For release on delivery
8:30 p.m. EDT
June 20, 1995

Remarks by

Alan Greenspan

Chairman, Board of Governors of the Federal Reserve System

before

The Economic Club of New York

New York, N.Y.

June 20, 1995

I am pleased to be with you tonight As you know, I was an active member of this Club for many years and an interested audience on occasions such as these, so I was glad to get your invitation some months ago to appear again on the other side of the dais, so to speak It has been a little more than two years since I last addressed the Economic Club of New York, and much has happened since

My main topic for this evening is the evolving global financial environment and its implications for central banks One of the most significant implications of the globalization process has been to increase the importance of consistently following disciplined macroeconomic policies to promote stable economies In this regard, I thought it might be appropriate to take a few minutes at the outset to review the current situation in the United States

As you all know, the Federal Reserve began to tighten monetary policy in February 1994 By that time, evidence became increasingly persuasive that the financial strains that earlier had been holding back economic expansion had eased considerably Borrower and lender balance sheets and income statements had improved markedly, and credit was readily available and increasingly used Improving financial conditions were accompanied by a considerable strengthening of economic growth and a more rapid rise in levels of resource utilization Under these circumstances, if policy weren't tightened at an early time, the likely result would have been an unsustainable pace of expansion and mounting inflationary pressures, which would unleash destabilizing forces in the economy

By 1995, the monetary tightening began to damp the increase in underlying demand This year has seen an appreciable slowing in the rate of growth of final sales from the torrid pace of 1994 and production adjustments to control inventory levels A moderation in growth was inevitable, and desirable, as the economy began to operate in the neighborhood of its long-term productive potential The longer it was delayed, the more severe the subsequent correction in output was likely to be, owing in part to the increasing risks of a major inventory buildup that would have to be reversed The process of slowing to a more sustainable pace has not been entirely smooth--anyone who thought it would be is not a very close student of economic history or human nature As I have indicated over the past several weeks, incoming information on the forces involved does suggest some increased risk of a modest near-term recession, but the early onset of this process of moderation also indicates markedly reduced prospects for a more severe inventory-induced downturn later

It is difficult at this point to judge with any confidence how these various forces will work themselves out in the period ahead The pattern of inventory investment is crucial to the outlook In recent years, improvements in technology and procedures have helped the managers of American businesses operate with increasingly leaner inventories, this was reflected in a fairly dramatic decline in inventory-sales ratios from the early 1990s into 1994 But there was obviously a limit to how far these ratios could be compressed without further technological improvements, and once the ratios flattened out last year, continuing robust sales growth necessarily led to a much higher rate of inventory investment With sales growth slowing this year, overall inventory-sales ratios have increased slightly, and a few key industries have found themselves with troubling overhangs But aggregate ratios are still low by historic standards, and the prospects of a substantial inventory liquidation, which characterized many of the sharp post-war contractions, seem limited

Although inventory investment patterns are likely to dominate near-term fluctuations in activity, it is final sales that provide the underpinnings for sustained growth Movements in financial markets recently, along with ample credit availability, should help support underlying demand going forward Nonetheless, uncertainties abound In part they arise from the inventory adjustment itself, which can feed back on final sales Ideally, production adjustments should quickly shut off unintended inventory accumulation, avoiding a prolonged period of weakness that could adversely affect business and consumer confidence and spending plans But the "ideal" and the "real" often do not converge Moreover, demand can be buffeted by a number of other factors, including importantly in current circumstances, evolving fiscal policy and economic conditions abroad

A complex business cycle process is underway, whose outcome is yet to be determined For the Federal Reserve it is a time for intensifying our normal surveillance and analysis of ongoing developments, to gauge whether policy still is appropriately positioned to foster sustained economic expansion Of one thing I am certain--our Federal Open Market Committee meeting in a couple of weeks will be most engaging I am also confident that the consideration given to the stance of policy will be in the context of our longer-term goal of price stability A consistently disciplined monetary policy is what our global financial system increasingly requires and rewards

This system also requires and rewards a disciplined fiscal policy, and in this sphere the prospects in the United States are clearly improving Both Congress and the President have committed themselves to reach budget balance early in the next decade Of course, too often in the past, good intentions have gone by the boards when specific program initiatives meet constituency pressures But I am encouraged that these are serious efforts, and offer the best chance in many years to put in place a sensible budget policy The rewards of success would be subtle, but ultimately substantial Removing the debilitating overhang of budget deficits from our entrepreneurial business system will free resources to engage in expanded wealth creation A more sustainable pattern of domestic saving and spending would promote lower interest rates and add to the trend of economic growth we bequeath to following generations Reducing the demands of the United States on world-wide savings to finance our deficit would also remove a potentially destabilizing question mark over global financial markets

Removing this possible source of disruption has become increasingly important, as global markets have evolved rapidly in recent years, taking a more prominent role in our economic lives As a result of changes in communications and information technology, and the new instruments and risk-management techniques they have made possible, financial markets undoubtedly are far more efficient today than ever before In particular, an ever wider range of financial and nonfinancial firms today can manage their financial risks quite effectively, allowing them to concentrate on managing the economic risks associated with their primary businesses Still, for central bankers with responsibilities for financial market stability, the new technologies and new instruments have presented new challenges Some argue that market dynamics have been altered in ways that increase the likelihood of significant market disruptions Whatever the merits of this argument, there is a clear sense that the new technologies, and the financial instruments and techniques they have made possible, have strengthened interdependencies among markets and market participants, both within and across national boundaries As a result, a disturbance in one market segment or one country is likely to be transmitted far more rapidly throughout the world economy This tendency poses a number of challenges to central banks as they discharge their responsibility for the stability of the world's interdependent financial system

It wasn't always thus In earlier generations information moved slowly, constrained by the state of communications technology Financial crises in the early nineteenth century, for example, particularly those associated with the Napoleonic Wars, were often related to military and other events in faraway places A European or American 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

As the nineteenth century unfolded, communications speeded up By the turn of the century events moved more rapidly, but their speed was at most a crawl by the standard of today's financial markets The environment now facing the world's central banks--and, of course, private participants in financial markets as well--is characterized by instant communication Complex financial instruments--derivative instruments, in one form or another--are being developed to take advantage of the gains in communications and information technology. Such instruments would not have flourished as they have without the technological advances of the past several decades They could not be priced properly, the markets they involve could not be arbitraged properly, and the risks they give rise to could not be managed at all, to say nothing of properly, without high-powered data processing and communications capabilities

Finance, of course, is not an end in itself It is the institutional structure that we have developed over the centuries to facilitate the production of goods and services Accordingly, to understand better the evolution of today's burgeoning global financial markets we need first to understand the extraordinary changes that have emerged in the past century or more in what we conventionally call the real side of economies the production of goods and services The same technological forces currently driving finance were first evident in the production process and have had a profound effect on what we produce and how we do it Technological change or, more generally, ideas have significantly altered the nature of output so that it has become increasingly conceptual and less physical A much smaller proportion of the measured real gross domestic product constitutes physical bulk today than in past generations

As the relative cost of transporting goods falls dramatically as a consequence of this physical downsizing, the conceptual content of output becomes a major factor in the increasingly rapid globalization of merchandise trade Obviously, the less the bulk and the lower the weight, the easier goods are to move, especially over long distances and across national boundaries Thus, in the United States we have estimated that, after we adjust for average price changes, pounds shipped per real dollar of both U S exports and imports are now less than half of what they were in 1970 The downsizing of American trade is, of course, a reflection of the extent to which conceptualization is also dominating the economies of our trading partners throughout the world Not inconsequentially, downsizing has extraordinary implications for our environment, since it is the extensive use of physical resources that has created much of our pollution and waste disposal difficulties as our populations have increased

Of course, a significant part of the pronounced expansion in international trade has resulted from the breaking down of trade barriers over the years, but the political processes that have led in that direction to a significant extent have been pushed by the technological changes in the composition of goods and services

Not unexpectedly, as goods and services have moved across borders, the necessity to finance them has increased dramatically But what is particularly startling is how large the expansion in cross-border finance has become, relative to the trade it finances To be sure, much cross-border finance supports investment portfolios, doubtless some largely speculative, but in the end, even they are part of the support systems for efficient international movement of goods and services The relative expansion in cross-border financial transactions is, in fact, another manifestation of conceptual trade, as a single financial product is broken into many pieces that, in turn, are traded

Specifically, over the decade 1983-1993, world trade measured in nominal dollars increased by about 125 percent But the increase in the stock of cross-border bank assets, bond and stock issuance and derivatives, was several multiples greater

Such rapid growth, however measured, should not be surprising given the extent to which low-cost information processing and communications technology have improved the ability of customers in one part of the world to avail themselves of borrowing, depositing, or risk-management opportunities offered anywhere in the world on a real-time basis

These developments enhance the process whereby an excess of saving over investment in one country finds an appropriate outlet in another In short, they facilitate the drive to equate risk-adjusted rates of return on investments worldwide They thereby improve the worldwide allocation of scarce capital and, in the process, engender a huge increase in opportunities for risk dispersion and hedging

The evolving nature of the financing of expanding cross-border trade suggests the potential for a far larger world financial system than currently exists If we can resist protectionist pressures in our societies in the financial arena as well as in the interchange of physical goods, we can look forward to the benefits of the international division of labor on a much larger scale in the 21st century

What we don't know for sure, but strongly suspect, is that the accelerating expansion of global finance may be indispensable to the continued rapid growth in world trade in goods and services It is becoming increasingly evident that many layers of financial intermediation will be required if we are to capture the full benefits of our advances in finance Certainly, the emergence of a highly liquid foreign exchange market has facilitated basic forex transactions, and the availability of more complex hedging strategies enables producers and investors to achieve their desired risk positions This owes largely to the ability of modern financial products to unbundle complex risks in ways that enable each counterparty to choose the combination of risks necessary to advance its business strategy, and to eschew those that do not This process enhances cross-border trade in goods and services, facilitates cross-border portfolio investment strategies, enhances the lower-cost financing of real capital formation on a worldwide basis and, hence, leads to an expansion of international trade and rising standards of living

But achieving those benefits surely will require the maintenance of a stable macroeconomic environment An environment conducive to stable product prices and to maintaining sustainable economic growth is a central responsibility of central banks How well we do our job has implications for participants in financial markets because we provide the backdrop against which individual market participants make their decisions Perhaps the most important development in recent years has been the shift from an environment of inflationary expectations built into both business planning and financial contracts toward an environment of lower inflation It is important that that progress continue

Few now question the overall benefits for economic growth and stability of the dramatic slowdown in the rate of price inflation on a worldwide basis over the past decade Fewer should question the need to maintain a credible long-run commitment to price stability

A consensus has developed among monetary authorities in most industrial countries, which is spreading to many developing countries as well, about the need to maintain a noninflationary environment in order to achieve maximum sustainable growth The statement in the communique issued following a meeting of G-7 Finance Ministers and Central Bank Governors at the end of this past April that "Considerable progress has been made in establishing the conditions conducive to achievement and maintenance of price stability," and similar references to noninflationary growth in the communique issued following last week's Halifax Summit reflect this emergence of convergence of views about a long-term focus on achieving price stability.

In the context of rapid changes affecting financial markets, disruptions are inevitable The economic consequences of these disruptions will be minimized if they are not further compounded by financial instability associated with fluctuations in underlying inflation trends Thus, as international financial markets continue to expand, central banks have twin objectives achieving macroeconomic stability and maintaining safe and sound financial institutions that can take advantage of stability while exploiting the inevitable new technological advances

The changing dynamics of modern global financial systems require that central banks address the inevitable increase of potential systemic risk It is probably fair to say that the very efficiency of global financial markets, engendered by the rapid proliferation of financial products, also 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 nineteenth century

Certainly, the Barings Brothers episode shows that large losses can be created quite efficiently Today's 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

Moreover, increasing global financial efficiency, by creating the mechanisms for mistakes to ricochet throughout the global financial system, has patently increased the potential for systemic risk Why not then, one might ask, bar or contain the expansion of global finance by capital controls, transaction taxes, or other market inhibiting initiatives? Why not return to the less hectic and seemingly less threatening markets of earlier years?

Endeavoring to thwart technological advance and new knowledge and innovation through the erection of barriers to the spread of knowledge would, as history amply demonstrates, have large, perhaps adverse, unintended consequences Suppressed markets in one location would be rapidly displaced by others outside the reach of government controls and taxes Of far greater importance, risk taking would be suppressed Without enterprises being willing to commit resources to an uncertain future on the basis of a new idea, wealth creation to enhance living standards is not possible We cannot turn back the clock--and we should not try to do so

Rather, we should recognize that, if it is technology that has imparted the current stress to markets, technology can be employed to contain it Enhancements to financial institutions' internal risk-management systems arguably constitute the most effective countermeasure to the increased potential instability of the global financial system

The availability of new technology and new derivative financial instruments clearly has facilitated new, more rigorous approaches to the conceptualization, measurement, and management of risk for such systems There are, however, limitations to the statistical models used in such systems owing to the necessity of overly simplifying assumptions Hence, human judgments, based on analytically looser but far more realistic and comprehensive valuations of what the future may hold, are of critical importance in risk management Although a sophisticated understanding of statistical modeling techniques is important to risk management, an intimate knowledge of the markets in which an institution trades and of the customers it serves is turning out to be far more important

In one sense, risk-management systems were exposed to a very severe real-life stress test in 1994, when sharp increases in interest rates created large losses in fixed income markets As a consequence, firms' models and judgments should be sounder today than those that prevailed in early 1994 But the Barings episode suggests that further improvements to internal risk-management systems as well as internal controls are needed, in some instances very significant improvements

As recent history also demonstrates, the key danger is that large and rapid movements of portfolio capital have the potential to disrupt the central market mechanisms for ensuring financial contract performance If a spasm of selling cannot readily be absorbed because of payment and settlement system inadequacies, uncertainties accelerate, inducing additional spasms and a broadening contagion of the disruption

If the central market mechanisms hold up and liquidity of underlying markets is preserved, risk-management failures at individual institutions are unlikely to give rise to systemic problems For example, the failure of Barings Brothers did not create systemic problems because the Asian futures clearinghouses continued to meet their obligations, albeit with difficulty, and the liquidity of the underlying markets for Japanese stocks and bonds was not significantly impaired

Experience with other recent market events supports the same conclusions Several studies of the 1987 stock market crash concluded that the greatest threat to the liquidity of the markets during that turbulent period was the potential for a default by a major participant in the settlement systems for equities or equity derivatives Again in 1990, the most serious threats to the orderly liquidation of the Drexel Burnham Lambert Group were posed by weaknesses in settlement arrangements

Fortunately, significant changes in payment systems are on the horizon that will allow securities settlement systems to be strengthened and thereby lessen the likelihood of a loss of market liquidity In particular, the central banks of the European Union countries are publicly committed to developing real-time gross settlement systems for large-volume payments as soon as possible This will create new opportunities for depositories in these countries to redesign their securities transfer systems as real-time gross settlement systems or as net settlement systems with multiple settlements throughout the day If depositories wish to take advantage of such opportunities, however, they will need to rethink fundamentally the design and operation of their systems, including their ability to complete settlements in the event of a default by a major participant

Central banks also have a key role to play in dealing with potential new sources of risk and of the transmission of shocks in financial markets Recognizing the increasingly interconnected nature of financial markets, central banks of various countries are working together to provide guides for the development of safer payment systems In the bank supervisory area, we are extending capital requirements for commercial banks to cover a broader array of risks, and in the process utilizing the new technologies in the private sector to assess the vulnerability of portfolio configurations

In these and other ways, we must ensure that our rapidly changing global financial system retains the capacity to contain market shocks This is a never-ending process which will require vigilance on the part of both private market participants and public regulatory authorities

In summary, recent events have taught us once again that the global nature of trade in goods, services, and financial instruments exerts an exacting discipline on the behavior of central banks Technology has defeated distance by slashing the costs of gathering information and of transacting Advances in computing and financial engineering during the past ten or fifteen years have enabled investors and speculators to choose among a wide array of investment instruments, allowing them to manage risks better and, when they choose, to exert their notions about future market movements forcefully through the use of leverage The former, improved risk management, has done much to make markets more resilient, while the latter, easier recourse to leverage, may add to the volatility of financial prices at times

These developments have freed up the flow of international capital, thus potentially improving the efficiency of the allocation of the world's resources and raising the world's living standards They have also permitted markets to respond more quickly and with greater force to a country's macroeconomic policies This puts a special burden on the Federal Reserve because the U S dollar is effectively the key reserve currency of the world trading system In that role, we enjoy an increased demand for our financial instruments However, this role also heightens the share of the demand for dollar assets that is related to more volatile portfolio motives The new world of financial trading can punish policy misalignments with amazing alacrity This is a lesson repeated time and again, taught in recent years by, for example, the breakdown of the European Exchange Rate Mechanism in 1992 and the plunge in the exchange value of the peso at the end of 1994 and early 1995

In the process of pursuing their domestic objectives, central banks cannot be indifferent to the signals coming from international financial markets Although markets can be harsh teachers at times, the constraints that they impose discipline our policy choices and remind us every day of our longer-run responsibilities

While there are many policy considerations that arise as a consequence of the rapidly expanding global financial system, the most important is the necessity of maintaining stability in the prices of goods and services and confidence in domestic financial markets Failure to do so is apt to exact far greater consequences as a result of cross-border capital movements that those which might have prevailed a generation ago