Global Institutions, National Supervision and Systemic Risk

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The rapid evolution of financial institutions, products and markets is increasingly challenging the effectiveness of management oversight, market discipline and official supervision. Managing an expanding range of complex products and varied services around the globe and around the clock is a daunting challenge, but it has become business as usual for globally active firms. This operating environment places a premium, as never before, on understanding and managing risk. A key to understanding and managing a firm's own risk is evaluating how effectively counterparty firms understand and manage theirs – a task that is, if anything, more challenging than the first because of the limited grounds on which to base such a judgment. Most daunting of all is the difficult task facing national supervisors who are charged with both the prevention of systemic risk and the setting supervisory requirements for the global operations of complex financial conglomerates while operating within the limits of national legal jurisdiction and supervisory charters.

Systemic risk may be defined as the risk of a sudden, unanticipated event that would damage the financial system to such an extent that economic activity in the real economy would suffer. To qualify as *systemic*, shocks must reverberate through and threaten the financial system, not just some small part of it. They may originate inside or outside the financial sector and may include the sudden failure of a major participant in the financial system, a technological breakdown at a critical stage of settlement or payments systems, or a political shock such as invasion or the imposition of exchange controls in an important financial center. Such events can disrupt the normal func-

□ Merrill Lynch & Co., Inc., New York (USA).

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tioning of financial markets by destroying the mutual trust that lubricates most financial transactions.

When a shock occurs, problems in one institution or sector of the market can spread to other institutions or markets. Contagious transmission of the shock may occur because of *actual* direct exposures to the damaged sector or, more insidiously, because of *suspected* exposures. In the absence of clear and convincing evidence to the contrary, market participants are likely to suspect that the institutions least able to withstand shocks have been damaged by one. They will attempt to protect themselves by liquidating their claims on these suspected, weaker institutions and shifting their portfolios in favour of claims to institutions perceived to be stronger. The result is a flight to quality.

When markets seize up, they cannot perform their essential function of channeling funds to those offering the most productive investment opportunities. Some institutions or sectors may lose access to the markets. Investment spending may suffer in both quality and quantity. Indeed, if the damage affects the payments system, the shock may also dampen consumption directly. The fear of such an outcome is what motivates policy-makers to act.

Over the past two decades, numerous *domestic* shocks have occurred which raised the spectre of systemic risk. Emerging markets in Asia, Eastern Europe and Latin America have sustained costly financial collapses and, since 1980, more than a dozen have suffered shocks that cost more than 10% of GDP to resolve. Among the much larger OECD economies, France, Finland, Japan, Norway, Spain, Sweden and the United States have all experienced costly financial problems within the last ten years that were (or are being) resolved by governments at substantial budgetary cost. In almost every case, governments chose to absorb losses and stand behind the financial system, apparently in the belief that this would be less costly than dealing with the consequences if a shock were to spread to the rest of the financial system and the wider economy. Concerned by the high costs involved and the danger of spillover into the international financial system, the G-7 Heads of State have called for measures to strengthen supervision and a number of initiatives have been launched.

The history of official intervention is reassuring; in fact, it could be a source of moral hazard if boards and management of financial institutions took too much comfort from it, but these successes have

been largely attributable to skillful crisis management rather than effective preventative measures.

Looking ahead, the increasing size, velocity and complexity of international transactions, and the increasing concentration of trading activity in a relatively small number of institutions that play a leading role in multiple markets, suggest an increased potential for shocks as well as increasing difficulty in improvising effective crisis management in the event a shock occurs.

New technologies, new financial products and funding techniques, internationalization of markets and the erosion of legal and trade barriers between markets and firms have all contributed to the increasing size, speed and complexity of international transactions. Advances in information and telecommunications technology have reduced the costs of cross-border transactions by dramatically lowering costs for collecting and analysing data, initiating and confirming transactions, clearing and settling payments and monitoring financial flows through management information and accounting systems. These advances have broadened the financial horizons of users of financial services, and enhanced the ability of financial institutions to provide international solutions to financial problems. They have made it possible for sophisticated firms to raise or invest funds, exchange currencies, or change the attributes of assets around the globe and around the clock.

Opportunities for cross-border financial transactions have increased as well. In recent years, country after country has liberalized its financial system and dismantled capital controls that were intended to seal off national financial markets from global influences. This has opened new markets to established firms as well as brought new players that are differently regulated or not regulated, often from countries outside the G-10, into international markets. In addition, the growing importance of institutional investors has contributed to the globalization of financial markets. In almost every major country institutional investors – banks, insurance companies, investment banks, mutual funds, pension funds and hedge funds – have come to dominate financial markets. Institutional investors face much lower transaction costs than do individuals and, thus, are much more likely to allocate assets across a global range of investment opportunities.

The developments that make possible enormous volumes of international transactions have encouraged the emergence of integrated

global financial firms with extremely complex financial and corporate structures. In fact, the growing volume of international financial transactions is heavily concentrated in a relatively small number of institutions, which have the presence and the technical expertise, information and communications systems to manage risks globally. These 'core institutions' tend to play a leading role in multiple markets and form an important part of the international financial infrastructure.

Core institutions are generally well-capitalized and headquartered in well-supervised jurisdictions. While it makes sense for international financial activity to concentrate in a small number of firms that can meet the challenge capably, the fact of concentration is worrisome given the complexity of interconnections among them. These institutions tend not just to be each other's largest counterparties, but also to have extensive dealings with many of the same customers around the world and to be members of the same clearing houses and exchanges. While mutual credit exposures with individual firms may not be excessive, direct and indirect risk exposures within this group are so complicated and opaque and change so rapidly that it is virtually impossible to monitor them in anything like real time. Accounting and disclosure practices have not begun to keep pace. Risk exposures can build up undetected by existing monitoring systems. In a crisis, both peer institutions and regulators may feel they have too little information about the condition of a faltering institution and insufficient time to assess this complex information to warrant taking action.

An institution active in scores of jurisdictions is also subject to the vagaries and interactions of the laws and regulations of each. The sudden collapse of a large, internationally-active participant in a payments system, for example, would cause unexpected difficulties for its counterparties if agreed netting arrangements prove not be legally binding. A counterparty may have permitted gross claims on the failed institution to rise to an amount larger than the counterparty's capital, presuming that claims would be netted down to a small fraction of the gross amount. If this presumption proves invalid, the surviving counterparty can be forced to joint the queue as a general creditor of the failed institution since laws in many jurisdictions favour the claims of local investors and depositors over those of foreign

institutions. And even a netted claim may not be collectible in an emergency.

Despite the complexities that have arisen in recent years, not all developments have been in the direction of increased risk. Technological improvements make possible more effective management information and control systems and analytic models which help institutions manage risks more effectively. Positive developments include: ongoing improvements in the measurement of credit and market risk, enhanced diversification of portfolios across markets, expanded use of netting and collateral, greater disclosure of off-balance-sheet risk, substantial increases in equity capital of many major financial institutions, financial sector consolidation and the growth of securitization.

Yet despite these improvements, substantial uncertainty remains over the level and direction of risk in the system and the effectiveness of measures to control it. Given the speed with which market participants can react to events anywhere in the world, reaction times in the event of a shock are virtually instantaneous. Managers and regulators have very little time to analyse the problem, formulate and implement a response. The sheer velocity with which international transactions take place may increase the risk of a misjudgment.

Confronting these challenges successfully will require improvements in management, market discipline and supervision. Core institutions should take the lead in developing an international framework for risk measurement and management. Not only do these institutions have an obvious stake in the success of such an effort, but no other institutions – private or official – are likely to bring comparable analytical resources or first-hand knowledge of global institutions and markets to the task.

Governments are also anxious that the solutions are found to this new systemic concern. Three times the G-7 Heads of State have expressed concern about vulnerability to international systemic risk, pointing out the need for remedial measures. International regulatory and supervisory authorities continue to move on a number of fronts to forge links of cooperation to overcome their individual geographic and functional constraints in dealing with global financial conglomerates. This continuing succession of initiatives suggests that no single action by itself can meet the challenge. There has to be an ongoing, cooperative effort.

Of course, there is no way to eliminate risk or failure completely. The business of market intermediation is to accept an appropriate amount of risk and manage it effectively. A financial system that attempts to eliminate risk rather than managing it well would be costly and inefficient. What is more, it would deprive the markets of innovation and creativity. Furthermore, market discipline requires the possibility of failure. This is not to say that the ideal financial market is one in which institutional failure is commonplace. Nonetheless, shareholders and managers must know that failure is possible; that knowledge is a powerful motivator of responsible behavior.

While it is not sensible to eliminate risk, the objective must be to eliminate systemic risk to devise an international financial system that can withstand shocks without failures cascading through the system. It is unreasonable to proceed as if no major institution can fail or to expect that a large, global institution will go quietly. The size and immense complexity of such institutions will make them virtually impossible to isolate.

The international financial system is going through a period of profound change that has brought about, among other things, the emergence of large integrated financial firms with corporate structures and finances of extreme complexity and global scope. Counterparties wishing to deal with them and supervisors charged with their oversight need to adopt a similarly global view of these firms' operations and finances. National systems of accounting, reporting and supervision, however, fall short of this objective. The legal structure upon which national regulators focus is no longer relevant to overall control of risk. Indeed, undue focus on legal structure could diminish the effectiveness of overall risk control in a global group.

Cognizant of this challenge, financial institutions have devoted substantial resources to improving risk management and global controls. National supervisors have likewise focused their attention on risk management, including such matters as active board and management oversight; the capacity to measure, monitor and control risks by activity and the adequacy of internal controls.

Supervisors are also recognizing the need to work with the market, so that prudential safeguards do not stifle financial innovation or competitiveness, and to encourage transparency and market discipline. The many international initiatives underway to expand

cooperation and improve coordination are also signs of progress. But there are limits to what can be achieved in this way.

Even with full understanding of these new challenges and the best of intentions to address them, supervisors find themselves hemmed in by national legislative mandates and agency practices, often based on a sectoral approach. They face political constraints arising from the issues of the moment when legislation is drafted. Such legislation may compel supervisors to act in a fashion which is unnecessarily at odds with the market unless they receive specific legislative authority to change the way they do business.

So cooperation among national and functional supervisory agencies alone is unlikely to produce oversight of global institutions on the time scale that the problem demands. As new issues arise, each supervisor will adopt its own reporting requirements to deal with them. Not only will reporting vary from country as it has in the past, but it may also be inconsistent with the practices of private managements and markets. I believe that an industry initiative is needed to promote a consistent, high standard of risk management and control for global institutions.

A single, globally consistent framework should apply to all globally-active institutions. This framework must start from the premise that the fundamental responsibility for ensuring the stability of financial institutions, and thereby limiting systemic risk, rests with the Board and management of global institutions themselves.

While this premise is not new, assigning enhanced responsibility to financial institutions implies an approach that, in practice, is much more than the *status quo*. It also implies that supervisors will be readier to rely on the institutions that they supervise, and that the institutions themselves will accept the responsibility to improve the structure of, and discipline imposed by, their internal control functions. Furthermore, it suggests a regime for global institutions that is different and more elaborate than that imposed on smaller or less geographically diversified competitors, although the responsibility of management in the area of internal controls is no less at smaller firms.

There are two reasons for this change in approach. First, by far the largest proportion of serious financial problems which beset financial organizations (whether or not they involve systemic risk) arise from problems which the organization ought to be able to control themselves. By way of example, the failures of Continental Illi-

nois and Barings, and the trading losses at institutions such as Daiwa Bank, Morgan Grenfell and Sumitomo Corporation could have been avoided if they had fully comprehensive internal controls and stronger management oversight.

Second, it is patently unreasonable to expect supervisors alone to keep global institutions from mishaps. Even if they had the resources, their mission cannot be to evaluate the quality of every trade or the current intra-day value-at-risk in trading exotic derivative instruments. The speed and complexity of innovation in the markets, the supervisors' inevitable position 'behind the curve', and their real handicaps in competing for talented staffers all argue for private institutions to take greater responsibility.

An industry framework must address the difficulties posed by institutional complexity, market volatility and geography. Yet the greatest challenge is the excessive risk behaviour that is the most likely underlying cause of losses to a financial institutions. Since no code of ethics is likely to eliminate this tendency, an institution's control system must at least aim to check the excesses of human nature by establishing an internal vigilance system that will provide early warning of such behavior. Controls must withstand both external shocks and internal breakdowns.

Comprehensive and effective controls must cover: an institution's audit committee; the internal audit function; the risk management function; and the compliance functions, including legal, regulatory and ethical review. Implementation will call for a major commitment in several discrete areas.

It should be apparent that comprehensive and effective controls are not solely a matter of skills and technologies, but of organizational culture as well. The Board and its management must exercise their responsibility to understand and manage the risks undertaken by their firm. This responsibility requires that senior management conduct a broad review of risks in the various parts of its business and follow up with an ongoing programme of action to improve risk management practices. Attention should be given to market and credit risk measures, to risk-limit structures, to operational and legal risk, to the impact of risk on capital allocation and compensation, and to the authority and effectiveness of internal functions such as risk control, internal audit and compliance.

Global institutions should undertake the difficult task of devising a framework that is appropriately aligned with supervisory requirements. The objectives and methodologies of management and supervisors do not always coincide. In some cases, they will have to be reconciled. To expedite the development of a framework, the industry and the supervisory community will have to maintain close contact and cooperate throughout the process.

It would not be sensible to fix a framework at one point in time and expect the resulting control systems to keep pace with the development of new products and trading strategies. The institutions that participate in this exercise must inevitably accept this effort as an ongoing enterprise with the continuing support and participation of leading financial institutions in close cooperation with the supervisory authorities.

In conclusion, it is patently clear that we have entered a new era of global intermediation. The private sector has reacted by reshaping their institutional framework to the realities of the market-place. Not so for those responsible for preventing systemic shocks which could roil the stability of the financial system – the supervisors. The time has come if, indeed it is not long past, to readjust the global supervisory network.

Since it is neither practical nor desirable to create a new institution – a supernational supervisor – the alternative is for the private sector to set global standards in concert with the supervisory community.