

Opening Remarks

Alan Greenspan

I want first to thank Tom Hoenig and his colleagues, once again, for organizing this conference.

There is a key policy issue that we must confront in the process of maintaining financial stability in a global economy. That is the division of responsibilities for containing systemic risk between the public and private sectors. This division of responsibilities, in turn, rests on the scope of sovereign credit extension and the private hurdle rate for the cost of capital.

Let me begin with a nation's sovereign credit rating. When there is confidence in the integrity of government, monetary authorities—the central bank and the finance ministry—can issue unlimited claims denominated in their own currencies and can guarantee or stand ready to guarantee the obligations of private issues as they see fit. This power has profound implications for both good and ill for our economies.

Central banks can issue currency, a non-interest-bearing claim on the government, effectively without limit. They can discount loans and other assets of banks or other private depository institutions, thereby converting potentially illiquid private assets into riskless claims on the government in the form of deposits at the central bank.

That all of these claims on government are readily accepted reflects the fact that a government cannot become insolvent with respect to obligations in its own currency. A fiat money system, like the ones we have today, can produce such claims without limit. To be sure, if a central bank produces too many, inflation will inexorably rise as will interest rates, and economic activity will inevitably be constrained by the misallocation of resources induced by inflation. If it produces too few, the economy's expansion also will presumably be constrained by a shortage of the necessary lubricant for transactions. Authorities must struggle continuously to find the proper balance.

It was not always thus. For most of the period prior to the early 1930s, obligations of governments in major countries were payable in gold. This meant the whole outstanding debt of government was subject to redemption in a medium, the quantity of which could not be altered at the will of government. Hence, debt issuance and budget deficits were delimited by the potential market response to an inflated economy. It was even possible in such a monetary regime for a government to become insolvent. Indeed, the United States skirted on the edges of bankruptcy in 1895 when our government gold stock shrank ominously and was bailed out by a last-minute gold loan, underwritten by a Wall Street syndicate.

There is little doubt that under the gold standard the restraint on both public and private credit creation limited price inflation, but it was also increasingly perceived as too restrictive to government discretion. The abandonment of the domestic convertibility of gold effectively augmented the power of the monetary authorities to create claims. Possibly as a consequence, post-World War II fluctuations in gross domestic product have been somewhat less than those prior to the 1930s, and no major economic contraction of the dimensions experienced in earlier years has occurred in major industrial countries. On the other hand, peacetime inflation has been far more virulent.

Today, the widespread presumption is that, as a consequence of expectations of continuing inflation over the longer run, both nomi-

nal and real long-term interest rates are currently higher than they would otherwise be. Arguably, at root is the potential, however remote, of unconstrained issuance of claims unsupported by the production of goods and services and the accumulation of real assets.

Pressures for increased credit unrelated to the needs of markets emerge not only as a consequence of new government debt obligations, both direct and contingent, but also because of government regulations that induce private sector expenditure and borrowing. All of these government-derived demands on resources must be satisfied. Hence, when those demands increase, interest rates tend to rise to crowd out other types of spending.

Any employment of the sovereign credit rating for the issuance of government debt, the guaranteeing of the liabilities of depository institutions, or the liquification of assets of depository institutions through a discount or Lombard facility enables the preemption of real private resources by government fiat. Increased availability of a central bank credit facility, even if not drawn upon, can induce increased credit extension by banks and increased activity by their customers, since creditors of banks are more willing to finance banks' activities with such a governmental backstop available. If that takes place in an environment of strained resource availability, expanded subsidies to depository institutions—that is, the “safety net”—can only augment the pressures. An accommodative monetary policy can ease the strain, but only temporarily and only at the risk of inflation at a later date unless interest rates are eventually allowed to rise. This dilemma is most historically evident in its extreme form during times of war, when governments must choose whether to finance part of increased war outlays through increased central bank credit or depend wholly on taxes and borrowing from private sources.

Accordingly, central banks must remain especially vigilant in maintaining a proper balance between a safety net that fosters economic and financial stabilization and one that does not. It is in this context of competing demands for resources and the government's unique position that we should consider the role of the central

bank in interfacing with banks, and in some instances with other private financial institutions, as lenders of last resort, supervisors, and providers of financial services.

It is important to remember that 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. Central bank provision of a mechanism for converting highly illiquid portfolios into liquid ones in extraordinary circumstances has led to a greater degree of leverage in banking than market forces alone would support.

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." 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 pervasive 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.

Any use of sovereign credit—even its potential use—creates moral hazard, that is, a distortion of incentives that occurs when the party that determines the level of risk receives the gains from, but does not bear the full costs of, the risks taken. At the extreme, monetary authorities could guarantee all private liabilities, which might assuage any immediate crisis but doubtless would leave a long-term legacy of distorted incentives and presumably thwarted growth potential. Thus, governments, including central banks, have to strive for a balanced use of the sovereign credit rating. It is a difficult tradeoff, but we are seeking a balance in which we can ensure the desired degree of intermediation even in times of financial stress without engendering an unacceptable degree of moral hazard.

We should recognize that if we choose to have the advantages of

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 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 have of necessity been 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.

In practice, the policy choice of how much, if any, of the extreme market risk that government authorities should absorb is fraught with many complexities. Yet we central bankers make this decision every day, either explicitly or by default. Moreover, we can never know for sure whether the decisions we made were appropriate. The

question is not whether our actions are seen to have been necessary in retrospect; the absence of a fire does not mean that we should not have paid for fire insurance. Rather, the question is whether, ex ante, the probability of a systemic collapse was sufficient to warrant intervention. Often, we cannot wait to see whether, in hindsight, the problem will be judged to have been an isolated event and largely benign.

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, even though such risks will sometimes result in unanticipated bank losses or even bank failures.

Risk taking is indeed a necessary condition for the creation of wealth. The ultimate values of all assets rest on their ability to produce goods and services in the future. And the future as we all know is uncertain and hence all investments are risky.

The papers we will hear today and tomorrow examine this crucial nexus of risk and financial stability from various perspectives. I look forward to the insights of our colleagues.