Mr. Greenspan offers his thoughts on the efforts currently being made relating to supervision and regulation of the financial markets Remarks by the Chairman of the US Federal Reserve System, Mr. Alan Greenspan, at the Spring Meeting of the Institute of International Finance in Washington on 29/4/97.

I will take this occasion to offer some thoughts related to the upcoming G-7 economic summit meeting, which will be held in Denver in less than two months. One theme in recent summit meetings -- starting in Halifax in 1995 and continuing in Lyon last year -- has been the promotion of stability in international financial markets. My purpose today is not to describe all the efforts that have been made in that regard, which relate primarily to supervision and regulation. Rather, I would like to step back a bit and offer a framework for thinking about those efforts.

To begin with, we should not lose sight of the fact that government regulation, if not carefully designed, can undermine the effectiveness of private market regulation and can itself be ineffective in protecting the public interest. No market is ever truly unregulated in that the self-interest of participants generates private market regulation. Counterparties thoroughly scrutinize each other, often requiring collateral and special legal protections; self-regulated clearing houses and exchanges set margins and capital requirements to protect the interests of the members. Thus, the real question is not whether a market should be regulated. Rather, it is whether government intervention strengthens or weakens private regulation, and at what cost. At worst, the introduction of government rules may actually weaken the effectiveness of regulation if government regulation is itself ineffective or, more importantly, undermines incentives for private market regulation. Regulation by government unavoidably involves some element of perverse incentives, that is, moral hazard. If private market participants believe that government is protecting their interests, their own efforts to do so will diminish.

At the same time, societies have judged that it is not sufficient to rely exclusively on the private sector to ensure the adequacy of the management of risk in our financial systems. There is a perceived need for supervision and regulation by the public sector, as well. As I will point out shortly, this need arises largely to counter the potential moral hazard that arises as a consequence of the development of large safety nets for our financial systems.

Many of the benefits banks provide modern societies derive from their willingness to take risks and from their use of a relatively high degree of financial leverage. Through leverage, in the form principally of taking deposits, banks perform a critical role in the financial intermediation process; they provide savers with additional investment choices and borrowers with a greater range of sources of credit, thereby facilitating a more efficient allocation of resources and contributing importantly to greater economic growth. Indeed, it has been the evident value of intermediation and leverage that has shaped the development of our financial systems from the earliest times -- certainly since Renaissance goldsmiths discovered that lending out deposited gold was feasible and profitable.

Central bank provision of mechanisms for converting highly illiquid portfolios into liquid ones in extraordinary circumstances -- a key element of our safety nets -- has led to a greater degree of leverage in banking than market forces alone would support. Traditionally these mechanisms involve making discount or Lombard facilities available, so that individual depositories could turn illiquid assets into liquid resources and not exacerbate unsettled market conditions by the forced selling of such assets or the calling of loans. More broadly, open market operations, in situations like that which followed the crash of stock markets around the world in

1987, satisfy increased needs for liquidity for the system as a whole that otherwise could feed cumulative, self-reinforcing contractions across many financial markets.

Of course, this same leverage and risk-taking also greatly increase the possibility of bank failures. Without leverage, losses from risk-taking would be absorbed by a bank's owners, virtually eliminating the chance that the bank would be unable to meet its obligations in the case of a "failure." Some failures can be of a bank's own making, resulting, for example, from poor credit judgments. For the most part, these failures are a normal and important part of the market process and provide discipline and information to other participants regarding the level of business risks. However, because of the important roles that banks and other financial intermediaries play in our financial systems, such failures could have large ripple effects that spread throughout business and financial markets at great cost.

The presence of the safety net, which inevitably imparts a subsidy to banks, has created a disconnect between risk-taking by banks and banks' cost of capital. It is this disconnect that has made necessary a degree of supervision and regulation that would not be necessary without the existence of the safety net. That is, regulators are compelled to act as a surrogate for market discipline since the market signals that usually accompany excessive risk-taking are substantially muted, and because the prices to banks of government deposit guarantees, or of access to the safety net more generally, do not, and probably cannot, vary sufficiently with risk to mimic market prices. The problems that arise from the retarding of the pressures of market discipline have led us increasingly to accept supervision and regulation that endeavors to simulate the market responses that would occur if there were no safety net, but without giving up its protections.

To be sure, we should recognize that if we choose to have the advantages of a safety net and a leveraged system of financial intermediaries, the burden of managing risk in the financial system will not lie with the private sector alone. With leveraging there will always exist a remote possibility of a chain reaction, a cascading sequence of defaults that will culminate in financial implosion if it proceeds unchecked. Only a modern central bank, with its unlimited power to create money, can with a high probability thwart such a process before it becomes destructive. Hence, central banks will of necessity be drawn into becoming lenders of last resort. But implicit in the existence of such a role is that there will be some form of allocation between the public and private sectors of the burden of risk of extreme outcomes. Thus, central banks are led to provide what essentially amounts to catastrophic financial insurance coverage. Such a public subsidy should be reserved for only the rarest of disasters. If the owners or managers of private financial institutions were to anticipate being propped up frequently by government support, it would only encourage reckless and irresponsible practices.

In theory, the allocation of responsibility for risk-bearing between the private sector and the central bank depends upon an evaluation of the private cost of capital. In order to attract, or at least retain, capital, a private financial institution must earn at minimum the overall economy's rate of return, adjusted for risk. In competitive financial markets, the greater the leverage, the higher the rate of return, before adjustment for risk. If private financial institutions have to absorb all financial risk, then the degree to which they can leverage will be limited, the financial sector smaller, and its contribution to the economy more limited. On the other hand, if central banks effectively insulate private institutions from the largest potential losses, however incurred, increased laxity could threaten a major drain on taxpayers or produce inflationary instability as a consequence of excess money creation.

Thus, governments, including central banks, have been given certain responsibilities related to their banking and financial systems that must be balanced. We have the responsibility to prevent major financial market disruptions through development and enforcement of prudent regulatory standards and, if necessary in rare circumstances, through direct intervention in market events. But we also have the responsibility to ensure that private sector institutions have the capacity to take prudent and appropriate risks.

Our goal as supervisors should not be to prevent all bank failures, but to maintain sufficient prudential standards so that banking problems that do occur do not become widespread. We try to achieve the proper balance through official regulations, as well as through formal and informal supervisory policies and procedures.

The revolution in information and data processing technology has transformed our financial markets and the way our financial institutions conduct their operations. In most respects, these technological advances have enhanced the potential for reducing transactions costs, to the benefit of consumers of financial services, and for managing risks. But in some respects they have increased the potential for more rapid and widespread disruption.

The efficiency of global financial markets, engendered by the rapid proliferation of financial products, has the capability of transmitting mistakes at a far faster pace throughout the financial system in ways that were unknown a generation ago, and not even remotely imagined in the 19th century. Financial crises in the early 19th century, for example, particularly those associated with the Napoleonic Wars, were often related to military and other events in faraway places. Communication was still comparatively primitive. An investor's speculative position could be wiped out by a military setback, and he might not even know about it for days or even weeks, which, from the perspective of central banking today, might be considered bliss.

Similarly, the collapse of Barings Brothers in 1995 showed how much more rapidly losses can be generated in the current environment relative to a century earlier when Barings Brothers confronted a similar episode. Current technology enables single individuals to initiate massive transactions with very rapid execution. Clearly, not only has the productivity of global finance increased markedly, but so, obviously, has the ability to generate losses at a previously inconceivable rate.

These technological forces also have been central to the process of globalization, that is, the growing integration of national economies -- including national financial markets. They are, of course, not the only forces. The gradual removal of barriers to trade, deregulation and reform of financial systems, and simply the enormous creation of wealth have all generated the demand and opportunities for the expansion of investment and business horizons beyond national boundaries. Technological changes have facilitated such an expansion.

The growing importance of emerging market economies in international financial markets is one manifestation not just of the impressive growth of those economies but also of increasing global integration. Thus, it is not surprising that the need to promote financial stability, and in particular to enhance prudential supervision, in emerging market economies was identified at the Lyon summit as an important objective. It is important for those economies individually and for all of us collectively.

One element of the follow-up to the Lyon summit that is especially fitting in the context of my earlier remarks has been efforts to enhance market transparency, including more - and more meaningful -- public disclosure. Meaningful public disclosures by firms about the

nature of their risk exposures and their procedures for managing those risks contribute significantly to the constructive role of market discipline. Not surprisingly, the market itself is probably the most powerful source of pressure for improved disclosures.

I might mention one specific accomplishment related to market transparency. Central banks have agreed to establish a system of regular reporting of derivatives activities by the world's major dealers, beginning as of June 1998. The system has been designed to yield aggregate data on global trading activities in a manner that avoids double counting and is sensitive to reporting burden. The aggregate data will be publicly released to enable firms to assess their own activities in relation to the market as a whole.

The globalization of international financial markets and of the operations of individual firms clearly calls for international cooperation among supervisors. Correspondingly, supervisory cooperation is an important element of the G-7 summit agenda on financial stability. Much of the recent work has related to the desirability of a more systematic exchange of information among national supervisors, including consideration of what kinds of information need to be exchanged and under what circumstances. The possible need for and possible roles of an "information coordinator" have been central issues in the Joint Forum discussions.

The objective of a more systematic exchange of information is easy to support in principle. However, when it comes to implementation, there are questions that need to be addressed. Even more questions arise when one thinks of going beyond the exchange of information to other forms of supervisory coordination, involving a "lead regulator" of some kind that is intended to fill so-called supervisory gaps.

What are the supervisory gaps that need to be filled? Each of us could probably point to episodes where problems could have been avoided, or the degree of disruption could have been reduced, if better information had been available sooner to supervisory authorities. Perhaps Barings is one example. It is more difficult to point to episodes when the absence of formal arrangements for coordination of supervisory actions inhibited a response to a problem. Conversely, might arrangements that are too formal, too rigid, or too cumbersome themselves inhibit appropriate responses in emergency situations, each of which is likely to be unique?

Another question is whether supervisory authorities have the expertise and resources to provide meaningful oversight and develop accurate assessments of the risk-taking activities of large, diversified, globally active financial institutions. If the answer is no, as might well be the case, should we nevertheless convey to market participants the sense that we are in fact adequately supervising such activities? Wouldn't that reduce the incentives for market participants themselves to provide discipline?

Would a statement that all major financial firms, even the most diversified ones, are subject to coordinated supervision suggest a degree of support that effectively extends, to an unwarranted extent, the subsidy associated with national safety nets? Would it generate a degree of moral hazard that could itself be the source of systemic risk?

The answers to these questions are not straightforward. However, while many firms should reassess and upgrade their risk management procedures, and supervisors should improve their procedures as well, I do not believe that the need for a radical change in our framework for the supervision of internationally active financial firms has been demonstrated. The paradigm of supervision itself is, of necessity, continuously adjusted to the rapidly changing, technologically driven financial system. In recent years, firms and supervisors alike

have sought to harness technological advances to enhance risk management procedures. Much thought has been given to how to make public disclosure more meaningful and to reinforce market discipline. Supervisors around the world, not just in the major industrial countries, have gotten to know each other better and to understand better each others' problems and policies. The legal and institutional infrastructure of financial markets has been significantly improved. Along with good macroeconomic policy -- a topic for another day -- a continuation of this ongoing process of careful and measured progress represents the most constructive strategy for ensuring financial stability.