was a key problem.
26. This problem plagued even the US FSLIC deposit insurance fund. See Kane (1985).
27. FDICIA changed the nature of the FDIC funding.
28. The funding of the ODGF in effect tied the health of all member institutions to the health of the fund in such a way that even the insolvency of one institution was easily turned into a systemic problem for all its members.
29. Kane (1987), Kane (1985).
30. In the case of the Nordic countries, Sweden, Norway and Finland, government guarantees were both extended and honored. But that was at a time when the banking systems were essentially domestic with little in the way of foreign activities or deposits and before the Euro had been introduced in Finland and Sweden. See Moe, Solheim and Vale (2004).
31. See Schuler(1989) for a discussion of the Ohio Deposit Guarantee Fund and other state-sponsored deposit insurance systems and some of the governance incentive problems they experienced.
32. Industry administered funds included Austria, Finland, France, Germany, and Italy, while those countries with jointly administered funds included Belgium, Greece, Netherlands, and Spain.
33. See Wall and Eisenbeis (1999).
34. An interesting example of this pricing occurred recently when the Office of Federal Housing Enterprise Oversight forced Fannie Mae to increase its capital and review its accounting statements. The rating agencies downgraded Fannie Mae's subordinate debt but not its senior debt, which effectively was a recognition of the uncertainty of what actions OFHEO might take.
35. See Kane (2003b) for alternative views on deposit insurance system design in an international context.

36. Schoenmaker and Oosterloo (2004).
37. Prati and Schinasi (1999) go so far as to argue, consistent with the view expressed in this paper, that national authorities may have trouble dealing with cross-border financial crises or with those that have cross-border implications.
38. Even this structure required legislative action to indicate that when a bank within a holding company structure experiences financial difficulties, that entity could not protect the assets and resources in other banking affiliates from being tapped by the authorities, if the institution got into trouble.
39. See Favero, Freixas, Persson and Wyplosz (2000).
40. See Schoenmaker and Oosterloo (2004a,b).
41. Krimminger (2004) outlines the features that effective resolution policies have with an emphasis on speed in returning funds to insured depositors to which one should add that depositors should have certainty that they will receive their funds.
42. See also the discussion in Bliss (2003a) and Bliss (2003b).
43. Herring (2002) indicates that some countries have a single entity policy that effectively treats a foreign branch as a separate legal entity. Should a foreign institution fail, then the assets of its branches and agencies would be seized and the resource used to satisfy the claims of the liability holders in that branch. Any assets that remain would then be made available to other claimants, regardless of location.
44. Actually, the application of the bankruptcy status to a failed bank holding company is different than to a failed bank. The holding company would fall under the general corporate bankruptcy laws while banking affiliates and subsidiaries would fall under the banking laws governing failed banks.
45. Bergman, Bliss and Johnson, and Kaufman (2003) consider the specific problems of derivatives contracts in failure situations.
46. See Bliss (2003a) for an explicit treatment of the problems of dealing with derivatives and related issues in large complex banking organizations.