

CONDUCT OF MONETARY POLICY

Report of the Federal Reserve Board pursuant to the Full
Employment and Balanced Growth Act of 1978, P.L. 95-523
and
The State of the Economy

HEARINGS
BEFORE THE
SUBCOMMITTEE ON
DOMESTIC MONETARY POLICY
OF THE
COMMITTEE ON BANKING, FINANCE AND
URBAN AFFAIRS
HOUSE OF REPRESENTATIVES
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FEBRUARY 18, 19, and MARCH 10, 1992

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MONETARY POLICY AND THE STATE OF THE ECONOMY

TUESDAY, FEBRUARY 18, 1992

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON DOMESTIC MONETARY POLICY,
COMMITTEE ON BANKING, FINANCE AND URBAN AFFAIRS,
Washington, DC.

The subcommittee met, pursuant to notice, at 10 a.m., in room 2128, Rayburn House Office Building, Hon. Stephen L. Neal [chairman of the subcommittee] presiding.

Present: Chairman Neal and Representative Roth.

Chairman NEAL. I would like to call the subcommittee to order this morning.

I welcome our witnesses. Today, the subcommittee meets to hear testimony on monetary policy and the state of the economy. This hearing is intended to serve as a prelude to tomorrow's hearing, at which Chairman Greenspan will present the Federal Reserve's monetary policy report to Congress.

Our purpose today is to elicit expert testimony on the issues and problems we should expect Chairman Greenspan to address, and thereby help us assess the content of that report. Since no one here knows exactly what Mr. Greenspan will say tomorrow, we have given today's witnesses complete latitude to highlight those aspects of monetary policy and the economy that they deem most critical. And we have suggested that they need not be bound by the short-time horizon that typically characterizes the Fed's semiannual monetary policy reports. We understand that monetary policy operates with considerable lags, so it must be judged in terms of its cumulative impact over several years.

Before turning to today's witnesses, let me throw out several comments on the current stance of monetary policy. I think it should be evident that monetary policy over Chairman Greenspan's entire tenure has been more or less persistently oriented toward reducing inflation. Whatever other short-term goals may have held sway at particular periods, it seems to me that the Fed is making good progress toward its goal of essentially eliminating inflation. I have supported this goal by sponsoring legislation that would make zero inflation the dominant objective of monetary policy. Though we have not yet been able to enact that proposal into law, I am certainly pleased that the Fed is making noticeable progress toward that goal on its own. In fact, the Fed seems to have behaved, in practice, about the same as I would have expected it to act had our proposed legislation become law the day I introduced

it. The only possible criticism would be that monetary policy may have been even tighter than necessary or desirable during some periods.

Measured inflation has now begun to fall, and I would expect it to continue to decline, though slowly and unevenly, over the next few years. On a year-over-year basis, the Consumer Price Index is now around 3 percent. I am certain this is lower than projected in most conventional inflation forecasts made about 2½ years ago.

In other words, at the time Chairman Greenspan endorsed our zero inflation legislation, neither the financial markets nor the standard forecasters believed that inflation would really be brought down over the next few years. But they were wrong. Inflation has fallen noticeably, and is now about where it would be on a 5-year path to reach the goal of our legislation—that is, inflation so close to zero that expected future inflation is negligible and does not affect economic decisionmaking.

That Fed policy has been persistently anti-inflationary over the past few years may not seem to square with the general perception that it has been aggressively easing over the past year to counter the current recession. The Fed funds rate has been certainly reduced dramatically and policy is much easier than it would have been had that rate been held constant or reduced more slowly. But the Fed funds rate can be a very misleading indicator of the true impact of policy. M2 growth has been very weak. Though the monetary aggregates are not infallible indicators of the thrust of policy, it seems clear that, in the current context, the behavior of M2 has been a much better gauge of policy than the funds rate. By that gauge, policy has remained tight and restrictive through much of the year. It has begun to ease only in the last couple of months. It has, in fact, been so tight for zoning that M2 now has ample room to grow more robustly for a while without endangering the longer term path toward price stability.

The Fed should not, of course, throw all caution to the winds and begin monetary growth relentlessly until the economy is once again booming at unsustainable growth rates. But it can and should act to boost money growth somewhat this year. That will be necessary to achieve a decent economic recovery, and will not endanger reasonable progress toward price stability over the next few years.

The trick will be to engineer this modest monetary expansion with discretion, not overdo it, and keep the longer term trend of M2 growth on a path consistent with price stability and economic growth at its potential.

There could be a temptation for money growth to be overly easy during an election year. Certainly, any political use of monetary policy must be resisted also.

Anyway, these comments indicate how I see things. I greatly look forward to hearing from our outstanding witnesses. They are real experts in the field of monetary policy in our economy, and we are very happy to welcome them today.

Our witnesses will be Mr. Paul Kasriel, who is an economist with The Northern Trust Co. of Chicago, IL; Prof. Bennett McCallum, Carnegie-Mellon University, Pittsburgh; Mr. Ray Stone, managing director, Stone & McCarthy Research Associates, Princeton, NJ.

I would like to yield to my distinguished ranking minority Member, Mr. Roth, for any comments he would like to offer.

Mr. ROTH. Thank you, Mr. Chairman.

Mr. Chairman, I congratulate you on the quality of your witnesses here today. Felix Frankfurter said if you want to know the right answer, you have to ask the right question. I think our witnesses here today can sensitize us to the right questions we have to ask tomorrow so we can get the right answers.

The number one issue from the questionnaires that I received from my district and from the town hall meetings, and I just have come back from 47 town hall meetings, is that the number one issue, of course, is the economy and growth. People are very concerned about our deficit spending. Every town hall meeting, the first issue that always came up was, What are you people in Washington doing with the deficit, what are you doing about this huge deficit that we are running up?

The people in New Hampshire are voting today, and I think they are going to send a message and I think it is going to be in line with what we mentioned here. Low inflation is something that certainly we would all applaud. But we also have to be concerned, I think, about jobs, interest rates, and how are the people being affected by the economy.

So I am looking forward to this testimony today, Mr. Chairman, because, again, I think it is going to be a real primer for our questions tomorrow, and also for us to take these issues to the floor and tell our colleagues what direction we should be looking at and what we should be focusing on.

Thank you, Mr. Chairman.

Chairman NEAL. Thank you, sir, very much.

Unless there is some objection, we will just hear from our witnesses in the order in which I mentioned them. Will that be all right with everyone?

We would like to say immediately that all of your entire statements, any accompanying documents, will be put into the record, without objection, and I hear none, and please feel free to abbreviate as you can, inasmuch as you can. That will give us a little more time for questions and answers, which I think will be useful.

Having said that, it is a real pleasure to welcome you all, and I thank you again for helping us.

Mr. Kasriel, we would like to start with you.

STATEMENT OF PAUL L. KASRIEL, ECONOMIST, THE NORTHERN TRUST CO.

Mr. KASRIEL. Thank you, Mr. Chairman, for inviting me to speak today on the subject of monetary policy.

My name is Paul Kasriel. I hold the title of economist and vice president at The Northern Trust Co. The views I express here are my own and do not necessarily represent those of my employer, The Northern Trust Co.

I have submitted a written statement for the record, and in my allotted time this morning I will attempt to summarize this statement.

Before starting with this, I want to make two apologies. First, there are several typographical errors in my written statement. One of them is of some substance. On page 15 of the copy that you have, I have started the recession a year earlier, in 1989 rather than 1990. Maybe that is what I was thinking at the time in 1989, but certainly it started in 1990, not 1989.

The other apology that I want to make is that at times my testimony will be a bit pedantic. Basically, what I am sharing with you are the thought processes that led me to my conclusions, and I am imposing a personal bias.

I am much more amenable to accepting a conclusion when I can see the steps that led up to that conclusion, than just accepting it on face value. So with those apologies in mind, I will begin.

Broadly defined, money supply, such as M2 and M3, has decelerated in growth over the past 3 years despite a Federal Reserve induced decline in short-term interest rates of almost 6 percentage points. During this period of historically slow money growth and declining interest rates, economic activity has been very sluggish.

At the same time that growth in money and economic activity was slowing, expenditures to honor the government's deposit insurance commitment at insolvent depository institutions, which I shall hereafter refer to as banks, increased dramatically. I believe these government expenditures, in conjunction with—and this is very important—in conjunction with a Federal Reserve operating policy of targeting the overnight Federal funds rate on a day-to-day basis, have played a major role in retarding growth in M2 and M3.

Furthermore, I believe the slow money growth brought about for these reasons implies sluggish economic activity, just as would be the case if the Federal Reserve intentionally produced a slowdown in money growth in the absence of government expenditures for deposit insurance.

I want to make it very clear that in no way am I suggesting that the government should abandon its commitment to its deposit insurance responsibilities, or in no way am I suggesting that the government should slow down its activities in this area.

Robert D. Laurent, Senior Economist at the Federal Reserve Bank of Chicago, has estimated that gross government expenditures related to deposit insurance totaled about \$333 billion between the beginning of 1986 and the end of September 1991. Based on the January 1992 Congressional Budget Office forecast data, I estimate that in fiscal years 1992 through 1994, the government will have to spend an additional \$350 billion gross in order to honor its deposit insurance commitment.

Unless the Federal Reserve offsets these actions, broadly defined money growth is likely to remain low and so too is growth in nominal economic activity. In the absence of deposit insurance when a bank fails, bank deposits and other bank liabilities contract by the amount of the failed bank's negative net worth.

This is exactly what occurred in the early 1930's in the United States before Congress passed legislation creating a system of deposit insurance. During this period, there was no question as to whether deposits contracted when a bank failed or whose deposits contracted when a bank failed. It was the deposits of the failed bank that disappeared.

Under the current system of deposit insurance, the closure of an insolvent bank also results in the contribution of deposits. However, unlike the situation in which there is no deposit insurance under the current arrangement, it is not the deposits owned by depositors at the failed bank that contract. When that bank is closed, these depositors get a check from the government. These checks are then redeposited in solvent banks.

With deposit insurance, the deposits that contract are those obtained by the government either through the sale of securities or the collection of taxes for the purpose of honoring its deposit insurance commitment. In my written statement, in exhibit 1, I have a simplified analysis of the transactions involved in the closure of a bank. I won't go through that at this point. I would be glad to answer any questions you have on that.

But two conclusions emerge from that analysis. One, deposits do indeed contract by the amount of the negative net worth of the closed bank. And two, and this is very important, reserves in the banking system are unchanged as a result of these transactions.

This situation of a decline in deposits but no change in reserves represents an unstable equilibrium. Even though the supply of reserves is unchanged, it is in excess of the demand for reserves. To understand this, it is important to realize that banks' demand for reserves is positively related to the level of their deposits. Part of this demand is mandated. The Federal Reserve has set legal reserve requirements against transaction accounts. But even if the Federal Reserve did not impose legal reserve requirements, banks would still hold reserves against their deposit liabilities to protect against adverse clearings with other banks.

Indeed, Federal Reserve statistics show that banks in the aggregate consistently hold reserves in excess of what they are required to hold. The critical issue is not the magnitude of the change in the demand for reserves; rather, the critical issue is that there is a fall in the demand for reserves.

Therefore, with the demand for reserves having fallen and the supply reserves unchanged, there must exist an excess supply of reserves relative to the demand for them. This represents a disequilibrium in the market for reserves.

This can be resolved in two ways: Either deposits can increase which will cause the demand for reserves to increase, or the supply of reserves can be reduced to match the lower reserve demand. The actions of the Federal Reserve determine how this disequilibrium is resolved. If the Fed chooses to leave the level of the reserves unchanged, the excess of reserves will manifest itself by a fall in the price of reserve credit, that is, the overnight Fed funds rate. The fall will induce surviving banks to acquire more earning assets, or, in other words, to make more loans and purchase more securities. Because assets equal liabilities, an increase in banks' assets also implies an increase in their liabilities of which deposits are by far the largest component.

As this process of asset acquisition and liability growth by banks progresses, banks' demand for reserves will start to rise back toward the level of reserves. If the Fed allowed this process to work its way to completion, the closure of insolvent banks would not result in a significant slowing of money supply growth.

The other way that this relative excess reserve disequilibrium can be resolved and the way I believe it has in actuality, is for the Fed to reduce the supply of reserves until it equals the reduced demand for reserves. What would motivate the Fed to do that under these circumstances would be the decline in the Fed funds rate as mentioned above.

Although the Fed does not pursue a static Fed funds rate targeting policy over time, on a day-to-day basis it does seek to keep the Fed funds rate at some specified target level. The Fed will drain or add reserves on any given day in order to stabilize the funds rate at this targeted level. Thus, it is likely that the Fed would engage in open market sales of government securities in order to drain reserves from the banking system if it observed a decline in the Fed funds rate from the targeted level, for whatever reason, including the loss of deposits because of bank closures.

Thus the Fed's practice of stabilizing the Federal funds rate on a day-to-day basis is tantamount to validating the contribution in deposits that occurs from the closing of insolvent banks. If the Fed's day-to-day operating procedure were geared more toward hitting an aggregate reserve target, the closing of insolvent banks would not depress money growth nearly to the extent implied by targeting the funds rate on a day-to-day basis.

Past statements by the Fed clearly indicate that it was aware that the closure of insolvent banks and thrifts had resulted in the slowing of the growth of the broad money supply. In its monetary policy report to Congress of February 20, 1991, the Federal Reserve wrote: "The shortfall in money growth probably reflected the shifting financial flows associated with the contraction of the thrift industry. Indeed, the slowdown of M2 growth emerged about the same time that RTC activity picked up."

In an unpublished staff memo entitled "Monetary Growth and Depository Closings" dated November 19, 1991, the Federal Reserve staff wrote: "Recent empirical studies have indicated that the closing of depository institutions, and particularly resolution activity by the RTC, does appear to be associated with the decline in M2 growth in the contemporaneous and following month."

While the Federal Reserve appeared to be aware of the contractionary effects of bank closures on broad money growth, it apparently did not view these money supply effects as having negative implications for financial activity. In its monetary policy report to Congress of July 18, 1990, the Federal Reserve wrote: "In anticipation of further contractions in the thrift industry, and its associated effects on depository intermediations, the committee reduced the annual growth range for M3 by a full percentage point in February."

If the Fed had thought the reduction in M3 caused by the "further contribution in the thrift industry" would have negative implications for economic activity going forward, at a time when economic growth already was getting low, it is doubtful it would have lowered its annual target range for M3.

It is generally acknowledged that the decline in deposits during the Great Depression was contractionary with respect to the economic activity. Indeed, many economic historians believe the Fed-

eral Reserve's failure to maintain the money stock during this period was its biggest policy mistake.

One striking difference between the early 1930's and now is the current system of deposit insurance. It appears that the reason many analysts do not view weak money supply growth resulting from bank closures as having negative implications for economic activity is that the depositors currently at failed banks do not directly suffer monetary losses.

Perhaps another reason why this source of weak money growth is not considered contractionary is that a large portion of the funds used by the government to honor its deposit insurance commitment has been acquired through the public's voluntary purchase of securities from the government.

It is argued by some that because the public voluntarily gives up deposits for securities, the reduction in the supply of money corresponds exactly with the reduction in the public's demand for money, and therefore is neutral with respect to its effect on economic activity.

It is important to understand that a transaction need not be involuntary to be contractionary for economic activity. Indeed, most economists acknowledge that a sale of government securities by the Federal Reserve from its portfolio to the public has contractionary implications for economic activity.

This purely voluntary purchase of securities by the public reduces bank reserves and ultimately bank deposits. The contractionary effect on economic activity arises because the supply of money has been reduced relative to the public's demand for money.

There is no reason to believe that the demand for money changes depending on whether the public is being offered more government securities to fund the government's deposit insurance commitment or whether the Federal Reserve is intentionally contracting the money supply. All the public knows is that it is being offered more government securities to hold.

It should be noted that the decline in the money stock that results from deposit-insurance-related government expenditures would occur in exactly the same manner if the funding of these expenditures came from taxes rather than security sales. It would strain credulity to argue that the decline in the money stock resulting from tax payments to fund deposit insurance expenditures represented a fall in the public's demand for money.

The chart in exhibit 2 of my written statement relating to volume of deposit insurance expenditures to the growth in total bank and thrift liabilities illustrates the inverse correlation between these two series. Sharp upward spikes in deposit-insurance-related government expenditures were associated with slowdowns in the growth of bank and thrift liabilities.

As deposit-insurance-related expenditures moved back down to lower levels, bank and thrift liability growth tends to pick up. This is quite apparent in the period October 1991 through January 1992, a period in which we have experienced a pickup in M2 and M3 growth.

Unlike laboratory scientists, economists do not have the luxury of holding everything else constant while measuring the effects of

changes in one particular variable on the behavior of other economic variables thought to be related.

One variable that would have a very important effect on the money supply and which has not been held constant since the pickup in deposit insurance expenditures in 1989 is the Fed funds rate. Despite the nearly 6-percentage-point Fed-engineered decline in the Fed funds rate, annualized M3 growth in the period between May 1989 and December 1991 was only 2 percent, considerably below the 5.6 percent annualized rate at which M3 grew in the preceding comparable period.

It would appear the contractionary effects of M3 on deposit expenditures have overwhelmed the stimulative effects of the lower Fed funds rate. Perhaps these government expenditures are the weather system that is spawning the metaphorical 50-miles-an-hour headwind against which Federal Reserve Chairman Greenspan says the economy has been moving.

In the presence of higher deposit-insurance-related government expenditures, in order to maintain a given growth rate in the money supply, the Fed will have to lower the funds rate more than otherwise.

Deposit insurance expenditures may help explain some anomalies of the current recession. Every recession in the postwar period, except for the current one, was immediately preceded by a rise in the Federal funds rate. In contrast, the recent recession occurred more than a year after the Fed funds rate had peaked, and about a year after the pace of deposit insurance expenditures picked up dramatically.

In the spring of 1991, the economy showed signs of recovery from the recession. However, by November the recovery had dissipated. In the 4 months at the end of 1991, deposit insurance expenditures averaged \$7.2 billion per month. In the following 7 months ended September 1991, the monthly average of these expenditures rose to \$13.7 billion per month, almost double that of the previous 4 months.

The pattern of deposit insurance expenditures seems to help explain how the economy slipped into recession and why the economy is having trouble emerging from that recession, despite the Fed's dropping of the Federal funds rate.

I don't have time to go into some other issues that I would very much like to, but one of them has to do with reserve growth. Some critics of my hypothesis point to reserve growth as being inconsistent with that hypothesis. I explain in my written statement that a closer inspection of reserve growth shows that it is consistent with my hypothesis, not inconsistent.

Other people have ascribed weak money supply growth to so-called portfolio shifts, individuals moving out of time deposits at banks into other assets such as stocks or bonds or stock or bond mutual funds which are not included in the definitions of money. I do not believe that these portfolio shifts have any effect on the growth of M2 or M3 any more than a shift out of time deposits into the purchase of an automobile would, which also is not included in M2 or M3.

These portfolio shifts have indeed been going on. I would argue that all they do is change the composition of M2 or M3 but do not

change its total size. In fact, I think they are a partial explanation for the divergence in the growth between M1 and M3. M3 grew 1.5 percent while M1 grew 8.6 percent.

In summary, the significant increase in deposit insurance expenditures in the past 3 years appears to have played a major role in explaining the weakest growth in the broad definitions of M2 and M3 in at least the past 30 years. I say "at least" because we don't have a consistent set of data going back before that.

Although causality is always difficult to prove, economic theory suggests that this weak money growth was at least partly responsible for the weak economic growth experienced in recent years. Weak money supply growth is not necessarily a *fait accompli* in the presence of deposit insurance expenditures. The Fed, by allowing the Federal funds rate to move sufficiently, can offset the money supply effects of changes in deposit insurance expenditures.

Deposit insurance expenditures on a gross basis in the next 3 fiscal years may very well be as large as the \$333 billion expended in the past 3 fiscal years. If so, and if the Federal Reserve fails to take actions to offset the contractionary effects of these expenditures on money supply growth, economic growth is likely to remain weak in the years immediately ahead. If weak economic growth is to be avoided, the Fed should narrow its target ranges to intervals thought to be consistent with desired nominal economic growth, and then it should allow the Fed funds rate to move to whatever levels are necessary to accomplish its monetary growth objectives.

The reason for narrowing the target range is that there is a world of economic difference between 1 percent M3 growth and 5 percent M3 growth. Not only should the Fed put a high priority on hitting its targets, it should not allow the money supply to deviate for long periods of time, for 6 months or more, above or below these targets.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Kasriel can be found in the appendix.]

Chairman NEAL. Thank you very much. Very interesting testimony.

At this time I would like to hear from Professor McCallum.

Let me just say, at some point, after we hear all your testimony and have a couple of questions, we would love to hear you comment on each other's testimony. You might keep that in mind as we go.

Thank you, Mr. McCallum, we would like to hear from you.

STATEMENT OF PROF. BENNETT McCALLUM, CARNEGIE-MELLON UNIVERSITY

Mr. McCALLUM. Thank you very much.

Any testimony on monetary policy given today is almost bound to be dominated by concerns over the current recession and the Federal Reserve's response. But it would be easy to get sharply conflicting evaluations from different observers.

Some might emphasize the very low growth rate of M2 during 1991 and on that basis suggest that the Fed needs to be much more aggressive in its attempts to stimulate demand. Others would em-

phasize that short-term interest rates are lower than they have been for 18 years and consequently suggest the Fed is already being dangerously expansionary in its behavior.

It is my view that neither of these variables—the M2 growth rate or the level of interest rates—is a reliable indicator for judging the appropriateness of monetary policy.

In my testimony to this subcommittee in March 1988, I argued that monetary policy should be conducted according to a rule that adjusts the growth rate of the monetary base upward or downward so as to keep nominal GNP, or now GDP, growing smoothly at a noninflationary rate. In line with that recommendation, I would favor looking at nominal GNP growth to see if aggregate demand needs more stimulus or restraint.

Changes in the growth rate in the monetary base will be more informative than changes in interest rates as to whether the Fed has been making its stimulus versus restraint adjustments in the proper direction. In a minute I will add some remarks designed to justify the choice of these as the variables to emphasize. But first let me use them to quickly evaluate recent and current conditions.

The time path of nominal GNP since 1972 is shown in a figure 1 that is appended at the back of my written statement. From that plot, it can be seen that from 1972 through 1980, nominal GNP growth proceeded at a rate of slightly over 10 percent a year, whereas the figure for 1981 through 1988 was about 7 percent. Consequently, the average inflation rate has been significantly lower during the years since 1982 than in the previous decade.

Over the past 3 years, beginning at the start of 1989, that is, nominal GNP growth has averaged only about 4.5 percent per year, a dropoff that is clearly visible in the figure. On a year-to-year basis, the values have been about 5.5, 4.5, and 3.5 percent over those 3 years.

Whether this reduction in demand growth was the result of deliberate policy steps designed to bring down the inflation rate closer to a pace that might be labeled "price stability" is unclear. And there is scope for dispute over the desirability of such steps if they were taken. But let's continue a bit with the consideration of the current recession.

Of course, one wants to end the recession, but we should want to do so in a way that will tend to promote healthy, noninflationary growth in the future. The basic enduring objective of monetary policy should be to keep total nominal spending growing smoothly at a noninflationary pace.

So if we were starting today from a situation with no inflation or with perhaps 1 percent, we would want nominal GNP or GDP to grow at about 3 or 4 percent per year. But, in fact, our present inflation rate is about 3.5 percent, and most analysts would favor moving that rate down only gradually, only slowly. So over the next year, nominal GNP growth should be in the vicinity of 6 to 7 percent. That range would be consistent with inflation of 3 to 3.5 percent and real growth of 3 to 4 percent.

In order to get nominal GNP growth of approximately 6 to 7 percent, the Fed will need to make the monetary base grow at that rate plus an adjustment for base velocity growth. Because base velocity has recently been declining at about 1.5 percent per year, I

would add 1.5 to the 6 to 7 percent figure for nominal GNP. Thus, I would conclude that the Fed should now be conducting open market operations at a pace that would lead to base growth of about 7.5 to 8.5 percent per year. That range pertains to the adjusted monetary base and is calculated by the Federal Reserve Bank of St. Louis.

Well, naturally, the next question is, What has the Fed in fact been doing? The answer is that recent base growth rates, say, between July 1991 and early January 1992, were in the range of 7 to 8 percent. During January, the base grew very rapidly, so that the latest reports show a figure of 9.2 percent for the 6 months ending on January 22. Again, those numbers are from the St. Louis Fed.

If you look instead at the Board of Governors' measure of the adjusted base, the growth rates were 8.3 or 7.8 percent, depending on whether you look at the last quarter or last half year's worth of figures. And they also show a big surge during January.

The general conclusion provided by this view is then that Fed policy was just about right as of early January. At that time, the monetary base was growing at a rate that would be adequate to yield about 3 or 4 percent real growth without changing inflation from its current rate of 3 to 3.5 percent.

The expansionary surge that occurred during January would not alter that conclusion if it proves to have been a brief aberration. If it were allowed to continue for long, however, it would be too expansionary and would eventually give rise to additional inflation.

Having taken this brief look at the current situation, I think it is important to add a few words about the Fed's operating procedures and also about the suggestion that it should adopt a more explicit and single-minded goal of price level stability. With respect to procedures, the past few years have seen a movement back toward use of the Federal funds rate as the Fed's main instrument variable, as it was before the 1979-1982 policy experiment during which non-borrowed reserves served in that capacity.

This movement is ironic since the Fed altered its reserve regulations in 1984 so as to make controlled procedures based on reserve aggregates more effective. They were not effective during the 1979-1982 period because of the lagged reserve requirement provisions that were then in force.

Now, unlike some economists, I happen to believe that it is in principle possible to implement a satisfactory monetary policy while using an interest rate instrument, but it would seem to be significantly harder to do so than if the base or some other reserve aggregate measure were used.

The problem with an interest rate is that tight monetary policy corresponds to high interest rates from a shortrun perspective, but tight monetary policy corresponds to low interest rates from a longrun perspective. You have got to get from one to the other.

It is also fundamentally wrong to believe that practical affairs take place "in the short run," as many economists have argued. Actually, at any point in time, the current situation is the consequence of longrun effects from many earlier policy decisions, as well as the shortrun effects of those that have just recently been taken.

Now, of course, I am well aware that there are also nontrivial problems with the monetary base as an instrument or indicator, especially when currency and bank reserves are behaving differently. But on balance, the base seems to me a better summary statistic for the force of the Fed's actions than any other single control variable. It increases when the Fed makes open market purchases and decreases when the Fed makes open market sales.

Also, the adjustments calculated by the St. Louis Fed or the Board of Governors take account of any effects that might come from an occasional change in reserve requirements.

In conclusion, I would like to add a few words about the desirability of lowering the average ongoing rate of inflation from the 4.5-percent of the past decade toward a figure more at price stability, more at the level of zero to 1 percent. Those who object to such a move do so because of the cost of the recession they believe would be necessary to bring about this reduction. But they often fail to take account of implications for the frequency of future recessions.

I would think this frequency of future recessions might be reduced if the inflation rate were lowered, because there will inevitably be fluctuations around whatever trend prevails and because public sentiment will require monetary contraction whenever the rate approaches an uncomfortable double-digit pace. An average value of zero to 1 percent would permit fluctuations without running into rates that rightly bring forth public alarm and subsequent policy-induced recessions.

Finally, I would like to emphasize that a 4.5-percent inflation rate is not innocuous. It is far from innocuous. The United States instituted its first monetary standard in 1792, just 200 years ago. Now, a 4.5 percent rate maintained for 200 years will increase the initial value of whatever variable is in question by a factor of 6,657.

So if we had averaged 4.5 percent inflation over these 200 years, a dollar would now be worth about $\frac{1}{600\text{th}}$ of its current value. I do not think that sort of behavior is what either Congress or the public would like.

Chairman NEAL. Thank you, sir, very much. I look forward to returning to this discussion. I thank you.

[The prepared statement of Mr. McCallum can be found in the appendix.]

Chairman NEAL. Now we would like to hear from Mr. Stone.

STATEMENT OF RAY STONE, MANAGING DIRECTOR, STONE & MCCARTHY RESEARCH ASSOCIATES

Mr. STONE. Mr. Chairman and members of the subcommittee, I appreciate the opportunity to share my views on the recent conduct of monetary policy, as well as a perspective on policy over the past several years.

As you know, the formulation and execution of monetary policy is more of an art than a science. Thus, with the benefit of hindsight, one can occasionally find fault with past, shortrun policy decisions of the Federal Reserve.

Of course, both the longer term and shortrun decisions of the Federal Open Market Committee are made without the benefit of the perfect information afforded by hindsight. With this qualifica-

tion in mind, my comments that follow will address three issues relevant to recent and prospective Federal Reserve policy actions.

First, I will discuss the gradualistic approach-to-policy characteristic of the Fed under Chairman Greenspan's tenure.

Second, I will provide examples of two recent episodes when monetary policy fell behind the curve.

And finally, I will highlight some prospective problems the Fed may encounter over the balance of 1992.

The earmark of Federal Reserve policy adjustments since 1987 has been to make frequent, but small, adjustments to the Federal funds rate. This gradualistic approach to policy has both benefits and drawbacks.

In the January 1992 Congressional Budget Office's report to the Senate and House Committees on the Budget, it was noted that in 1991: "The gradual pace of monetary easing may have eroded its stimulative effect. The small, repeated easing measures may have created expectations of further moves, possibly causing some businesses and individuals to delay spending in hopes of getting even lower interest rates later on."

This, according to the CBO's report, may have helped delay economic recovery.

While I would agree that small changes in policy may cause businesses and households to form expectations of future adjustments, more significant steps—such as those taken by the Federal Reserve in the second half of 1982—resulted in the formation of similar expectations.

Expectations of future policy adjustments are formed within the Fed-watching community, not so much by the size of recent policy adjustments, but by the behavior of a variety of economic and financial variables. It is these expectations which are ultimately highlighted by the press and help form impressions of businesses and consumers.

Chairman Greenspan has correctly noted that the easing of policy which began in mid-1989 should be judged in cumulative terms. Since May 1989, the Federal funds rate has been reduced by roughly 6 percentage points. In 1991 alone, the Fed cut the funds rate a full 3 percentage points. In all, during this period the Federal Reserve has eased policy on 21 occasions—19 of which were one-quarter percent adjustments.

The benefit of small but frequent adjustments in policy is that the weight of economic and monetary evidence necessary to justify a change in rates can be less than associated with bold actions. As a consequence, using Chairman Greenspan's phrase, it is easier for the Fed to stay "ahead of the curve."

If you remember, since policy decisions are made without the benefit of hindsight and every action or inaction may prove later to be a mistake, the small steps minimize the size of the potential policy error.

Another benefit of the gradualistic approach to policy is that small adjustments to the Fed funds rate are possible without necessarily being so obvious as to be discomfiting to the foreign exchange markets, or to raise unwarranted concerns regarding the Fed's anti-inflationary resolve.

The primary disadvantage of making many small adjustments rather than a few bold moves is the lack of a significant announcement effect. Occasionally it may be deemed appropriate to send a strong signal of Federal Reserve intentions to reassure financial markets or the public of the Fed's commitment to economic growth in periods such as we have recently experienced. Conversely, it may also be appropriate to reinforce the Fed's anti-inflationary resolve during periods in which economic activity may appear steamy and associated with inflationary bottlenecks.

The Federal Reserve, while mostly taking small steps, has on occasion in recent years taken larger, more significant steps. The most recent was the December 20, 1 percent cut in the discount rate and the associated one-half percent cut in the Federal funds rate. This move had the benefit of triggering a general 1 percent drop in prime lending rates, and caused a significant rally in the stock market.

While the benefits of this rate reduction have yet to be felt in their entirety, I sense that the impact will prove to be more profound than perhaps the cumulative impact of two smaller adjustments.

There remains one final note on gradualism at the Fed. Since it is easier to reach a consensus within the FOMC for small policy adjustments rather than larger changes, there is a risk that the Fed may unintentionally become guilty of attempting to fine tune the economy.

Countercyclical policies are appropriate in dampening the amplitude of business cycles, for business cycles have a tendency to naturally purge excesses from the system. These excesses can be inflationary, as was the case in the late 1970's, or they can take the form of creating the environment wherein both household and corporate balance sheets become overleveraged, thereby rendering them more vulnerable to whatever eventual slowdown may unfold.

This, of course, is a problem that developed during the late 1980's, and is at least partially responsible for the unsatisfactory economic performance of the early 1990's.

One constraint against unwarranted "fine tuning," which should be taken seriously by both the Federal Reserve and this subcommittee, is the discipline of setting targets for monetary growth each year. The targets should be viewed not only in terms of providing for a seemingly appropriate pace of economic activity, but they should also be seen as a check against straying from the longer term objectives of policy in favor of short-term fine tuning.

The targets present a balance in which short-term policy can be set in a longer term context. This is a particularly significant consideration during a Presidential election year.

Generally speaking, the Federal Reserve deserves high marks for the conduct of policy in recent years. Actions taken in the immediate aftermath of the October 1987 stock market crash served to calm financial markets and to keep the temporary financial dislocations from significantly impacting on real sector activity.

The cumulative easing of monetary policy since mid-1989 has undoubtedly lessened the severity of the recession. If you remember, recent actions—including the December 20, 1991 full 1 percent cut in the discount rate—have encouraged a greater awareness on the

part of the public of the relatively low level of interest rates, including those on mortgages. This, in turn, is largely responsible for what appears to be a recent improvement in housing activity.

Nevertheless, there have been occasions in recent years in which I feel the Fed has fallen behind the curve. The first such occasion took place during the late winter and early spring of 1990. Many of the economic numbers released during that period were skewed by unusual events. A frigid December 1989, followed by an unusually warm January, played havoc with the economic reports. The December freeze caused oil demand to rise, resulted in refinery problems in Louisiana and Texas, and ultimately triggered a sharp rise in fuel prices.

In addition, the December freeze resulted in extensive crop damage in Florida and Texas, rendering hefty increases in the prices of fresh fruits and vegetables. These factors taken together resulted in substantial gains in both the CPI and the PPI which didn't wash out until several months later.

Other economic barometers were distorted as well. The frigid December followed by the warm January caused a significant rise in housing starts and construction employment. A variety of other measures of economic vitality were also skewed by special circumstances.

The Federal Reserve appeared to be fooled by these data. The easing of policy that began in mid-1989 was halted in December 1989, and the policy reins were held steady until July 1990.

According to the minutes of the March 27, 1990 FOMC meeting, two members actually dissented in favor of a more restrictive bias. In retrospect, the Federal Reserve easing that began in mid-1989 should not have been interrupted by data which were clearly distorted. Had interest rates been somewhat lower going into the recession, the loss of output, incomes, and jobs may have been lessened.

The second episode of Fed policy falling behind the curve took place in the spring of 1991. With the ending of the Gulf war, consumer confidence surged. A variety of economic time series revealed improvement in the months that followed.

The Fed, faced with seemingly improved economic numbers, became less aggressive in the march toward lower rates. The frequency of the small policy adjustments slowed.

What the Fed didn't fully appreciate, however, was that the seemingly improved pace of economic activity was largely the result of an exercising of the pent-up demand for goods that accumulated between August 1990 and February 1991 when consumers postponed spending due to the uncertainty of the consequences of the Gulf crisis. After this pent-up demand was soon exhausted, it became apparent that still lower interest rates were appropriate and the frequency of the easing moves increased.

Had the Fed appreciated the fact that the improvement in the economic data in the spring of 1991 was temporary, they may have eased more aggressively, which may have forestalled the economic lull that befell the country in the second half of the year.

With the unfolding of 1992, most of the economic reports remain weak. Payroll employment fell by 91,000 workers in January. Car

sales continue to hover around the cyclical lowest. Consumer confidence remains depressed.

Conversely, unofficial reports from homebuilders and realtors have become more upbeat. It appears as if housing activity is poised to improve in a sustainable fashion over the months ahead.

The Fed, however, is faced with a particularly difficult set of circumstances. With 1992 being a Presidential election year, there is a natural inclination for the central bank to take a low profile. Whatever prospective policy adjustments might be deemed necessary in the months ahead may be enacted earlier than otherwise to divorce monetary policy from pre-election political considerations.

Although I view the thrust of monetary policy as not having been aggressive enough in the spring of both 1990 and 1991, I fear there is some risk that the Fed may overstimulate activity in the months ahead. The Fed's classic mistake has been easing too long into a recovery. This is a mistake that is easily repeated in an election year.

This risk poses a responsibility for this subcommittee. The safeguards against too stimulative a monetary policy include the 1992 targets for the monetary aggregates. Some have argued that the target for M2 and M3 should be raised to account for the poor performance of these aggregates in 1991. M2 came in at the bottom of its 2.5 percent to 6.5 percent range, as did M3 to its 1 percent to 5 percent range.

While I concur with the notion that the growth target for M2 should be set with an eye on the desired pace of nominal GDP growth, I do not think raising the 1992 M2 target range to account for the underperformance in 1991 is prudent for two reasons. First, it might be construed as a lessening of the Fed's anti-inflationary resolve, especially in an election year.

Second, the upper end of the preliminary 1992 M2 should allow for acceptable monetary and economic expansion. In my opinion, the Fed should welcome growth toward the upper bound of the target. Raising the range, however, while providing the Fed with added leeway to stimulate activity, may inappropriately intensify the political pressure to spur growth.

Should the pulse of economic activity remain unsatisfactory in the months ahead, it may become desirable to allow monetary expansion to violate the upper bounds of the preliminary 1992 targets. If this occurs, the FOMC can review raising the targets in July. But for the first half of the year, the targets should provide the Fed with a welcomed dose of discipline.

Thank you.

[The prepared statement of Mr. Stone can be found in the appendix.]

Chairman NEAL. Thank you, sir, very much.

Mr. McCallum, I just want to comment briefly if I can on a point that you made. I think it is a—you just made an important point and we shouldn't let it slide by. That is, while often commentators worry over the costs of fighting inflation, there is an enormous cost of not fighting inflation.

One of those costs, of course, is future recessions, which it seems to me are almost always a result of inflation. I guess we couldn't guarantee there would never be another recession, but the likeli-

hood of recession would be greatly reduced if we were to maintain a policy of zero inflation or price stability, which means the same thing to me. Anyway, it is certainly an important point.

Mr. Kasriel, I certainly enjoyed your testimony. I haven't had a chance to try to think my way through it. I—certainly it is interesting and challenging, and I would ask if either of our other witnesses have had a chance to do that, that they might comment. Yes, sir, Mr. McCallum.

Mr. McCallum. Yes, sir. I spent a little bit of time trying to think about the argument, stimulated by some material provided by your staff, and also stimulated by the fact that some of my colleagues had heard of this argument and didn't agree with it. I think it is basically correct, myself. But let me make a suggestion about how to look at the argument that the closing of a failed bank entails monetary contraction.

Since we do have deposit insurance and it prevents any loss to depositors, the fact that it is a bank that is failing is almost irrelevant. What matters is that there is a government agency that is paying out a subsidy to some private firm to take on the assets and liabilities of some organization that has got negative net worth and that the acquiring firm that is being subsidized is a bank.

And then the monetary contraction comes about because the cash that is transferred from the public to the acquiring firm, by way of the government's borrowing and subsidy action, this cash no longer counts as part of the money stock, because the money stock is checkable deposits plus currency held by the nonbank public.

So, an implicit assumption of their argument is that the acquiring bank is not left with excess reserves as a result of this operation, but I think that is a very reasonable assumption. The failed banks that are having their assets and liabilities distributed are not—their assets don't include a lot of reserves, would be my guess. That is the implicit assumption being made.

Mr. KASRIEL. You are right. That may be their only asset.

Chairman NEAL. Is that a very big number?

Mr. KASRIEL. Is what a big number?

Chairman NEAL. I guess the important number would be the subsidy number, wouldn't it?

Mr. McCallum. That is consistent with the argument Mr. Kasriel was making.

Chairman NEAL. I am really asking a question. As I recall, that is not a terribly large number, is it? The big numbers are the amounts paid to depositors. The subsidy—I don't really know what it is right now, but maybe you looked at that. The reason I asked the question, if it is not a big number it wouldn't have a very big impact on monetary policy, even though the analysis may be 100 percent correct. That is really the question I have immediately. I haven't had a chance to try to walk through it.

Mr. KASRIEL. Mr. Chairman, economists look at a lot of data. A good econometrician is like a good accountant. What is two and two? What do you want it to be? A good econometrician can find about anything you want. I am not an econometrician, good or bad, but if you would just examine the data—the changes in gross expenditures for deposit insurance purposes, the changes in M2 and M3—you would see that it is striking, especially in recent years.

Of course, in recent years is when it has occurred. And I think it is very interesting that in the third quarter of last year, 1991, we experienced the slowest growth in M2 and M3—on a 3-month basis in the past 30 years, and in the third quarter of last year, combined RTC, FDIC expenditures were at a record, about \$60 billion. Then in the fourth quarter of last year, those expenditures were cut to about \$18 billion.

At the same time, the Fed did lower the funds rate very aggressively. I think it is very interesting the money supply growth picked up in the fourth quarter, and so far into the first quarter of this year.

Now, it may very well be a coincidence, but it is one heck of a coincidence and every economist dreams of these coincidences.

Chairman NEAL. Yes, sir.

Mr. McCALLUM. Could I finish with a couple more comments? I really hadn't quite finished my commentary.

Thank you. While I agree, then, with Mr. Kasriel's argument about this effect, it is not clear to me that it is really of major importance. What it is doing is saying that you should take seriously the contraction shown in the monetary statistics.

It is not saying there is any more contraction than is showing up in monetary statistics. It is just that we should not discount them any more or less than we would normally.

A slight problem is that the monetary statistics don't show this tremendous dropoff in growth for M1, which should be affected in the same way as M2, given his argument. So, I am not sure what to make of that. I would certainly agree with Mr. Kasriel's argument about the fact that these things are taking place voluntarily, but that does not mean you should discount any contractive influence.

Certainly, Mr. Kasriel's argument about open market operations being voluntary things, that is entirely correct. Thus, I think his arguments are right in principle, but I don't know how to gauge the impact overall when we get M2 growth being historically low, and M1 growth being more or less normal, we are back in the position we are often in of having conflicting signals from the monetary aggregates.

I would, as usual, rather look at nominal spending measures.

Mr. KASRIEL. May I respond to the M1? I, too, was interested in this divergence between M1 growth or M3 growth or M2 growth, whichever one you want. I have included some charts in my prepared statement that relate growth in M1 and M3 to changes in short-term interest rates.

And there is an inverse correlation between movements in short-term interest rates and M1 growth, very striking. When you get sharp declines in interest rates, you typically get increases in M1 growth. I think the reason for that is the price for liquidity has gone down.

As interest rates fall, they fall relative to the rates paid on transactions, deposits. In the case of demand deposits, the rate paid is zero. They don't change very much, but other rates move down relative to that.

So, an individual is not being paid very much in terms of foregone interest to forgo liquidity. So the price of liquidity, in effect, falls, and when the price of anything falls, like the price of beef,

you wanted to consume more of it. So when the price of liquidity falls measured by the differential between short-term interest rates and the rates paid on transaction deposits, you want to consume more liquidity.

I think that is one reason why we have seen M1 growth grow.

In those charts, I also plotted M3 growth. Typically, when you get a sharp decline in interest rates and you get this increase in M1 growth, you typically get an increase in M3 growth as well; not of the same magnitude, but an increase; typically, but not in the most recent period.

So, I think one of the factors affecting M1 growth is this so-called price of liquidity effect or the quantity of money demanded is increasing. In fact, if you look at the chart, you have to go back to 1969 to see a period of M3 growth as weak as it has been in the most recent period, and that was a period just before the recession of 1970.

I think there is another reason why M1 growth has picked up, and it has to do with this so-called portfolio shift idea. To the best of my knowledge, you cannot buy a stock or a bond or a stock or a bond mutual fund or a car or anything else by writing a check on a time deposit. It is not allowed.

So, if you want to perform a transaction, you have to have a transaction deposit. What is going on is people are letting their small-time deposits mature, instructing the bank to put those funds in a transaction account and then going out and buying a stock or a bond. So that increases M1, it doesn't change M3.

The seller of that stock or bond now ends up with that deposit, just as the seller of an automobile ends up with that deposit. What that person does with the deposit, I don't know. Maybe he puts it back in a time deposit, maybe he does something else with it. I don't know.

The point is in order to perform transactions and indeed, there has been an increase in the number of financial transactions in the past year, you have to have a transaction deposit, an M1 deposit to do it.

I think these two things, the price of liquidity and the increased financial transactions have accounted for the strength in M1. I might also say that during the Great Depression, the monetary base increased. It increased primarily because of currency—in fact, exclusively because of the increased demand for currency.

Currency certainly is an asset that can be most easily used to perform transactions, but total bank deposits contracted during the Great Depression. I wonder if the current period has some similarities to that period where you might want to substitute M1 for currency. I think there are times when the monetary base in M1 can be a misleading indicator for activity.

Chairman NEAL. Thank you.

Mr. Roth.

I know Mr. Stone wanted to comment.

Mr. STONE. One quick comment, if I may. I come to the same conclusions as Paul does with regard to the expenditures for the closing of thrifts—insolvent thrifts and banks, as it being contractionary. I don't think it is related to the market for bank reserves,

the Federal Reserve's operating procedures, or even the direct impact on the monetary aggregates.

I think it is associated with the regulators and, ultimately, bank examiners feel a degree of responsibility to the taxpayers, and with that, they have been perhaps a little bit more stringent in their questioning of banks.

This, I believe, has resulted in the so-called credit crunch, and it is the lack of willingness of banks to lend for fear of making bad loans, which is causing loan growth to be quite weak and, ultimately, weak growth in the monetary aggregate.

Indeed, I do view it as contractionary, but for different reasons.

Chairman NEAL. Let me yield to Mr. Roth.

Mr. ROTH. Thank you, Mr. Chairman. I just have three questions, and they are basically for my gratification, and also to prepare me for some floor debate. Maybe I can cop some of your ideas.

The first question I have, there are people in the Congress that are saying we should audit the Federal Reserve. In fact, there is legislation before Congress to do that, and a good many Members have signed on.

I would like to have you tell me, why don't you give me some of the pros and cons to that, and how do you feel about that? We will start with Paul.

Mr. KASRIEL. That is a very politically sensitive issue. There might be arguments made.

Mr. ROTH. But you are an economist. You could care less about politics. That is why I am asking you the question.

Mr. KASRIEL. From an economic perspective, the Federal Reserve is, in effect, a government agency, and I have no reason to argue why it shouldn't be audited along with other Federal Reserve agencies.

I think the principal concern is that there might be some political pressures brought to bear on the Federal Reserve to pursue a different policy than it might otherwise.

I guess that would be the principal argument against auditing the Fed, but other than that, I can see no reason why it shouldn't be audited.

Mr. ROTH. How about Professor McCallum?

Mr. MCCALLUM. I think if by auditing you mean bringing the Federal Reserve into closer touch with the political process, I think the movement would be entirely undesirable. The correct desire is to have the central bank independent of the political process, so that it can take a longer run look at things and not be swayed by what the pressures of the day are.

If you think back to the constitutional provision for this, the Constitution presumed that the United States would have a monetary standard which was based on commodity money, gold and/or silver. That has gone by the boards. What is supposed to be there to take its place is the independence of the central bank and its role as a guardian of the monetary standard; that is, of the value of money or the price level.

And bringing the Federal Reserve more directly into the political process would, I think be entirely bad. One may think that the Federal Reserve has been great or only fairly good in its performance over the past years, but compared to most other branches of

the government in their macroeconomic functioning, I think the Fed has looked very good.

Mr. STONE. The independence of the Federal Reserve is critical to a longrun low inflation or zero inflation objective. With that in mind, I think any such audit that would propose blanket control over the Federal Reserve could be associated with political pressures to stimulate growth at times, where it may be unnecessary.

More optional in nature is a budget of the Federal Reserve that will constrain their ability to conduct open market operations. It could have devastating impact on the economy or financial markets. Any such audit where budgetary issues would have to provide associated flexibility with policy is needed.

Mr. ROTH. I thank you gentlemen. Although, if you had an audit of the Federal Reserve, wouldn't that strengthen the public trust? The only thing that stands behind our money is public trust and confidence.

Mr. STONE. Perhaps that would strengthen the public trust in the Federal Reserve as a process. But in terms of its independence, it would probably weaken their confidence. It is the independence of the Federal Reserve that has allowed inflation to come down. I think this is something that is necessary to be sustained to avoid the pitfall that may otherwise occur.

Mr. ROTH. I respect what you are saying. We all remember Volcker not knuckling under and so on. But if you had audited the Federal Reserve, wouldn't have Volcker done the same thing he did? I am not arguing, I am trying to think my way through on this.

Mr. STONE. The audit itself is not too much an issue. To the extent it would impose questioning of allocation of resources within the Federal Reserve Board, whether it be for research purposes or any other issue, it may come under public scrutiny which could constrain those activities which would ultimately strain the intellectual freedom of the Federal Reserve.

Mr. ROTH. OK.

Professor McCallum, you were going to say something, but I think I interrupted you.

Mr. McCALLUM. I was simply going to make the statement that the value of money is determined primarily by the Fed's restraint in creating it. It was in response to a particular phrase you used in addressing the situation.

Mr. ROTH. OK, thank you.

The second question I have is we put a lot of emphasis, of course, in your testimony, as I interpret it, as far as the Fed controlling inflation, the economy and so on, but isn't this really an anachronism? You know, with credit cards we have today, credit unions, how much influence does the Fed really have?

How much can the Fed really determine what happens in our economy? Do we as a Congress many times put too much emphasis on it? Mr. Stone.

Mr. STONE. I think you are right. There are many ways in which individuals or institutions can circumvent restraints, whether it be such things as reserve requirements or whatever, but the Fed does absolutely control the level of the Federal funds rate.

Other short-term interest rates vary directly with behavior of the funds rate. As you move out to longer maturities, 1-year, 2-year, all the way out to 30-year Treasury bond, the Fed's impact on those interest rates becomes lessened.

However, the fact the Fed can control at least short-term interest rates gives them a degree of flexibility. I think in recent years, the increased uses of money market funds, the nonbank type intermediaries, as well as a variety of other issues, Eurodollar market, using foreign exchange or bank deposits in foreign countries and so forth, has enabled institutions and individuals to circumvent some of the regulatory aspects of monetary policing.

Having made that qualification, the Fed does still impact on short-term rates. Short-term rates impact on a little bit longer term rates, and they can have a ripple effect and, of course, it causes an impact on the foreign exchange value of the dollar. I don't think the Fed is impotent.

Right now, short-term interest rates are fairly low. One may argue the Fed has fallen into what some economists call a liquidity trap. By easing policy further, they have very little stimulus impact on the economy. This may indeed be the case.

I do applaud the Fed, however, for their last move, the 1-percent cut in the discount rate was a very noticeable action which I think has an impact on business confidence and consumer confidence.

I think through such an announcement, they can impact—the fact I think the public at large should feel comforted by the fact the Fed is addressing the issues at hand should spur confidence.

Mr. ROTH. You can't draw universal principal from an isolated case, but it comes up so often, it has some impact on me. You know, in these town hall meetings I mentioned, I had 47 of them. A young man got up in Green Bay, the place was packed. A young man got up and said, "I don't care if interest rates are at zero, I am not going to borrow any more money. I have too much debt now. I have to get out of debt."

You hear a sort of theme over and over again. Maybe there are other variables like—one of you mentioned in here something about the psychology or what consumer attitudes or something—I can't find the testimony now, but it seems to me that has had a tremendous impact. Maybe this young man is telling us something, and these other people, that we really haven't put enough emphasis on.

Maybe the interest rates, heck, you can have interest rates down to zero. Maybe people won't borrow.

Mr. STONE. When people don't have jobs, the low-interest rate provides little incentive for them to spend money. What has happened recently, we are beginning to see some signs of life in housing. Housing is the first sector that leads the economy out of recession. These signs became more pronounced during the month of January, and I credit the Federal Reserve with encouraging that by lowering the discount rate, bringing to the attention of the public the low level of interest rates.

Where housing goes, the rest of the economy will ultimately follow, including consumer confidence.

Mr. ROTH. Thank you. Any one of the other two gentlemen?

Mr. KASRIEL. I would like to comment on that. I think the Federal Reserve is an extremely important determinant of short-term economic activity. To the best of my knowledge, the Federal Reserve is the only economic entity that can extend more credit without cutting back on its own consumption.

If I want to extend more credit or save more, by implication I have to spend less. But the Fed doesn't have to. To the best of my knowledge, when the Fed engages in market operations to purchase government securities, and puts reserves into the banking system, which is, in effect, an extension of credit, it doesn't cut back on subsidies at the Fed cafeteria or cut Fed salaries.

I think that is a critical role that the Fed plays and a critical attribute that it has. So I think that the Fed has some of the most important effects on the economy in the short run. Of course, I think most of us would agree that inflation in the long run is purely a monetary phenomenon.

If you had a pure barter economy, you would have no inflation.

With respect to zero interest rates having no impact on economic activity, I can recall one other time when short-term interest rates approached zero and that, of course, was the Great Depression. And I don't want to hammer this point too much, but that was also a time of massive bank failures. So again, we come to the correlation.

Mr. ROTH. Thank you.

Mr. McCALLUM. I would agree. In my opinion, the Fed is a quite important determinant of short-run activity. I don't have much to add to that. So why don't we go on?

Mr. ROTH. Thank you, Mr. Chairman.

Chairman NEAL. Wouldn't you also say—I mean, even though the impact is a little less obvious, it is an enormous determinant of long-range activity. I mean—

Mr. McCALLUM. Well, it is setting or failing to set a stable monetary environment for us to live in.

Chairman NEAL. Exactly. I think Mr. Roth raised an interesting question as to whether or not the Fed still is the major determinant of economic activity, and I think it is, and I think you all are agreeing that it is. And really what it does is the foundation for everything else that goes on in the economy; those things don't drive Fed policy. Fed policy drives everything else.

I would like to return for a moment to this question about auditing the Fed. There is a bill Mr. Roth quite rightly points out. What I don't understand is where is the—you know, there is no public outcry. I am not aware of any lack of faith in the Fed.

One of you all pointed out that its record of performance is a lot better than fiscal policy over the last several years, and I just—myself—you know, the Fed, there should not be the assumption the Fed is not audited. It is audited. The Fed audits the reserves banks. The reserve banks have their own internal audit.

I am not aware of any scandal or abuse anywhere in the system, ever. We are certainly trying as an ongoing project to clarify all that and make it just as clear as possible, that every aspect of their activity is proper, and we are very determined that there will not be any, you know, misbehavior anywhere in that system, and are

trying to be sure that the system is in place internally, which I personally think that there is, to make sure that doesn't happen.

Mr. ROTH. Would the gentleman yield?

Chairman NEAL. Yes.

Mr. ROTH. I noticed that most of the push for an audit of the Federal Reserve comes from Chicago and Midwest-based Congressmen. I happen to come from Wisconsin, and, of course, we have a healthy skepticism about East bankers.

You notice the chairman is from the East, and he says it never comes up. You know, in my town meetings, it comes up all the time. Maybe it is a phenomenon of the Midwest that people are asking for audit of the Reserve.

But that comes up quite frequently in our area of the country.

Chairman NEAL. I don't want to mischaracterize it, but there is sort of a persistent movement historically, ever since I have been around here, to audit the Fed. I hear it mostly from—there are several organizations that—

Mr. ROTH. What the chairman means is rightwing groups.

Chairman NEAL. I don't want to mischaracterize any of them. There seems to be a pattern of what they are interested in. They think there is a conspiracy, some kind of cabal that runs our government. They think the Fed is a part of it, and they are suspicious of the Rockefellers and some other interests.

Usually when I hear it, I hear all of these things mentioned together. I have never seen any evidence that this is a major problem. I guess that is what I was really trying to say. I am not trying to say no one raises the question; they have.

But I have not yet seen any evidence that there is a serious problem. And I am very interested in it. If there is any evidence, I want to do something about it myself. I think the Fed is so important that we cannot tolerate any misbehavior, or even potential for it, in that institution. It is way too important to our economy. If there ever was any evidence at all, we would certainly want to get to the bottom of it immediately. What I hear normally is some sort of generalized suspicion without any evidence. That is the problem.

I agree with you that the only way that we will achieve a healthy economy is—the only way we can maintain a healthy economy is to keep political motivation out of Fed decisionmaking. That would be my worry.

You all expressed it very well, that the audit idea is just sort of one pretext to get in there and meddle with policy and move it around for some short-term gain at the expense of the long-term health of the economy. That would be the worry.

It is not that there is any reason not to look at the books. The worry is that it would result in something very unhealthy for the economy. That would be my—that would be my fear.

Well, let me, if I can—Mr. McCallum, in your comments you again discuss your—what you think is the desirability of focusing on a monetary base, and I am interested in all these things, also.

The criticism I have heard of that over the years is that there is such a large currency component of the monetary base and that the demand for currency often responds to factors that have nothing to do with the U.S. economy, namely, from drug dealers or for-

eign economies and so on, when our currency is used in their black markets and so on. I am very curious how you would respond.

I don't mean to minimize it, because if there is a better way, I want to learn about that also. How would you respond to that?

Mr. McCALLUM. Well, I am aware, of course, of the problems you have mentioned and have worried about that myself, and have given some thought to the possibility of using total reserves, rather than the base, as the variable that I would have the Fed use as an instrument.

And I stress, this is really as an instrument. It is not as a target. There is a big difference. I don't think the base should be looked at as the variable whose trajectory we ourselves are concerned with. It is the thing that should be manipulated to keep total spending trajectory appropriate.

The reason I continue to say the base, rather than total reserves, is simply that the statistical work I have done with it—and that others have done—seems to indicate that the base has borne a more regular, stable relationship with total spending than reserves have over the historical period, despite all of these aberrations. But there certainly are times when currency is growing rapidly, and I am also uncomfortable by an emphasis on the base when that is happening. I don't think that it is a good indicator then, I just don't know what is better. And I think that in this regard—and this is consistent with Mr. Kasriel's argument—is that the Fed should look for some quantitative magnitude having to do with the base or reserves rather than looking at short-term interest rates as the instrument that it is going to focus its attention on and manipulate on a day-to-day basis.

Chairman NEAL. I certainly couldn't agree with you more. If we could find a quantity that was reliable, that ought to be the focus, and not short-term interest rates. It is just that those relationships have broken down, and it looks like—Mr. Hoagland, welcome.

Mr. HOAGLAND. Mr. Chairman, thank you for recognizing me. I have no questions today, and do have an appointment, but I was pleased to be able to come by and hear a little bit of the testimony of these distinguished witnesses.

Chairman NEAL. Thank you, sir. Mr. Feldstein has a proposal. We are going to hear from him early next month about his thoughts on this. He suggests that we use reserve requirements, that all banks hold reserves and interest be paid other than them, that that would be a better tool for controlling money growth.

I am a little foggy on those ideas. If you are familiar with them, would you want to comment on what he has in mind?

Mr. KASRIEL. I am not familiar with his specific proposal, but I would just like to make some comments on the imposition of Reserve department.

Unless the Fed is going to adopt a policy of targeting some reserve aggregate, and I think total reserves would be the optimum in this case, then I see no purpose in imposing reserve requirements on deposit liability. If the Fed is going to operate by targeting the Federal funds rate, there is no need for reserve requirements on any deposits.

And I agree with what Professor McCallum said earlier, that the Fed can devise a system for controlling money by manipulation of

short-term interest rates. It doesn't have that system in place right now, but it could if it wanted.

It would seem to me one of the great ironies of the Monetary Control Act, I believe in 1980, was that reserve requirements were imposed on nonmember banks, but the Fed was not operating on a total reserve targeting policy at that point.

So unless—unless there is a commitment by the Fed to operate as the textbooks suggest that the money supply process might work, I would see no real gain from imposing additional reserve requirements on a bank. Reserve requirements are a tax on banking.

Now, I understand another part of the proposal might be to pay interest on required reserves, presumably. There could be some problems with that. If the interest paid were too high, one could have a situation where banks create, in effect, some phony deposits to really earn a higher rate of return than their other opportunities.

This would degrade the signaling value, if you will, of the monetary aggregates. I think before we contemplate imposing more reserve requirements, we need to know exactly how the Fed would operate. And to some degree, this goes back to the auditing question.

There are two kinds of audits: One is to look at the dollars and cents. There is another audit to look at goals and objectives and accountability for meeting those. That is one of the reasons I suggested that the Fed might want to narrow its monetary growth targets, because I do believe there is a world of difference between 1-percent growth in M3 and 5-percent growth in M3, and that there might be some benefits from making the Fed more accountable.

One other point on a related issue: Mr. Stone ascribes the weak money growth to the credit crunch. I have examined the behavior of banks in recent years, the data I looked at do suggest that banks are behaving differently now than they have in past cycles.

Typically, in the early stages of recovery, banks acquire government securities. They don't make a lot of loans. Loans are actually a lagging indicator. But in this particular period, banks have acquired fewer securities, that is, the rate of their security acquisitions has been less than in most prior periods—comparable periods.

I do believe this is related to so-called credit crunch or some capital requirements that have been imposed on banks. I don't believe this is an explanation for weak money supply growth that excludes my hypothesis. I think it actually fits in with my hypothesis.

But the monetary policy implication of the credit crunch is the same as my view of the deposit insurance effects. The basic message is that all else the same, to get the same money supply growth, the Fed needs to push the Fed's fund rate lower.

The implication is the Fed should put a higher priority on hitting its monetary targets and place less emphasis on the particular level of the Fed's funds rate that is necessary to hit those targets.

Mr. STONE. With regard to Professor Feldstein's recommendation, I agree with Paul, it wouldn't make any sense at all unless the Fed targeted total reserves. In that context, recent accounting rules for bank reserve management were such that until December 1990, any types of required reserves on nontransaction accounts

were lagged in terms of when the deposits would be held vis-a-vis when the reserves would be held against those deposits.

If we would continue to keep those deposits lagged, Professor Feldstein's recommendation in terms of targeting reserves and having reserve requirements against nontransaction type accounts, that linkage would be broken.

To make it work, you would have to swing to a complete contemporaneous reserve accounting regime. If you did that, you would probably end up with interest rate volatility the likes of which we haven't seen, with fund rates moving 3 or 4 interest points a day.

At the same time, I think reserve requirements, even if they paid interest, sort of like a Treasury bill rate, would provide banks with incentive to shift deposits to offshore branches or institutions, to shift deposits to non-U.S. banks housed outside the United States, circumventing the reserve requirements, possibly getting a higher return.

Also, you have such instruments as money market funds that are not subject to reserve requirements. This too would cause problems with Professor Feldstein's recommendations. Against all these qualifications, I wouldn't be in favor of imposing reserve requirements on nontransaction accounts at this time.

Chairman NEAL. If I may, I missed the impact of your first comment. What would require—what would cause short rates to be so volatile?

Mr. STONE. What you would have, until December 1990, you had reserve requirements on nonpersonal time accounts and on the transactions balances. Those on the transactions balances were so-called contemporaneous reserve requirements.

In other words, during a 2-week banking maintenance period, you would hold reserves against those in the same 2-week period. Basically that is the concept. With nontransactions accounts, the reserve requirements against those accounts, the small time were based on deposits 2 weeks earlier.

If you reimposed reserve requirements on those deposits and other deposits with a lag, as occurred prior to December 1990, then even if you had those reserve requirements, the linkage between the deposit levels and the reserve—the reserve requirement would be broken. You need to have it in the same period. You would need to have contemporaneous reserve accounting, not just transactions deposits, but against all these other deposits included in M2 and M3.

Without that, you have nothing.

Chairman NEAL. If you have contemporaneous reserve requirements, as you suggest, you would overcome the problem.

Mr. STONE. You would overcome the problem in the accounting sense; indeed, the linkage between deposit levels may be closer, but it would cause such a research management problem for banks, given you can have wide swings in the level of your CDs or small-time deposits or any of these other types of nontransactions accounts, your ability to add just your reserve position would be much more erratic than under the current regime.

Chairman NEAL. I am not arguing for it. I am just trying to understand this criticism. It seems to me that managers in banks

could make some sort of adjustment daily that could handle this, couldn't they?

Mr. STONE. Right now, how a bank reserve manager would view—

Chairman NEAL. I am talking about a contemporaneous regime.

Mr. STONE. We have contemporaneous reserve managing gains accounts. As the bank reserve manager goes into the period, he already knows something about the historical management of these deposits. He might know during this particular 2-week period, demand deposits may rise or fall, and therefore adjust his required reserves accordingly.

When you introduce all these other accounts, it makes it much more difficult. As a consequence, if you impose the 10-percent reserve requirement against these accounts, any change in the swings of your deposits during that intraperiod, bank reserve maintenance period, would cause—would play havoc with how you would manage your reserve accounts.

As a consequence, you might be low on reserves right now, have more than you need, long on reserves in day number one, but in day number two fall real short. When this happens, you will be buying or selling reserves in a way that would increase the volatility of the funds rate.

Keep in mind, in the period between 1979 and 1982, we did have an episode where the Fed tried to target nonborrowed reserves to a degree, and we had enormous volatility in the funds rate. We would reintroduce that same volatility, and at the same time, complicate it because we are adding all these nontransaction accounts.

Mr. McCALLUM. I don't agree with that. I am not speaking to Marty Feldstein's proposal, but just to the argument made by Mr. Stone, which is, using the reserve aggregate as the control instrument, rather than the Federal funds rate, would lead to a great deal of volatility in the Federal funds rate.

It probably would lead to some additional volatility in the Federal funds rate, but I would argue it is unreasonable to gauge that by looking back at the period 1979 to 1982, because this was a period with lagged reserve requirements for deposits. Therefore, it amounted to a noisy way of using the Federal funds instrument, which can be shown analytically, that will generate a lot of variability.

So, the question is, what would happen if you had full contemporaneous reserve requirements and used reserves as the Fed's control instrument rather than the Federal funds rate.

Well, one thing that would happen, is that banks would learn that they have to manage things differently. They would manage things differently. They would carry more excess reserves. They wouldn't like it, for they have to carry excess reserves, but these would reduce funds rate volatility.

Chairman NEAL. Excess reserves, beyond those—

Mr. McCALLUM. Beyond those required.

Mr. KASRIEL. I would like to make two comments on that.

First of all, this is rare, because two out of three isn't bad. You've got two out of three economists agreeing with each other. That is something for the record there.

First of all, Mr. Stone says it would create a lot of volatility, and this would be confusing—interest rate volatility, and this would be confusing as to what the Fed's policy stance is. I would suggest it would be less confusing.

We would know the Fed is trying to control the money stock. We would know exactly what the Fed's objectives were.

Second, I think you would probably get less volatility in the Fed funds rate—you would get more volatility rather than what the Fed is doing now, essentially stabilizing the fund rate, but with contemporaneous reserve accounting, as you gained deposits or lost deposits, you would also have some effect on your demand for reserves because you would be gaining or losing reserves.

If you had an inflow of deposits, reserves would come with those deposits. So you would be meeting your reserve requirements by that inflow. Actually, as Mr. McCallum said, a system of lag reserve accounting does not provide any sort of cushion effect, because your required reserves don't change with an inflow or outflow of deposits.

As a result, all you do is get changes in excess reserves which are very insensitive to the level of interest rates. This is a very esoteric issue, but I disagree with Mr. Stone, let the record show that.

Chairman NEAL. Mr. Roth.

Mr. ROTH. Well, in summation for myself, Mr. Chairman, I want to compliment you and the witnesses we had here today. It was very enlightening. We used the word "sensitivity". Well, it certainly heightened my sensitivity to the power of the Fed.

I think, Mr. Chairman, I am going to ask you to join us in asking for the audit of the Fed. Think about it. We have the Fed here. No one has any control over the Fed. It is out in orbit. Even our discussion here indicated what is happening. No one is looking over the shoulder of the Fed.

Basically, it says trust the super bankers. We did that with savings and loans; we did that with the banks, and look what it got us. Hundreds of billions of dollars of taxpayers' money having to be shoved in this.

Mr. McCallum made the most telling point of all. He said, who determines the value of money today? It is determined by the Fed, right? You did say that.

Would you, if that is the case, and we don't have any audit of the Fed, this is like going back to the Middle Ages. Follow us by faith and faith alone. I would say, Mr. Chairman, I am going to ask you to ask—to join us in asking for an audit of the Fed. I can't see what harm it could possibly do.

This idea of bringing up this—well, we are going to have political tinkering. Hell, the chairman is called down to the Oval Office three times a year. I am going to ask the chairman to join us.

Chairman NEAL. I don't know if you would like it so much, the result of that, your farmers and your small businessmen. When they had to pay attention—when the President calls and says do this, do that, I want to get reelected, then your—then your farmers and small business people would have to pay very high rates of interest for money, and so on. That is my—

Mr. ROTH. I am sorry, Mr. Chairman, but in our testimony, I think it was Mr. Stone who repeatedly pointed out we have the

variable of an election year. Isn't the political implication in that testimony already?

Chairman NEAL. You know, I mentioned that in passing. It is true that here the Fed is lowering interest rates in an election year, and we should keep an eye on that, but there again, that is one of the reasons for this hearing, to see if what they are doing is sound economic policy or is it a political sort of thing?

You know, being a Democrat, I guess it would serve my interest better to charge political manipulation or something, but I am not doing that, because I don't see any evidence of it. I don't hear it from economists. I think our economists in this country are independent, and so on.

I think we would hear it if there were that kind of suspicion. I wouldn't mind saying it at all if I began to suspect that this was political manipulation. I have said it before about previous Fed Chairmen. I would say it again in a flash, but I just don't see it right now.

Anyway—do you have any other questions?

Mr. ROTH. No.

Chairman NEAL. All right. I want to thank—well, I have just got a note. Over the last 10 years, the GAO has performed over 100 audits of Fed functions. The Fed does have—we are trying to put together a very detailed analysis of how the Fed is audited now, and get that—get the GAO to comment on that, and we will welcome any other comments on it to try to be sure to maintain trust in the system.

Maybe that will meet the needs of those who are calling for an audit; maybe not. We will just have to see. That will be our intent.

I want to thank our witnesses again. You have been a big help to us, and we welcome your comments in the future. If you see something going on you would like us to know about, please let us know. We welcome it. I thank you again for being with us today.

The subcommittee will stand adjourned until tomorrow morning, at 10, when we hear from Chairman Greenspan. Thanks again.

[Whereupon, at 12 noon, the hearing was recessed, to reconvene at 10 a.m., Wednesday, February 19, 1992.]

FEDERAL RESERVE'S MONETARY POLICY REPORT TO CONGRESS

WEDNESDAY, FEBRUARY 19, 1992

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON DOMESTIC MONETARY POLICY,
COMMITTEE ON BANKING, FINANCE AND URBAN AFFAIRS,
Washington, DC.

The subcommittee met, pursuant to call, at 10:05 a.m., in room 2128, Rayburn House Office Building, Hon. Stephen L. Neal [chairman of the subcommittee] presiding.

Present: Chairman Neal of North Carolina, Representatives Neal of Massachusetts and Roth.

Also present: Representatives LaFalce, Schumer, Hoagland, and Cox.

Chairman NEAL. I would like to call the subcommittee to order at this time.

Today, the subcommittee meets to hear the Chairman of the Board of Governors of the Federal Reserve System present his *monetary report to Congress*.

Before turning to Chairman Greenspan, please permit me a few brief comments.

I think it should be evident that monetary policy over Chairman Greenspan's entire tenure has been, though sometimes irregularly, oriented toward reducing inflation. Whatever other short-term goals may have held sway at particular periods, it is clear the Fed is making good progress toward its goal of essentially eliminating inflation. I have encouraged this goal by sponsoring legislation that would make zero inflation the dominant objective of monetary policy, though we have not yet been able to enact that proposal into law. It is just great the Fed is making good progress toward that goal on its own.

In fact, the Fed seems to have behaved in practice about the same as it would have been expected to had our proposed legislation become law the day we introduced it. The only possible criticism would be that monetary policy may have been even tighter than necessary or desirable from time to time.

Measured inflation has now begun to fall and I would expect it to continue to decline, though slowly and unevenly, over the next few years. On a year-over-year basis the Consumer Price Index is now around 3 percent. I am certain this is lower than projected in most conventional inflation forecasts made about 2½ years ago.

In other words, at the time Chairman Greenspan endorsed our zero inflation legislation, neither the financial markets nor the

standard forecasters believed that inflation would really be brought down over the next few years. But they were wrong. Inflation has fallen noticeably and is now about where it would be on a 5-year path to reach the goal of our legislation; that is, inflation so close to zero that expected future inflation is negligible and does not affect economic decisions.

That Fed policy has been persistently anti-inflationary over the past few years and may not seem to square with the general perception that it has been aggressively easing over the past year to counter the current recession. The Fed funds rate has certainly been reduced dramatically and policy is much easier than it would have been had that rate been held constant or reduced more slowly.

But the Fed funds rate can be a misleading indicator of the true impact of policy. M2 growth has been weak. Though the monetary aggregates are not infallible indicators of the thrust of policy, it seems clear in the current context the behavior of the M2 has been a much better gauge of policy than the funds rate.

By that gauge, policy has remained tight and restrictive through much of the year. It has begun to ease only in the last couple of months. It has, in fact, been so tight for so long that M2 has ample room to grow more robustly for a while without endangering the longer term path toward price stability.

The Fed should not, of course, throw all caution to the winds and begin monetary growth relentlessly until the economy is once again booming at unsustainable growth rates. Market reaction to yesterday's Fed action attests to that. We will discuss that action in a little more detail later.

But it can and should act to boost money growth somewhat this year. That will be necessary to achieve a decent economic recovery and will not endanger reasonable, responsible progress toward price stability over the next few years.

The trick will be to engineer this modest monetary expansion with discretion and not overdo it and keep the longer term trend of M2 growth on a path consistent with price stability and economic growth and its potential.

There could be a temptation for money growth to be overly easy during this election year. Certainly, any political use of monetary policy must be resisted.

Anyway, these comments indicate how I see things. We look forward to hearing from our witness today, the Honorable Alan Greenspan. He is not only a very fine, well-experienced economist who has done an outstanding job, but when he speaks, he offers up not only his own very important opinion but that of probably the finest organization of economists in the world. So what he says is important and we look forward to hearing your comments, Mr. Chairman.

Your entire statement will be put in the record and we will ask that you condense it as you will.

Mr. Roth.

Mr. ROY. Mr. Chairman, thank you. I will be brief this morning. I join you in welcoming Chairman Greenspan before our subcommittee again.

It is always a delight to have you here to hear illuminating testimony. This is the time to analyze where we are, where we are going as a country and as an economy, and where the Fed is going. That is one of the key questions we have. The economy needs stability and certainty, and I think people like to hear that from the Chairman.

Yesterday, we had testimony before this subcommittee and there was criticism of the Fed because of what was termed gradualism. Well, I suppose that comes under the heading "damned if you do, damned if you don't"—that type of thing.

We are getting mixed signals. Some of the key issues we have been hearing about here on the subcommittee are that banks, on the one hand, banks have to have certain capital, to protect the taxpayer. On the other hand, we are told banks have to ease up on lending for the good of the economy, small business, and the like.

I would like to get your thinking on that exactly. You know, how do we respond to that dilemma.

What role does the huge consumer indebtedness play in our economy? What significance does that factor have and also the factor of the huge Federal deficit?

We have a \$400 billion deficit staring us in the face this year. I don't know how we can keep a huge deficit and the debt we have when the largest item in our Federal budget is interest on the Federal debt and \$1 out of every \$5 the taxpayers send to Washington is used to pay on the Federal debt—our interest on the debt, I should say.

The huge deficit, the Federal deficit, what factor does that play in the economy?

I hope you can address yourself to some of those questions this morning because I think yesterday we heard in New Hampshire people are looking for specifics. People are willing to accept the message if it is tougher, but they want people like myself and others to be totally frank and candid with the public.

For that, we have to rely on you. As the chairman said, you have a tremendous legion of economists at your elbow. You, yourself, are one of our great economists. So maybe you can help us try to come to the core of these issues so when we make a decision and a judgment on the floor of Congress, when we vote, we can say, or I can say, hey, I have a good deal of confidence in casting this vote because Greenspan and all the other people said this is the right thing to do.

Thank you, Mr. Chairman.

Chairman NEAL. Mr. LaFalce.

Mr. LAFALCE. Thank you, Mr. Chairman. I am delighted to be here. I want to listen to Dr. Greenspan. I share the respect you have for him and for the Federal Reserve Board. Dr. Greenspan, one of the issues I have been most interested in is my concern that the recession we are in was almost preordained with the passage of the 1989 FIRREA legislation.

I think that the policy of both the administration and the Congress was absolutely wrong-headed in calling for a precipitous buildup in capital for all the institutions within the United States at a time when capital was scarce, when they were sick. It almost

assured their condition would worsen. That was the policy. Liquidation became the policy rather than rehabilitation.

I think that was probably the single greatest contributing factor to the recession. I am heartened by the fact that both the FDIC and the OTS now seem to be trying to come up with measures to ease up on that approach.

I think it was very difficult for you, as Chairman of the Federal Reserve Board, whose primary tool is monetary policy, to deal with a situation where financial institutions had as their primary concern building up capital and not making loans. The economy ceases to function when the banks stop performing such an essential role, that intermediary function within our society; and during the course of your testimony or later, I would appreciate your perspective on that.

Chairman NEAL. Mr. Hoagland.

Mr. HOAGLAND. Thank you, Mr. Chairman. I would like to welcome you as well, Chairman Greenspan, to the subcommittee for your semiannual report. It is always a pleasure to have you here.

I think many of us are most interested in what kind of guidance you might be able to give Congress and the administration as to what to do about the terrible squeeze middle-class families are experiencing in America today.

Middle-class families are having more and more difficulty just making ends meet, finding money for the monthly mortgage payment, and funds to send their kids to college. The pressure on the family has been very difficult.

One study purports to show American workers since 1963 have had to spend 6 more hours a week in the workplace just to make ends meet. Of course, through the 1980's, many families put the second spouse in the workplace as an escape valve.

More and more mothers are working now; more and more families with both spouses working than ever before. The elbow room that that made available to American families is now being used up. Unless we can figure out a way of putting in a third spouse in the workplace in the 1990's, I am not sure where the extra income will come from.

Another difficulty is the time deficit American families are experiencing. One study shows since 1973 the average child in America has 12 hours a week less parental time than he or she had before. And there are up to 10 million latch key children in America now since so many families have both spouses in the workplace. Children that come home from school and there is no parent present in the home.

I think we would very much appreciate your long-term observation as to what we can do to relieve what some people feel to be a declining standard of living for middle-class America and what we can do to get our economy back on the right track over the long haul.

Welcome again to the subcommittee. Thank you again, Mr. Chairman.

Chairman NEAL. Thank you, sir.

Mr. Cox, welcome.

Mr. Cox. Thank you, Mr. Chairman. I appreciate the opportunity to be here today and be part of your hearing although I am not a

member of the subcommittee. I also want to thank you for holding this hearing to hear the testimony of Mr. Greenspan and have a chance to talk with him.

Mr. Chairman, it seems to me in the midst of an extended recession or at least flat growth, Congress is struggling to create an economic growth package to get our economy moving again. In this process, however, we cannot ignore the fundamentals of monetary policy and the integral effect interest rates have on our Nation's pattern of spending and saving.

It seems to me the panaceas of the past are not sufficient for the crisis we face today. Lowered interest rates have done little to create the necessary economic boost over the past few months. I have taken a close look at a number of the proposals to stimulate the economy through investment in the infrastructure.

A particularly interesting approach would allow States and cities access to an increased money supply through interest-free loans. Such a proposal would serve the dual purpose of addressing the problems of our decaying cities and localities by improving infrastructure and creating jobs. I am pleased to have the opportunity to discuss this with the Chairman here today.

As we work to get our economy back on track, I feel strongly we need to work together. This is not the time for the administration and Congress to play politics. It is clear to me Chairman Greenspan has invaluable knowledge to offer this debate. I personally look forward to hearing from him today.

Thank you, Mr. Chairman.

Chairman NEAL. Thank you, sir, Mr. Cox.

Now we look forward to hearing from Chairman Greenspan. We will put your entire statement in the record.

Please proceed as you would.

STATEMENT OF HON. ALAN GREENSPAN, CHAIRMAN, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

Mr. GREENSPAN. Thank you, Mr. Chairman.

Let me say first, I appreciate your very thoughtful remarks. I do agree with you: the group of economists that we have at the Fed are as dedicated and as effective as any group that I know in this country. That recognition by you will come to them as an important indication of what they have done for this country and I suspect will continue to do for quite a while.

Chairman NEAL. Thank you.

Mr. GREENSPAN. I am, as always, Mr. Chairman, and members of the subcommittee, pleased to present the Federal Reserve's Monetary Policy Report to the Congress. The policy decisions discussed in the report were made against the background of a troubled economy. The recovery that seemed to be in train at the time of our last report to the Congress stalled, job losses have mounted, and confidence remains low.

Looking forward, though, there are reasons to believe that business activity should pick up. Indeed, anecdotal reports and early data seem to be indicating that spending is starting to firm in some sectors. In addition, a number of measures suggest that the balance sheets of many households and businesses have been strengthened,

a development that should facilitate spending in the recovery. Similarly, banks and other lenders have taken steps to bolster their capital positions so that they will be able to supply the credit to support additional spending. And, most recently, broad measures of money have strengthened. Moreover, there are clear signals that core inflation rates are falling, implying the prospect that within the foreseeable future we will have attained the lowest rates of inflation in a generation, an encouraging indicator of future gains in standards of living for the American people. Still, the outlook remains particularly uncertain. That uncertainty stems in large measure from the unprecedented balance sheet adjustments now underway. This means that we at the Federal Reserve have to be particularly sensitive to signs that the anticipated strengthening in business activity is not emerging and be prepared to act should the need arise.

Understanding the forces that have resulted and restrained the economy, and the appropriate role of monetary policy under the circumstances, requires stepping back several years. As I have discussed with you previously, the 1980's saw outsized accumulation of certain kinds of real assets and even more rapid growth of debt and leverage. To a degree this buildup of balance sheets was a natural and efficient outcome of deregulation and financial innovation. It may also have reflected a lingering inflation psychology from the 1970's—that is, people may have expected a general increase in the price level, and especially in the prices of specific real assets that would make debt-financed purchases profitable. But in retrospect, the growth of debt and leverage was out of line with subsequent economic expansion and asset price appreciation. Indeed, the burden of debt relative to income mounted as asset values, especially for real property, declined or stagnated. In part, our current economic adjustments can be seen as arising out of a process in which debt is being realigned with a more realistic outlook for incomes and asset values.

Rapid rates of debt-financed asset accumulation were broad-based during the 1980's. For example, households purchased cars and other consumer goods at a brisk pace. Although household income was increasing swiftly in this period, the growth of expenditures was faster. This was reflected in burgeoning consumer installment debt. Mortgage debt against existing and new homes also grew rapidly as home buying in some parts of the country at times seemed to be motivated more by speculative considerations than by fundamental needs.

The 1980's also witnessed a dramatic increase in leverage of the business sector, which fostered a wave of mergers and buyouts. These transactions typically involved substantial retirements of equity financed through issuance of debt. Efficiency gains were achieved by a number of firms. However, many deals were predicated on overly optimistic assumptions about economic growth and asset prices.

The primary example of the accumulation of debt and real assets occurred in the commercial real estate markets. In the early 1980's, when space was in unusually short supply, commercial real estate received an additional push from the Economic Recovery Tax Act, which provided an acceleration of depreciation allowances for cap-

ital goods. While an adjustment was appropriate and overdue, that for commercial structures was excessive, resulting in tax lives far shorter than economic fundamentals would dictate. This shift in incentives led to a surge in debt-financed commercial construction in the 1980's.

Financial institutions, of course, participated in this process. Banks lent heavily against real estate collateral, for corporate restructurings, and, for consumer credit, and, in addition, for more traditional business purposes. Life insurance companies also expanded their portfolios rapidly with growth in real estate loans especially prominent.

By the end of the 1980's, the inevitable correction was upon us. The economy was operating close to capacity, so that growth had to slow to a pace more in line with its long-run potential. In the commercial real estate sector, soaring vacancy rates and a change in tax law in 1986 brought the boom to an end, producing sharp decreases in prices of office buildings in particular.

These developments resulted in declines in the value of assets and growing problems at servicing the associated debt out of current income. Because of the runup in leverage over previous years, these problems have been more severe than might be expected just from the slowing in income and spending. And the difficulties of both borrowers and lenders have fed back on spending, exacerbating the economic downturn and inhibiting the recovery.

Faced with mounting financial problems and uncertainty about the future, people's natural reaction is to withdraw from commitments where possible and to conserve and even build savings and capital. Both households and businesses concerned about their economic prospects over the past 2 years or so have taken a number of measures to reduce drains on their cash-flow and to lower their exposure to further surprises. Part of this process has involved unusually conservative spending patterns and part has involved the early stages of restructuring of financial positions.

Businesses have cut back staffing levels and closed plants. They have tried to decrease production promptly to keep inventories in line. Firms also have taken steps to lower their risk exposures by restructuring their sources of funds to reduce leverage, enhance liquidity, and cut down on interest obligations.

The response of households has been to increase their net worth by restraining expenditures. To reduce interest expenses, they have paid down consumer debt, and as long-term interest rates have declined, they have refinanced mortgages and other debt at lower interest rates.

Lenders, too, have drawn back. With capital impaired by actual and prospective losses on loans, especially on commercial real estate, banks and other intermediaries have not only adopted much more cautious lending standards, but also have attempted to hold down asset growth and bolster capital. They have done so in part by reducing what they pay for funds by more than what they charge for credit. Like other businesses, they have taken steps to pare expenses generally, including reducing work forces and looking for cost-saving consolidations with other institutions. To a considerable extent, this response has been rational and positive for the long-term health of our financial intermediaries. But in many

cases it seems to have gone too far, impelled to an extent by the reaction of supervisors to the deteriorating situation.

The Federal Reserve has taken a number of measures to facilitate balance sheet restructuring and adequate flows of credit. With other supervisors, we have directed supervisors to examine not only the current market value of collateral against performing loans but the overall quality of the credits. We have also met on numerous occasions with bankers as well as bank examiners to clarify bank supervisory policies and emphasize the importance of banks continuing to lend and take reasonable risks.

Monetary policy also has in part been directed in recent quarters to supporting balance sheet restructuring that is laying the groundwork for renewed, sustained, economic expansion. We recently reduced reserve requirements on transaction deposits. This will free up some funds for lending for investment and should, over time, enhance the ability of banks and their customers to build capital.

In addition, lower short-term interest rates clearly have been helpful to debtors. But reductions in short-term rates that were expected very soon to be reversed or that were not seen as consistent with containing inflation would contribute little to the strengthening of balance sheets fundamental to enhancing our long-term economic prospects.

In part because we have seen declines in long- as well as short-term rates and increases in equity prices, progress has been made in balance sheet restructuring. Household debt service as a percent of disposal percentage income has fallen in the past year. Further declines are in prospect as more refinancing occurs and as interest costs on floating rate debt gradually reflect current interest rates. In the business sector, a large number of firms have called, retired, and replaced a considerable volume of high-cost debt. A flood of issuance of longer term debt and equity shares has reduced dependence of firms on short-term obligations. A number of the equity deals constituted a so-called reverse LBOs—the deleveraging of highly leveraged and therefore rather risky firms. The increase in equity, together with the lower levels of interest rates, has enabled many corporations to make significant headway in lowering interest expenses over the past 2 years, and further decreases are in prospect.

The condition of our financial institutions also is improving. In the banking sector, wider interest margins seemed to be boosting profits by the end of last year. An improved earnings outlook and a generally favorable equity market have spurred a number of holding companies to sell substantial volumes of new shares, contributing to a significant rise of capital ratios in the banking system, despite still large provisions for loan losses.

The balance sheet adjustments that are in progress in the financial and nonfinancial sectors alike are without parallel in the post-war period. Partly for that reason, assessing how far the process has come and how far it has to go is extraordinarily difficult. As increasingly comfortable financial structures are built, though, the restraint arising from this source eventually should begin to diminish. In any case, the nature and speed of balance sheet restructuring are important elements that we will need to continue to moni-

tor on a day-by-day basis in assessing whether further adjustments to the substance of monetary policy are appropriate.

Against this background of significant progress in balance sheet strengthening as well as lower real interest rates, the Board Members and Reserve Bank Presidents expect a moderate upturn in economic activity during 1992, although in the current context, the outlook remains particularly uncertain. According to the central tendency of these views, real output should grow between 1¾ and 2½ percent this year. The unemployment rate is projected to begin declining, finishing the year in the vicinity of 6¾ to 7 percent.

An especially favorable aspect of the outlook is that for inflation. The central tendency of the Board Members' and Reserve Bank Presidents' forecast is that inflation, as measured by the Consumer Price Index, will be in the neighborhood of 3 to 3½ percent over the four quarters of 1992 compared with a 3-percent rise in 1991. However, the CPI was held down last year by a retracing of the sharp runup in oil prices that resulted from the Gulf crisis. Consequently, our outlook anticipates a significant improvement in the so-called core rate of inflation. With appropriate economic policies, the prospects are good for further declines in 1993 and beyond even as the economy expands.

To support these favorable outcomes for economic activity and inflation, the subcommittee reaffirmed the ranges of M2, M3, and debt that it had selected on a tentative basis last July—that is, 2½ to 6½ percent for M2; 1 to 5 percent for M3; and 4½ to 8½ percent for debt, measured on a fourth-quarter-to-fourth-quarter basis. These are the same as the ranges used in 1991. The 1992 ranges were chosen against the backdrop of anomalous monetary behavior during the last 2 years. Since 1989, M2 has posted widening shortfalls from the levels historical experience indicates would have been compatible with actual nominal gross domestic product and short-term market interest rates.

The appropriate pace of M2 growth within its range during 1992 thus will depend on the intensity with which forces other than nominal gross domestic product turn out to affect money demand. Deposit rate reductions could be significant, especially if banks are not seeking retail deposits, given their continued caution in extending credit, contributing to further shifts of funds into longer term mutual funds and into debt repayment. With the RTC remaining active in resolving troubled thrifts, the restructuring of depository institutions is likely to continue to influence M2 growth.

Will these ranges for money and credit growth prove to be appropriate? Obviously, we believe the answer is yes. I should reemphasize the sizable uncertainties that prevail. The ongoing process of balance sheet restructuring may affect spending, as well as the relationship of various measures of credit and money to spending, in ways we are not anticipating. In assessing monetary growth in 1992, the Federal Reserve will have to continue to be sensitive to evolving velocity patterns.

Our focus, quite naturally and appropriately, has been on our immediate situation—the causes of the recent slowdown and the prospects for returning to solid growth this year. However, as we move forward, we cannot lose sight of the crucial importance of the longer run performance of the economy. As I have noted before,

much of the difficulty and dissatisfaction with our economy comes from a sense that it is not delivering the kind of long-term improvement in living standards we have come to expect. The contribution monetary policy can make to addressing this deficiency is to provide a financial background that fosters savings and investment and sound balance sheet structures. Removing, over time, the costs and uncertainties associated with ongoing inflation encourages productivity—thereby enhancing investment.

Moreover, inflation tends to promote leverage and overaccumulation of real assets as a hedge against increases in price levels; progress toward price stability provides a backdrop for borrowing and lending decisions that lead to strong balance sheets, far less apt to magnify economic disturbances.

Through a combination of fiscal policies directed at reducing budget deficits and monetary policies aimed at noninflationary growth, we can achieve the strong economic performance that our fellow citizens rightfully expect.

Thank you very much, Mr. Chairman.

[The prepared statement of Mr. Greenspan can be found in the appendix.]

Chairman NEAL. Thank you, Mr. Chairman.

The growth figures that you have in mind for the monetary aggregates start where they ended up this year; is that correct? They don't start your—your projected growth for M2, for example, would start from what it was at the fourth quarter of this year, not at—

Mr. GREENSPAN. Fourth quarter of last year.

Chairman NEAL. Fourth quarter of last year? Not what it would have been had it been at the midpoint?

Mr. GREENSPAN. That is correct. We are not extrapolating last year's cones. We, as a matter of practice, choose each year to re-start from the previous fourth quarter's level in order to make adjustments as we see fit for changes that may have occurred in a relationship between money on the one hand, and, on the other hand, gross domestic product, interest rates, and a number of other factors.

Rather than deal with adjusting historic cones periodically, we choose to adjust them once a year systematically.

Chairman NEAL. Yes, sir.

It seems to me that if there was one policy that we would want to emphasize at this point it would be the national savings rate. I say that because essentially all savings ends up in investment one way or the other.

That investment, essentially, means increased productivity, increased competitiveness, better jobs for our people, higher paying jobs, a better economy.

Now if we compare our savings rate with that of most of the developed countries of the world, it is fairly low. In fact, maybe abysmally low. What I am talking about, national savings, what I have in mind here—there may be a technical term for it I am not familiar with—but all the savings at the government level, business level, personal level, and so on.

Mr. GREENSPAN. Excluding foreign borrowed saving, what we call domestic saving, which includes all the items you read.

Chairman NEAL. Is that the correct technical term I am looking for then?

Mr. GREENSPAN. Yes.

Chairman NEAL. Domestic saving?

Mr. GREENSPAN. Yes.

Chairman NEAL. If I am right, that should be the focus of policy. It seems to me that we are on the right track with monetary policy because it is clear that low inflation, predictably low inflation, creates the best condition for savings. That is to say, if people are not worried their savings will be eaten away by inflation, they are more inclined to save.

But on the fiscal side, the biggest dissavings is the Federal budget deficit. So if I am right, the emphasis ought to be on savings, then it seems to me the emphasis ought to be on reducing the deficit. I know that that is not a startling comment. I think most people agree.

I raise it this morning because there are a lot of proposals for cutting taxes from Republicans and Democrats and most of them result in a higher budget deficit. So I am just—I want to ask you what do you think would be the best policy in this regard? Would it be better to try to not cut taxes—which is what I think personally would be—it would be better to not increase the budget deficit; or is it a good idea to cut taxes in some way?

Do we need that short-term stimulus that that might provide? Although, frankly, I look at the level of tax cuts, even though they doubled, most people are suggesting \$40 billion, \$50 billion, something like that, does not amount to much for any individual in whatever we have, a \$6 trillion. It doesn't seem it would make much impact. Might be politically popular.

What do you think? Should we give a higher priority to reducing the budget deficit? Is it a good idea to go for one of these tax cut proposals?

Mr. GREENSPAN. Mr. Chairman, as I have indicated before this subcommittee in the past, in the longer term sense, the major shortcoming of the American economy is, as you point out, our inadequate saving, which has very extraordinary consequences, and even though we have been endeavoring over the years to find the means to expand private gross saving, it now appears that the most readily available means to improve the net saving available for domestic investment is to reduce the Federal budget deficit's claim on the gross private saving that we have.

It may be a cliché, but it is one of those clichés that is perhaps worthwhile repeating and repeating because it is a crucially important issue with respect to America's future.

I have said, Mr. Chairman, before other committees, that I, myself, personally, am not of the belief that we should be moving toward a broad fiscal policy package in this particular context, but I have emphasized that should that, in fact be the case, we must be very careful to be aware of the structural long-term budget deficits and not do anything which, in the process of short-term stimulation, creates more difficult problems for the American economy in the future.

I have been supportive of several different tax proposals but not as a short-term stimulus basically because I think they are appro-

ropriate longer term tax policies. I have been in favor, as you know, of a significant cut—and preferably the elimination—of the capital gains tax. And I would like to see some alteration in the passive loss provisions that exist as a consequence of the 1986 Tax Act.

But while they may be viewed as short-term expansionary forces in the current environment, I would still be in favor of them even after the economy recovered, because that would be an appropriate long-term tax action to improve the efficiency of our tax system.

But I am, as I suspect you have been indicating, not unconcerned about the possibility that in our endeavor to stimulate the current economy, we may inadvertently create problems which are more difficult for us than we realize down the road.

Chairman NEAL. I think you are saying that the emphasis ought to be on savings and deficit reduction in so much as that is possible?

Mr. GREENSPAN. I would certainly say that over the long run that is our major problem. It is becoming an especially urgent long-term issue as we begin to realize that the current services budget deficit, which previously had been presumed to continue to decline until a surplus was reached now appears to stall out in about 5 years at an unacceptably high level of the deficit. And should that occur, that will make it quite difficult for us to maintain an adequate amount of domestic net private saving going into domestic investment, a necessary condition for the achievement of adequate growth in productivity and, therefore, in standards of living.

Chairman NEAL. Yesterday, you reduced the reserve requirement for banks; and the markets, the stock, the bond markets turned downward a little. I don't know what is going on today.

I take it that that was read as possibly being an overly stimulative kind of move on your part. You have been making such good progress on inflation. It looks like—although there may have been something going on—that that is the way that that was read.

Would you please comment on three things? If you agree that that is the way that that was read—as I stated, read to mean maybe a little too much ease on your part?

What is the right reserve requirement? If 12 is too much, why is 10 the right level?

Well, let me stop there. I want to yield some time to others and come back.

Mr. GREENSPAN. Mr. Chairman, I will leave to market commentators appraisals of why the markets move as they do. I would note, however, in many of the press reports of the markets' reaction yesterday, there were differing reports.

Some people suggested that we were being overly stimulative, some suggested we were taking actions which presupposed that we had no further interest in supporting the economy and that we were being basically too tight.

Well, both cannot be right. Obviously.

Chairman NEAL. You actually eased. I don't think the criticism would be that you were too tight.

Mr. GREENSPAN. There is the presumption—which obviously I am not going to comment on further—that in choosing to move as we have been planning for a number of months on reserve require-

ments, that that meant we had no further interest in viewing the state of the economy and potential need for further monetary ease.

It is difficult to read the markets, especially when you get conflicting forces. I cannot add very much to what I read in the newspapers with respect to yesterday's action.

Chairman NEAL. Just briefly, if 12 percent is too high, why is 10 percent the right level?

Mr. GREENSPAN. As I will be indicating in a letter that I am in the process of drafting relevant to what you raised with regard to this question, we at the Federal Reserve, going back to the 1970's, have uniformly been supportive of allowing the Federal Reserve to pay interest on reserve balances. One of the reasons why we have been strongly supportive of this is that the reserve balances are effectively a tax on commercial banks and have adverse effects, especially in a period such as the last decade when technology has enabled all sorts of new instruments to evolve to essentially evade this noninterest paying reserve balance.

It is becoming clear to us that we are going to be fighting a rear guard action to try to maintain noninterest paying reserves as individual banks endeavor to try to find ways around the regulations.

This would be immediately resolved were we to be able to pay interest on these balances, because then clearly banks would be more than pleased to hold them and we would get the full reserve balance effect. But short of that—and we hope at some point we will be able to do that—we do believe that it is better for the efficiency of banks and their lending capabilities to have a lower level of reserve requirements on transaction balances.

The reason why we chose 10 percent is that a very significant amount of these balances represents essentially the needs to meet very high transaction clearings that have occurred in the system and were we to lower the rate significantly below 10 percent, it would create a number of difficulties for the banks.

So we decided that even though we cannot do very much, we decided doing a little bit—which is what we did—is certainly better than doing nothing.

That is the basic reason why we decided to move from our previous level of 12 percent down to a level which we believe is sustainable in today's market and eliminates at least in part some of the problems associated with requiring substantial reserve balances without paying interest on them.

Chairman NEAL. Thank you, sir.

Mr. Roth.

Mr. ROTH. Thank you, Mr. Chairman.

Chairman Greenspan, as I mentioned in my opening statement, I take what you say very seriously. I do believe you have a good sense of what is taking place in our economy. The last time you were here, you mentioned to us you were very much concerned about the Federal deficit. I noticed in your summation today in your last sentence, you talk about large stocks of Federal debt that have been allowed to build up affecting our economic prospects.

Since you were here last, I voted 33 times—33 times—against increased spending because I felt you were right.

But how do we drive that message home to the liberal Democrats in Congress who keep spending, spending, spending, taxing, taxing,

taxing. We have \$400 billion worth of debt this year. These guys just keep spending. What are we going to do?

Mr. GREENSPAN. Well, I must say some of the strongest proponents of getting the Federal deficit down are a lot of my liberal Democratic friends. I would not think—

Mr. ROTH. Oh, Mr. Chairman. As much as I like you, I must respectfully disagree. There is no empirical evidence to back up that statement. Absolutely none.

Mr. GREENSPAN. I could give you a very long list of names but I think I will choose not to at this particular point.

I don't think that this is or should be a partisan issue. It is too important a question for the future of this country to make a partisan issue of it largely because what we are dealing with is basically the long-term standards of living of the American people. And I must say I praise you for your votes and trying to repress expenditures and I encourage you to continue if at all feasible to do so, and to whatever extent you can convince your colleagues, liberal Democrats or whomever, who vote in this House, I would very much think it desirable to do that.

Mr. ROTH. Thank you, Mr. Chairman. I realize in the position you are in, you do not get involved in partisan politics. Frankly—and I am not asking this as a question, it is a statement—it is not partisan politics. It is a matter of empirical evidence.

You can take a look at the vote when this comes up. These Democrats keep on spending, spending, spending to the point they have a guy who wins in New Hampshire who does not even agree with the liberal Democrats in Congress. That is how bad the Democrats in Congress are.

They are so out-of-step they are not even in step with their own party leaders.

The question I have is on capital gains reduction. I agree with you. We need capital gains reduction.

When I go back home—I just came from 47 town hall meetings. The farmers, the small business people say we have to have capital gains reductions. We need help. Incentive again.

I am voting for capital gains reduction because 60 percent of all the people who are getting capital gains reduction earn less than \$50,000 a year, according to the facts given to me.

The question I have for you is when you talk about capital gains reduction, are you talking about the President's plan of 15.6, 15.8 percent or are you talking about the total elimination of capital gains?

Mr. GREENSPAN. Mr. Roth, for a number of years, I have been supportive of elimination of the tax on the grounds that I believe it is a highly inefficient means to raise revenue and that it has significant disincentive effects.

Needless to say, any tax is a disincentive vehicle. It is really a question of the practical need to raise revenues and the efficiency costs that one creates in the process of doing so. It has been my belief over the years that taxes on capital, per se, tend to over the long run create disincentives to economic growth and rising standards of living, and as a consequence, my view is essentially not related to the President's program or any other issue but is a view I have held for quite a long while.

Chairman NEAL. I thank the gentleman. Let me—the gentleman is interested in empirical facts. Let me mention something. Both parties like to spend. We spend on different things, generally speaking, and within the parties there are differences of opinion.

Now, the Republicans, by and large, spend on big ticket items like the superconductor and the supercollider. The space station, SDI, tens of billions of dollars of spending, a lot of different countries both don't spend on those things, they spend on other things. There are different priorities.

The empirical fact is that President Bush has succeeded with every single veto. If President Bush doesn't like any of the spending that has gone on in Congress, he can veto the bills that contain that spending and he would win.

There would have to be a change in that legislation to satisfy him, so President Bush has gone along with every single bit of spending that has passed the Congress, and President Reagan went along with every single bit of spending that passed the Congress.

Mr. ROTH. Will the chairman yield?

Chairman NEAL. Because President Reagan hardly overrode anything. So if President Bush doesn't like any of the spending that has passed the Congress, all he has to do is veto.

Mr. ROTH. Will the chairman yield?

Chairman NEAL. Yes, I will.

Mr. ROTH. In ancient Greece they have the sophists. These are the people that can win any argument. The point is that you can. But Democrats cannot continue to win the argument because the Republicans do not go for spending. President Bush is not interested in Democrat spending proposals, but either he goes along with you, or you shut down the government. That is the problem with divided government.

When Reagan was President, the Democrats ran the House. When Bush is President, the Democrats have run the House. Democrats have run the House for 38 consecutive years. Every Speaker, every chairman, every subcommittee chairman has been a Democrat since 1954, and look at the results.

The American people have got to remember that divided government does not work, and the reason the President took your tax increase, because you shoved it down his throat just like Reagan on December 24 when Reagan was President—either shut down the government or accept the Democrat proposals.

The American people have got to have changes in government behavior, and we can't keep going in this direction.

Chairman NEAL. Let me tell you, the empirical fact is that President Bush has won on every single veto. If he doesn't like spending, we have never shut down the government, he doesn't like some spending, veto. It is easy. So this is just political nonsense.

Mr. ROTH. Mr. Chairman, I don't think it is—Mr. Chairman, if I can, if you can yield to me for just a few seconds.

Chairman NEAL. I think we have had enough of this.

Mr. Neal.

Mr. NEAL OF MASSACHUSETTS. Mr. Chairman, let me draw us away from partisanship.

Mr. GREENSPAN. I haven't noticed any.

Mr. NEAL OF MASSACHUSETTS. Let me suggest, in fairness, by drawing us away from partisanship this morning, Chairman Greenspan, if I were George Bush, I would be as upset today with the Federal Reserve Board as I am with Pat Buchanan and I bring that to your attention to highlight one elementary fact. And that is, you and I have gone back and forth on this issue for the better part of 2 years.

I still contend it was the Reserve's—a position that I took—that the board took in denying routine credit to people in New Hampshire, in New England, and now across the Northeast and the slow reaction that the Federal Reserve Board has had. It has caused much of the political consternation and economic consternation that is currently being borne out across my region of the Nation.

I would suggest to you again, do you think today that you can suggest that the Federal Reserve Board was slow to react to the credit problems that were taking place across New England?

Mr. GREENSPAN. No. As we discussed in the past, Mr. Neal, monetary policy of necessity must be national. We do not have the capability of maintaining a regional monetary policy unless we have different currencies or we create an extraordinarily elaborate technical system which prevents the free movement of funds from one sector to the other.

We must maintain a national policy and problems that exist regionally have got to be confronted by other means. You cannot, for example, hope to basically cure some of the very obvious problems that were emerging in New England well before they began to show up nationwide. You cannot confront them without having significant distortions in other parts of the country.

So as far as monetary policy is concerned, as much as we are aware, and indeed, obviously we were aware of the emerging credit crunch in New England, we could not change national monetary policy to address that.

All we could do, very specifically, was endeavor to try to find means to ease specific problems for specific banks, but whenever we are dealing with a regional problem, we cannot use national monetary policy to resolve that no matter how difficult it may appear.

If, for example, we tried, as we did back at the beginning of the Federal Reserve, to have different discount rates in different regions of the country—we did for a very short period of time—what we found very quickly was monies moved in such a manner as to make essentially regional policies ineffective and ultimately counterproductive.

As the national financial system emerged through the 1920's, 1930's, and especially after World War II, the ability to deal with one region apart from the others through monetary policy was eliminated.

Mr. NEAL OF MASSACHUSETTS. We rely in this business that I am in heavily, as you might expect, on anecdotal evidence to draft positions, and let me tell you that the Members of this body that I speak with on the floor, they tell me that the New England nightmare has now spread to the Southeast and to the west coast where good people with longstanding credit risks are being denied routine credit.

Let me cite an example for you in New England that I think that the regulators have contributed to mightily. People who had longstanding relationships with banks, particularly the Bank of New England, they found that after the Bank of New England collapsed, that routine credit not only was being denied, but if the collateral value of the property had fallen, that the loans were being called despite the fact that they were current in there interest and principal payments.

When I asked time and again over the course of the last 2 years if we could have relief in New England, I wasn't shelling for bankers, I was standing up for their customers; people that had good business ventures, people that had longstanding credit histories.

And I would suggest today that, in my opinion—and I have said many times that I admire your intellect and that I don't profess to know more about monetary policy than you do—but I do know that vacant storefronts and longer unemployment lines and routine credit being denied has contributed significantly to what has occurred across New England.

And last night that evidence, I think, was borne out by the better than 40 percent of the voters in the Republican side who went in and voted for Pat Buchanan. The Democratic candidates attempted to speak forcefully to this issue, too, of what was happening in the region economically and they all zeroed in on that issue of routine credit being denied.

And I think it was the failure of the Federal Reserve to acknowledge it at the time and it was a slow reaction that has contributed to that problem we are just now beginning to feel some relief.

Mr. GREENSPAN. I can't agree with that, Mr. Neal, that we were not aware of the problem. Obviously, we were aware of it, and indeed we have taken innumerable actions in a supervisory way and through a monetary policy means to improve the banking system, which is one of the reasons for the action we took yesterday.

But the fundamental problem of the credit crunch we have addressed, recognized, and acknowledged since we saw the signs of change that were occurring in the spring of 1990.

We have made very major moves and far more importantly, since we only have a minor position in supervision within the banks in New England, our colleagues, who have the major areas of supervision, have done a great deal more, and I would say that, for example, Bill Taylor, our former Federal Reserve head of supervision and now FDIC Chairman, has been acutely aware of this problem.

Mr. NEAL OF MASSACHUSETTS. Taylor, I have got to say, has been sensitive, I have got to tell you that.

Mr. GREENSPAN. I want to tell you that the reason why we at the Federal Reserve were sensitive is that he was running the show for us in that respect, and while we would very much—as I have indicated to you in the past—tried to ease that crunch far more quickly, it has been very difficult. It has not gotten worse, but it has been one of the most difficult supervisory problems that I am aware of.

Mr. NEAL OF MASSACHUSETTS. I would suggest that I think it was this morning, it might have been yesterday morning, David

Broder's column on President Bush standing there defending his positions vis-a-vis banking regulators, I think, tells the tale very well of what has happened across New England, where the President was almost pleading for relief.

And, again, I think the evidence has been borne out by what occurred yesterday in New Hampshire. If I may have one additional moment, Mr. Chairman.

As you develop—and I tried to get to the core of this—as you develop your positions, the outstanding criticism of the Federal Reserve Board has been that there has been an obsession with inflation and was it that obsession with inflation that perhaps might have contributed to a slow reaction?

I would like to try to get to the nub of it. It seems to me the criticism that I hear most frequently of the Federal Reserve Board today is—right through your tenure, and I find much that I agree with—what you have done over the years but the criticism seems to be that you have been obsessed with the inflation, almost at the expense of economic growth across the Northeast.

Mr. GREENSPAN. Mr. Neal, I hope we are not obsessed with anything. It is our rational judgment that bringing destabilizing inflationary pressures under control which started with some very forceful actions in the early 1980's by Chairman Volcker, very difficult ones, has brought the economy to a degree of stability which now gives us a running shot at a stable, growing economy, one which should be moving at a significantly higher pace than it would have been if inflation was still either out of control or chronic in a form which would make it difficult for us to deal with.

It is not an obsession that we have. It is a desire to set in place conditions where economic growth is sustainable and at a maximum, and in our view, a necessary condition for that, not a sufficient condition, but a necessary condition, is that we have a noninflationary economy.

We are also aware of the fact that one cannot look solely at the longer term because the longer term is made up of a series of short terms and we have, I hope, been sufficiently sensitive, as we have seen the inflationary pressures ease, to take advantage of that fact and move increasingly more aggressively to ease monetary conditions, doing it not only through open market policy, which is our major tool, but also employing reserve requirements and the discount rate when they appeared to be the appropriate vehicles.

So I am aware, obviously, of people's concerns of what they perceive to be obsessive central bank reactions to inflation, but it is a rational concern in that economic growth and standards of living are the beginning or, I should say, the goals of what we are trying to do.

Monetary policy is only a means to an end. It is not an end in itself. Inflation control is not an end in itself. It is a means to an end. Having stable prices may not do anything for us, and if that were the case, we shouldn't seek it. But the truth of the matter is it does a very great deal and that is the reason we focus on it. It is not inflation stability that we seek. It is solid sustained long-term economic growth that we are endeavoring to set the stage for, and therefore we are moving or have moved in the direction trying to

contain the inflationary instabilities which were on the edge of significantly destabilizing this economy in the late 1970's.

Mr. NEAL OF MASSACHUSETTS. Thank you, Mr. Chairman.

Chairman NEAL. Mr. Cox.

Mr. Cox. Thank you, Mr. Chairman.

To continue in a nonpartisan vein, I would just encourage my friend from across the border in Wisconsin that, if he sincerely is interested in facts—and I am sure he is, he wouldn't say it if he were not—I would encourage him to read David Stockman's book, "The Triumph of Politics" to see what really happened in the early 1980's concerning spending in the United States.

Mr. ROTH. Will the gentleman yield?

Mr. Cox. I would like to later.

Mr. ROTH. Just for a question?

Mr. Cox. Sure.

Mr. ROTH. The President has asked, when he came before Congress, for authority for the line-item veto. Is my friend going to vote for that?

Mr. Cox. No. And we don't need any more dictators. We got rid of those in the 1700's and I would just as soon we stay in that position. But for Chairman Greenspan, a reporter from the *Washington Post* presumed to know why you do what you do. And he said today that in another attempt to shore up bank profits so bankers will be more willing to lend, you reduced the fraction of deposits that banks have to keep in reserves. Was he accurate in stating that, that is the reason for the reduction?

Mr. GREENSPAN. Yes, indeed. The basic thrust of why we moved the reserve requirements yesterday, aside from the technical issues which I raised with the chairman this morning, were obviously that it would facilitate the propensity to lend on the part of commercial bankers.

Mr. Cox. Just for my edification, what is the connection between banks lending and the monetary policy of the Federal Reserve? How do they connect?

Mr. GREENSPAN. They connect largely through the cost of funds so that to the extent that we bring short-term interest rates down, which we can control, it clearly opens up the pretax presumptive profit margins of the banks and hence the incentive to move forward to lend.

The same thing is true if you lower reserve requirements, because you then have removed a degree of non-interest-bearing assets from the balance sheet and therefore, banks would be getting a wider profit margin from which to start to function.

Mr. Cox. Am I correct that in layman's language, in encouraging banks to lend more, that that, in effect, increases the money supply.

Mr. GREENSPAN. It could and usually does.

Mr. COX. And that it would be beneficial in stimulating the economy.

Mr. GREENSPAN. It isn't the money supply in that connection which does it. It is the lending which does it and it is the money supply which surfaces at that point as the other side of the balance sheet, but it is not the money supply, per se, which is in that sense regenerating the economic activity.

Mr. Cox. Well, the availability of the bank to make the loan is directly related to the policies that you implement.

Mr. GREENSPAN. To the extent that it is, the answer is yes. I don't wish to say that the money supply has no effect, but what I am trying to say is that it is the total action of the commercial banks at that particular point which is supporting increased economic activity.

Mr. Cox. Am I correct that the actions, like the action you took yesterday, are focused on, in fact, attempting to encourage the banks to do more lending?

Mr. GREENSPAN. Yes.

Mr. COX. And if they were to do that, there would be more money out there for small businesses to get started, and so forth, and the economy will get going again?

Mr. GREENSPAN. Yes.

Mr. COX. Am I correct that the policies that you have followed to date are achieving less than satisfactory goals in in that regard?

Mr. GREENSPAN. If one looks at the state of what we call the credit crunch, it is obvious that we have not eliminated it, and unless and until we do, I would not consider that the actions that we have taken, relative to endeavoring to encourage lending, have fully succeeded.

Mr. Cox. Would it, under the circumstances that we currently face, be helpful to investigate and experiment with an alternative means of expanding the money supply or expanding growth in business activity aside from your usual route of affecting bank lending.

Mr. GREENSPAN. I think we do that all the time. In other words, there is nothing that formally requires us to sit with a specific rigid procedure which we never alter. On the contrary, we have been looking for all sorts of various different types of things we might or might not do when confronted with problems. It would seem that the credit crunch problem is as intractable as some that we have seen in the last couple of years.

Mr. Cox. I would be interested in your comments, then, regarding this idea. What if Congress, in its constitutional authority to create money, were to provide interest-free loans to cities and States to be used for two specific purposes, either to reduce their existing debt or to invest in the infrastructure, and at the time that the loans would be repaid to the Federal Government, that that money would not continue and the money supply would be eliminated when they are paid back, and they have to identify where the funds would come from to pay it back before the loan would be made?

Mr. GREENSPAN. There is no need for any of that type of transaction to even get within the financial system because, were the Congress to choose to do that, then what would occur would be payments from the Treasury out of its accounts with us to the State and local governments, and movements in Treasury balances, which occur as a consequence, do not generally affect overall money supply in the system largely because we take actions to offset that.

Mr. Cox. And I assume you would do that if there were a negative effect such as this action being inflationary or something like

that. But would it not assist in moving money out into the economy at a relatively low inflation? Say if we limited it to the proposal of Mayor Flynn and the other mayors in the country to fund the infrastructure projects that they have in place, knowing that you would respond if there were a negative effect on inflation or whatever.

Mr. GREENSPAN. You are raising the problem which I believe Chairman Neal was referring to with respect to increasing the budget deficit, because the type of activity which you were referring to would appropriately be scored as an increase in the deficit.

And if you were to do it by another means—that is, to go outside the budget caps or something of that sort—it would have exactly the same economic effects and it would just be reshuffling the numbers which I would necessarily think would not be a good idea. It is something very close to grants-in-aid.

And if you are going to do it, I would say it is probably appropriately a grant or some sort of loan which, in order to prevent an increased structural budget deficits as a consequence, you would have to find a means by which that would get paid back. As you well know, past history has not been overly sanguine in this other side of that transaction.

Mr. Cox. If I could just have one last question with that regard, Mr. Chairman.

Would there be a negative effect on banks if we found a way to do that? In other words, they would pay off some of their debts or whatever.

Mr. GREENSPAN. Well, it depends. Are you suggesting that this particular loan, interest-free loan, be made by commercial banks?

Mr. Cox. No.

Mr. GREENSPAN. By the Treasury?

Mr. Cox. By the Treasury.

Mr. GREENSPAN. No, its effect on banks would not be significant unless, of course, they paid off bank loans. That would have an effect.

Mr. Cox. That would be an option that they would have to get rid of that interest expense. That is what I am asking.

Mr. GREENSPAN. On loans from commercial banks?

Mr. Cox. Yes.

Mr. GREENSPAN. Sure.

Mr. Cox. Then it would have that negative effect?

Mr. GREENSPAN. That would not be negative. It would be positive.

Mr. Cox. Thank you.

Thank you, Mr. Chairman.

Chairman NEAL. Mr. Charles Schumer.

Mr. SCHUMER. Thank you, Mr. Chairman. I want to thank you, Mr. Chairman, for appearing before us as you always do. I think it is no secret that, as we get closer and closer to election time, what is good for the economy and what is good for politics are going to become more closely and closely entwined and that puts you in the hot seat in a certain sense.

Your statement is more sunny than you have issued in a while, but I am sure there is gloom and doom in the White House today. And so, sure as I am sitting here and you are sitting here, I think

there is going to be tremendous political pressure on you to open up the throttle and make the economy do whatever it has to do before November, regardless of the economic consequences that that might bring after November.

So my first series of questions is related to that. I am not going to ask you how you are going to respond to whatever pressure may or may not be brought, obviously. I can just say that I hope you will resist those kinds of pressures as you and other Fed Chairmen have done in the past.

My first question relates to one change in your testimony, your verbal testimony and the written. On the first page, you said, looking forward, though, there are reasons to believe that business activity, and you said when you gave the testimony, "should pick up." In the statement it said "will pick up." Being a little more cautious about it?

Mr. GREENSPAN. I read that this morning, and I said to myself, that is an inappropriate statement. It presupposes necessity and in that type of context the appropriate word is "should." So I edited it.

Mr. SCHUMER. I understand that. My question is: How confident are you that, say, that in the next 6 months, the economy will begin to turn up again, and obviously you are not a seer, although I remember when we first met and I asked you what you liked about the Fed. Your eyes lit up and you said the data, which I always respected. You think that you had some kind of—well, I won't say.

In any case, give us—can you just flush out a little more how optimistic you are.

Mr. GREENSPAN. Yes. First, let's start with the clear awareness that this is a really unusual economic situation, something which I have not seen as an economic forecaster in my professional life, and I would suspect that one would have to go back into the 1920's and perhaps even into the 19th century to see many of the characteristics of the balance sheet effects impacting on economic activity that we are seeing today.

The reason why I have put so much emphasis on the question of restoring balance sheets is that it is pretty clear that the major problem that we have has been the sharp increase in debt in the 1980's, financing asset values which were presumed to be sustainable. When that failed to occur, then you have got a whole sequence of events.

What we do not know is how far the adjustment process in balance sheets must proceed prior to the renewal of the normal forces of economic activity taking hold. And that, at this stage, is an empirical issue.

Mr. SCHUMER. And if I might interrupt, probably a more psychological issue than you are used to dealing with?

Mr. GREENSPAN. To be sure. There is no doubt that there is a crucial element of psychology in here and, to the extent that the real events and psychology intertwine, that is part of the process of evaluation.

You are quite correct, Mr. Schumer, that the phrases in here are somewhat more optimistic than in testimony I have made in recent weeks because we are beginning to see stirrings.

I don't want to overemphasize them, but it is clear that home building is doing better. We are beginning to get traffic through both the various different housing operations and retail operations, which are a little better than they have been.

Even though we saw a sharp contraction in industrial production in January, largely reflecting inventory adjustments, as best we can judge, that does not appear to be continuing in February on the basis of weekly data on production that we can compile. And one senses in the orders data—new orders and backlogs—some modest improvement in recent weeks.

Now, I don't wish to overemphasize it. It is a series of weeks and it could just as easily peter out as indeed the much more vigorous recovery of last spring petered out. But it is the case that there is some improvement that is emerging, but, as I mentioned in my earlier remarks, we are watching, obviously, very closely.

But that is essentially, in my judgment, the basis why the members of the Board of Governors and the Presidents at the Banks, in trying to put down their best—I was about to say judgment, but it almost gets to a point of guesses at this stage—have given us a view which suggests some modest quickening in economic activity as the year progresses.

Mr. SCHUMER. And would you say that that would begin to show in the second quarter?

Mr. GREENSPAN. Yes.

Mr. SCHUMER. OK. Next question relates to some of the tax proposals and again the nexus of politics and economics. Some of the proposals that are out there—and you made it very clear and I completely agree with you that anything that might increase the deficit would be a bad thing to do—but let's assume that we have some deficit neutral proposals; that is, we are raising rates on—raising taxes on some part of the economy. That has been proposed on the most well-to-do. Would a "middle-class tax cut" that equalized, took money away from the well-to-do and gave it to the middle income people have any stimulative or regressive effect on the economy?

Mr. GREENSPAN. I would say most economists would say its effect would be negligible.

Mr. SCHUMER. Do you agree with that?

Mr. GREENSPAN. Yes, I do.

Mr. SCHUMER. If, on the other hand, you took those dollars you were gaining from increasing the taxes and put them into certain kinds of, quote, growth oriented proposals—I have been pushing, as you know, indexing and I want to talk to you about that, not only of all investment but also of savings and of borrowing to try and lean America a little more in the direction of savings and investment and a little less in the direction of borrowing and consumption. My proposal shouldn't be implemented until we begin to recover, so it wouldn't have any drag effect. Would that improve the economy in the long run and might it have some significant psychological effects in the short run that would be either positive or negative, assuming it wouldn't actually be implemented—wouldn't take effect until, say, a year from now?

Mr. GREENSPAN. Obviously, to the extent that you move resources from consumption to investment, one must assume that it would have a significant positive effect in the longer term.

It is not clear if the psychological effect has a significant short-term economic effect, but I think you are quite correct in focusing on what long-term positive effects might emerge, especially if one suspects, as I do, that the confidence issue is not a short-term issue.

Mr. SCHUMER. Right.

Mr. GREENSPAN. But something has become pervasive among significant groups of the American people about long-term possibilities of standards of living. If that is, in fact, the case and one gets a better view of how the longer term would look, one must presume that the feedback effect could be positive in the short term.

Mr. SCHUMER. I think you have summed it up pretty well. The difference, I think, between this recession and other recessions is that the confidence issue in previous recessions was a short-term issue and now it is a long-term issue.

Just one final question, if I might, Mr. Chairman. What I am taking from your argument is that you would prefer, if we were going to raise taxes on, say, the upper brackets, that the money be put into policies that would stimulate growth in investment as opposed to simply returning some money to a group of people, middle class tax cut.

Is that fair to say, from an economic point of view, not a political one?

Mr. GREENSPAN. Yes, emphasizing the word "if." If you were going to do that, then the answer is yes.

Mr. SCHUMER. OK, so you would advise both the Congress and the President not to substitute the immediate hit of a middle class tax cut for longer term, growth-oriented tax policies; is that fair to say?

Mr. GREENSPAN. That is fair to say.

Mr. SCHUMER. Thank you, Mr. Chairman.

Chairman NEAL. Mr. Chairman, you say that this current economic environment is unique, that you have to go back a long way in history to find something similar. I am wondering, what is it about it that is so unique and what sort of lessons should we learn from this.

Mr. GREENSPAN. Mr. Chairman, I want to say it is unique in the context of the post-World War II period, but it is not unique in the annals of American business. The fundamental difference here is the extraordinary decline in asset values, specifically in commercial property, which has had a devastating effect on financial institutions, and a significant slowing down and change in expectations of residential property value increases which, even though are clearly not of the same magnitude, have had some very extraordinary effects on consumer attitudes and activities.

That is basically different from anything that I have seen in the past, say the past 50 years. What that means, basically, is that rather than as economists looking solely at the question of income, consumption, and saving, and investment and the usual relationships which we tend to build up for economic forecasting purposes, we have had to go inordinately to looking at the pressures coming from balance sheets in a way that we have not had to do in recent

decades. And that has created a whole new set of relationships, attitudes, and potential forecasts that we did not have to confront in the earlier period.

Chairman NEAL. If you—I guess you take one step back beyond the run-up in value of these assets and look at the policies that inspired them, among those policies were the high inflation of the late 1970's, the tax changes that took place in the early 1980's and then the decline related, I guess, primarily to a winding down of inflation and the tax changes of 1986.

Is that what you look at, primarily, or are there some other things? And, again, I am sort of trying to get at the question of what we should learn from it.

Mr. GREENSPAN. There are other things, but if you ask my opinion, you are looking at the core of the problem. Even though I was a strong supporter and remain a strong supporter of the original 1981 Tax Act, which did a number of very important things for incentives and growth in the economy, the one element that I have always felt uncomfortable with was an endeavor to adjust tax lives, depreciation lives for commercial real estate, which were clearly excessive in the 1970's and created major problems for real estate operators under that inflationary environment.

Instead of moving them from an excessive life to an economically rational point, in other words, so-called economic lives, we went all the way in the other direction and created unnecessary incentives which, in effect, induced people to produce large office buildings with very high vacancy rates and still make very significant profits.

Chairman NEAL. For tax reasons as opposed to economic?

Mr. GREENSPAN. Yes. Fundamentally, a goodly part of those investments were to take advantage of the tax changes that occurred, the tax credits and depreciation that occurred. And what then inevitably occurred was an excessive building up of vacancies which collapsed the price structure. It started nationwide in 1985 and accelerated especially after values started to go down in 1988, then accelerated further in 1989, and especially in 1990, and created some very severe financial problems for our intermediary institutions.

Chairman NEAL. Well, I guess I learned a little bit—or come away with a little bit different impression of the value of that early tax change. I didn't vote for it. I guess I have to defend that, but I—the reason I didn't, because it seemed unbalanced to me and it seems to me, looking back over history, that that has proven to be correct, that the—that however desirable in the abstract a number of those policies were, when you threw them all in the same mix, the dramatic reduction—I am talking about the tax change of the early 1980's, the 1981—

Mr. GREENSPAN. 1981.

Chairman NEAL. Tax change which dramatically reduced taxes and made some other changes in the Code, but at the same time increased spending dramatically in the defense area and didn't cut spending in other areas and, you know, it does seem to me that the result of that, even though, you know, we made changes and fortunately made some changes or the deficit would have been much greater, has led to essentially the quadrupling of the national debt.

As I say, I couldn't agree with you more that there were some valuable aspects of those changes, but you mentioned one negative feature of it. And isn't this another negative feature of it? I mean, I just—it does seem to me that we have built—we have talked about a long—this long-term economic recovery, but it is been built on the very debt that we all sit here today and say is very damaging to the economy.

I am trying to keep this out of the partisan area if I can—

Mr. ROTH. Mr. Chairman.

Chairman NEAL. Because that is not my point here. I am trying to honestly learn for the future. If we faced another situation where we had a—I hope we never do, where we let inflation get out of hand again and do some other bad things, do we want to—would we, in fact, want to repeat what we did then, that formula?

Mr. GREENSPAN. Mr. Chairman, you are raising the broader question of spending and the like. I am focusing on specific aspects of that Tax bill.

Chairman NEAL. Right.

Mr. GREENSPAN. For example, the cut in marginal tax rates was a very important and major improvement in the efficiency of the tax structure. And there were certain elements in the depreciation changes and incentives in the corporate sector which were actually quite an improvement and quite useful.

When you begin to get to the question of why the deficits ballooned, which clearly I was not happy about by any means, that gets on to the expenditure side and what didn't proceed as scheduled there was the prospective declines in expenditures which, in retrospect, occurred only very marginally.

Mr. ROTH. Mr. Chairman, will you yield?

Chairman NEAL. Yes, one second, if I can. I know that you have supported the cut in the capital gains tax and others have and it makes—again, I think it makes a lot of sense. If I could design the Tax Code starting at ground zero, I don't think I would have any capital gains tax at all. Try to free up capital for the kind of investment we all want which will improve our standard of living.

But we are operating—we are not starting at ground zero. We are starting in an environment where we made a deal back in 1986. We changed some—you know, made some deals over the last several years where we changed one thing in exchange for doing something somewhere else and there are equity questions, political questions and all that.

Anyway, I am not trying to get into an argument about this either really. It is just that I think that is the problem we face, honestly, that it points to the kind of problem we face. There are a lot of policies out there that are quite excellent taken alone, but often when we put them in a package and if we don't get other policies that fit, we can have some very adverse consequences. Anyway, I am not trying to create another political situation.

Mr. Roth.

Mr. ROTH. Thank you, Mr. Chairman. I don't think it is a matter of being partisan. I think we want to look at the facts. I have a question. When you are talking about the 1981 Tax Act, are you talking about TEFRA.

Mr. LAFALCE. TEFRA was the 1982 tax.

Mr. GREENSPAN. It is ERTA, remember, it is the Kemp—

Mr. ROTH. Yes. That was the good Tax bill. I was wondering which one you were talking about.

Mr. GREENSPAN. Yes.

Mr. ROTH. I have a little anecdote for TEFRA in 1982 and, again, I think it is important that we point these things out because sometimes people just try to shut you up by saying, hey, you are just being partisan. No one wants to be partisan, but you have to look at the facts.

I want to tell you something that happened to me when TEFRA was up. Ronald Reagan had me in the Oval Office because he needed a few extra votes, and I wouldn't go along with it. And so President Reagan said: Look, conservatives are not going along with it. For every dollar I give in tax increases, I get \$3 in spending cuts.

President Reagan went along with TEFRA. I voted against it because I gave them my word back home I was going to vote against it. Where were the \$300 billion in spending cuts? They never came. That is why you have got the deficit. You know, talk is cheap, and it costs money to buy whiskey.

Chairman NEAL. Mr. LaFalce.

Mr. LAFALCE. The historical revisionism is quite interesting. Dr. Greenspan, unfortunately, in all my time here in Congress, I have yet to learn the art of bilocation and so forth. The last half hour I haven't been able to be here and someplace else at the same time.

So I don't know whether in the past half hour you had the opportunity to answer the question I posed in my opening remarks regarding what I consider to be one of the principal causes, not necessarily the only or the principal cause of the recession that we are in right now and that is the legal regulatory requirement for a precipitous capital buildup.

I don't say for a capital buildup, I say for a precipitous capital build-up which left so many of our financial institutions in the position of either having to sell off their assets, very often their best assets, or not make loans or a combination of the two, in order to meet the capital ratio requirements. This was coupled with the creation of something that no one had heard of until 1989, even speculatively, the RTC, an agency which apparently had as its goal apparently the liquidation of a great many financial institutions as opposed to their rehabilitation.

And in liquidating these institutions, the RTC acquired so many of their assets, good, bad, or indifferent, all of which became atrocious once they were acquired. This created this huge overhang on the American economy which had this tremendous depressive effect, not only on the price of the assets that the RTC, now the largest financial corporation in America, was holding, but also on the rest of the real estate assets of America.

Such real estate assets were often looked to by financial institutions as potential collateral for commercial and industrial loans, but now could not be used nearly to the same extent as collateral for those loans, thereby hurting commercial and industrial loans too because of the reduced value of those assets.

Do you care to comment on that?

Mr. GREENSPAN. I discussed the issue only in part, relevant to discussing the credit crunch. The issue comes down to a question of the significance of the impact of the required rise in capital on the lending actions on the part of individual banks. That is a factual question.

There has been some impact, but I think the overwhelming element involved has been the buildup in nonperforming loans, causing fear on the part of bankers and therefore withdrawal.

And if that is, in fact, the case, then one could argue that the credit crunch and its impact on economic activity—which is, as I understand the logic that you are running through—would have occurred whether or not there was any increase in capital requirements. In other words, the mere fact of a rise in nonperforming loans themselves could have done it.

And frankly, I suspect that while I am not—I don't wish to argue that the credit crunch is the determinant force in the weakness in the economy, there is no question it has been a significant factor.

Mr. LAFALCE. This is something that I was hypothesizing as early as the first congressional hearing on the potential credit crunch problem in April 1990 when I think the Federal Reserve Board was denying the prospects of a credit crunch.

Mr. GREENSPAN. We weren't denying the prospect. We were saying that the tightening of standards which had been excessively lax earlier, was healthy, not deleterious, and it is only as we got into the late spring and early summer that that process continued to the point where we changed our view, and indeed we, in discussing some of our monetary ease at that time, argued that it was in response to the emerging negative aspects, the corrosive aspects of the credit crunch at that point.

But I would say, as best we can judge—while we certainly do pick up in our various different surveys of banks indications of particular needs to meet the core capital requirements have been a factor in certain lending restraints—they have not been a major factor.

And were it not for the extraordinarily poor lending practices with respect to commercial real estate, for example, and the rise in the nonperforming loans, I would be very doubtful that we would have a significant impact from those capital requirements because, indeed, the vast majority of banks have now met those requirements and will, as of the end of this year, be in pretty good shape in that regard.

Mr. LAFALCE. Well, for those banks, the vast majority of which are in pretty good shape, that is one thing, but for those banks who didn't meet them, and in large part were liquidated on account of that, the result has been how much in assets now held by the RTC?

Mr. GREENSPAN. It is \$200 billion.

Mr. LAFALCE. Roughly.

Mr. GREENSPAN. It is a large number, around \$150 billion on a book value basis in conservatorships and receiverships, Mr. LaFalce.

Mr. LAFALCE. Two, \$300 billion in assets, depending on how you value them, of course.

Mr. GREENSPAN. Very much so.

Mr. LAFALCE. But has that buildup in assets in the RTC had a tremendously depressing effect on the real estate market in America?

Mr. GREENSPAN. I'm sorry. Would you say that again? The assets we are talking about are not real estate. Most of them are mortgages and loans and all other elements that were in the failed savings and loans. Real estate owned and foreclosed real estate is a relatively small part of the total.

Mr. LAFALCE. Is that correct?

Mr. GREENSPAN. Oh, yes. In other words, the trouble unfortunately is the biggest losses are right there. But, for example, the losses on the one-to-four family mortgage portfolios in these defunct S&Ls have not been large and the recoveries have been fairly substantial, but the recoveries in land and real estate rarely get up to 50 percent.

Mr. LAFALCE. That is quite good if they get up to 50 percent. But to what extent do land and real estate comprise the bulk of the portfolio now held by the RTC?

Mr. GREENSPAN. There are still a lot of loans they are trying to get rid of. The major problem, strangely enough, is that the loans are performing. It is that the documentation is poor and it is difficult to get.

Mr. LAFALCE. And that is what makes them performing and nonperforming, because of the documentation; is that correct?

Mr. GREENSPAN. No, a nonperforming loan is one which has to have more than just a documentation problem. It has got to be either not paying its way or very clearly not going to be able to pay principal in one form or another.

Mr. LAFALCE. If it is not paying its way, it would be nonperforming, but we have been experiencing the phenomenon of the performing/nonperforming, so if it is performing, it is paying its way. If it is performing/nonperforming loan, it is paying its way but with the expectation that it won't be able to pay its way; is that correct?

Mr. GREENSPAN. That is correct.

Mr. LAFALCE. And what creates the expectation that it won't be able to pay its way? I said lack of documentation; maybe I should have said inadequate documentation regarding the value of the collateral. Is it the value of the collateral in that portfolio?

Mr. GREENSPAN. The more general case of that type of phenomenon is when you get a situation where somebody has been paying right on schedule all along and, say, has an office building in which the rental income is adequate to pay the interest payment, but say in 6 months all of the leases are going to terminate and it is a high-cost building and the examiner rightly or wrongly assumes that all the tenants are going to leave and the owners will not be able to pay.

Mr. LAFALCE. Is the assumption that they will run because there is RTC property surrounding this hither-to good property and the RTC property which previously had been charging \$20 per square foot is now charging \$5 to \$6 per square foot and therefore the performing loan could be viewed as nonperforming because of the expectation that the developer who is getting \$20 will be forced to go into competition with the RTC which is now charging \$5?

Mr. GREENSPAN. Well, it could be the RTC or any number of other people.

Mr. LAFALCE. I understand that. But isn't that a very common phenomenon and isn't this what is actually happening in the marketplace in New England, in Florida, and so forth.

Mr. GREENSPAN. It is happening, Mr. LaFalce. How prevalent it is, is not something I am personally aware of.

Mr. LAFALCE. Do you know if there is a body of knowledge within any of the Federal regulatory agencies which would give us an indication of how prevalent it is? Anecdotally, I am under the impression that this is the principal cause of our real estate difficulties right now.

Mr. GREENSPAN. I would say the person who has within his grasp the broadest base of knowledge in this area is Albert Casey, the newly appointed head of RTC. He and his staff have the base data.

Mr. LAFALCE. I think that we can arrive at a consensus, the executive and legislative branch, Democrat, Republican, on, for example, restoring the ability to take passive losses, at least for active developers, on an aggregate basis, and that that will do some good; but if we are still left with the tremendous oversupply because of the 1981 Code, at least its component provisions with respect to depreciation, credits, and so forth, and if we do have this overhang of commercial real estate in the hands of the RTC, I am not sure whether we are going to be able to come out of it simply by changing that provision of the Tax Code.

I am not sure we will come out of it until we address directly whether or not we should put any more property in the hands of the RTC than is absolutely necessary and what we can do to deal with that property presently in the hands of the RTC.

Mr. GREENSPAN. Mr. LaFalce, unless I am mistaken, the old RTC oversight board with its new name will appear before this subcommittee within a reasonably short period of time. That might well be an important question which should be presented to us.

Mr. LAFALCE. I present it to you because you are in front of me now.

Mr. GREENSPAN. What I am trying to say is that you are stretching the degree of my knowledge, when I am fully aware that there are other people whose detailed information on this subject is far superior to mine.

Mr. LAFALCE. I appreciate that. It is just that I consider this to be such an important subject—

Mr. GREENSPAN. I agree with that.

Mr. LAFALCE. That I want you to be tuned in to it. I want—if you share some of my concerns with me—to pick up on those concerns and talk to the individuals within the administration, the RTC, and so forth. I don't think we are going to come out of our economic difficulties until we do something about the approach that was taken from 1989 to the present to deal with the problem of our failing institutions, to deal with the problems of real estate.

I am pleased, for example, that one change that was going to take place—the requirement that S&Ls meet the same capital requirements that commercial banks meet—was suspended or delayed because of the President's State of the Union Address when he said we will put a temporary hold on all new regulations. That

was one of the new regulations. Otherwise, all S&Ls would have to go to a four-to-one rather than a three-to-one ratio; is that correct?

Mr. GREENSPAN. You are talking about the national bank requirement?

Mr. LAFALCE. Yes.

Mr. GREENSPAN. I don't know that that was specifically involved in that particular point.

Mr. LAFALCE. I don't know it was specifically intended but it was included in the temporary embrace of this moratorium. I think that that is to the good, which means that if it is to the good, we ought to be considering whether or not, absent that moratorium, we should go ahead with the mandate that thrifts have to meet the same capital buildup requirements as the banking institutions have to meet.

There is a blurring of the responsibilities of the Federal Reserve Board, the FDIC, OTS, the Comptroller of the Currency.

Mr. GREENSPAN. This is OTS.

Mr. LAFALCE. I understand that.

Mr. GREENSPAN. I should convey to you that the heads of these agencies meet for breakfast periodically, usually once a month. We talk about exactly these kinds of questions.

Mr. LAFALCE. Thank you very much.

Chairman NEAL. Mr. Chairman, I just want to pursue one brief line of questioning with you. Then I will let you go.

Right now, starting at 11 clock, the Democrats were meeting in caucus on taxes, what to do about taxes. I know the Republicans are talking about it. The President has ideas. A lot of ideas floating around.

You know, it seems pretty important we understand where we are as precisely as we can and where we need to go to do the right things to build a healthy economy for the future. Now I think I take it from your testimony—and actually I sort of feel this way, have been feeling this way myself—that the economy is on a bad track given what has gone on over the last 10, 20 years. There are certainly pockets of severe pain out there; but it is hard for me to see what we can do that would not make things worse other than pursue sensible policies for the long term.

It seems to me we are, as is so often the case, we are in a situation where most of the policies we might pursue for some short-term benefit will affect us adversely for the long term. Even in the case of New England, for instance, which because of the primary election process, is much in the news; we see how tough things are. I just do not see myself what we could do to make things a lot better without making things eventually a lot worse.

I mean, we might do something that would, you know, be nice before the election. I just cannot see it benefiting for the long term.

I guess I am not being precise in my question, but what generally the question is, what should we do? It seems to me—maybe let me put it this way: It seems to me we should probably—given the fact it will take a little time to work out of the imbalances that have been created by policies that we pursued over the last 10 or 12 years, that we would be better off not doing very much in terms of making any big changes.

We ought to continue to pursue a policy that will bring down inflation. We ought to bring down the budget deficit as quickly as we can, and maybe a few microeconomic policy changes here and there, around the edges, but nothing very major.

Because if we do not do anything too bad, the economy will be back on the right track here pretty soon. Is that about right? If it is not right, where do you disagree?

Mr. GREENSPAN. I suspect that that is correct, Mr. Chairman. Indeed, in previous testimony before various committees of the Congress, I have, in effect, stipulated something very close to the position you have taken, fully recognizing, however, that we must be fairly sensitive to changes in the environment which suggest that things may not be proceeding as we imagined, in which case perhaps alternate policies would be required.

But aside from that caveat, the more general philosophy you bring forward with respect to policy in this particular conflict is one to which I fully subscribe.

Chairman NEAL. You know, I think it was a Fannie Mae economist that pointed out that the refinancing of mortgages has had a—or will have over the period 1991 to 1992, \$20 billion, \$25 billion stimulative effect on the economy. I am not sure I agree with that. I have not thought it through.

It does seem clear to me if a person refinances the home at a lower rate and that puts more money in that family's pocket, that is like a tax cut. That is more money. Chances are some money will be saved or spent. It will have about the same stimulative effect or same effect overall as a tax cut.

It seems to me it would have the opposite effect on the institutions somehow. So maybe it doesn't have an overall stimulative effect.

Anyway, I have to say this. There has been, I think, maybe an unnoticed benefit to the economy that has accrued from anti-inflationary policies. Inflation has come down some. That has meant interest rates could come down some. That, in and of itself, will have great benefits as we move into the future here. Isn't that right?

Mr. GREENSPAN. I think—

Chairman NEAL. It was noticed—the interest rates could not have come down if we had not gotten inflation down—interest rates could not have come down and stayed down.

You can manipulate the rates for a little bit of time but they cannot stay down. That has an important effect, does it not?

Mr. GREENSPAN. Yes. I would add to that not only the refinancings but the adjustable rate mortgages, for example, which have had that effect.

Chairman NEAL. Exactly.

Mr. GREENSPAN. The numbers are not small.

Chairman NEAL. No.

Mr. GREENSPAN. You are correct in pointing out there are offsetting effects, such as interest rates falling on assets which create interest income, personal income. So, as you are probably aware, there are substantial numbers of people in this country, namely retired, who are having difficulties with these lower interest rates because their incomes are coming down.

But you are quite correct in observing the net effect of this is quite positive in the direction which you are suggesting.

Chairman NEAL. Even on that score, it certainly is—will be—tough for some retired people and others who will experience some reduced income. On the other hand, a lot of those folks are shifting into the stock market.

That has a beneficial effect for the long term. It helps build capital, I guess, for the kind of purposes we think are positive.

By the way, I wonder—I want to make just one other comment and see did you agree or not.

It seems to me if we will do essentially the right things here, which it looks like we generally agree are to not do too much of anything, except continue to produce some sound policies, that we have the opportunity to build the foundation for a very exciting economy into the future.

It would seem to me that in a low inflation, low interest rate environment, if we can get more—a bit more serious about the deficit, and I even see some positive signs there. The savings and loan expense is essentially a one-time thing. We will be through with that at some point in the near future, whatever leftover expenses from the war, a one-time thing.

The recession itself is sort of a one-time—a \$100 billion expense. A couple of hundred billion dollars of expenditures or deficit that need not be permanent, the winding down of defense expenditures, all of that. It has given us a new opportunity, it seems to me, to build a very, very fine economy, a very—and if we do a few things right, improve as we go along: Education, keep an eye out for our environment, some of the other—deal with some of the macroeconomic problems affecting us like health care—not to minimize them, they are big, but they are within our ability to handle, and if we do that, and do not make too many mistakes, I believe we will have created an economy, a culture here that is fabulous, unlike anything in history.

I would be very optimistic about our opportunities here. Would you agree with that?

Mr. GREENSPAN. I would agree in general, with one caveat. It is the issue I raised earlier in this session, Mr. Chairman, namely, that while I agree that under the current services accounting system, the budget deficit will come down quite appreciably, it will not come down to zero.

It will stall out according to the best calculations that CBO and others are capable of making at levels which are higher than we should be willing to accept.

Chairman NEAL. What do you have in mind there?

Mr. GREENSPAN. My recollection is that in 1996, for example, or thereabouts, that the budget deficit bottoms out in the CBO calculations, I think, at about \$200 billion.

Chairman NEAL. That is unexpectedly high. I agree with you.

Mr. GREENSPAN. More work is required here.

Chairman NEAL. Yes. But it is within our capability to do it. Well, I think the requirements for defense spending are down. Over time—I know we do not realize that all right away, but over time that helps some. We are spending money on things that we do not have to spend it on. Cut back. And you know, you are laying

the foundation here with low inflation, and so on, that there is a more productive economy that produces more revenue, too.

Maybe I am jumping in. What would you do?

Mr. GREENSPAN. I don't disagree with that point of view. There are definite possibilities here of improved productivity and the basis for a stronger economy than we have seen in a while. I don't disagree with that.

Chairman NEAL. On the deficit—then I will quit—what would you do specifically? Do you see very specifically some areas where we can make the kind of changes now so that we will not have that \$200 billion structural deficit—I guess you would call it—in 1996? That is a result of projecting current trends out?

Mr. GREENSPAN. Yes.

Chairman NEAL. So you have some specific suggestions that would be acceptable to you?

Mr. GREENSPAN. I am sure that CBO or OMB has a list of potential changes which would be far more than necessary to restore a longer term structural balance to an acceptable level.

Chairman NEAL. It is just a matter of us making the right choices?

Mr. GREENSPAN. Yes.

Chairman NEAL. Well, thank you very much. As always, it has been very helpful to us.

Thanks again.

The subcommittee will stand adjourned.

Mr. GREENSPAN. Thank you, Mr. Chairman.

[Whereupon, at 12:20 p.m., the hearing was adjourned, subject to the call of the Chair.]

POSTMORTEM ON THE FEDERAL RESERVE SYSTEM'S MONETARY POLICY REPORT

TUESDAY, MARCH 10, 1992

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON DOMESTIC MONETARY POLICY,
COMMITTEE ON BANKING, FINANCE AND URBAN AFFAIRS,
Washington, DC.

The subcommittee met, pursuant to call, at 10:05 a.m., in room 2128, Rayburn House Office Building, Hon. Stephen L. Neal [chairman of the subcommittee] presiding.

Present: Chairman Neal of North Carolina and Representative Barnard.

Chairman NEAL. I would like to call the subcommittee to order at this time.

Today, the subcommittee meets to conduct a postmortem examination of the Federal Reserve's Monetary Policy Report to Congress.

Before turning to today's witnesses, please permit me to restate a few observations on current monetary policy and the economy. I think it should be evident that monetary policy over Chairman Greenspan's entire tenure has been more or less persistently oriented toward reducing inflation.

Whatever other short-term goals may have held sway at particular periods, it seems clear that the Fed is making good progress toward its goal of essentially eliminating inflation. I have supported this goal by sponsoring and working for legislation that would make zero inflation the dominant objective of monetary policy.

Though we have not yet been able to enact that proposal into law, I am very pleased that the Fed is making noticeable progress toward that goal on its own. In fact, the Fed seems to have behaved in practice about the same as they could have been expected to act had our proposed legislation become law the day that I introduced it.

My only criticism to date would be that monetary policy may have been even tighter than necessary. Measured inflation has begun to fall, and I would expect it to continue to decline, slowly and erratically, in the near future.

On a year-over-year basis, the Consumer Price Index is down over 3 percent. I am certain that this is lower than projected in most "conventional" inflation forecasts made about 2½ years ago.

In other words, at the time Chairman Greenspan endorsed my "zero inflation" legislation, neither the financial markets nor the standard forecasters believed that inflation would really be brought

down over the next few years. But they were wrong. Inflation has fallen noticeably, and is now about where it would be on a 5-year path to reach the goal of my legislation: That is, inflation so close to zero that expected future inflation is negligible and does not affect economic decisions.

That Fed policy has been persistently anti-inflationary over the past few years may not seem to square with the general perception that it has been aggressively easing over the past year to counter the current recession. The Fed funds rate has certainly been reduced dramatically, and policy is much easier than it would have been had that rate been held constant, or reduced more slowly.

But the funds rate can be a very misleading indicator of the true impact of policy. Until very recently, M2 growth has been quite weak. Though the monetary aggregates are not infallible indicators of the thrust of policy, it seems clear that, in the current context, the behavior of M2 has been a much better gauge of policy than the funds rate.

By that gauge, policy remained tight and restrictive through much of last year, and has begun to ease only in the last few months. It has, in fact, been so tight for so long that M2 now has ample room to grow more robustly for a while without endangering the longer term path toward price stability.

The Fed should not, of course, throw all caution to the winds and gun monetary growth relentlessly until the economy is once again booming at unsustainable growth rates. But it can, and should, act to boost money growth somewhat this year. That will be necessary to achieve a decent economic recovery, and will not endanger reasonable progress toward price stability over the next few years.

The trick will be to engineer this modest monetary expansion with discretion, not overdo it, and keep the longer term trend of M2 growth on a path consistent with price stability and economic growth at its potential.

I have cast these remarks in terms of M2 because that particular measure of money has historically been the best indicator of the impact of monetary policy. At present, we are witnessing a sharp divergence between the behavior of M2, which is now growing around 5 percent, and the more narrow measures of money; namely, M1 and Total Bank Reserves. These latter measures have been growing extremely fast in recent weeks.

I will want to ask our witnesses if they have an explanation for this divergence, and if they think it might signal a much easier, much more inflationary policy than is indicated by M2. I do not want to be alarmist about very shortrun trends, but they do bear watching, particularly if M2 begins to accelerate sharply in their wake.

I wanted to make a few comments at the opening because I respect our witnesses, and if they see something in those comments that doesn't make sense, I hope they will comment on it.

I want to say, before introducing them, that I am very grateful for our witnesses coming today and helping us better understand policy. We are very fortunate to have in this country a number of very public-spirited experts who are willing to help. I am sorry there aren't more people here to hear what you have to say, but your testimony will be very helpful to us in any case.

Today's witnesses are Mr. William A. Brown, chief economist, J.P. Morgan and Co.; Prof. Martin Feldstein, president, National Bureau of Economic Research, and former Chairman of the Council of Economic Advisors; Mr. Robert Barbera, chief economist, Lehman Brothers.

Again, gentlemen, I welcome you this morning. We will put your entire statements in the record. Please feel free to summarize. If you will keep your comments reasonably brief, it will help us have a little more chance for some interchange between us. That will be useful.

Unless there is objection, we will just hear from the witnesses in the order I read your names, if that is all right. If there is a problem with that, let me know.

All right, Mr. Brown, we will start off with you.

STATEMENT OF WILLIAM A. BROWN, CHIEF ECONOMIST, J.P. MORGAN AND CO.

Mr. BROWN. Thank you very much. Good morning. It is a pleasure to have the opportunity to share with the subcommittee my thoughts on the economic outlook, and more importantly, the conduct of recent monetary policy.

It appears to me the economy has stabilized after the declines in production and employment seen between September and January. Household spending has improved modestly, housing activity has responded to the declines in interest rates that occurred late last year, and monetary indicators, particularly the growth rate of M2, have improved.

The most likely pattern for the economy in the year ahead is a gradual acceleration, with growth reaching its 2.5 percent longrun potential at some point during the second half of the year.

The pickup is fragile, however. Labor markets are continuing to deteriorate and consumer attitudes, as a result, remain very negative. The recent backing up of long-term interest rates appears to be capping the housing recovery. And, although U.S. manufacturing is highly competitive internationally, demand conditions abroad are deteriorating.

There appears to me to be relatively little risk that the economy will rebound strongly, while the risk is significant that lower interest rates, certainly long term and maybe short term, will be necessary for growth to reach even trend.

The recession or, more accurately, the extended period of below trend growth we have seen over the past 3 years, has not been completely without benefit. As you mentioned, it has produced a drop in inflation to levels that are more in line with our major foreign trade competitors and that have not been seen in the United States on a sustained basis since the mid-1960's. Moreover, chances of maintaining inflation at these lower levels, say at a 3-percent rate, appear to be good.

Against these prospects for the economy, and with an eye to the experience of the past few years, let me make a few comments on the conduct of monetary policy.

More than in any other postwar recession, the current downturn resulted from weakness and caution on the part of financial inter-

mediaries as opposed to simple restraint on the part of the Federal Reserve.

To be sure, real interest rates were high throughout the 1980's, and the tightening of monetary policy in 1988 and early 1989 were clearly designed to slow economic growth. However, the Federal Reserve began to lower its administered interest rates more than a year before the actual onset of recession in 1990.

During most of the postwar era, banks and thrifts expanded their balance sheets aggressively whenever the Fed gave them the ability and incentive to do so. But the significant increase in reserve availability seen since early 1991 has been used largely to reduce high cost liabilities rather than to grow bank balance sheets. In this respect, the current cycle differs markedly from every other postwar cycle.

The important restraining role of depository institutions can be seen in the differential trends of growth of bank reserves and M1 on the one hand, and the broader money aggregates, M2 and M3, on the other.

Over the 12 months ended January, M1 increased 10.2 percent, while M2 gained only 3.5 percent. In a sense, the behavior of M1 is a reflection of the Fed's own stance: Since its major components are directly tied to the level of reserves supplied by the central bank through open market operations.

The behavior of M2 and M3 are more a reflection of depositories' willingness, in the aggregate, to expand their balance sheets and the eagerness of their clients to borrow.

This unusual performance relates to the whole set of conditions that can be grouped loosely under the heading "debt excesses of the 1980's." These include overleveraging of portions of the corporate sector, unsound real estate lending practices, rundown of consumer saving rates and runup of debt, and inadequate levels of capital in the thrift and banking industries.

The Federal Reserve, rather than the Federal budget, has been relied on to offset these weaknesses. This policy is appropriate and should be continued. The failure of the economy to recover as expected last year does not reflect an inability of monetary policy to work current circumstances, but simply that interest rates were not lowered as aggressively as was necessary to achieve the desired result.

The size of the budget deficit, moreover, seriously limits the ability of fiscal policy to effectively stimulate the economy. Bigger deficits would likely drive long-term interest rates higher, offsetting much of the stimulus.

The Federal Reserve's failure to lower interest rates rapidly enough to fully offset these sources of weakness is a reminder that the level of interest rates cannot be used as a guide to the appropriateness of monetary policy. Policy must be based on direct indicators of economic and monetary conditions such as the money and credit aggregates, commodity prices and other inflation measures, and indicators of real and nominal activity.

Particularly notable has been the continued reliability of M2 as a policy guide, despite the restructuring going on in the banking and thrift industries. While no one policy indicator should be used ex-

clusively, if M2 had been given greater weight in policy formulation, the results would have been better over the last 2 years.

I believe the Federal Reserve continues to be cautious in the conduct of policy. In the near term, the Fed has the flexibility to lower interest rates further in order to "ensure" recovery. While it is probable that Fed easing to date has been sufficient to eventually bring about a modest recovery, the level of uncertainty is high and the risk of overheating the economy is very low in the near future.

Certainly, the Fed should lower interest rates quickly if money growth or the economic indicators generally do not continue to improve, as they have over the last couple of months.

In formulating an overall monetary policy strategy for the 1990's, the United States must take note of changes occurring elsewhere in the developed world. Although many Americans may question the benefits of bringing inflation down to 3 percent versus, say, 5 percent, our major competitors are committed to doing so.

Germany and Japan have long geared economic policies toward promoting inflation no higher than 3 percent, and with economic and currency integration, the EC countries are following Germany's lead.

Even many developed nations outside these two "blocs," such as Sweden, Australia, and Canada are striving for, and achieving, low sustained inflation rates. An international norm for inflation of *something like to 2 to 4 percent is developing*, and monetary policies abroad suggest that if anything, the norm may move to the lower end of that range over the next few years.

Given the still dominant role of the dollar in international transactions, the United States would risk serious consequences if it were to follow policies geared to significantly higher inflation rates than this international norm.

Inflation in the 2- to 3-percent range, I think, is an appropriate and realistic inflation goal for the next several years. It is an interesting and important question whether price stability should be the ultimate objective of monetary policy; and, if so, what measure of inflation to use. These questions, however, are still of little immediate importance, and the Federal Reserve's longstanding policy of gradually reducing inflation remains appropriate.

An intermediate-term inflation target, however, deserves more attention. There continues to be a general underappreciation of the extent to which progress has been made in reducing inflationary pressures. The growth of the monetary aggregates and nominal GNP over the past several years, as well as the monetary targets that have been set for 1992 are consistent with a 2- to 3-percent inflation objective.

The slowness of the recovery that I anticipate over the coming year is, to a significant extent, due to the continued lack of credibility of forecasts of low inflation. This is a key reason why long-term interest rates remain high, and it is one reason why Federal Reserve policy remains cautious.

This cynicism will give way gradually, as actual inflation performance continues to be better than generally expected, but the process of reducing inflation expectations requires time and patience.

There are, however, several things that could possibly nudge the process along and thus improve economic performance without risking a resurgence of inflation: The Federal Reserve should do a better job in articulating its intermediate term inflation goals; the Congress and the administration should make clear their full support of the inflation objectives of the Federal Reserve; and, of course, anything that can convince people that responsible budget policies will be followed in the 1990's would be helpful.

That is a very broad-brush run through of the outlook and the multifaceted considerations involved in the setting of monetary policy. I will be happy, however, to fill in any of the gaps during the questioning period.

Thank you for your attention.

Chairman NEAL. Thank you, sir, very much. We will get to the questioning a little bit later.

Professor Feldstein.

STATEMENT OF PROF. MARTIN FELDSTEIN, PRESIDENT, NATIONAL BUREAU OF ECONOMIC RESEARCH, AND FORMER CHAIRMAN OF THE COUNCIL OF ECONOMIC ADVISORS

Mr. FELDSTEIN. Thank you, very much, Mr. Chairman. I have a prepared statement which I would like included in the record, but I will just talk through the main points I made in that statement.

I might say, first of all, that I agreed with what you said in your opening remarks, and I agree with what Will Brown just said.

It is my pleasure also to be here at a time when economic activity as a whole appears to be strengthening, as measured by consumer activity, and more recently by the statistics on employment.

It is also good news that inflation appears to have shifted down, as both you and Mr. Brown have said, to about 3 percent, a lower level than we have seen on a sustained basis for about a quarter of a century. I share his optimism that if the Fed continues to pursue the right kinds of policies, we can continue to see the inflation rate notching down in the years ahead.

Indeed, for the next few years, we should be in the favorable situation in which inflation comes down, and also the unemployment rate comes down.

Before I look ahead, let me give you my own reaction to why the economy slowed down in the past year. I think it is a direct reflection of the earlier decline in the rate of M2 growth, and I share your emphasis and Mr. Brown's emphasis on M2.

After all, between the middle of 1990 and the middle of 1991, M2 increased at a rate of only 3.4 percent. And, as you know, historically there has been no trend in M2 velocity. Therefore, what we would have expected to happen, some half-year later, is that nominal GNP would increase at the same 3.4 percent that M2 grew by.

Now, of course, it could be more and it could be less, but on average, we would expect 3.4 percent money growth to produce 3.4 percent nominal GNP growth and that is exactly what happened in 1991.

With nominal GNP growing only 3.4 percent, it is not at all surprising that we saw a sharp decline in the rate of growth of real

GNP to a point where, in the final quarter of last year, final sales actually fell.

Some analysts try to explain the slowdown by looking at particular sectors and particular factors. Commercial construction, for example. That is certainly true, but there were also positive things that were happening last year. Exports surged as the dollar became more competitive.

I think it is a mistake to focus on these components. I think the fundamental thing that slowed the economy down was the overly slow growth of M2. The rest is a question of composition, rather than overall performance.

Fortunately, the Fed did start to ease more aggressively at the end of last year, and since then, M2 has increased quite sharply. Indeed, since the beginning of the year, it has increased at 8.5 percent, a rate higher than we would like to see on a sustained basis.

If you compare the average M2 in February with the average of December, it is a 6.1-percent annual increase. I think that is just about right. If that continues, we would expect to see the economy from the middle of this year on out through the next 12 months increasing in nominal GNP at about 6 percent. I think that would split roughly into 3 percent real growth and 3 percent inflation.

To my sense, that is the best achievable performance that we could hope for over these next 12 months. So I hope that the Fed will *continue this last 3-month rate of M2 growth into the future*, about 6 percent, which would mean the upper end of their target range.

I would be afraid if they cut it back down again and aimed for the midpoint of that range, 4.5 percent, that that would simply not give us strong enough growth of nominal GNP, and the result would be an increasing rather than a decreasing rate of unemployment over the coming year, year and a half.

Of course, velocity could increase, and if it did, 4.5 percent money growth would be enough to give us 6 percent nominal GNP, and therefore roughly 3 percent real growth and therefore a slight decline in unemployment. But there is also a risk that velocity could decline and, therefore, we would need even more than 6 percent money growth.

So I agree with Chairman Greenspan's statement to your subcommittee that the Fed should be sensitive to evolving velocity patterns during the year. I don't think you can lock in an appropriate rate of growth of M2. I think you have to look on a quarter-to-quarter basis at what is happening to actual velocity (relating current GNP to where the money supply was in the past) and modify money targets accordingly.

But I would be much more comfortable if the Fed took as its current target point not the midpoint of the range, but about 6 percent, until there was clear evidence that velocity had increased. And the experience last year, as I commented a moment ago, was no increase in velocity.

And I hope that your subcommittee, when it next sees witnesses from the Federal Reserve, will encourage them to keep M2 in the upper end of their range unless there is evidence of an increase in velocity.

That brings me to the central point that I wanted to talk about, which is the issue of improving the Fed's control over M2. I have spoken, and Chairman Greenspan spoke when he testified to this subcommittee, as if the Fed can achieve whatever M2 growth target it wants. And certainly, the experience in the last few years has been a reminder that that is far from the truth.

Last year, although the target was 4.5 percent for M2 growth, they produced only 2.7 percent M2 growth. I think that was undesirable. Members of the FOMC, with whom I have discussed it, generally, also felt it was undesirable. I don't think anybody wanted to have such low growth.

The question is, why did they allow it to increase so slowly? I think part of the answer is some members of the FOMC don't really care very much about M2; despite the historic experience, they just don't see M2 as a driving force linking Fed policy to the subsequent performance of the economy.

Rather, they look at M2 as some kind of a rough indicator of where GNP is at the current time. When they think about policy, they focus on short-term interest rates.

I think experience shows time and again that that is a mistake, that short-term interest rates are very hard to judge. It was hard to know whether the fall in interest rates last year was a sign of "Fed easing" or a sign of falling demand.

In retrospect, it is clear there was a sharp fall in demand, and the Fed was not easing as much as it should have.

So I think that being able to control M2 is very important. But even those members of the FOMC who would like to control the money supply are frustrated by the simple technical inability to do so. Basically the Fed cannot control M2 over the next month or over the next 6 months. It can't even predict very accurately what is going to happen to M2.

The reason, as you and I have discussed before, is that reserve requirements now only apply to about 20 percent of M2, the checkable deposits. The other 80 percent of M2 is not directly controlled. I think that is a serious problem. It is a problem that needs legislative remedy.

The inability of the Fed to control M2 last year led to the slowdown of the economy and in the future, it could go the other way and we could have unwanted inflation.

Basically, I think the Fed should require reserves on all of the deposits that make up M2. If that were done, open market operations would allow the Fed to control M2 in a precise and predictable way.

You asked in your opening statement about why M1 and M2 have differed. And as I commented in my remarks, and Mr. Brown more extensively in his remarks, what has happened in this past year is that the banks have used their additional reserves to increase M1, a cheaper source of funds, and have not used it to support an overall growth in total deposits in M2 or in loans and investments.

If the Fed has reserve requirements against all of M2 on a uniform basis, then you wouldn't have that response to an increase in reserves by the Federal Reserve. Rather, it would lead to an increase in M2 which would show up either in loans or investments.

When you and I discussed this before, you raised the question about the nonbank component of M2, and I have looked into that since then. If you leave the nonmoney money market mutual funds out of M2, the stability or velocity relationship is impaired very, very little. Not a lot is lost if the reserve requirements only apply to the bank component of M2.

Indeed if you expand the definition to be not M2, but bank M2 plus the large CDs, which are now out of M2, then you get a monetary aggregate which is even more stable in its velocity relationship than existing M2. And that would pick up some of the assets which are currently held in the money market mutual funds provided by nonbanks.

So, I don't think that technical problem is a barrier to being able to use expanded reserve requirements. What, of course, our problem is, is that first of all, if new reserve requirements were imposed, that would have to be balanced by open market operations so that there was no net contractionary effect.

The Fed would have to buy in Treasury bills and put out the additional reserves. That it could certainly do, and therefore, there would be no shortrun macroeconomic effect, there would simply be improved longrun control. That is a good thing.

The other problem is reserve requirements would represent a tax on the banks. They would lose the interest they currently get on securities when they have to sell those to the Fed and put the funds in as deposits at the Fed.

The remedy to that is simply to have the Fed pay interest on those increased reserve deposits. That could be done in a way which would completely and precisely neutralize the financial impact on the banks, and in doing so, would also neutralize the impact on the budget.

What the Fed lost in the interest it paid on the deposits it would gain, because it now held the Treasury bills it got through open market operations. It would be a budgetary wash. It would be a wash from the point of view of the—of the banks.

That is where Congress enters the story. While the Fed could increase reserve requirements with congressional approval, they keep moving in the opposite direction because they don't want to burden the banks. Right now, they don't have the legislative authority to pay interest on their deposits. So I think that the first step should be an authorization by the Congress for the Federal Reserve to provide interest on deposits, because that would give them the ability then to increase reserve requirements and therefore to control M2.

I was very pleased by most of the content of the letter from Chairman Greenspan, in which he strongly advocates that the Congress grant them authority to pay interest on deposits at the Federal Reserve. Although he indicated the Fed might not use that new authority to increase its reliance on M2, my judgment is that once the Fed had the ability to pay interest on reserve requirements and did so, then over time, it would develop a greater reliance on M2.

Now, it is kind of a frustrating situation in which even those who would strongly advocate a greater reliance on M2 have to recognize the Fed really doesn't have the ability to control it precisely, so they, therefore, look at interest rates and other ways of trying to judge the stance of their own policy.

I think they could put much greater reliance on M2 if they were given the authority to pay interest—and I hope that will become one of your legislative priorities.

I think I should stop there. The last section of my testimony deals with the issue of leverage capital, a subject I wrote about in the *Wall Street Journal* last week. I would be happy to answer questions about that, as well as about the issue of reserve requirements.

Thank you very much.

[The prepared statement of Mr. Feldstein can be found in the appendix.]

Chairman NEAL. Thank you for your testimony. I don't know if interested folks know that we took an idea that you had suggested, this idea of better improving the Fed's ability to conduct monetary policy by better controlling M2 through increased reserves, paid interest on the reserves, and submitted this idea to the Fed.

Chairman NEAL. You are right, he certainly does generally endorse your thinking on this. Anyway, I want to thank you for that. I think it is certainly another example of something that you have done very much in the public interest, and I thank you for your efforts.

Chairman NEAL. Mr. Barbera, glad to hear from you at this time.

STATEMENT OF ROBERT BARBERA, CHIEF ECONOMIST, LEHMAN BROTHERS

Mr. BARBERA. Thank you, Mr. Chairman, for the opportunity to address this subcommittee on the state of the U.S. economy and on monetary policy. A detailed account of my thoughts has been submitted for the record, but I will touch on a few highlights.

To summarize the points I will make:

First, at the outset, this downturn was misdiagnosed. Not Iraq and the tanks, but debt and the banks.

Second, bank regulators and the Federal Reserve, in 1989-1990, cannot be held accountable for the 1990-1991 credit crunch. Blame the 1980's economywide love affair with debt.

Third, once debt finance speculations foundered, a recession was inevitable.

Fourth, the best face one can put on the last 3 years is that it was an extended period of economic duress which completed the job Paul Volcker began in 1978 and has thereby improved our chances for a healthy recovery with low inflation and moderate debt use.

Fifth, my best guess about the future is that we are about to embark on just such a performance. I expect a recovery with some guts to it; real growth approaching 5 percent over the next year, alongside low inflation and moderate use of debt.

Again, I believe that most assessors misdiagnosed the 1990-1991 recession in its initial stages because of the riveting events in the Mideast. But with the benefit of hindsight, most now agree that credit growth excesses and burdened financial company balance sheets were at the core of the U.S. economic decline. Not Iraq and the tanks, but debt and the banks has been my sense of the matter for some time.

Second, the credit crunch that enveloped the United States over the last several years cannot be laid at the doorstep of bank regulators or the Federal Reserve Board because of their actions in 1989-1990. One needs to examine what prompted the near decade-long run of extraordinary debt growth.

The credit crunch/1990-1991 recession owes itself largely to that set of developments.

The explosive use of debt during the 1980's, as I see it, reflected an economywide misperception about where inflation was headed. In the recessions of the early 1980's, Fed policy dealt a deadly blow to inflation, but businesses and individuals continued to borrow aggressively, with the expectation that higher inflation would return.

Debt grew at twice the rate of income, an incredible anomaly, because people believed that income streams would naturally accelerate along with inflation. Neither panned out. Simply put, we beat inflation in the early 1980's, but we didn't get the joke.

The willingness to borrow and thus bet on higher income streams explains the other anomaly of the 1980's; super high real short-term interest rates. Why were Fed funds 3 percent to 8 percent above the inflation rate for much of the 1980's, in contrast to their near-zero levels during other periods?

Because, as long as borrowers were willing to wager on rapid inflation, the Fed had no choice but to set short rates super high, to contain the economy and inflation.

In that context, the late 1980's sea change in attitude about debt growth and the 1990-1991 recession can be viewed as the painful, but successful, completion of the inflation fight begun by Paul Volcker in 1978. The back-to-back recessions of the early 1980's beat secular inflation. The 1989-1990 soft landing coupled with the 1990-1991 recession dealt a blow to debt use and inflation expectations, hence the need for a sharp collapse in short rates to turn things around.

Looking forward, I believe the prospects are bright. Debt burdens, ignored by most forecasters until the recession's resurgence last fall, have many now claiming that recovery will be paltry, if not nonexistent. I strongly disagree.

The sharp shift in attitude about debt necessitated a return to near-zero real short rates, and the Federal Reserve Board delivered late last year. As a consequence, debt burdens are now in the midst of an explosive and very positive unwind.

Consumers are refinancing mortgages at a breakneck pace. In the 4 months ending this past February, over four times as many applications to refinance have been received versus last year's November through February period. We believe that by year's end, consumers will have lowered their annual debt payments by some \$40 billion.

Corporations issued bonds at a record rate in January and February, lowering their interest payments on debt. Moreover, companies, for the first time in 10 years, are large sellers of equity, issuing stock at a rate that suggests nearly \$100 billion could be sold this year. The proceeds from this sale of equity are being used to pay down debt.

Thus, for both the U.S. consumer and U.S. corporations, the last leg down for U.S. interest rates has engendered a powerful move

toward reliquification. Substantially less cash is needed to pay interest burdens, and, as a consequence, the prospects for recovery are much better.

The effects of these improved cash-flows are already evident in many leading economic indicators. In January, home sales surged 13 percent, month over month; housing starts jumped and store sales lifted. In February, purchasing managers saw a sharp jump in new orders, retailers registered further gains, construction activity surveys suggested building momentum for single family homes, and payroll employment tallied its first genuine jump in 6 months.

True, one could point to the current liftoff for these economic barometers as simply a repeat of the false dawn of late last spring. But this time, the fundamental backdrop of big-time consumer and corporate reliquification is in place. Lower debt burdens mean freed-up cash-flows, and as such, a more enduring recovery.

One obvious difference between the rebounding of front-end economic data, this time, and the postwar euphoria of late spring 1991, is that M2 is responding and M1 is soaring. That was not the case in mid-1991. Money data told you last spring's rebound was illusory, and today it suggests we are in the midst of the real thing.

I would add, that there is a straightforward explanation for soaring M1 and slowly improving M2. The saving component of M2 is shrinking, because cash returns are de minimis. People are leaving CDs and money funds and shifting monies' into bond and equity funds. The spending part of M2, transaction accounts that comprise M1 are strong. Strong M1 growth is telling us it's a real recovery despite soft M2. Too strong? No. We have had 3 years of next to zero growth, a year or so of a above trend GNP is quite all right, given the slack in our system.

My last point concerns the prospective pace of the recovery about to unfold. Most other forecasters insist that it will be super slow. In fact, many contend that second half 1991 was simply the first 6 months of what will turn out to be a multiyear period of a timid rebound. I think that will prove incorrect. The recovery that began last spring, aborted in late summer and last October through January looked like a typical recession, not the early stages of a mild recovery. Heavy job losses appeared again, with nearly 400,000 payroll jobs lost. Production fell 1.5 percent. Consumer sentiment plunged and store sales slid.

Most importantly, over the period, there was a second slide in interest rates. Short-term rates fell sharply, compliments of the Federal Reserve Board. Long-term interest rates moved lower, with the all-important fixed rate mortgage falling through 9 percent, and making a run toward 8 percent. And this second sharp slide for U.S. interest rates makes it quite unlikely that the next 12 months will look like the last nine. Instead, there is ample reason to expect robust recovery starting this spring.

That is my view. I believe we will experience a recovery with some guts to it; five percent GDP growth beginning in the second quarter of this year, following a recession that was twice as long as most thought and that required much more ease than the conventional wisdom expected. In short, consensus, having been terribly wrong about the length of the recession, is likely to be just as incorrect about the pace of the liftoff once genuine recovery arrives.

[The prepared statement of Mr. Barbera can be found in the appendix.]

Chairman NEAL. Thank all of you.

Professor Feldstein, you didn't get into too much detail in this, but you did—you have suggested that you would like to see M2 growth a little higher, and a little bit more robust economy. And I don't want to put words in your mouth, but you have said you would like to see M2 growth higher.

Mr. FELDSTEIN. I would like to see it at the rate it has been for the past 3 months. I would like to see it continue with that. I would like to see it higher than the midpoint of the Fed's—

Chairman NEAL. About 6 percent.

Mr. FELDSTEIN. Until I see evidence that velocity defined in terms of the lag relation between nominal GNP and past money even growth. Until I see evidence that is increasing, I would like to see the Fed up there at the upper end of their target range.

Chairman NEAL. We have all noticed long range sort of staying up or coming down a little bit and edge back up. And that—Mr. Barbera suggests he thinks they are going to come on down. I don't want to put words in your mouth either, but that is what I gathered from what you said.

This is the area that troubles me, because it seems to me that the long range are considerably higher than would be justified by today's rate of inflation, and that obviously suggests worry about the future, and the worry that probably is not terribly unfounded, because so often in history, we have reinflated with—get inflation.

Folks get the idea we need more inflation and we go through the cycle again. That would be my worry—not very eloquently expressed to you, that if we were to do as you suggest, Professor Feldstein, that might have a negative impact on long-range debt, would have a very negative impact on the economy in the short term, and I am always worried about what that might do in the long term.

I think there—you could justify some growth in M2, but I guess my prejudice, if that is what it is, would be for less—for making sure—making absolutely sure that we continue to, at the very least, capture today's rate of inflation and don't let it slip up.

I personally would like to see it come on down a little bit more, and I would like to discuss that more fully in a little while.

How about commenting on this one thing?

Mr. FELDSTEIN. I think the only issue is how fast we would like to see inflation come down. I would like to see it come down, too.

If the Fed were to have 4-percent money growth instead of 6-percent money growth, and velocity were to do what it has done on average in the past and not increase, then nominal GNP would increase at 4 percent, and I suspect if you did that, you could get the inflation rate down to 2.5, 2.25, but at the same time you would have further increases in unemployment.

I don't think that would be a good tradeoff. I don't know what the political reaction would be to another year of deepening recession with higher unemployment rates, it might be to force the Fed to move in the opposite direction, and that would undo all the things that have been accomplished.

Even if there weren't that political reaction, personally I would think that would be a bad tradeoff. I am prepared to let the infla-

tion rate get to 2 percent 3 years from now, rather than 9 months from now in order to have the unemployment rate coming down at the same time.

And I think that is what you would expect to get with 6 percent nominal GNP growth this year, 5.5 percent nominal GNP growth the year after that, and so on.

Chairman NEAL. Well, you are probably right. It is just, Will, that I don't see what suggests there would be the will to do that. I mean that would be—if we could plan that precisely, that would seem to me to be not an unreasonable course.

I would worry that that kind of course would suggest to investors that we are not terribly serious about inflation, and that long rates would probably stay up, which would—which would work—be at odds with what you are trying to achieve.

Mr. FELDSTEIN. One of the problems with the Fed's inability to control M2, to come back to that issue, is that they can't say to the markets, what we are trying to do is get nominal GNP to grow as our forecasts indicate, and we are setting M2 correspondingly, and we will adjust M2 if velocity is changing.

They don't have that kind of precision in their control. There has to be more faith in the process. They have to ask for more trust than they would if they were more clearly able to deliver what they say is their target for M2.

Chairman NEAL. I will come back to you in one second. I have to say, if you look at what has happened over the last several years, even though it has been a bit irregular, they have been able to accomplish their stated goal.

Before I yield to Mr. Barbera, how about the long range? What makes you think they would come down if we have money growth at 6 percent?

Mr. FELDSTEIN. I think what will bring the long rates down is evidence that the economy is recovering without inflation bouncing back up. I like to look at the monetary aggregates. In the financial community, some do and some don't. But I think the driving force will be what actually happens to inflation when the economy begins to recover.

I think, as I gather the other two witnesses do, that we are going to have a recovery without a surge in inflation. I think that is not the view that underlies current long-term interest rates. Once that recovery begins to become real and inflation doesn't go back up to 5 percent, then I think the long-term rates will be able to notch down.

Chairman NEAL. Do you agree with that, Mr. Barbera?

Mr. BARBERA. I would make one point: I don't know how much we want to make the 30-year-long bond the fount of all wisdom and what future inflation will be.

If we go back to November 1990 and we look at the blue chip forecasters, a full 85 percent of them thought there would be a very mild recession, and with the core inflation rate moving down to about 4 percent.

Now, when they published those numbers, in late November, early December, the yield on the 30-year bond was 8 percent. Since those numbers have been published, we have been subjected to the longest recession on record, instead of the shortest and the core in-

flation rate looks to be about 3.5 instead of 4 percent. Since inflation fell more than expected, an expectational model suggests bond yields should have fallen more than expected. They did not.

Thus I don't think high inflation expectation explains sticky long rates. I think, instead the unwinding of 1980's debt excess kept long rates sticky.

Chairman NEAL. Mr. Brown, you want to comment on any of this?

Mr. BROWN. Well, on the question of long-term interest rates, do I feel that the long range will—should have a bias toward declining over the next year or so as we see inflation improve?

As far as explaining why they are as high as they are now, I would say we should remember that most long-term rates, particularly if you look at the 5- to 10-year area, which is really the heart of where most of the financing is done, are substantially lower now than they were a year or two ago and averaging in the past. So we have seen long-term rates come down to some extent.

I would cite three reasons for why they are as high as they are now. I think inflation expectation is one. I think market participants are cynical. If you look at performance of bond markets, they very seldom anticipate moves in inflation. They tend to respond to inflation with a lag.

I think there is also an expectation for the economy growing quite rapidly and strong growth is associated with higher, long-term interest rates, so I think that produces a nervousness in the market.

There is also a supply and demand question. It has been aggravated by the heavy refinancings that we have seen which is backing things up. A lot of tension on the side of the budget deficit and worries about the budget deficit being even higher looking ahead. So I think that both actual supply and concerns about supply explain some of the higher rates.

Chairman NEAL. Do most economists suspect a robust recovery? Is that what you were saying?

Mr. BROWN. Well, the blue chip consensus, which is a reasonable measure of the average economist, shows what you would call a modest or mild recovery relative to past standards, something like 2 percent growth in the year ahead, $2\frac{1}{2}$ to 3.

Chairman NEAL. Three percent real growth you mean?

Mr. BROWN. Yes, real growth. I wouldn't, however, necessarily think that what the average economist is saying is what is priced in the markets. I think some forecasts have credibility with market participants and others don't. I think there is a bias on the part of market participants at this point to say here we are on the start of an economic cycle.

What has been the average growth of economic cycles in the past? It has been pretty strong. You better have good reasons to convince me that is not going to happen this time. I think what is priced in the market is a stronger recovery than the average economic forecast.

Chairman NEAL. Let me yield to Mr. Barnard.

Mr. BARNARD. Thank you, Mr. Chairman, and let me certainly congratulate you for assembling this outstanding panel to give us a

critique on the Fed's monetary policies. I have got several questions.

Over the years—I am not speaking over the last several years—but even maybe going back to 1978 on, what is your opinion about the Fed's reactions? It seems to me that they have been slower than necessary to react to the economy. I thought they were slow in adopting M2 as opposed to M1, and it was very significant what was going on in—when we deregulated interest rates, and yet I didn't find that they were relying—that they moved M2 as quick as they should have.

Was I wrong in that evaluation, Dr. Feldstein?

Mr. FELDSTEIN. Well, as Chairman Greenspan (or the Congress) said, they used M1 because they did not have the ability to control M2. So that when they actually were targeting M1 around 1978 to 1979 to 1982, they could not have targeted M2 with anything like the same way because of the focus of reserve requirements on M1 alone.

Now, after that, when they were no longer literally targeting an aggregate or even claiming to target an aggregate, they began to talk more about M2. I think it is appropriate and I think it would have been appropriate.

Mr. BARNARD. But they didn't talk about—but they were very late in even to start discussing the factors that there should be some reserves applied to M2—I mean to large CDs and so forth.

Mr. FELDSTEIN. But they moved which—they moved just the opposite direction.

Mr. BARNARD. Should they?

Mr. FELDSTEIN. No, I think they should be requiring reserves on M2, including the large CDs, but compensating the banks for the loss of income by paying interest on those reserves.

Mr. BARNARD. You know that some in Congress are very much concerned about deposit insurance, so they say we ought to go back and reinstate Reg Q. Well, we know what that would do to the banking business, but would that be a good tool for the Federal Reserve if they reinstated Reg Q to control interest rates?

Mr. FELDSTEIN. No, I don't think so.

Mr. BARNARD. In other words, that wouldn't be a substitute for extending the reserve requirements?

Mr. FELDSTEIN. I think it would be going in just the wrong direction.

Mr. BARNARD. I was impressed with your agreement and with the Fed's late—I feel that somebody actually—I was interested in reading Dr. Greenspan's answer restating the Fed's agreement on paying interest on reserves. I have been in Congress 16 years. I just don't remember them being that positive over the 16 years and want to go pay interest on reserves.

Now, of course, what they want now is not having it legislated but letting it be permitted. So I have no problem with that, but I have to say that from my experience, maybe my distinguished chairman, who is a lot more learned than I am, I think the Fed is a late bloomer when it comes to paying interest on reserves, because we have actually introduced legislation to that effect in the past.

It got absolutely nowhere, mainly because of the fact that the Congress did not feel like the Fed certainly endorsed that in that

policy. I think it is a good policy and I hope that those who follow me in Congress, this is my last term, will see that that is done.

You know, I am impressed about what all of you are saying. You seem to be of one mind and one accord about the recovery, and I agree with that. Can you tell me where in the world is the wisdom now in all of these newfangled tax proposals as far as the recovery is concerned?

I mean, I don't see any need for all of these newfangled tax proposals, whether they are coming from the White House or from Congress or from the Senate. It looks like, to me, that is going to— it is too little too late or it is too little at a time when we have already turned the curve.

What is your opinions about that, Mr. Brown?

Mr. BROWN. Well, I think the economy does not need any support from fiscal policy changes at this point and they would not help the recovery significantly. As I said, I think monetary policy is the correct tool to use to deal with the weakness we have been seeing in the economy, and it will be the correct tool to control the recovery when it does get going.

I would say, more generally, that there is very little potential to improve the performance of the economy by various tinkering on either side of the—on either the tax or the expenditure side of the fiscal equation other than changes that directly deal with the two large budget deficits there.

The damage done to the economy by maintaining large budget deficits over a long period of time is a much greater damage than anything done by any—say other specific aspects of either the spending or the tax side of the budget.

Mr. BARBERA. I completely agree.

Mr. BARNARD. What about this, what about if we felt like we do need a tax program? What if we went into a genuine reduction of the capital gains tax, a genuine readdressing of the investment tax credit and possibly corrected some of the 1986 tax mistakes like passive loss?

Wouldn't those particular kinds of proposals, as opposed to these middle-class tax cuts, would that disrupt the recovery or would that help the recovery? I am not trying to get you gentlemen into politics, but these are the things that are on the minds of the Members of Congress.

Mr. FELDSTEIN. Somehow I can't really imagine Congress voting for that narrow package, but if you asked me whether it would be a plus or a minus, just the three things that you mentioned, I think it would be a plus.

Mr. BARNARD. I have been a voice in the wilderness many, many times, Dr. Feldstein. I don't know whether you have followed my few years in Congress, but I don't mind venturing into waters that some sharks are swimming in.

Mr. BROWN. Let me make just one comment there. I think the important thing to keep in mind is that taxes are bad things. They hurt the economy. It is a wedge. They are necessary for other reasons because we need to fund various programs.

It is also tempting to look at a particular tax, be it capital gains, investment side of things, and lower that tax rate and say the economy will do better. That is, no doubt, true.

You could lower almost any tax and the economy will do better, but you have got to remember when you look at those specific areas that you have got to have higher overall rates to offset the loss from those specific reductions.

If you look at both the benefit done by the specific reduction and the damage done by somewhat higher overall rates. It is very hard to do much for the economy by playing around in this area or, anyway, the potential is much less than you might think.

Mr. FELDSTEIN. There has been so much agreement from this table, I have to at least, on this point, disagree with Mr. Brown. I think the general proposition that he made is absolutely correct, that when you think about undoing the damage of one tax, you have to realize that you are going to have to raise some other tax in order not to be a net revenue loser. And maybe that can do more harm than the first, but I think the capital gains tax is an exception to that.

There is, of course, a lot of debate about that between the staff of the Treasury and the staff of the Joint Tax Committee. The Treasury, in effect, says the unlocking of gains by lowering the capital gains tax rate will more than offset all of the revenue loss, so that the Treasury will actually, in the long term, make a small amount of additional revenue.

The Joint Committee staff says, no, it is only enough to offset about 80 percent of the revenue loss that would come from static calculations. So there would be a little revenue loss.

I think the numbers are so close together, a small loss versus a small gain, that, frankly, economic analysis is just not precise enough to know which of those is correct. I think the right way to think about the capital gain reduction is, it is something which has essentially no revenue impact, neither plus or minus, but does have a favorable economic impact.

Indeed, if it does have a favorable economic impact, that feedback from better economic performance into revenue isn't even part of the debate. Then overall, we would have more revenue and the problems that Mr. Brown raised wouldn't apply in this case.

But I think that is one of those special areas, the capital gains tax, because of the discretionary nature of realizing capital gains or carrying them on to death. There is the opportunity to improve economic performance through a lower tax rate with no adverse revenue effect.

Mr. BARBERA. Let me add one. We have agreed that, in general, monetary policies should be used to deal with the business cycle phenomenon of recession. And if you are going to make adjustments in the Tax Code it is, in some sense, to try to improve productivity and your longrun growth potential.

That is a very standard response from most economists. I would add though, if you take a political economic focus, could you imagine a worse time to address those longrun considerations than coming out of an 18-month recession after 3 years of next to no growth and in the midst of a Presidential election? The predisposition to be talking long term, when in fact the prescriptions administered are short-term palliatives is extreme.

Mr. BARNARD. In other words, you would say it would be better for us to do nothing rather than to—

Mr. BARBERA. Absolutely.

Mr. BARNARD. I have one final question, Mr. Chairman.

I would like to ask Dr. Feldstein, when he was in the White House, what would have been his recommendation to the Treasury if a proposal came from Congress that the Fed should pay interest on reserves and it would therefore reduce the income to the Treasury?

Mr. FELDSTEIN. Well, it isn't a net reduction to the Treasury if the interest is paid only on the increase reserve requirements from the current baseline. That is why I say it is fiscally neutral as well as neutral from the point of view of the profits of the bank.

If I had understood then what I understand now, I haven't really thought through these issues about the Fed's inability to control M2, but if somebody had put all of this case to me that I am now putting to you, I think I would be convinced by my own case.

Chairman NEAL. Why don't you just briefly run through that calculation, because I had the same question for you, but you convinced me that there would be no cost, unless you see it immediately.

Mr. BARNARD. I see it because I am talking about paying interest on reserves, period. He is talking about paying interest on only the increase in reserves on M2.

Chairman NEAL. That is right.

Mr. BARNARD. I would like to see a little of both if I could.

Mr. FELDSTEIN. Those are separable issues. You can decide that you want to pay interest on the reserves, on the existing reserves. You can decide that you want—the Fed can unilaterally lower the reserve requirements on the existing components of M2, the checkable deposits that are subject to reserves, at the same time that they are expanding reserve requirements on the other components.

Chairman NEAL. If you didn't pay a market rate of interest on the reserve requirements, a pretty precise rate of market interest, it seems to me you would run the risk of creating other distortions.

Mr. FELDSTEIN. You would. So you really don't want to. I think Chairman Greenspan says that in his record.

Chairman NEAL. I have just been told Professor Feldstein has to leave at 11:30 to catch a plane and I certainly have no objection to that.

We thank him for being here. Before we go, if I may, I would just like to pursue briefly this line of questioning.

You have all said that you think it is a good thing that inflation has come down and none of you are arguing that we should increase the rate of inflation. But you all seem to be sort of saying that you think this rate of inflation is about right and that we—you shouldn't go too much further with it. Again, I don't mean to put words in your mouth.

Mr. FELDSTEIN. No. No. You are putting words in our mouth.

Chairman NEAL. I don't want to do that, because I don't think it is right, and I personally think that we shouldn't tolerate inflation and we ought to—I don't want to do anything radical or do it overnight. I want to do it over a period of time so it is not risk disruptive or very disruptive.

I think it is worth a little thought along the line. But, frankly, it seems to me that there is no good rate of inflation. It ought to be

down to essentially zero or price stability, what you guys like to call price stability, because we get the maximum benefits there in terms of economic growth, employment, savings, investment, productivity, everything we want for the economy.

And it just doesn't seem to me sensible to say, we have made a little prior, so let's hang in at 3 percent. Maybe I misunderstood. That is the point, though. If anyone would argue for not going ahead and bringing the rate of inflation down to essentially zero for several years, I would like to hear the argument. That is really it. Maybe I didn't hear any hint of that.

Mr. FELDSTEIN. You are hearing silence because I think we all agree that you do want to get the inflation rate coming down. I think if we had 3 percent real growth for the next 2 or 3 years, we would still have an economy with excess slack in it.

We would still have an unemployment rate which was above—well above 6 percent, and therefore there would continue to be downward pressure on inflation. So we could see the inflation rate continuing to notch down even if the economy was growing at about 3 percent a year over the next 2 or 3 years.

That seems to me to be a pretty good situation, to have the inflation rate coming down, quarter of a percent or so a year, and the unemployment rate coming down at the same rate.

Chairman NEAL. Right. I mean that is ideal, it seems.

Mr. FELDSTEIN. You can force the inflation down faster by having the unemployment rate go up and I don't think that would be the appropriate method.

Chairman NEAL. I think, as you suggested, that that would generate pressures to yield in the fight against inflation.

Mr. BARBERA. Can I come back?

Chairman NEAL. Absolutely. Did you want to show something in here? Mr. Barnard.

Mr. BARNARD. One of the most important votes that we will ever take in Congress comes up this week and that is whether we drop the barriers on increasing the deficit and, I mean, doesn't the deficit have a relationship to how we are going to reduce inflation?

Mr. FELDSTEIN. It has a tangential one. I have got as many scars as anybody who has served in Washington for the last 10 years for speaking out against budget deficits. But it is true that, while our budget deficits grew, tough monetary policy at the same time brought down inflation, so that there is not the link in our economy that there has been historically in economies with less developed capital markets between budget deficits and inflation.

We can finance a budget deficit by selling bonds. The unfortunate thing is that in doing that, we crowd out other kinds of investment. We slow down the long-term rate of economic growth. So the budget deficits are a very bad thing and we ought to be doing what we can. And I don't think there is any disagreement about that here.

We ought to be doing what we can to bring budget deficits down, but I don't think the inflation fight is a central part of the reason for being concerned about the budget deficit.

Chairman NEAL. Mr. Barbera, you were going to say something on this?

Mr. BARBERA. There was a question that I didn't respond to, the question about why has the Fed been so slow to react to money growth. If we go back to the first half of 1990 and we lay alongside their seemingly slow response to slow money and the question about inflation, we come to that tradeoff.

In the first half of 1990, real M2 growth collapsed and it was telling you that you had a much higher risk of recession than you might have thought going into that year. Greenspan testified to that effect and the Greenspan-led Fed eased 25 basis points, if you will remember, in June 1990.

We then had the invasion in the Middle East, oil prices soared and inflation really began to take off. My own opinion is that they were brutally aware of the choice that they now faced. They either were going to have to take the recession, because you now had some surge in prices that otherwise would be imbedded into the inflation rate, or you were going to have to sit on your hands, not ease, let the recession take hold, and get the disinflation that you normally benefit from when you accept the recession.

In Chairman Greenspan's testimony over the next 3 or 4 months, he would say the recession risks are higher and higher. He noted the worsening credit crunch, the deleterious effects of higher energy prices. He would conclude, however, that his primary focus had to be price stability. I think that is as close as the central bank chairman can come to saying we have opted to take the recession.

Mr. BROWN. If I can make two points, one on the budget question, and as Marty has said, there is nothing that prevents—the budget deficit does not prevent the Federal Reserve from bringing inflation lower. But I think at lower inflation rates, one should recognize that a given budget deficit probably does more damage to the economy.

To the extent you have got inflation, you are basically deflating the outstanding debt which, in a sense, allows you to run a larger budget deficit without the government restricting the private savings that is available.

As you get to lower inflation rates, that process doesn't occur and the outstanding debt is going to start going up as the percent of GNP for the same budget deficit because your nominal GNP is growing slower. So I think at lower inflation rates, a given level of the budget deficit becomes a bigger concern.

As we move down to inflation below 3 percent, one should worry more about deficits of 3 or 4 percent of GNP than we did when inflation was at 5 percent.

The second point I would just like to mention on the question of reserve requirements, I would be less enthusiastic about broader reserve requirements or M2 reserve requirements, even if interest were to be paid on those reserve requirements. I think the real question is whether you want to switch from a system where the immediate policy tool is controlled interest rates or the immediate policy tool is the control of reserves and thus a monetary aggregate.

Of course, we looked at this question under Fed Chairman Volcker, when he switched from an interest rate targeting system to one much closer to a reserve—in that case, M1 targeting system—and I think we saw the consequences of that type of shift.

You accept a great deal more volatility in interest rates, and I don't think you get very much of a gain from it.

And I would also say that I think the experience over the last 3 to 4 years under Chairman Greenspan is that when the current monetary policy tools are capably and effectively used, they can bring inflation lower and can maintain stable inflation rates for stable pricing levels.

So I think the existing policy tools are there to do it. It is just a question of following through with the types of policies that have, in fact, been put in place over the last 3 to 4 years and getting too bogged down in changing the system, adjusting the reserve requirements, if anything. They may be a distraction from the real business at hand.

Chairman NEAL. Mr. Brown, you say we didn't get much from controlling money growth. We got inflation coming from 10 percent to 4 percent. It was a pain, no question about it, but it is what had to be done.

Mr. BROWN. I think you can argue there was a political benefit in that switch in policy. In a sense, it allowed the Federal Reserve to put rates as high as 20 percent which would have been difficult if they were doing it directly.

But I think the same results could have been achieved and probably achieved with less interest rates volatility if you had just had a straight interest rate for getting procedure as you had now. And I think the recent experience where we have reduced inflation, I think substantially, two to three points in terms of underlying rates in the past 3 years, and what I would argue is a relatively low cost in terms of foregone output, has indicated that the current system can effectively do the job.

Mr. FELDSTEIN. I think we are talking about a Fed system now that has worked pretty well. The question is: Can we make it work better? Last year, I think interest rates should have come down faster. There is a consensus—I think the Fed would agree in retrospect—that that is true, but they had no basis for deciding that, at the time, because they didn't have any other reference point.

They couldn't look at—they weren't focusing on M2 as such. I think that is what got them in trouble. As a result, instead of the economy clearly continuing to expand last summer, we slid back down again.

We have 1 million people more unemployed than we otherwise would have. I think you want to try to improve monetary control mechanisms so that that doesn't happen again, or the flip side, that we don't find inflation going up at a higher rate at some future time because the Fed hasn't been able to—or hasn't chosen to push up interest rates fast enough because they would say that is too volatile, when, in fact, focusing on the aggregate would have given them the right kind of nominal GNP growth, even though it would bring with it more volatility in short-term interest rates.

Chairman NEAL. Yes.

Mr. BARBERA. I don't want to sound like Dr. Pangloss, but I think perhaps we are asking too much of monetary policy when we think about such a shift and expect it to change things dramatically.

I think you have, in the capital system, a predisposition to excesses. I mean, animal spirits are what drive people, not the notion

that they are going to get 2.5 percent above the inflation rate on an average. These emotions take people to extremes. In the middle and later part of business cycles, you see some set of investments or speculations taken to excess. I don't think you adjust that by making a technical adjustment in the way you conduct monetary policy. You really can't avoid that excess.

Second, in every recession and recovery, you can find with the benefit of hindsight a monetary policy indicator that gave you the right signal. But, of course, the trick is, you don't know that monetary policy indicator looking forward.

In 1979 and 1980, if you remember, M1 growth was very weak and we kept waiting for this recession to appear that didn't appear. And with the benefit of hindsight, we found out you had a sharp surge in M1 and velocity. Monetary authorities, at that time were looking at M1, and had to constantly shift down their targets in order to justify raising short rates.

The second half of 1982 we had a surge in M1 growth. The Fed had to jettison M1 in order to continue to ratchet down short rates and deliver recovery. They asserted, at the time that we were not going to see an inflation acceleration, M1's surge notwithstanding. In that instance, they made the right decision. Over the subsequent 18 months the U.S. economy grew strongly but with very little inflation. If you look at circumstances right now, if you look at M1 growth, you should suspect a very hefty recovery. M2 growth suggests quite a mild recovery. The truth is, we don't know, for sure, what will occur. As a consequence, monetary authorities have to proceed judiciously.

When you said the Fed responds a little bit slow to the switch, I think that is because, unlike some of us who just have to forecast, they have to make decisions that have profound implications for the economy amidst that kind of uncertainty. Moreover, I don't think any technical operating or reserves adjustment can get you to a meaningfully higher level of conviction about either exactly where the economy is headed or about precisely what the next adjustment will deliver for you. We simply can't slice the baloney that thin.

Chairman NEAL. Let me ask a little technical question, if I can. Would it help to bring down long range for the Treasury to stop selling long bonds and the Fed buy them? And, if so, would that help the economy?

Thank you, Dr. Feldstein.

Mr. FELDSTEIN. Thank you very much, Mr. Chairman. Sorry to leave.

Mr. BROWN. I think the potential to bring long-term rates down on a sustained basis would certainly help the economy. As far as the economy is concerned, one should not focus on the 30-year bond, because that is not where most of the real financing is done.

Probably the most important longer term range for the economy is, say, 7 to 10 years, which is what is most important to the mortgage market. Corporate lending, if anything, is focused even shorter than that.

So to significantly twist the yield curve or twist the supply of the Treasury in a way to help the 5- to 10-year rates, you would have to bring all that borrowing into the very short-term end of the

thing. So what you would really have to do is increase a bill issuance very substantially.

Bills may be out to 1 year, very short-term borrowing, very substantially, which I think would cause problems because the amount of the debt would be refinanced and turned over on a short-term basis. Even if you were to do that, I am not sure that the effects on a yield curve on a sustained basis would be all that great anyway. I think this whole issue is probably one that has gotten more attention than it is worth.

Mr. BARBERA. I don't know.

Chairman NEAL. I don't know either. I suspect that you are right, though.

Mr. Barbera, you argued that expansive buildup of debt was due to the failure to appreciate that inflation would stay under control. I just sort of wonder how that is possible, given that inflation stayed around for—has stayed around 4 percent, 4.5 percent since 1983.

The reason I raise this is just to raise the question of what does it really take for markets to adjust expectations and for the Fed's and at this inflationary policy to become credible? What does it take to convince people?

Mr. BARBERA. It is definitely an oversimplification, but if you look at what went on in the middle 1980's in terms of the extraordinary growth in commercial real estate, leveraged buyout transactions and the like, it was an implicit belief that you would get sharp appreciation in those assets, either the asset price appreciation of the company that you were going to sell when you issued the junk bonds or a sharp appreciation in the value of the commercial structure as you built it.

I would argue that, believing you are going to get this big appreciation in the price of that building or the asset price appreciation of this company was a belief that they could deliver strong growth in income streams.

On a microbasis, if you look at the analyses of those endeavors as people went into them and you added them all up, they were saying, on average, we have got this confidence in a 15-percent rise in income streams. Each assessment was a microassessment. It was a particular focus on one company or one building. Add them all up together and it combined to produce a belief in strong growth in aggregate income—a belief that required strong inflation to return.

Now, that proved to be incorrect, and then you saw, first, in commercial real estate and junk bonds and then for the banking system as a whole, a sharp change in attitude of the value of those assets.

Thus, on the private asset valuation side, I would agree we just broke inflation expectations. We just had a bursting of a bubble. That is why the Fed funds rate today is half its mid-1989 8 percent level. Remember that in mid-1990 8 percent was perceived to be a neutral interest rate. The bursting of the debt bubble had a lot to do with that.

Mr. BROWN. May I just say a word on controlling inflation expectations?

Chairman NEAL. Yes.

Mr. BROWN. Although inflation has gone up and down with each business cycle, I think it is important to keep in mind there has been only one sort of broad inflation cycle in the post-war period. Inflation sort of crept along in the 1950's and jogged up in the 1960's and took off in the 1970's.

You had these 30 years of uptrends. And, finally, we have turned it, we have come down since the peak at around 1980. If you look at what Congress forecasted, they will always tell you here is what has happened in past cycles and here we sort of are, sort of, when you haven't even seen one complete cycle.

It is very hard to have confidence to tell what the implications of coming down that cycle are or how it is likely to come out. I think a couple of points to make in this regard, you are not going to convince people to have confidence about what is going to happen with inflation until they actually see it.

One should expect markets to respond with a lag to what you see on inflation. You can't do anything, say anything, that is going to convince people exactly what is going to happen. There is a basic uncertainty here.

The second thing to keep in mind is this broad inflation cycle has had some very important consequences for the economy. It explains a lot of the way the economy behaved cyclically in the 1970's, investors behaved, debt markets developed—and I think what we are seeing in the last couple of years is seeing that cycle come on the down side—has had some pretty dramatic implications for how the economy behaves, how the debt market behaves, which is really the opposite of the prior 30 years, which is what everyone has gotten used to.

That is why we are surprised at how hard it is to get the key money going in the 1980's, how hard it was to turn the expansion off. It is important to keep in mind this broad debt cycle or broad inflation cycle.

Chairman NEAL. Is it your estimate that—well, what would be the consensus on the future for inflation in this country among respected economists, would you say? Are we hovering around what it would be?

Mr. BARBERA. Unlike 24 months ago, as Bill said, the biggest change in opinion is what happened over the last 6 months. And since we have seen such a big break with the inflation numbers, I think people are somewhere between 3 to 4 percent, which is a sharp downturn in expectations from where we are 1½ years ago.

Mr. BROWN. Yes. I think that the next year or two, or somewhere just under four probably, although, if you take brokerages out of house or our own investment people, for example, and ask them what they use for a long-term inflation assumption for dropping their valuation work on dividend streams, and so forth, I think the—almost everybody will be somewhere between 4 and 5 as opposed to below 4, and on the very longer term.

Chairman NEAL. It would be a very pleasant surprise, wouldn't it, if we could go ahead and get it to 2 instead of 4.

Mr. BARBERA. And there is ample precedent for that. In the first year of recovery, most people fear inflation. In the first year, inflation goes down. It goes down. A consequence of the surge you get in labor productivity. Companies, instead of being pressured from

rising labor costs, find that their productivity is going up, and they have the most control on labor costs that they will get in the cycle. On average, inflation declines 3.8 percent in the first year of recovery.

Chairman NEAL. There is the opportunity to do that, too. I mean, all of you are suggesting a healthy recovery at today's rates of inflation, you are not anticipating any higher rate of inflation for the short term, and you are suggesting a good recovery. That says to me, if we wanted to, we could bring inflation down a little bit more and still have a good recovery.

Mr. BROWN. I think it—the question of how far ahead, I think, certainly over the next year, there is nothing inconsistent about having relatively strong growth and having inflation stable or even improving, but given this recovery is starting at an unemployment rate of somewhere near 7.5 percent, let's say, peaked or a little lower, there is not tremendous room to have growth substantially above trend before unemployment gets to a level that you put upward as opposed to downward pressure on prices.

So I would say you probably have got 18 months or maybe 2 years in which growth could be relatively high, but it is not longer than that, given the starting place here. The recovery of the 1980's started with an unemployment rate of around 10 percent, so there was a lot more room that time around.

I think the Federal Reserve could usefully focus a little more on the intermediate-term targets for inflation. Longer term, I think, we are all comfortable with the notion they should be working inflation lower than from wherever it is now. It would be beneficial if they talk a little more specifically about what they consider acceptable inflation performance over the next, let's say, 1- to 3-year period, sort of the next business cycle.

The last business cycle they were clearly comfortable with inflation at 4 to 5 percent. They did not follow a policy that got you lower inflation in the short run or over that business cycle. They followed a policy that would get you lower inflation the next business cycle. What is it that they consider acceptable over the business cycle coming ahead? I would think 2 to 3 percent is acceptable over that timeframe as opposed to a 3.5 to 4.5 rate.

Mr. BARBERA. I am going to respectfully disagree. We may get those low-inflation numbers. If we don't, we will simply need to accept a bit higher inflation for a time. We fight inflation in disaster periods, and accept economic duress over those moments. For 1992 and first half 1993, I believe growth needs to be natural. We can, later on, accept performance in order to get some more disinflation.

After all, with the benefit of hindsight it's clear that Mr. Greenspan delivered more disinflation than he set out to. He did believe he was delivering a recovery in the second half of last year and it evaporated, so we have taken a pretty healthy dose of disinflation here.

It is likely to give us lower inflation over the next 6 months. We will then establish a running rate for inflation for the next 2 or 3 years below the levels in place in the middle 1980's.

If that running rate is 3.5, I think you let the economy run that 3.5 for a couple of years and you don't contemplate the next reces-

sion the minute the inflation rate stabilizes at a level like that. You know, we sort of figure we have. Inflation was 13 percent, it was moved down to 4 percent in the middle 1980's. Inflation spiked to 6 percent, as recession took hold, and now we are probably at 3 to 3.5 percent.

I think that is progress. As it creeps up cyclically, you have your next recession, at which point, coming out, you could look at 1 to 2 percent. But it would be early in the day to start tightening aggressively in the middle of the year because you found out that the running rate for an inflation associated with the recession we just had was 3.5 and that was acceptable.

Chairman NEAL. I guess it was just a hope. What I would wish is we would go on and just gently keep it—make sure that we stay between 2 and 3 and closer to 2 over the next couple years and then reduce greatly the likelihood we have of another recession instead of anticipating that and putting us through the pain of it again. Why not just try to, you know, keep a lid on it and avoid the recession.

Mr. BARBERA. It comes down to just how fine a line you can cut. The history suggests that you can succeed against inflation, but do it within the context of the business cycle.

Chairman NEAL. I'm sorry.

Mr. BROWN. The other alternative is to look at the unemployment rate. The question is: Should the Federal Reserve—I think everyone will agree the Federal Reserve should pursue growth at least close to something like trend to stabilize the unemployment rate. The next question is: Should they aim for growth substantially above that trend, say 3.5 or 4 percent, in order to bring the unemployment rate down?

On that score, I would say, if inflation is 3.5, 4 percent, I would suggest that they not push growth that amount higher to get unemployment down, but they ought to try and hold the unemployment rate at, say, 7 percent until they see inflation in a sustainable way below 3 percent, somewhere in the 2- to 3-percent area. In that range, I would be sympathetic to a policy of trying to bring inflation—the unemployment rate down another point, say, to 6 percent.

Chairman NEAL. I agree with that, in general terms, because you are just trading unemployment now for unemployment later if you control inflation. Reduce the likelihood of recession, you reduce the likelihood of throwing people out of work a few years from now. There is no kindness, it seems to me, with the economy. It would plague the economy to provide a few jobs which you know will be lost in the not-too-distant future when you are riding it out.

Anyway, I want to thank you all very much for your help this morning. We welcome your vision anytime. If you are along the line, and you see other things that would be useful to the subcommittee, let us know. Thanks again for being with us.

The subcommittee stands adjourned.

[Whereupon, at 11:40 a.m., the hearing was adjourned, subject to the call of the Chair.]

APPENDIX

February 18, 1992

OPENING STATEMENT
The Honorable Stephen L. Neal, Chairman
February 18, 1992

Today the Subcommittee meets to hear testimony on monetary policy and the state of the economy. This hearing is intended to serve as a prelude to tomorrow's hearing, at which Chairman Greenspan will present the Federal Reserve's Monetary Policy Report to Congress. Our purpose today is to elicit expert testimony on the issues and problems we should expect Chairman Greenspan to address, and thereby help us assess the content of that report. Since no one here knows exactly what Mr. Greenspan will say tomorrow, we have given today's witnesses complete latitude to highlight those aspects of monetary policy and the economy that they deem most critical. And we have suggested that they need not be bound by the short time horizon that typically characterizes the Fed's semi-annual Monetary Policy Reports. We understand that monetary policy operates with considerable lags, so it must be judged in terms of its cumulative impact over several years.

Before turning to today's witnesses, let me throw out several comments on the current stance of monetary policy. I think it should be evident that monetary policy over Chairman Greenspan's entire tenure has been more or less persistently oriented toward reducing inflation. Whatever other short-term goals may have held sway at particular periods, it seems to me that the Fed is making good progress toward its goal of essentially eliminating inflation. I have supported this goal by sponsoring and championing legislation that would make "zero-inflation" the dominant objective of monetary policy. Though we have not yet been able to enact that proposal into law, I am pleased that the Fed is making noticeable progress toward that goal on its own. In fact, the Fed seems to have behaved, in practice, about the same as I would have expected it to act had my proposed legislation become law the day I introduced it. The only possible criticism would be that monetary policy may have been even tighter than necessary or desirable.

Measured inflation has now begun to fall, and I would expect it to continue to decline, though slowly and unevenly, over the next few years. On a year-over-year basis, the Consumer Price Index is now around 3%. I am certain that this is lower than projected in most "conventional" inflation forecasts made about two-and-a-half years ago. In other words, at the time Chairman Greenspan endorsed my "zero inflation" legislation, neither the financial markets nor the standard forecasters believed that inflation would really be brought down over the next few years. But they were wrong. Inflation has fallen noticeably, and is now about where it would be on a five-year-path to reach the goal of my legislation -- that is, inflation so close to zero that expected future inflation is negligible and does not affect economic decisions.

That Fed policy has been persistently anti-inflationary over the past few years may not seem to square with the general perception that it has been aggressively easing over the past year to counter the current recession. The Fed Funds Rate has certainly been reduced dramatically, and policy is much easier than it would have been had that Rate been held constant, or reduced more slowly. But the Funds Rate can be a very misleading indicator of the true impact of policy. M2 growth has been notoriously weak. Though the monetary aggregates are not infallible indicators of the thrust of policy, it seems clear that, in the current context, the behavior of M2 has been a much better gauge of policy than the Funds Rate. By that gauge, policy has remained tight and restrictive through much of the year. It has begun to ease only in the last couple of months. It has, in fact, been so tight for so long that M2 now has ample room to grow more robustly for a while without endangering the longer-term path toward price stability. The Fed should not, of course, throw all caution to the winds and gun monetary growth relentlessly until the economy is once again booming at unsustainable growth rates. But it can, and should, act to boost money growth somewhat this year. That will be necessary to achieve a decent economic recovery, and will not endanger reasonable progress toward price stability over the next few years. The trick will be to engineer this modest monetary expansion with discretion, not overdo it, and keep the longer-term trend of M2 growth on a path consistent with price stability and economic growth at its potential.

STATEMENT OF PAUL L. KASRIEL
VICE PRESIDENT AND ECONOMIST
THE NORTHERN TRUST COMPANY

BEFORE THE

SUBCOMMITTEE ON DOMESTIC MONETARY POLICY

of the

COMMITTEE ON BANKING, FINANCE AND URBAN AFFAIRS

U. S. HOUSE OF REPRESENTATIVES

February 18, 1992

I. Introduction

Thank you, Mr. Chairman, for inviting me to speak today on the subject of monetary policy. It should be understood that the views expressed herewith are my own, and do not necessarily represent those of my employer, The Northern Trust Company.

Broadly-defined money, such as M2 and M3, has decelerated in growth over the past three years despite a Federal Reserve-induced decline in short-term interest rates of almost six percentage points. During this period of historically slow money growth and declining interest rates, economic activity has been very sluggish. At the same time that growth in money and economic activity was slowing, expenditures to honor the government's deposit insurance commitment at insolvent depository institutions (hereafter referred to as "banks") increased dramatically. It will be argued below that these government expenditures in conjunction with a Federal Reserve operating policy of targeting the overnight interest rate on interbank loans (commonly referred to as the federal funds rate) have played a major role in retarding growth in M2 and M3. Furthermore, it will be argued that the slow money growth brought about for these reasons implies sluggish economic activity, just as would be the case if the Federal Reserve intentionally produced a slowdown in money growth in the absence of government expenditures associated with deposit insurance.

Robert D. Laurent, Senior Economist at the Federal Reserve Bank of Chicago, estimates that gross government expenditures to make depositors whole at banks that were closed or merged due to insolvency between the beginning of 1986 and the end of September 1991 totaled about \$333 billion. Based on January 1992 Congressional Budget Office forecast data, I estimate that in fiscal years 1992 (which began in October 1991) through 1994, the government will have to spend an additional \$349 billion, gross, to honor its deposit insurance commitment. Thus, unless the Federal Reserve offsets these actions, broadly-defined money growth is likely to remain low and so, too, is growth in economic activity. In light of this, I would recommend that the Federal Reserve narrow its annual growth targets for M2 and M3, that it place a greater priority on achieving these monetary growth objectives, and that it be willing to move the federal funds rate up and down more vigorously in order to keep M2 and M3 within their narrow growth target bands. It should be emphasized that the arguments presented here do not imply that the government should renege on any of its deposit insurance commitments, nor do they imply that government activities to close insolvent banks should cease. The Federal Reserve has the policy tools to offset the contractionary effects on money and economic growth of the government expenditures associated with these activities.

I. The Impact of Deposit Insurance Expenditures on Money

In the absence of deposit insurance, when a bank fails, bank deposits and other liabilities disappear by the amount of the failed bank's negative net worth. Negative net worth, in this case, would be the difference between the par amount of the bank's liabilities and the market value of its assets. This is what occurred in the early 1930s in the United States before Congress passed legislation creating a system of deposit insurance. During this period, there was no question as to whether deposits disappeared when a bank failed, or whose deposits disappeared. It was the deposits of the failed bank that disappeared. During the early 1930s, the Federal Reserve failed to take actions that would have induced and enabled "surviving" banks to increase their assets, and, thus, their deposits, so as to maintain the aggregate level of deposits in the face of individual bank failures.

Under the current system of deposit insurance, the closure of an insolvent bank also, initially, results in the disappearance or contraction of deposits. However, unlike the situation in which there is no deposit insurance, under the current arrangement, it is not the deposits owned by depositors at the failed bank that disappear. When the bank is closed, these depositors get checks from the government equal to the par value of their deposits plus accrued interest. These checks are then re-deposited at solvent banks. With deposit insurance, the deposits that disappear are those obtained by the government, either through the sale of securities or the collection of taxes, for the purpose of honoring its deposit insurance commitment.

The "T" accounts in Exhibit 1 illustrate this point. It is assumed that Insolvent Bank has \$90 of negative net worth, as a result of its having \$100 in deposit liabilities but only \$10 in assets. (To "balance the books" of Insolvent Bank, the government's deposit insurance contingent liability of \$90 is listed as an asset.) It also is assumed that Insolvent Bank's \$10 of assets are in the form of reserves held at the Federal Reserve. In order to pay off the depositors of Insolvent Bank, the government has to acquire \$90 from the public, either from the sale of securities or from the collection of taxes. Assume that the depositors at Solvent Bank purchase \$90 of securities from the government. Both deposits and reserves at Solvent Bank will then fall by \$90. With this \$90, plus Insolvent Bank's \$10 in reserves, checks totaling \$100 will be issued to the depositors of Insolvent Bank. These checks will then be deposited in Solvent Bank. After these transactions, Solvent Bank's deposits and reserves will both have increased by a net \$10. The closure of Insolvent Bank implies that its deposits fall by \$100 and its reserves fall by \$10. Netting out these changes for the banking system as a whole, it can be seen that deposits have fallen by \$90, but reserves are unchanged.

This situation of a decline in deposits but no change in reserves represents an unstable equilibrium. The supply of reserves is in excess of the demand for reserves. To understand this, consider the following. Banks' demand for reserves is positively related to the level of their deposits. Part of this demand is mandated. The Federal Reserve has set legal reserve requirements against transactions accounts such as demand deposits and NOW accounts. For every \$100 of these types of deposits on their books, most banks are required by the Federal Reserve to hold \$12 in non-interest bearing reserves in the form of either deposits at the Federal Reserve or vault cash. Even if the Federal Reserve did not impose legal reserve requirements, banks still would hold reserves against their deposit liabilities to protect against adverse clearings with other banks and against currency withdrawals. Indeed, Federal Reserve statistics show that banks, in the aggregate, consistently hold reserves in excess of what they are required to hold.

In the T-account example in Exhibit 1, it has not been specified what kind of deposits, transactions or nontransactions, has fallen. All that can be said for sure is that some kind of deposits has fallen by \$90. If all of the decline were in the form of transactions deposits, then the fall in the required demand for reserves would have been \$10.80 ($\$90 \times .12$). If all of the decline in deposits were in the form of nontransactions deposits, then the fall in the demand for reserves would have been greater than zero, but less than \$10.80. The critical issue is not the magnitude of the change in the demand for reserves. Rather, it is the direction of the change in the demand for reserves. Logic suggests that the demand for reserves will have fallen. The Federal Reserve sets the supply of reserves. At this stage in the sequence of events, the Federal Reserve has done nothing, nor is it motivated to do anything to change the supply of reserves. Therefore, with the demand for reserves having fallen, and with the supply of reserves unchanged, there must exist an excess supply of reserves relative to the demand for reserves. This represents a disequilibrium in the market for reserves.

III. The Crucial Role of Federal Funds Rate Targeting

This disequilibrium can be resolved in two ways. Either deposits can increase, which will cause the demand for reserves to increase, too. Or the supply of reserves can be reduced to match the lower reserve demand. The actions of the Federal Reserve determine how this disequilibrium is resolved. If the Federal Reserve chooses to leave the level of reserves unchanged, the excess of reserves will manifest itself by a fall in the price of reserve credit, i.e., a fall in the overnight federal funds rate. This fall in the federal funds rate, the interest rate representing the marginal cost of funds to banks, will induce surviving banks to acquire more earning assets, or, in other words, to make more loans and purchase more securities. Because assets equal liabilities, an increase in banks' assets also

implies an increase in their liabilities, of which deposits are, by far, the largest component. As this process of asset acquisition and liability growth by banks progresses, banks' demand for reserves will also increase. The relative excess reserve disequilibrium will be resolved by the movement of aggregate bank deposits back up toward the level that existed before Insolvent Bank was closed. The federal funds rate will increase as banks' demand for reserves rises commensurate with the increase in bank deposits. If the Federal Reserve allowed this process to work its way to completion, the closure of insolvent banks would not result in a slowing of money supply growth.

The other way that the relative excess reserve disequilibrium could be resolved is for the Federal Reserve to reduce the supply of reserves until it equals the reduced demand for reserves. What might motivate the Federal Reserve to reduce the supply of reserves under these circumstances would be the decline in the federal funds rate that evolves from the reserve market disequilibrium. Although the Federal Reserve does not pursue a static federal funds rate targeting policy over time, on a day-to-day basis, it does seek to keep the federal funds rate at some specified target level. Unless the Federal Open Market Committee votes to change that target level of the federal funds rate, the Federal Reserve will drain or add reserves on any given day in order to stabilize the federal funds rate at its target level. Thus, it is likely that the Federal Reserve would engage in open market sales of government securities from its portfolio in order to drain reserves from the banking system if it observed a decline in the federal funds rate from the targeted level for whatever reason, including the loss of deposits because of bank closures. Thus, the Federal Reserve's practice of stabilizing the federal funds rate on a day-to-day basis is tantamount to validating the contraction in deposits that occurs from the closing of insolvent banks. If the Federal Reserve's day-to-day operating procedure were geared more toward hitting an aggregate reserve target, the closing of insolvent banks would not depress money supply growth nearly to the extent implied by the operating procedure of targeting the level of the federal funds rate.

Throughout this analysis, it has been assumed that the nonbank public purchases the government securities used to fund deposit insurance expenditures. The resulting decline in the money stock depends critically on this assumption. If all of the securities were purchased by banks instead of the nonbank public, and the banks did not reduce other earning assets in the process, then the money stock would not decline. In actuality, both the nonbank public and banks have increased their holdings of government securities. If, however, banks had been increasing their earning assets at a faster rate, growth in the broader monetary aggregates would have been faster. If

this were the case, economists would not be pondering the question of why money growth in the past three years has been the slowest in, at least, the past thirty years.

IV. The Federal Reserve's View on Deposit Insurance Expenditures

Past statements by the Federal Reserve clearly indicate that it was aware that the closure of insolvent banks and thrifts had resulted in a slowing of the growth of the broad money supply. In its Monetary Policy Report to Congress of February 20, 1991, the Federal Reserve wrote: "The shortfall of money growth...probably reflected the shifting of financial flows associated with the contraction of the thrift industry...Indeed, the slowdown of M2 growth emerged at about the same time that RTC activity picked up. The drop in depository credit, which had its primary effect on the M3 aggregate, also may have damped M2..." (p.19) An unpublished Federal Reserve Board staff memo, "Monetary Growth and Depository Closings" (November 19, 1991), ~~which~~ was written as a critique of my and Robert D. Laurent's manuscript, "Closing Depository Institutions and Fed Funds Targeting - The Case of An Inadvertently Contractionary Monetary Policy" (October, 1991). In the memo, the Federal Reserve staff wrote: "Recent empirical studies have indicated that the closing of depository institutions, and particularly, resolution activity by the RTC, does appear to be associated with a decline in M2 growth in the contemporaneous and following month." The empirical study referenced in this regard was another Federal Reserve staff memo, "RTC Activity and Growth of M2 Deposits" (November 1, 1991).

But while the Federal Reserve appeared to be aware of the contractionary effects of bank closures on broad money growth, it apparently did not view these money supply effects as having negative implications for economic activity. In its Monetary Policy Report to Congress of July 18, 1990, the Federal Reserve wrote: "In anticipation of further contraction in the thrift industry, and its associated effects on depository intermediations, the Committee reduced the annual growth range for M3 by a full percentage point in February." (p.17) If the Federal Reserve had thought that the reduction in M3 growth caused by the "further contraction in the thrift industry" would have negative implications for economic activity going forward at a time when economic growth already was relatively low, it is doubtful that it would have lowered its annual target range for M3. Rather, one would think that the Federal Reserve would have taken actions to keep M3 within its higher growth target range.

It is generally acknowledged that the decline in deposits during the Great Depression of the 1930s that emanated from the massive failure of banks was contractionary with respect to economic activity.

Indeed, many economic historians believe that the Federal Reserve's failure to maintain the money stock during this period was its biggest policy mistake. One striking difference between the early 1930s and now is the current system of deposit insurance. It appears that the reason many analysts do not view weak money supply growth resulting from bank closures as having negative implications for economic activity is that depositors at failed banks do not directly suffer any monetary losses. Perhaps another reason why this source of weak money growth is not considered contractionary for economic activity is that a large portion of the funds used by the government to honor its deposit insurance commitment has been acquired by the public's voluntary purchase of securities from the government. It is argued that, because the public voluntarily gives up deposits for securities, the reduction in the supply of money corresponds with a reduction in the public's demand for money.

V. Why Slow Money Growth Resulting from Bank Closures is Contractionary

It is important to understand that a transaction need not be involuntary to be contractionary for economic activity. Most economists would acknowledge that a sale of government securities by the Federal Reserve from its portfolio to the public has contractionary implications for economic activity, all else the same. This voluntary purchase of securities by the public reduces bank reserves and, ultimately, bank deposits. The contractionary effect on economic activity arises by virtue of the assumption that the supply of money (i.e., bank deposits) has been reduced relative to the public's demand for money. This induces the public to cut back on its current spending. There is no reason to believe that the demand for money changes depending on whether the public is being offered more government securities to fund the government's deposit insurance commitment or whether the Federal Reserve is intentionally contracting the money supply. All the public knows is that it is being offered more government securities to hold.

The events are the same in the case where the Federal Reserve intentionally contracts the money supply as in the case where the money supply contracts as a result of the closure of an insolvent bank in conjunction with the Federal Reserve targeting a specific level of the federal funds rate, ~~the events are the same~~. A difference arises only in the sequence of those events. When the Federal Reserve intentionally contracts the money stock by selling securities from its portfolio, it simultaneously reduces reserves. Following this, the money stock declines further because a dollar of reserves supports several dollars of deposits. In contrast, when the government closes an insolvent bank, the entire decline in the money stock occurs first. Then the Federal

Reserve, in order to push back up the federal funds rate, sells securities from its portfolio in an amount equal to a fraction of the decline in deposits, which, again, simultaneously reduces reserves to the level needed to meet the lower demand for them at the previous federal funds rate.

It should be noted that the decline in the money stock that results from deposit insurance-related government expenditures would occur in exactly the same manner if the funding of these expenditures came from taxes rather than from securities sales. It would strain credulity to argue that the decline in the money stock resulting from tax payments to fund deposit insurance expenditures represented a fall in the demand for money.

The chart in Exhibit 2 relating the volume of expenditures by the government to honor its deposit insurance commitments to the growth in total bank and thrift liabilities (exclusive of IRA accounts) illustrates the inverse correlation between these two series. As the chart shows, the sharp upward spikes in deposit insurance-related government expenditures in September-October 1989, June-October 1990, and July-September 1991 were associated with slowdowns in the growth of bank and thrift liabilities. As deposit insurance-related expenditures move back down to lower levels, bank and thrift liability growth tends to pick up. This is quite apparent for the periods November 1990-June 1991 and October 1991-January 1992.

Unlike laboratory scientists, economists do not have the luxury of holding everything else constant while measuring the effects of changes in one particular variable on the behavior of other economic variables thought to be related. So, as the chart in Exhibit 2 also shows, sometimes bank and thrift liability growth rises when deposit insurance expenditures rise, and sometimes liability growth falls when expenditures fall. One variable that would have a very important effect on bank and thrift liability growth, and which has not been held constant since the pick-up of deposit insurance-related government expenditures in 1989, is the federal funds rate. From a level of about 9-7/8% in the spring of 1989, the federal funds rate has been lowered by the Federal Reserve to its current level of about 4%. The timing of the declines in the federal funds rate almost assuredly will alter the relationship between deposit insurance expenditures and bank/thrift liability growth. Despite the nearly 6 percentage point Federal Reserve-engineered decline in the federal funds rate, annualized M3 growth in the period between May 1989 and December 1991 was only 2.0% -- considerably below the 5.6% annualized rate at which M3 grew between October 1986 and May 1989, and the 8.7% annualized rate at which it grew between January 1959 and December 1991. It would appear that the contractionary effects on M3 of deposit insurance-related government expenditures have overwhelmed the stimulative effects of the lower federal funds rate. Perhaps these government expenditures are the "weather system" that is

spanning the metaphorical "50 m.p.h. headwind" against which Federal Reserve Chairman Greenspan says the economy has been moving. It should be appreciated that flying into a headwind does not necessarily imply that a desired ground speed cannot be maintained. What it does imply is that a given engine throttle setting will not produce the same ground speed in the presence of a higher headwind. Therefore, to maintain the desired ground speed, the pilot has to push the throttle farther forward. In terms of monetary policy, in the presence of higher deposit insurance-related government expenditures, in order to maintain a given growth rate in the money supply, the Federal Reserve will have to lower the federal funds rate more than otherwise.

Deposit insurance-related government expenditures may help explain some anomalies of the current recession. Every recession in the postwar period, except for the current one, was immediately preceded by a rising federal funds rate. In contrast, the recent recession, which began in July 1980, occurred more than a year after the federal funds rate had peaked, and about a year after the pace of deposit insurance expenditures picked up dramatically. From the beginning of June 1989 through the end of July 1990, the federal funds rate fell by just under 1-7/8 percentage points. In the 44 months beginning in January 1986 through August 1989, deposit insurance expenditures totaled about \$70 billion. But in the subsequent 11 months, September 1989 through July 1990, these expenditures increased by nearly \$97 billion. In the spring of 1991, the economy showed signs of recovering from the recession. However, by late summer, the forward momentum in the economy had been dissipated. In the four months ended February 1991, deposit insurance expenditures averaged \$7.2 billion per month. In the following seven months ended September 1991, the monthly average of these expenditures rose to \$13.7 billion, or almost double that of the previous four months. From the end of January 1991 through the end of September 1991, the federal funds rate fell by about 1-1/2 percentage points. The pattern of deposit insurance-related government expenditures seems, at least, to help explain how the economy slipped into recession and is having trouble emerging from that recession, despite the Federal Reserve's dropping of the federal funds rate.

VI. Other Criticisms of the Hypothesis

A. Reserve Growth

It has been argued here that the reason bank deposits decline in the face of deposit insurance-related government expenditures is that the Federal Reserve is induced to contract reserves in order to hit its day-to-day federal funds rate target. At first blush, it would seem that a straightforward test of this hypothesis would be to observe the behavior of bank reserves. Some have pointed to the growth of reserves as evidence that a federal funds rate targeting procedure

has not been instrumental in the slow monetary growth. Again, the inability to hold other variables constant in economic experiments makes a direct comparison between, say, M3 growth and reserves growth an unsatisfactory test of the hypothesis. Federal Reserve-mandated reserve requirements are imposed on transactions deposits -- i.e., deposits included in the M1 definition of money. For the most part, non-M1 deposits and other bank liabilities are exempt from mandatory reserve requirements. Thus, it is possible for required reserves to be rising even as total bank deposits are falling if M1 deposits are increasing. Because the Federal Reserve, in order to stabilize the federal funds rate, supplies reserves passively on a day-to-day basis in response to changes in the demand for reserves, the increase in required reserves would be expected to be accommodated by the Federal Reserve with an increase in the supply of reserves.

In the interval between February 1991 and September 1991, M3 contracted at an annual rate of about 1/2% while M1 grew at an annual rate of about 7%. In this same interval, total bank reserves grew at an annual rate of 5.4%. During this period, deposit insurance-related government expenditures totaled about \$96 billion, or about \$13.7 billion on average per month. Between September 1991 and December 1991, deposit insurance expenditures slipped to about \$17.6 billion, or about \$5.9 billion per month. In the same period, M3 growth picked up to an annual rate of 2.6%; M1 growth increased to 12.8%; and total reserve growth rose to 22.0%. Clearly, reserve growth is dominated by M1 growth. It is interesting to note, however, that when the pace of deposit insurance expenditures moderated, the pace of total bank deposits, for which M3 is a proxy, and the pace of total bank reserves picked up. One crude way to control for the effect of M1 growth on total reserve growth is to examine the ratio of M1 deposits to total reserves. In February 1991, the ratio was 11.55. In September 1991, at the end of a 7-month period of heavy deposit insurance expenditures, this ratio was 11.73. In December 1991, at the end of a 3-month period of relatively light deposit insurance expenditures, the ratio of M1 deposits to total reserves was 11.56. These movements in the ratio suggest that reserve changes are not just due to changes in M1 deposits. M1 deposits increased relative to reserves when bank closings increased and M3 deposits decreased (February 1991 - September 1991). Conversely, when bank closings decreased and M3 deposits increased, the ratio of M1 deposits to reserves decreases, as in the period September 1991 - December 1991. Although not conclusive, the movements in this ratio suggests that reserve changes are not just due to the changes in M1. The ratio data are consistent with the hypothesis that, as deposit insurance expenditures slowed, the destruction of total bank deposits slowed, and, therefore, the Federal Reserve did not have to contract reserves as much, on a relative basis, to hit its federal funds rate target on a day-to-day basis.

B. Deposit Shifts

In the 12 months ended December 1991, M3 grew 1.5% while M1 grew 8.6%. It is interesting to speculate as to why these two monetary aggregates diverged so much in growth. An explanation for the slow M3 growth already has been presented -- deposit insurance-related government expenditures in combination with the Federal Reserve's practice of day-to-day targeting of the federal funds rate. The faster growth of M1 may be due to the nonbank public shifting its funds out of absolutely and relatively low yielding bank time deposits. Although these shifts can explain faster M1 growth, they cannot explain slower M3 growth.

Data pertaining to the net sales of stock and bond mutual fund shares in 1991 are consistent with the notion that the public is shifting large amounts of funds into these investments. In the first quarter of 1991, net dollar sales of stock and bond mutual funds were \$17.6 billion. Sales rose steadily throughout the year, reaching \$41.8 billion in the fourth quarter of 1991. Although these investments are not included in the Federal Reserve's money supply definitions, shifts out of bank time deposits into stock and bond mutual funds, or the underlying stocks or bonds themselves, cannot reduce the supply of bank deposits if the Federal Reserve passively supplies the amount of reserves demanded any more than the shift out of time deposits for the purchase of a car, which is also not included in the money definitions, could cause a fall in total deposits. A mutual fund share cannot be purchased by writing a check on a time deposit. The time deposit first has to be converted into a transaction deposit, a deposit included in M1. Thus, the prelude to purchasing mutual fund shares might be a decline in time deposits matched by an equal increase in transactions deposits. Although this will increase M1, because transactions deposits are a subset of M3, the total of M3 will be unaffected. Only its composition will be affected -- more transactions deposits and fewer time deposits. The shift into transactions deposits will increase required reserves. Because the Federal Reserve supplies reserves passively in response to changes in demand in order to stabilize the federal funds rate, this increase in required reserves will be accommodated by the Federal Reserve. Therefore, there is no total deposit contraction arising from the increase in required reserves. After time deposits have been converted into transactions deposits, the purchase of the mutual fund shares can take place. With the purchase, however, the transactions deposits do not disappear. Their ownership is merely transferred. The mutual fund now owns the transactions deposits.

Presumably, the mutual fund uses these deposits to buy stocks or bonds. Again, deposits do not disappear. The sellers or issuers of the stocks and bonds become the owners of the deposits. What the new

owners of these transactions deposits do with them is not particularly relevant to the argument at hand. What is relevant is that in order to engage in transactions, one has to have transactions deposits. Moreover, while certain kinds of portfolio shifts can change the composition of deposits, they cannot change the total, given the passive reserve-supplying behavior adhered to by the Federal Reserve.

Portfolio shifts are consistent with the behavior of M1, but not M3. For example, in the third quarter of 1991, the net dollar sales of stock and bond mutual fund shares was \$33.1 billion. M1 grew at an annual rate of 5.5% in the 3 months ended September 1991. M3 contracted at an annual rate of 1.3% during this time period. In the fourth quarter of 1991, net dollar sales of mutual funds increased to \$41.8 billion. M1 growth accelerated to 12.8% at an annual rate in the 3 months ended December 1991, consistent with the transactions hypothesis of M1 growth discussed above. M3 growth also accelerated in the final three months of 1991 -- to an annual rate of 2.6%. The fact that the pace of both mutual fund share sales and M3 growth picked up in the fourth quarter of 1991 is inconsistent with the view expressed by some analysts that portfolio shifts were responsible for the behavior of M3 in 1991. What is consistent with the behavior of M3 in the third and fourth quarters of 1991 was the pattern of deposit insurance-related government expenditures in these periods. In the third quarter of 1991, deposit insurance expenditures totaled nearly \$59 billion. In the fourth quarter of 1991, these expenditures dropped down to about \$17-1/2 billion.

There is another explanation for the rise in M1 growth in 1991. It, too, is related to portfolio shifts. As the charts in Exhibits 3A and 3B show, there is an inverse relationship between M1 growth and the movement in short-term interest rates. As interest rates decline, less interest income is forgone if one holds an M1-type deposit -- a deposit that pays low or no explicit interest. That is, as interest rates go down, so does the "price" of liquidity. When the price of beef falls, people want to consume more beef, all else the same. Likewise, when the price of liquidity falls, people want to consume more liquidity. Thus, when interest rates fall, the quantity demanded of M1 rises. When short-term interest rates plunged in 1970-71, 1974-75, 1976, 1980, 1982, 1985-86, and 1991, M1 growth accelerated, if not coincidentally with the interest rate decline, then after a short lag. Notice, too, that in all cases, save for the 1991 episode, M3 growth also accelerated. The only period in which M3 growth came close to being as weak as it was in 1991 was 1969 -- a period in which interest rates were rising, and the economy was on the abyss of a recession.

Typically, sharp declines in short-term interest rates are associated with periods when the Federal Reserve is attempting to promote faster monetary and economic growth. The decline in interest rates not only induces portfolio shifts into M1 deposits, but also usually leads to a pick-up in the pace of bank acquisitions of earning assets -- i.e., securities and loans. If banks' assets are increasing, so, too, must be their liabilities, which include deposits. Thus, while M1 is likely to grow faster relative to M3 when short-term interest rates are declining, M3 also is likely to post faster growth, absolutely. During the Great Depression of the 1930s, a period of plunging short-term interest rates and massive bank failures, currency, an asset that dominates all others in terms of liquidity and the facility with which it can be used to engage in transactions, grew rapidly, while total bank liabilities contracted. In the three years ended December 1991, another period in which short-term interest rates fell sharply and a large number of depository institutions were closed, M3, a proxy for total bank and thrift liabilities, grew at an rate of 2.1% -- its slowest rate of growth in at least 30 years. M1 grew at an annual rate of 4.5% in this three-year period. Just as currency growth was a poor gauge of the accommodativeness of monetary policy in the 1930s, the performance of the economy to date suggests that M1 growth was a poor gauge in the past three years.

VII. Conclusions

In summary, the significant increase in deposit insurance-related government expenditures in the past three years appears to have played a major role in explaining the weakest growth in the broad definitions of money, M2 and M3, in the past thirty years. Although causality is always difficult to prove, economic theory suggests that this weak monetary growth was, at least, partly responsible for the weak economic growth experienced in recent years. Weak money supply growth is not necessarily a fait accompli in the presence of deposit insurance expenditures. The Federal Reserve, by allowing the federal funds rate to move sufficiently, can offset the money supply effects of changes in deposit insurance expenditures. Deposit insurance-related government expenditures, on a gross basis, in the next three fiscal years may very well be as large as the \$333 billion expended in the past three fiscal years. If so, and if the Federal Reserve fails to take actions to offset the contractionary effects of these expenditures on money supply growth, economic growth is likely to remain weak in the years immediately ahead. If weak economic growth is to be avoided, the Federal Reserve should narrow its annual monetary growth target ranges to intervals thought to be consistent with desired nominal economic growth, then it should allow the federal funds rate to move to whatever levels are necessary to accomplish its monetary growth objectives.

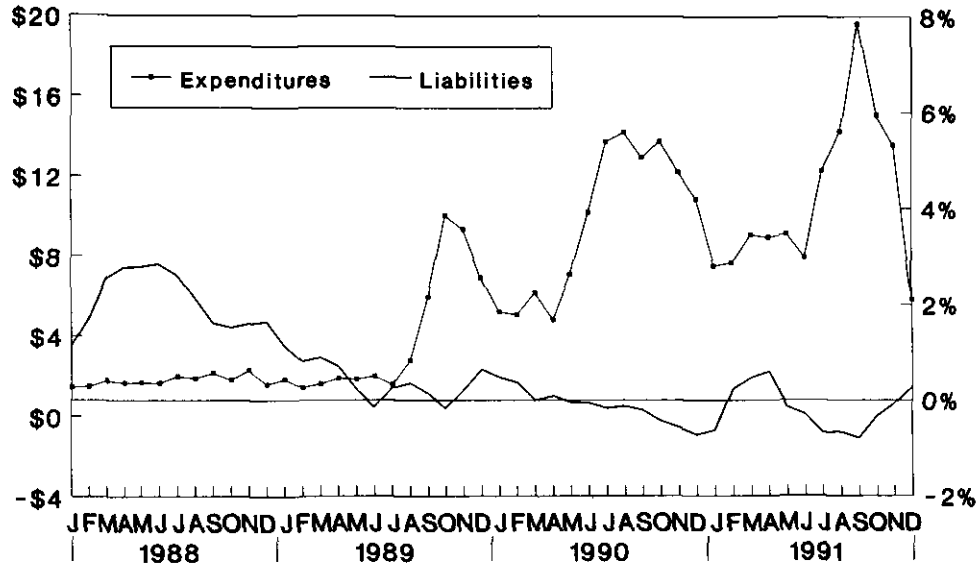
Exhibit 1

T-Accounts for the Closure of a Depository Institution

	<u>Solvent Bank</u>		<u>Insolvent Bank</u>		<u>Government</u>		<u>Federal Reserve</u>	
	<u>A</u>	<u>L</u>	<u>A</u>	<u>L</u>	<u>A</u>	<u>L</u>	<u>A</u>	<u>L</u>
I-Initial Conditions			10 Res. 90 Gov't. Dep. Insur. Liabil.	100 Dep.-Prvt.				
II-Gov't. borrows 90 to honor dep. insur. commitment		-90 Dep.-Prvt. +90 Dep.-Gov't.			+90 Dep.	+90 Sec.		
III-Gov't closes Insolvent Bank and pays off its depositors	+10 Res.	-90 Dep.-Gov't. +100 Dep.-Prvt.	-10 Res. -90 Gov't. Dep. Insur. Liabil.	-100 Dep.-Prvt.	-90 Dep. +10 Dep.@Fed -10 Dep.@Fed	-90 Dep. Insur. Liabil.	+10 Gov't. Dep. -10 Res. -10 Gov't. Dep. +10 Res.	
Net changes:	+10 Res.	+10 Dep.-Prvt.	-10 Res. -90 Gov't. Dep. Insur. Liabil.	-100 Dep.-Prvt.		+90 Sec. -90 Dep. Insur. Liabil.		
Net change in deposits in banking system:			-90					
Net change in reserves in banking system:			0					

Exhibit 2

**Gov't Deposit Insurance Expenditures*
vs. Bank/Thrift Liabilities Growth**
(3 Month Moving Average)**



109

- Gross amount
- ** Excludes IRA deposits

Exhibit 3A

Yield On 1Yr Treasury Coupon Security vs
3Mo Rolling Annualized Growth Of Monies

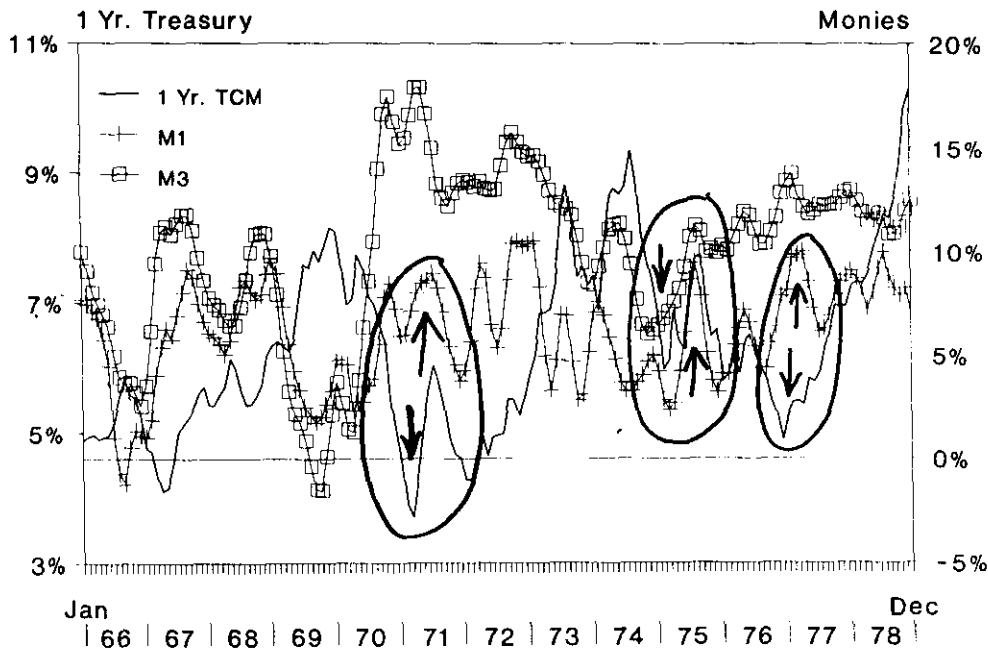
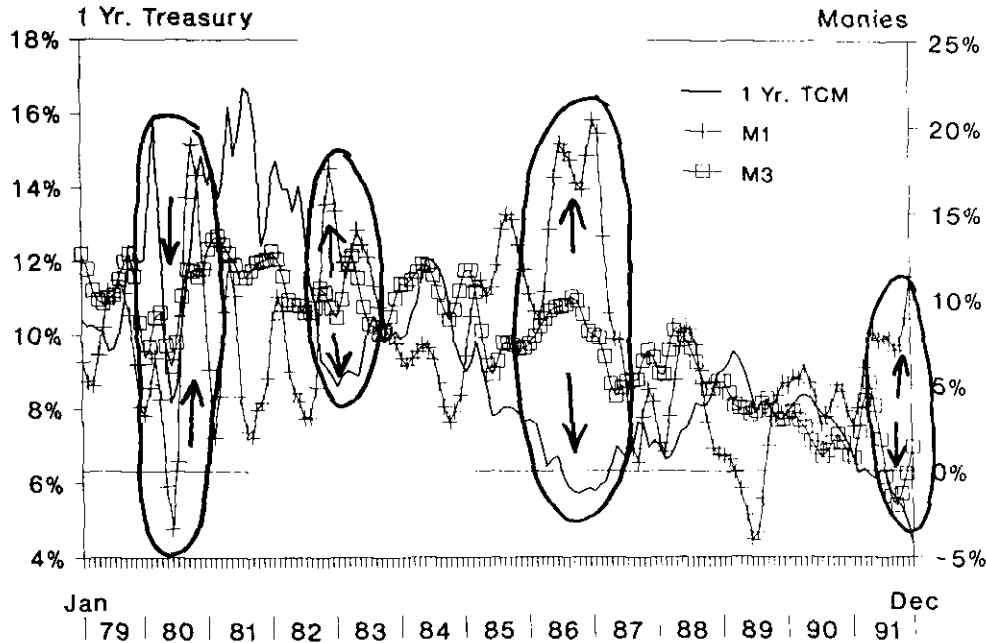


Exhibit 3B

Yield On 1Yr Treasury Coupon Security vs
3Mo Rolling Annualized Growth Of Monies



Monetary Policy and the State of the Economy

Hearings of the
Subcommittee on Domestic Monetary Policy
of the
Committee on Banking, Finance, and Urban Affairs
U.S. House of Representatives

February 18, 1992

Testimony by

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Any testimony on monetary policy given today is almost bound to be dominated by concerns over the current recession and the Federal Reserve's recent and future response. But it would be easy to get sharply conflicting evaluations from different observers. Some, for instance, might emphasize the very low growth rate of M2 during 1991 and on that basis suggest that the Fed needs to be much more aggressive in its attempts to stimulate demand. Others would emphasize that short-term interest rates are lower than they have been for 18 years and consequently suggest that the Fed is already being dangerously expansionary in its behavior.

It is my opinion that neither of these variables--M2 growth rates or levels of interest rates--is a reliable indicator for judging the appropriateness of monetary policy. In my testimony to this subcommittee in March 1988 I argued that monetary policy should be conducted according to a rule that adjusts the growth rate of the monetary base upward or downward so as to keep nominal GNP (or GDP) growing smoothly at a noninflationary rate. In line with that recommendation I would favor looking at nominal GNP growth to see if aggregate demand needs more stimulus or restraint. And changes in growth rates of the monetary base will be more informative than interest rates as to whether the Fed has been making its instrument adjustments in the right direction.

Below, I will add some remarks designed to justify the choice of these as variables to emphasize. But first let us use them to evaluate recent and current conditions. The time path of nominal GNP since 1972 is shown in Figure 1. From that plot it can be seen that from 1972 through 1980 nominal GNP growth proceeded at a rate of slightly over 10 percent per year, whereas the figure for 1981 through 1988 was about 7 percent. Consequently, the average inflation rate has been significantly lower during the years since 1982 than in the previous decade.

Over the past three years--beginning with 1989.1, that is--nominal GNP growth has averaged only about 4.5 percent per year, a drop-off that is clearly visible in Figure 1. On a year-to-year basis, the values were about 5.5 percent in 1989, 4.5 percent in 1990, and 3.5 percent in 1991. Whether this reduction in demand growth was the result of deliberate policy steps, designed to bring the inflation rate down closer to a pace that might be labelled "price stability," is unclear. And there is scope for dispute over the desirability of such steps if they were taken. But let us continue with our consideration of the current situation.

Of course one wants to end the recession, but we want to do so in a way that will tend to promote healthy, noninflationary growth in the future. The basic, enduring objective of monetary policy should be to keep total nominal spending growing smoothly at a noninflationary pace. So if we were starting from a situation with no inflation, or with perhaps one percent, we would want nominal GNP or GDP to grow at about 3-4 percent per year. But in fact our present inflation rate is about 3.5 percent, and most analysts would favor adjusting that rate downward only gradually. So over the next year nominal GNP growth should be in the vicinity of 6-7 percent. That range would be consistent with inflation of 3-3.5 percent and real growth of 3-4 percent.

In order to get nominal GNP growth of approximately 6-7 percent, the Fed will need to make the monetary base grow at that rate plus an adjustment for base velocity growth. Because base velocity has, over the past four years, been declining at about 1.5 percent per year, I would add 1.5 to the 6-7 percent figure for nominal GNP. In sum, I would conclude that the FED should now be conducting open market operations at a pace that will lead to base growth of about 7.5-8.5 percent per year. That range pertains to the adjusted monetary base as calculated by the Federal Reserve Bank of St. Louis.

The next question, naturally, is what has the Fed in fact been doing? And the answer is that recent base growth rates--say, between July 1991 and early January 1992--were 7-8 percent. During January the base grew very rapidly, so that the latest report shows a figure of 9.2 percent for the six months ending on January 22. Those numbers are from the St. Louis Fed. If instead one looks at the Board of Governor's measure of the adjusted base, the growth rates were 8.3 for the 13 week period ending in early January or 7.8 percent for the corresponding 26 weeks. Those figures also show a big surge during January.

The general conclusion provided by this view of the situation is, then, that Fed policy was just about right as of early January. At that time the monetary base was growing at a rate that would be adequate to yield about 3-4 percent real growth without changing inflation from its current rate of 3-3.5 percent. The expansionary surge that occurred during January will not alter that conclusion if it proves to have been a brief aberration. If it were allowed to continue for long, however, it would be too expansionary and would eventually give rise to additional inflation.

Having taken that brief look at the current situation, I think it is important to add a few words about the Fed's operating procedures and about the suggestion that it should adopt a more explicit and single-minded goal of price level stability. With respect to procedures, the past few years have seen a movement back toward use of the federal funds rate as the Fed's main instrument variable, as it was prior to the 1979-82 policy "experiment" during which non-borrowed reserves served in this capacity. This movement is ironic since the Fed altered its reserve regulations in 1984 so as to make control procedures based on reserve aggregates more effective. (They were not effective during the 1979-82 period because of the lagged reserve requirement provisions then in force.) Now I believe that it is in principle

possible to implement a satisfactory monetary policy while using an interest rate instrument, but it would seem to be harder to do so than if the base or some other reserve-aggregate measure were used. The problem with an interest rate is that tight monetary policy corresponds to to high interest rates from a short-run perspective but to low interest rates from a long run perspective. And it is fundamentally wrong to believe that practical affairs take place "in the short run," as many have argued. Actually, at each point of time the current situation is the resultant of "long run" effects from many earlier policy decisions as well as the short run effects of those recently taken.

I am of course aware that there are also non-trivial problems with the monetary base as an instrument, especially when currency and bank reserves are behaving differently. On balance, however, the base seems to me a better summary statistic for the impact of the Fed's actions than any other controllable variable--it increases when the Fed makes open-market purchases and decreases when it makes open-market sales. And the adjustments calculated by the St. Louis Fed or the Board of Governors take account of similar effects coming from occasional changes in reserve requirements.

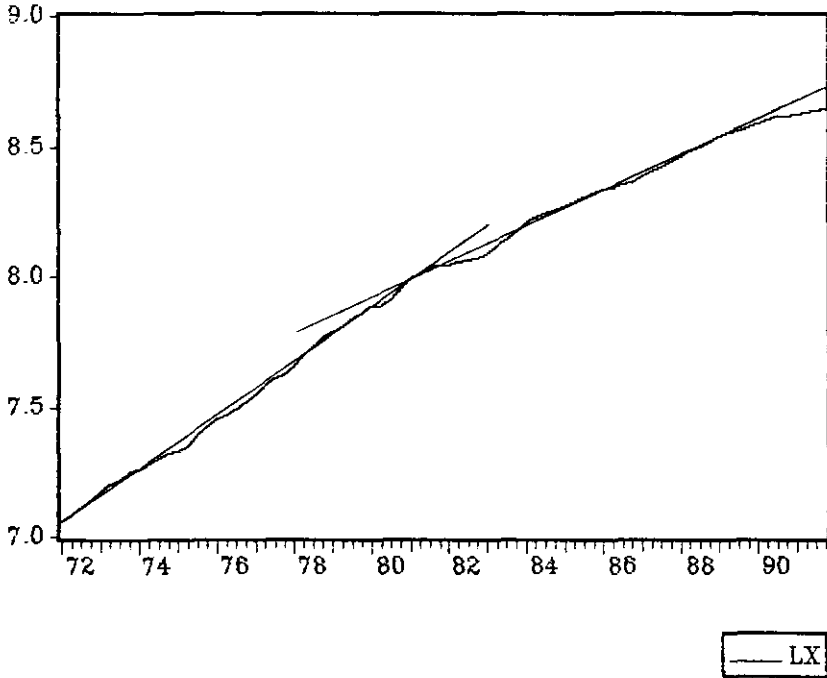
In conclusion, I would like to add a few words about the desirability of lowering the average ongoing rate of inflation from the 4.5 percent of the past decade toward a figure that is nearer to price level stability--one in the vicinity of 0-1 percent. Those who object to such a move usually do so because of the costs of the recession that they believe would be necessary to effect this reduction. But they fail to take account of implications for the frequency of future recessions. I would think that this frequency might be reduced if the inflation rate were lowered, because there will inevitably be fluctuations around the trend value that prevails and public sentiment will require a monetary contraction whenever the current rate approaches a

double-digit pace. An average value of 0-1 percent would permit fluctuations without running into rates that rightly bring forth public alarm and subsequent policy-induced recessions.

Finally, I would like to emphasize that a 4.5 percent inflation rate is far from innocuous. The U.S. instituted its first monetary standard in 1792, exactly 200 years ago. If we had averaged 4.5 percent inflation over these 200 years, a dollar would now be worth only about 1/800th of its current value! I think that sort of trend is not what the Congress or the public wants.

Figure 1

Log of U.S. Nominal GNP (\$bil), 1972-91



Testimony by

Raymond W. Stone

Managing Director, Stone & McCarthy Research Associates, Inc.

before the

Subcommittee on Domestic Monetary Policy

of the

Committee on Banking, Finance and Urban Affairs

U.S. House of Representatives

February 18, 1992

Mr. Chairman and members of the Committee, I appreciate the opportunity to share my views on the recent conduct of monetary policy, as well as a perspective on policy over the past several years. As you know, the formulation and execution of monetary policy is more of an art than a science. Thus, with the benefit of hindsight, one can occasionally find fault with past, short-run policy decisions of the Federal Reserve. Of course, both the longer-term and short-run decisions of the Federal Open Market Committee are made without the benefit of the perfect information afforded by hindsight.

With this qualification in mind, my comments that follow will address 3 issues relevant to recent and prospective Federal Reserve policy actions. First, I will discuss the "gradualistic" approach to policy characteristic of the Fed under Chairman Greenspan's tenure. Second, I will provide examples of 2 recent episodes when monetary policy fell "behind the curve." And, finally, I will highlight some prospective problems the Fed may encounter over the balance of 1992.

Gradualism and the Federal Reserve

The earmark of Federal Reserve policy adjustments since 1987 has been to make frequent, but small, adjustments to the federal funds rate. This gradualistic approach to policy has both benefits and

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drawbacks. In the January 1992 Congressional Budget Office's report to the Senate and House Committees on the Budget, it was noted that in 1991

"The gradual pace of monetary easing may have eroded its stimulative effect. The small, repeated easing measures may have created expectations of further moves, possibly causing some businesses and individuals to delay spending in hopes of getting even lower interest rates later on."

This, according to the CBO's report, may have helped delay economic recovery.

While I would agree that small changes in policy may cause businesses and households to form expectations of future adjustments, more significant steps (such as those taken by the Federal Reserve in the second half of 1982) resulted in the formation of similar expectations. Expectations of future policy adjustments are formed within the Fed-Watching community, not so much by the size of recent policy adjustments, but by the behavior of a variety of economic and financial variables. It's these expectations which are ultimately highlighted by the Press and help form impressions of businesses and consumers.

Chairman Greenspan has correctly noted that the easing of policy which began in mid-1989 should be judged in cumulative terms. Since May 1989, the federal funds rate has been reduced by roughly 6 percentage points. In 1991 alone, the Fed cut the funds rate a full 3 percentage points. In all, during this period the Federal Reserve has eased policy on 21 occasions--19 of which were 1/4% adjustments.

The benefit of small but frequent adjustments in policy is that the weight of economic and monetary evidence necessary to justify a change in rates can be less than associated with bold actions. As a consequence, using Chairman Greenspan's phrase, it is easier for the Fed to stay "ahead of the curve." Furthermore, since policy decisions are made without the benefit of hindsight and every action or inaction may prove later to be a mistake, the small steps minimize the size of the potential policy error.

Another benefit of the gradualistic approach to policy is that small adjustments to the fed funds rate are possible without necessarily being so obvious as to be discomfoting to the foreign exchange markets, or to raise unwarranted concerns regarding the Fed's anti-inflationary resolve.

The primary disadvantage of making many small adjustments rather than a few bold moves is the lack of a significant announcement effect. Occasionally it may be deemed appropriate to send a strong signal of Federal Reserve intentions to reassure financial markets or the public of the Fed's commitment to economic growth in periods such as we have recently experienced. Conversely, it may also be appropriate to reinforce the Fed's anti-inflationary resolve during periods in which economic activity may appear steamy and associated with inflationary bottlenecks.

The Federal Reserve, while mostly taking small steps, has on occasion in recent years taken larger, more significant steps. The

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most recent was the December 20 1% cut in the discount rate and the associated 1/2% cut in the federal funds rate. This move had the benefit of triggering a general 1% drop in prime lending rates, and caused a significant rally in the stock market. While the benefits of this rate reduction have yet to be felt in their entirety, I sense that the impact will prove to be more profound than perhaps the cumulative impact of 2 smaller adjustments.

There remains one final note on gradualism at the Fed. Since it is easier to reach a consensus within the FOMC for small policy adjustments rather than larger changes, there is the risk that the Fed may unintentionally become guilty of attempting to "fine tune" the economy. Counter-cyclical policies are appropriate in dampening the amplitude of business cycles, but should not be embraced as a tool to do away with the cycle; for business cycles have a tendency to naturally purge excesses from the system. These excesses can be inflationary, as was the case in the late 1970s. Or, they can take the form of creating the environment wherein both household and corporate balance sheets become over-leveraged thereby rendering them more vulnerable to whatever eventual slowdown may unfold. This, of course, is a problem that developed during the late 1980s, and is at least partially responsible for the unsatisfactory economic performance of the early 1990s.

One constraint against unwarranted "fine tuning," which should be taken seriously by both the Federal Reserve and this Committee, is

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the discipline of setting targets for monetary growth each year. The targets should be viewed not only in terms of providing for a seemingly appropriate pace of economic activity, but they should also be seen as a check against straying from the longer-term objectives of policy in favor of short-term fine tuning. The targets present a balance in which short-term policy can be set in a longer-term context. This is a particularly significant consideration during a Presidential election year.

Recent Episodes When The Fed Fell "Behind the Curve"

Generally speaking, the Federal Reserve deserves high marks for the conduct of policy in recent years. Actions taken in the immediate aftermath of the October 1987 stock market crash served to calm financial markets and to keep the temporary financial dislocations from significantly impacting on real sector activity. The cumulative easing of monetary policy since mid-1989 has undoubtedly lessened the severity of the recession. Furthermore, recent actions--including the December 20, 1991 full 1 % cut in the discount rate--have encouraged a greater awareness on the part of the public of the relatively low level of interest rates, including those on mortgages. This, in turn, is largely responsible for what appears to be a recent improvement in housing activity.

Nevertheless, there have been occasions in recent years in which I feel the Fed has fallen behind the curve. The first such occasion

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took place during the late winter and early spring of 1990. Many of the economic numbers released during that period were skewed by unusual events. A frigid December 1989, followed by an unusually warm January, played havoc with the economic reports. The December freeze caused oil demand to rise, resulted in refinery problems in Louisiana and Texas, and ultimately triggered a sharp rise in fuel prices. In addition, the December freeze resulted in extensive crop damage in Florida and Texas rendering hefty increases in prices of fresh fruits and vegetables. These factors taken together resulted in substantial gains in both the CPI and PPI which didn't wash out until several months later.

Other economic barometers were distorted as well. The frigid December followed by the warm January caused a significant rise in housing starts and construction employment. A variety of other measures of economic vitality were also skewed by the special circumstances.

The Federal Reserve appeared to be fooled by these data. The easing of policy that began in mid-1989 was halted in December 1989, and the policy reins were held steady until July 1990. According to the minutes of the March 27, 1990 FOMC meeting, two members actually dissented in favor of a more restrictive bias. In retrospect, the Federal Reserve easing that began in mid-1989 should not have been interrupted by data which were clearly distorted. Had interest rates been somewhat lower going into the recession, the loss of output, incomes, and jobs may have been lessened.

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The second episode of Fed policy falling behind the curve took place in the spring of 1991. With the ending of the Gulf War, consumer confidence surged. A variety of economic time series revealed improvement in the months that followed. The Fed, faced with seemingly improved economic numbers, became less aggressive in the march towards lower rates. The frequency of the small policy adjustments slowed.

What the Fed didn't fully appreciate, however, was that the seemingly improved pace of economic activity was largely the result of an exercising of the pent-up demand for goods that accumulated between August 1990 and February 1991 when consumers postponed spending due to the uncertainty of the consequences of the Gulf Crisis. After this pent-up demand was soon exhausted, it became apparent that still lower interest rates were appropriate and the frequency of the easing moves increased. Had the Fed appreciated the fact that the improvement in the economic data in the spring of 1991 was temporary, they may have eased more aggressively which may have forestalled the economic lull that befell the country in the second half of the year.

Prospective Problems for Monetary Policy in 1992

With the unfolding of 1992, most of the economic reports remain weak. Payroll employment fell by 91,000 workers in January. Car sales continue to hover around the cyclical lows. Consumer confidence remains depressed.

Conversely, unofficial reports from home builders and realtors have become more upbeat. It appears as if housing activity is poised to improve in a sustainable fashion over the months ahead.

The Fed, however, is faced with a particularly difficult set of circumstances. With 1992 being a Presidential election year, there is a natural inclination for the central bank to take a low profile. Whatever prospective policy adjustments might be deemed necessary in the months ahead may be enacted earlier than otherwise to divorce monetary policy from pre-election political considerations.

Although, I view the thrust of monetary policy as not having been aggressive enough in the spring of both 1990 and 1991, I fear there is some risk that the Fed may over-stimulate activity in the months ahead. The Fed's classic mistake has been easing too long into a recovery. This is a mistake that is easily repeated in an election year.

This risk poses a responsibility for this Committee. The safeguards against too stimulative a monetary policy include the 1992 targets for the monetary aggregates. Some have argued that the target for M2 and M3 should be raised to account for the poor performance of these aggregates in 1991. M2 came in at the bottom of its 2-1/2% to 6-1/2% range, as did M3 to its 1% to 5% range.

While I concur with the notion that the growth target for M2 should be set with an eye on the desired pace of nominal GDP growth, I do not think raising the 1992 M2 target range to account for the underperformance in 1991 is prudent for two reasons. First, it might

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be construed as a lessening of the Fed's anti-inflationary resolve, especially in an election year. Second, the upper end of the preliminary 1992 M2 target, (2-1/2% to 6-1/2%) should allow for acceptable monetary and economic expansion. In my opinion, the Fed should welcome growth towards the upper bound of the target. Raising the range, however, while providing the Fed with added leeway to stimulate activity, may inappropriately intensify the political pressure to spur growth.

Should the pulse of economic activity remain unsatisfactory in the months ahead, it may become desirable to allow monetary expansion to violate the upper bounds of the preliminary 1992 targets. If this occurs, the FOMC can review raising the targets in July. But for the first half of the year, the targets should provide the Fed with a welcomed dose of discipline.

APPENDIX

February 19, 1992

(129)

RICHARD E. NEAL
SECOND DISTRICT, MASSACHUSETTS

COMMITTEE ON SMALL BUSINESS
SUBCOMMITTEE ON REGULATION,
BUSINESS OPPORTUNITIES AND ENERGY



Congress of the United States
House of Representatives
Washington, DC 20515
February 19, 1992

COMMITTEE ON BANKING
FINANCE AND URBAN AFFAIRS
SUBCOMMITTEE ON FINANCIAL
INSTITUTIONS SUPERVISION, REGULATION
AND INSURANCE
SUBCOMMITTEE ON INTERNATIONAL
DEVELOPMENT, FINANCE, TRADE AND
MONETARY POLICY
SUBCOMMITTEE ON HOUSING AND
COMMUNITY DEVELOPMENT

Mr. Chairman, first of all, I would like to say that I am extremely interested in hearing Chairman Greenspan's outlook for the economy and more importantly the action the Federal Reserve plans on taking in the area of monetary policy during the next six months.

Chairman Greenspan, for over two years now I have been very outspoken about the credit crunch. I started hearing from local businesses that they were unable to obtain credit or the line of credit was being called. I am referring to solid businesses that were current on all their payments. About a year ago, businesses in other parts of the country were starting to make similar complaints. It was not until last fall that a credit crunch was officially announced and it was not until December 20, 1991 that the Fed cut the discount rate a full percentage point, from 4.5% to 3.5%. I realize this was a significant cut and the discount rate has not been this low since November of 1964.

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However, I believe that his action came too late. This latest cut in the discount rate had an immediate impact on the economy. Several banks cut their prime lending rate and this impacted mortgage and consumer loans and the stock market rallied. Individuals began to restructure their finances and reduce their debt. Most economists believe that it takes about six months before an interest rate cut can stimulate the economy and therefore, we will not know until May the full effects of the cut of the discount rate had on the economy. I cannot help but wonder why the Fed waited til December to cut the discount rate by a full percentage point. I realize that the Fed has been gradually lowering the discount, but I do not think enough action was taken soon enough.

The Federal Reserve has been obsessed with inflation and has not addressing immediate concerns. The Federal Reserve was not in touch with the consumer. Debt and taxes are high. Home values have fallen and job insecurity has not been this high since the Depression. The tight- fisted policies of the Federal Reserve did not reflect what was happening to the average consumer. The recession is longer and deeper than it had to be. Tight monetary policy was one of the major causes of this recession, especially in the New England region. Reserve growth did not occur at a high enough rate.

Dead in the water is the most accurate way of describing our economy. Chairman Greenspan, last July, you came before us and gave your reported growth rate ranges for M2 and M3. In addition,

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you gave the impression economic activity was picking up in a broad based manner, and that the growth of Gross Domestic Product (GDP) was expected to about 1% for 1991 and unemployment would be lower than 6.8%. In reality, unemployment is at a recession high of 7.1% and your forecast for the economy was not accurate. January economic data still shows a weakened economy. I look forward to hearing what your economic forecasts and more importantly, what actions the Fed plans on taking to get our economy growing again. I believe monetary policy and not fiscal policy provides the answers to our economy's problems. We need to have an increase in M2 growth to recover. I want to be able to tell the people of New England that positive steps are being taken to end this recession.

For release on delivery
10:00 a.m., E.S.T.
February 19, 1992

Testimony by

Alan Greenspan

Chairman, Board of Governors of the Federal Reserve System

before the

Subcommittee on Domestic Monetary Policy

of the

Committee on Banking, Finance and Urban Affairs

U.S. House of Representatives

February 19, 1992

Mr. Chairman and members of the Committee. I am pleased to present the Federal Reserve's Monetary Policy Report to the Congress. The policy decisions discussed in the report were made against the backdrop of a troubled economy. The recovery that seemed to be in train at the time of our last report to Congress stalled, job losses have mounted, and confidence remains low.

Looking forward, though, there are reasons to believe that business activity will pick up. Indeed, anecdotal reports and early data seem to be indicating that spending is starting to firm in some sectors. In addition, a number of measures suggest that the balance sheets of many households and businesses have been strengthened, a development that will facilitate spending in the recovery. Similarly, banks and other lenders have taken steps to bolster their capital positions so that they will be able to supply the credit to support additional spending. And, most recently, broad measures of money have strengthened. Moreover, there are clear signals that core inflation rates are falling, implying the prospect that within the foreseeable future we will have attained the lowest rates of inflation in a generation, an encouraging indicator of future gains in standards of living for the American people. Still, the outlook remains particularly uncertain.

As background, I would like to discuss our recent economic performance, reviewing in some detail the causes of the disappointments we've experienced, and the important balance-sheet adjustments in process that promise eventually to support a resumption of sustainable economic growth.

Macroeconomic Performance and Monetary Policy in 1991

Following the contraction of economic activity in the autumn of 1990 that resulted from the invasion of Kuwait and the subsequent

sharp rise in oil prices, economic activity continued to decline in the first quarter of 1991. In response to the weakening of activity and anemic money growth, the Federal Reserve eased policy substantially over late 1990 and into early 1991.

By the spring, many signs pointed to economic recovery. The quick and successful conclusion of the Gulf war bolstered consumer confidence. Growth of the money stock was strengthening. Homebuilding had begun to stir, consumer spending had turned up, and industrial production was advancing. The lower interest rates and the retracing of the earlier jump in oil prices appeared to be providing support for an expansion of aggregate demand. In these circumstances, the odds appeared to favor a continued moderate recovery in jobs and employment during 1991.

Over the third quarter, however, evidence began to surface that the recovery had not taken hold. The impetus to consumer sentiment and spending that was provided by the completion of the Gulf war seemed to ebb, and consumer outlays turned down again. Businesses, apparently caught by surprise by this development, saw their inventories back up in the late summer and fall. With demand slackening, businesses engaged in another round of layoffs, and private nonfarm payrolls declined over the second half of 1991 while the civilian unemployment rate rose to 7.1 percent.

In addition, growth of the monetary aggregates slowed unexpectedly during the third quarter. Expansion of M2 virtually ceased, while M3 actually contracted--a nearly unprecedented occurrence. Judging from our surveys of banks, other contacts in the financial industry, and anecdotal information from borrowers, the supply of credit for many borrowers remained quite tight, particularly for those

firms without access to open market sources of funds. Moreover, private credit demands weakened further.

Against this background, and with signs that inflationary pressures were diminishing, the Federal Reserve took a number of steps to ease policy further in the second half of 1991. Through both open market operations and reductions in the discount rate, money market interest rates were lowered nearly two percentage points between August and December.

These monetary policy actions, building on those over the previous 2-1/2 years, have resulted in a large cumulative reduction of interest rates. The federal funds rate has declined nearly 6 percentage points from its cyclical peak, and the discount rate by 3-1/2 percentage points. Other short-term interest rates have fallen substantially as well. The prime rate also has been reduced appreciably, but by somewhat less than market rates as commercial banks have sought to bolster lending margins. In longer-term markets, bond and mortgage yields have dropped about 1-1/4 percentage points on balance from their cyclical highs, with much of the decline coming in the latter half of 1991. The decreases in interest rates appear to have given stock prices a boost as well, with most major indexes rising to record levels early this year.

Despite substantial decreases in interest rates in late 1990 and throughout 1991, however, M2 growth was only about 3 percent in 1991, the same as the sluggish pace of expansion of nominal GDP. M3 rose only 1-1/4 percent. Both aggregates ended the year only modestly above the lower bounds of their respective annual ranges. Growth of domestic nonfinancial sector debt, at 4-3/4 percent, also was near the lower bound of its monitoring range. Outside the federal sector, debt increased less than 3 percent for the year in reflection not only of

depressed spending but also of a deleveraging in the household and business sectors and financial difficulties of many state and local governments.

The behavior of the monetary aggregates in 1991 relative to other economic variables was somewhat puzzling. Doubtless, part of the slow money growth was related to the weakness in borrowing and spending. But even after taking account of weak spending, growth of money was unusually slow. The velocity of M2 was about unchanged over the year rather than falling as would ordinarily be expected in circumstances of sharp declines in short-term market interest rates. It appears that certain interest rate relationships gave households incentives to limit their money holdings. Commercial banks, restraining their own balance sheets in response to weak loan demand and in an attempt to conserve capital, lowered deposit interest rates appreciably, especially late in the year. On the other hand, interest rates on consumer debt, particularly when adjusted for the lack of tax-deductibility, remained relatively high. As a result, many households apparently used deposit balances to pay off or to avoid taking on consumer credit. Also, the steep yield curve and the attractive returns recorded by bond mutual funds, as well as impressive gains in the stock market, apparently led many households to shift funds out of deposits and into capital market instruments, which are not included in the monetary aggregates.

Finally, a brisk pace of activity by the Resolution Trust Corporation appears to have depressed the monetary aggregates, especially M3. When the RTC takes savings and loan assets onto its own balance sheet, they are financed with Treasury securities, rather than depository liabilities. In effect, the RTC has taken on some of the role of thrift institutions, but its liabilities are not included in

the monetary aggregates. In addition, the disruption of banking relationships as institutions are resolved, including the abrogation of some time deposit contracts, seems to lead investors to reassess their portfolio allocation and, in some cases, to shift funds out of deposits.

Thus, a number of factors reduced the public's demands for monetary balances in 1991. Some of these factors tended to raise the velocity of money, so that to an extent slow growth of M2 was not reflected in income flows. But the pattern of money and credit growth over the the last half of the year appeared also to stem importantly from forces depressing spending and economic activity, which the Federal Reserve attempted to counter through easing money market conditions.

Balance Sheet Adjustments

Understanding these forces and the appropriate role for monetary policy under the circumstances requires stepping back several years. As I have discussed with you previously, the 1980s saw out-sized accumulation of certain kinds of real assets and even more rapid growth of debt and leverage. To a degree, this buildup of balance sheets was a natural and economically efficient outcome of deregulation and financial innovation. It also may have reflected a lingering inflation psychology from the 1970s--that is, people may have expected a rapid increase in the general price level, and especially in the prices of specific real assets, such as real estate properties, that would make debt-financed purchases profitable. But in retrospect, the growth of debt and leverage was out of line with subsequent economic expansion and asset price appreciation. Indeed, the burden of debt relative to income mounted as asset values, especially for real pro-

perty, declined or stagnated. In part, our current economic adjustments can be seen as arising out of a process in which debt is being realigned with a more realistic outlook for incomes and asset values.

Rapid rates of debt-financed asset accumulation were broad-based during the 1980s. For example, households purchased cars and other consumer goods at a brisk pace. Although household income was increasing swiftly in this period, the growth of expenditures was faster. Household saving rates dropped from about 8 percent at the beginning of the decade to a 4 to 5 percent range by its end. This was reflected in part in burgeoning consumer installment credit, which expanded at an average annual rate of 15 percent between 1983 and 1986. In addition, mortgage debt expanded at an 11 percent pace between 1983 and 1989. Most of this increase was against existing homes, representing borrowing against rising values either in the process of home turnover or as owners borrowed against higher equity. Mortgage borrowing also financed a substantial amount of buying of new homes, which in some parts of the country at times seemed to be motivated more by speculative considerations than by fundamental needs.

The 1980s also witnessed a dramatic increase in desired leverage of the business sector, which fostered a wave of mergers and buyouts. These transactions typically involved substantial retirements of equity financed through issuance of debt; equity retirements in the nonfinancial corporate sector exceeded new equity issuance by a staggering \$640 billion in the 1984-1990 period. Such restructurings often were based, at least in part, on a well-founded quest for increased efficiency, and gains were achieved by a number of firms. However, many of these deals also were predicated on overly optimistic assumptions about what the economy could deliver--that rapid economic

growth could continue without setback and that asset prices would always rise.

A primary example of the accumulation of debt and real assets occurred in commercial real estate markets. In the early 1980s, when space was in unusually short supply, commercial real estate received an additional push from the Economic Recovery Tax Act, which provided an acceleration of depreciation allowances for capital goods. While an adjustment was appropriate and overdue, that for commercial structures was excessive, resulting in tax lives that were far shorter than economic fundamentals would dictate. This shift in incentives led to a surge in debt-financed commercial construction during the 1980s.

Financial institutions, of course, participated in this process by lending heavily; indeed, their aggressive lending behavior probably contributed to the speed of debt accumulation. During the economic expansion, bank credit expanded at an average annual rate of nearly 9 percent, well in excess of the growth of nominal income. Banks lent heavily against real estate collateral, for corporate restructurings, and for consumer credit, and, in addition, for more traditional business purposes. Life insurance companies also expanded their portfolios rapidly, with growth in real estate loans especially prominent.

By the end of the 1980s, the inevitable correction was upon us. The economy was operating close to capacity, so that growth had to slow to a pace more in line with its long-run potential. Inflation did not pick up much, contrary to what some might have expected as capacity was approached. In the commercial real estate sector, soaring vacancy rates and a change in tax law in 1986 brought the boom to an end, producing sharp decreases in prices of office buildings in particular.

Together, these developments resulted in declines in the value of assets and growing problems in servicing the associated debt out of current income. Because of the runup in leverage over previous years, these problems have been more severe than might be expected just from the slowing in income and spending. And the difficulties of both borrowers and lenders have fed back on spending, exacerbating the economic downturn during the Gulf crisis, and inhibiting the recovery.

Faced with mounting financial problems and uncertainty about the future, people's natural reaction is to withdraw from commitments where possible and to conserve and even build savings and capital. Both households and businesses, concerned about their economic prospects, over the past two years or so have taken a number of measures to reduce drains on their cash flow and to lower their exposure to further surprises. Part of this process has involved unusually conservative spending patterns and part has involved the early stages of a restructuring of financial positions.

Businesses, for example, have strived to reduce fixed costs. To do this, they have cut back staffing levels and closed plants. They have tried to decrease production promptly to keep inventories in line. Firms also have taken steps to lower their risk exposures by restructuring their sources of funds to reduce leverage, enhance liquidity, and cut down on interest obligations.

The response of households has been analogous. To increase their net worth, households have taken steps to increase their savings by restraining expenditures. To reduce interest expenses, they have paid down consumer debt, and as long-term interest rates have declined, they have refinanced mortgages and other debt at lower interest rates.

Lenders too have drawn back. With capital impaired by actual and prospective losses on loans, especially on commercial real estate, banks and other intermediaries have not only adopted much more cautious lending standards, but also have attempted to hold down asset growth and bolster capital. They have done so in part by aggressively reducing what they pay for funds, by more than they have reduced what they charge for credit. Like other businesses, they have taken steps to pare expenses generally, including reducing work forces and looking for cost-saving consolidations with other institutions. To a considerable extent, this response has been rational and positive for the long-term health of our financial intermediaries. But in many cases it seems to have gone too far, impelled to an extent by the reaction of supervisors to the deteriorating situation.

The Federal Reserve has taken a number of measures to facilitate balance sheet restructuring and adequate flows of credit. Together with other supervisors, we have directed examiners to consider not only the current market value of collateral against performing loans, but the overall quality of the credits. We also have met on numerous occasions with bankers as well as bank examiners to clarify bank supervisory policies and to emphasize the importance of banks continuing to lend and take reasonable risks.

Monetary policy also has in part been directed in recent quarters to supporting balance sheet restructuring that is laying the groundwork for renewed, sustained, economic expansion. We recently reduced reserve requirements on transactions deposits. This will free up some funds for lending or investment and should over time enhance the ability of banks and their customers to build capital.

In addition, lower short-term interest rates clearly have been helpful to debtors, but their contribution to the restructuring

process would be relatively muted if long-term rates had not also declined at the same time and stock prices were not buoyant. Reductions in short-term rates that were expected very soon to be reversed or that were not seen as consistent with containing inflation would contribute little to the strengthening of balance sheets fundamental to enhancing our long-term economic prospects.

In part because we have seen declines in long- as well as short-term rates and increases in equity prices, progress has been made in balance sheet restructuring, and hopefully more is in train. As a result of lower interest rates, household debt service as a percent of disposable personal income has fallen in the past year, from about 19-1/2 to about 18-1/2 percent. Moreover, further declines are in prospect as more refinancing occurs and as interest costs on floating-rate debt, such as adjustable-rate mortgages, gradually reflect current interest rates.

In the business sector, similar patterns can be observed. With corporate bond rates close to their lowest levels in more than a decade, a large number of firms in recent months have called, retired, and replaced a considerable volume of high-cost debt. A flood of issuance of longer-term debt and equity shares has reduced dependence of firms on short-term obligations. A number of the equity deals constituted so-called "reverse LBOs"--the deleveraging of highly leveraged and therefore rather risky firms. The ratio of corporate debt to equity in book value terms has only begun to edge down, but the increase in equity, together with the lower level of interest rates, has enabled many corporations to make significant headway in lowering interest expenses over the past two years, and further decreases in corporate debt burdens are presumably in prospect. Restraint on inventories and other spending has contributed to this

result by keeping outlays in close alignment with internally generated funds. And the strengthening of balance sheets is paying off in terms of credit evaluations. Downgrades of nonfinancial firms, though still greater than upgrades, are well below the levels of last winter and spring, and upgrades have risen slightly.

The condition of our financial institutions also is improving. In the banking sector, wider interest margins seemed to be boosting profits by the end of last year. In addition, many institutions have taken difficult but necessary measures to control noninterest expenses. Reflecting an improved earnings outlook and a generally favorable equity market, the stock prices of large banks have doubled on average from their 1990 lows, and the premium paid by many money-center banks on uninsured debentures has dropped several percentage points. Increased share prices have spurred a number of holding companies to sell substantial volumes of new equity shares in the market, contributing to a significant rise of capital ratios in the banking system, despite still-large provisions for loan losses. Measures of bank liquidity, such as the ratio of securities to loans in bank portfolios, have risen appreciably, signalling an improved ability of banks to lend.

The balance-sheet adjustments that are in progress in the financial and nonfinancial sectors alike are without parallel in the post-war period. Partly for that reason, assessing how far the process has come and how far it has to go is extraordinarily difficult. As increasingly comfortable financial structures are built, though, the restraint arising from this source eventually should begin to diminish. In any case, the nature and speed of balance sheet restructuring are important elements that we will need to continue to

monitor on a day-by-day basis in assessing whether further adjustments to the stance of monetary policy are appropriate.

Economic Expansion and Money and Credit Growth in 1992

Against this background of significant progress in balance-sheet strengthening as well as lower real interest rates, the Board members and Reserve Bank Presidents expect a moderate upturn in economic activity during 1992, although in the current context the outlook remains particularly uncertain. According to the central tendency of these views, real output should grow between 1-3/4 and 2-1/2 percent this year. The unemployment rate is projected to begin declining, finishing the year in the vicinity of 6-3/4 to 7 percent.

An especially favorable aspect of the outlook is that for inflation. The central tendency of the Board members' and Reserve Bank Presidents' forecast is that inflation, as measured by the Consumer Price Index, will be in the neighborhood of 3 to 3-1/2 percent over the four quarters of 1992, compared with a 3 percent rise in 1991. However, the CPI was held down last year by a retracing of the sharp runup in oil prices that resulted from the Gulf crisis. Consequently, our outlook anticipates a significant improvement in the so-called core rate of inflation. With appropriate economic policies, the prospects are good for further declines in 1993 and beyond even as the economy expands.

To support these favorable outcomes for economic activity and inflation, the Committee reaffirmed the ranges for M2, M3, and debt that it had selected on a tentative basis last July--that is, 2-1/2 to 6-1/2 percent for M2, 1 to 5 percent for M3, and 4-1/2 to 8-1/2 percent for debt, measured on a fourth-quarter-to-fourth-quarter basis. These are the same as the ranges used for 1991. The 1992 ranges were chosen against the backdrop of anomalous monetary behavior during the

last two years. Since 1989, M2 has posted widening shortfalls from the levels historical experience indicates would have been compatible with actual nominal GDP and short-term market interest rates.

The appropriate pace of M2 growth within its range during 1992 thus will depend on the intensity with which forces other than nominal GDP turn out to affect money demand. Depository institutions are likely to continue reducing their rates on retail deposits in lagged response to the steep declines in money market yields before year-end. Those deposit-rate reductions could be significant, especially if banks are not seeking retail deposits, given their continued caution in extending credit and borrowers' continued preference for longer-term sources of credit to strengthen balance sheets. With the effects of lower deposit rates contributing to further shifts of funds into longer-term mutual funds and into debt repayment, and with the RTC remaining active in resolving troubled thrifts, the velocity of M2 could increase this year, independently of changes in market interest rates.

The ongoing restructuring of depository institutions, as in the last two years, is likely to continue to have an even larger influence on M3 than on M2 growth. Assets previously on the books of thrifts that are acquired by the RTC will be financed by Treasury debt rather than the liabilities of thrifts. Managed liabilities in M3 should continue to be more depressed by resolution activity than retail CDs. The reaffirmed range for M3 growth thus remains lower than for M2.

Nonfinancial debt growth is likely to be a little faster than last year's 4-3/4 percent increase. The wider federal deficit in prospect for 1992 will increase Treasury borrowing. Assuming output and incomes are again expanding, balance sheets in somewhat better

condition, and credit conditions no longer tightening, the borrowing of households and businesses may pick up a little, although their overall posture probably will remain cautious.

Will these ranges for money and credit growth prove to be appropriate? Obviously, we believe that the answer is yes. But I should reemphasize the sizable uncertainties that prevail. The ongoing process of balance sheet restructuring may affect spending, as well as the relationship of various measures of money and credit to spending, in ways we are not anticipating. In assessing monetary growth in 1992, the Federal Reserve will have to continue to be sensitive to evolving velocity patterns.

Concluding Comments

Our focus, quite naturally and appropriately, has been on our immediate situation--the causes of the recent slowdown and the prospects for returning to solid growth this year. However, as we move forward, we cannot lose sight of the crucial importance of the longer-run performance of the economy. As I have noted before, much of the difficulty and dissatisfaction with our economy comes from a sense that it is not delivering the kind of long-term improvement in living standards we have come to expect. The contribution of monetary policy can make to addressing this deficiency is to provide a financial background that fosters saving and investment and sound balance sheet structures. Removing over time the costs and uncertainties associated with ongoing inflation encourages productivity-enhancing investment. Moreover, inflation tends to promote leverage and over-accumulation of real assets as a hedge against increases in price levels; progress toward price stability provides a backdrop for borrowing and lending decisions that lead to strong balance sheets, far less apt to magnify economic disturbances.

A crucial aspect of our recent economic performance is the difficult situation of our financial sector. Clearly, some of the weakness of the economy over the past two years arose from the restraint on the supply of credit--the so-called credit crunch. Both depository institutions and other financial intermediaries made some of the same mistakes of judgment about the likely appreciation of asset prices as did borrowers. In addition, though, the balance sheets of many financial intermediaries themselves were not robust: many lacked adequate capital to continue to lend to good credit risks in the face of losses from their previous lending mistakes. Our emphasis on improving the capitalization of depository institutions over time, where we have already made substantial progress, should help bolster their ability to lend both in good times and bad. We could make further strides in strengthening our depository institutions through removal of outmoded constraints on their behavior. By loosening strictures on the ability of these firms to compete across arbitrary boundaries of product line and geography, we would improve their profitability and capital. Their strengthened position should augment their ability to lend and potentially could reduce demands on the federal safety net.

Finally, we should consider carefully the effects of the extremely low rates of national saving that we have experienced for a decade. Certainly, low personal and corporate saving rates have contributed to the deterioration in balance sheets that has impaired our economic performance in recent years. The large stocks of federal debt that have been built up, too, likely have adversely affected our economic prospects by putting upward pressure on real interest rates and thus stunting the growth of the capital stock, on which our future incomes depend. In considering the various fiscal options that are

before you as members of the Congress. I urge you to keep in mind their long-term implications for national saving. Through a combination of fiscal policies directed at reducing budget deficits and boosting private saving and monetary policies aimed at noninflationary growth, we can achieve the strong economic performance that our fellow citizens rightly expect.

**For use at 10:00 a.m., E.S.T.
Wednesday
February 19, 1992**

Board of Governors of the Federal Reserve System



**Monetary Policy Report to the Congress
Pursuant to the
Full Employment and Balanced Growth Act of 1978**

February 19, 1992

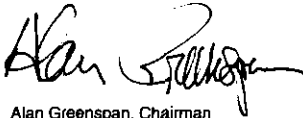
Letter of Transmittal

BOARD OF GOVERNORS OF THE
FEDERAL RESERVE SYSTEM
Washington, D.C., February 19, 1992

THE PRESIDENT OF THE SENATE
THE SPEAKER OF THE HOUSE OF REPRESENTATIVES.

The Board of Governors is pleased to submit its Monetary Policy Report to the Congress, pursuant to the Full Employment and Balanced Growth Act of 1978.

Sincerely,

A handwritten signature in black ink, appearing to read "Alan Greenspan", written over a horizontal line.

Alan Greenspan, Chairman

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Section 1: Monetary Policy and the Economic Outlook for 1992

When the Federal Reserve presented its midyear monetary policy report to Congress last July, a moderate economic upturn was under way. Consumer spending and housing activity had risen considerably since the winter, bolstered by the decline in oil prices, by a rebound in consumer confidence in the wake of the allied victory in the Persian Gulf conflict, and by lower interest rates. Inventories had been trimmed appreciably, orders were rising, and businesses, while still cautious, had begun to increase employment and production. The key monetary aggregates had accelerated and were around the middle of their 1991 target ranges. With the stance of monetary policy seemingly conducive to an upturn in economic activity, the Federal Reserve, after having progressively reduced pressures on reserve positions earlier in the year, maintained a more neutral money market posture in the spring and early summer.

As the year wore on, however, the incipient recovery lost its momentum. Consumer spending turned down, and business and consumer sentiment began to erode. Inventories at wholesale and retail trade establishments began to increase relative to sales, inducing a new outbreak of production adjustments and layoffs that continued through year-end. Although the economy—as measured by its real gross domestic product—continued to grow in the second half of the year, the pace of expansion was only marginally positive.

The faltering of the recovery process apparently owed to a variety of forces, some of which were operating well before the oil price shock of 1990 tipped the economy into recession. In a sluggish economy and amid unexpectedly weak asset values—particularly in real estate—deteriorating financial positions of debt-laden households and corporations further damped credit demands and aggregate spending. Financial intermediaries, chastened by their negative experience with earlier loans, became more hesitant about extending new credit; the resultant tighter lending standards deepened the slowdown in economic activity and inhibited the subsequent recovery. In the government sector, where deficits remained large, not only at the federal level, but also in many state and local jurisdictions, efforts to curb spending and increase revenues constituted a further drag on aggregate demand in the short run.

Inflation, meanwhile, moved down over the second half of 1991. Weak demand reduced pressures in both

labor and product markets, and, after some acceleration of wages and prices in 1989 and 1990, an underlying disinflationary trend has now been established. Important in this process has been a reduction in inflation expectations, visible not only in a variety of survey data but also in the behavior of securities markets.

With actual and prospective inflationary pressures easing, economic activity flagging, and the broader monetary aggregates weakening and growing near the bottom of their target ranges, the Federal Reserve resumed easing money market conditions in the second half of the year. As a result, the federal funds rate fell from 5¾ percent in July to 4 percent by year-end, and most other short-term rates followed suit; the discount rate was also reduced over this period, from 5½ percent to 3½ percent, the lowest rate in nearly 30 years. Long-term interest rates, which had failed to respond to declines in money market rates in the early months of the year, came down significantly in the latter part of 1991, partly in response to the easing in inflationary expectations. Although long-term rates have backed up some in recent weeks, they remain appreciably below the levels of last summer. The decline in rates has helped reduce the financial burdens of highly-leveraged households and corporations, who have taken this opportunity to refinance mortgages and to replace existing debt with new lower-cost bonds. Lower interest rates also have contributed to an increase in stock prices, inducing firms to boost equity issuance and to pay down debt, further strengthening their balance sheets. With the decline in U.S. interest rates, the foreign exchange value of the dollar has largely reversed the upward movement that had occurred earlier in the year.

The unusually slow growth of the key monetary and credit aggregates last year was, to a degree, indicative of the continuing restraint on private credit usage and spending. The aggregate debt of domestic nonfinancial sectors—abstracting from federal government debt, which continued to grow briskly—expanded only 2¾ percent in 1991, the slowest advance in decades, and below the pace of nominal GDP; households, nonfinancial businesses, and state and local governments all retrenched, curbing spending and borrowing in order to buttress deteriorating financial positions.

The weakness in the monetary aggregates M2 and M3 reflected not only subdued overall credit usage but

Ranges for Growth of Monetary and Credit Aggregates

	1990	1991	1992
<i>Percentage change, fourth quarter to fourth quarter</i>			
M2	3 to 7	2½ to 6½	2½ to 6½
M3	1 to 5	1 to 5	1 to 5
Debt	5 to 9	4½ to 8½	4½ to 8½

also a continued decline in the share of credit intermediated by depositories. With the thrift industry contracting further, commercial banks exercising caution in their credit extensions, and borrowing demand concentrated in longer-term instruments, depository credit continued to shrink as a share of overall credit extensions. As a result, the velocity of M3—a monetary aggregate that comprises most of the liabilities used by depositories to fund credit growth—increased again in 1991, as M3 grew only 1¼ percent, near the bottom of its target range. Depository restructuring also restrained M2, which grew in line with nominal GDP despite a steep drop in short-term market interest rates, which ordinarily would have been expected to depress the velocity of this aggregate. Banks, eager to improve capital positions, reduced deposit rates more than loan rates, increasing the incentive for households to pay down debt rather than to accumulate monetary assets. Less aggressive pursuit of retail accounts by depositories also led investors to switch into other financial assets, such as bond and stock mutual funds. Flows into these funds helped finance credit that had formerly been intermediated by depositories, facilitating shifts to longer-term borrowing and reducing the adverse effects of any retrenchment by banks and thrifts on the cost and availability of credit to many borrowers. *However, some types of lending that are not so easily rechanneled—such as construction loans and credits to small and lower-rated businesses—have been curtailed, and a number of borrowers now face more stringent credit terms.*

Monetary Objectives for 1992

In formulating its objectives for monetary policy for 1992, the Federal Open Market Committee has sought to promote a sustainable upturn in economic activity while continuing to build upon the hard-won

gains against inflation that have already been made. The task of translating these objectives into specific ranges for money and debt continues to be complicated by the ongoing restructurings of depositories and by the evolving attitudes towards credit on the part of borrowers and lenders. The Committee believes that the rechanneling of credit flows away from depository institutions could well continue to produce slower growth in the broad monetary aggregates than normally would be associated with a given path for nominal GDP.

Taking account of these effects, the Committee has deemed the ranges for 1992 tentatively adopted last July as appropriate for achieving its objectives. The M2 range for 1992 is 2½ to 6½ percent, unchanged from 1991. Demands for M2 relative to income would be damped if, as seems likely, banks and thrifts continue to reduce deposit rates in lagged response to the decline that has occurred in market rates. These deposit-rate reductions could be especially large if credit continues to be channeled outside depositories, and in this case, relatively modest growth in M2 would be adequate to support a satisfactory outcome for the economy. On the other hand, as the balance sheets and capital positions of depositories continue to improve, banks and thrifts may adopt a generally more accommodative posture with respect to credit extensions and would therefore have greater need for retail deposits. In that event, somewhat faster growth of M2 would be appropriate.

On balance, the Committee's M2 range for 1992 allows room for a variety of developments in the intermediation process and thus in the behavior of monetary velocity. Flexibility in interpreting M2 within its range is particularly important at this time, in light of the ongoing and unpredictable shifts in the patterns of credit usage and financial intermediation

Economic Projections for 1992

Measure	Memo: 1991 Actual	FOMC Members and Other FRB Presidents		Administration
		Range	Central Tendency	
<i>Percentage change, fourth quarter to fourth quarter¹</i>				
Nominal GDP	3.2	4 to 6	4½ to 5¾	5.4
Real GDP	.2	1½ to 2¾	1¾ to 2½	2.2
Consumer price Index²	2.9	2½ to 3½	3 to 3½	3.1
<i>Average level in the fourth quarter, percent³</i>				
Unemployment rate	6.9	6¾ to 7¼	6¾ to 7	6.8

1. Actual for the fourth quarter of the preceding year to the fourth quarter of the year indicated.

2. All urban consumers.

3. Percentage of the civilian labor force.

that likely will continue to buffet our financial system. Looking ahead to future years, the Committee also recognizes that the range for M2 growth may eventually have to be lowered in order to put in place the monetary and credit conditions consistent with price level stability.

The target range for M3 for 1992 remains at 1 to 5 percent. Although credit growth is expected to pick up somewhat in 1992, in line with a firming of economic activity, much of this credit likely will be financed outside the depository system. The thrift industry is expected to contract further as activity by the Resolution Trust Corporation continues apace, and banks, faced with continued—though moderating—pressures on capital positions, will still be somewhat hesitant to expand. At the same time, additional households are likely to refinance adjustable-rate mortgages with fixed-rate obligations that can easily be securitized, and corporations will probably continue to turn to equity markets and long-term bonds rather than bank loans. As a result, depository funding needs are likely to remain damped relative to the pace of economic activity, and the velocity of M3 should consequently rise further.

The monitoring range for the aggregate debt of domestic nonfinancial sectors for 1992 is 4½ to 8½ percent, also unchanged from 1991. Federal government borrowing is expected to remain heavy in 1992, given the large budget deficit. Debt growth of

nonfederal sectors, however, should remain fairly subdued relative to economic activity, as borrowers and lenders alike maintain a cautious approach to leverage, stemming in part from a desire to make further repairs to damaged balance sheets.

Economic Projections for 1992

Although the long-standing structural problems that aborted the fledgling recovery last summer clearly are being addressed, the speed of their resolution—and the associated restraint on economic growth—is quite difficult to gauge, augmenting the usual uncertainties in assessing the economic outlook. On the whole, however, the members of the Board of Governors and the Reserve Bank presidents believe that, with the easing of monetary conditions to date providing considerable impetus to the economy, the most likely outcome is for a moderate reacceleration of activity over 1992. At the same time, they anticipate that the trend toward price stability, which now appears to be rooted more securely, will be sustained through this year.

The forecasts of most of the governors and presidents for growth of real gross domestic product are in a range of 1¾ to 2½ percent measured from the fourth quarter of 1991 to the fourth quarter of 1992. With employers likely to be cautious about hiring until they are fully persuaded of the sustained vitality of the

upturn, gains in employment are expected to come slowly. Thus, only a small improvement in the unemployment rate is anticipated this year, with the central tendency of projections being a range of 6¼ to 7 percent for the fourth quarter of 1992. With regard to inflation, the central tendency range for the CPI increase this year is 3 to 3½ percent. These forecasts are, in general, very similar to the projections presented by the Administration in the fiscal year 1993 budget. Indeed, the Administration's forecast for nominal GDP is well within the Committee's central tendency range and thus appears to be quite consistent with the FOMC's monetary ranges.

In their discussion earlier this month of the economic outlook, the Board members and Reserve Bank presidents observed that the effects of recent job losses and weak consumer confidence are likely to restrain activity in the near term. Under the circumstances, the Board members and Bank presidents stressed that economic developments need to be monitored closely to guard against the possibility that the economy might falter. Nonetheless, the monetary stimulus already in train is expected to provide effective support for economic growth this year, and in this regard the early indications of a marked pickup in residential real estate activity and a rise in retail sales are a particularly favorable sign.

It is also expected that the drags on growth from credit supply disruptions and from the restructuring of household and business balance sheets will begin to lessen over the year. As noted above, this is obviously an area of substantial uncertainty. However, as household and corporate debt loads diminish in an environment of stronger economic activity, and as lower interest rates continue to ease financing burdens of borrowers, consumers and businesses should be poised to participate more fully in the economic expansion. Moreover, the problems of credit availability that have plagued the economy over the past couple of years should begin to ease in 1992 as the economic recovery takes hold and lenders become more confident about extending credit.

Nonetheless, the pace of expansion this year is expected to remain weaker than in previous business cycle recoveries. In large part, this expectation reflects some still unresolved economic and financial imbalances in particular segments of the economy. The persistent overhang of space in office and other commercial buildings undoubtedly will inhibit new construction in that sector for some time. In addition, the budgetary constraints that have capped government spending are likely to linger; a good many states and localities are finding that budget gaps are reopening, despite the spending cuts and tax increases they instituted last year. Meanwhile, the external sector is expected to have a relatively neutral net influence on domestic production this year; foreign demand—particularly from Mexico and developing countries in Asia—should continue to boost export growth, but the anticipated pickup in domestic purchases is likely to draw in additional imports as well, limiting the potential for further substantial improvement in the trade balance.

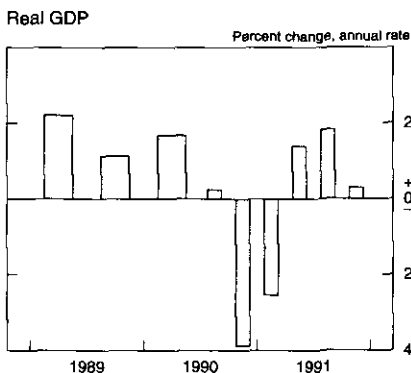
Only a minority of Board members and Reserve Bank presidents foresee a smaller increase this year in the overall CPI than the 3 percent rise experienced in 1991. But the pickup in inflation suggested by the 3 to 3½ percent central-tendency range is deceptive: the underlying trends of price movement are more favorable. The CPI was held down to a substantial degree last year by the unwinding of the energy price shock that followed Iraq's invasion of Kuwait in August 1990, and further sharp declines in energy prices do not appear likely in the current environment. However, an ongoing deceleration in prices is evident for a wide range of other goods and services, and with inflationary tendencies under considerable restraint from several factors—including further moderation in labor cost growth, continued slack in industrial product markets, and small increases in import prices—"core" inflation is expected to move down appreciably in 1992. Indeed, this trend should carry into 1993—a pattern that bodes well for the achievement of a balanced, sustained economic expansion.

Section 2: The Performance of the Economy in 1991

The year 1991 began with the U.S. economy in the midst of recession. Activity had contracted sharply after the jump in oil prices that followed Iraq's invasion of Kuwait in August 1990, and this weakness spilled into the first quarter with further reductions in production and employment. By the spring, however, economic data indicated that the decline in economic activity had bottomed out. The rapid conclusion of the Persian Gulf war boosted consumer confidence, and the reversal of the earlier runup in oil prices and the cumulative effects of declining interest rates were providing support for an increase in household spending. Indeed, construction of single-family homes had already turned up noticeably by April, and consumer spending posted a moderate rise in the second quarter. Although businesses continued to liquidate inventories at a fairly rapid pace, industrial production grew steadily from April through July, and hiring activity increased.

However, the pickup in the economy evident from April to July failed to develop any momentum, as the thrust to domestic demand initiated by the end of the Gulf war dissipated during the summer. The absence of a more robust recovery likely reflected the drag on aggregate demand from some longer-term economic and financial adjustments. For example, imbalances long evident in the commercial and multifamily construction sectors damped enthusiasm for new projects, and ongoing difficulties in the financial sector continued to restrain credit availability; these influences undoubtedly muted the stimulus that normally would have been forthcoming from the decline in interest rates. Fiscal restraint evident at all levels of government weighed on aggregate demand in a way not typically observed in previous economic cycles. Significant restructurings of operations in a number of sectors had the effect of retarding employment and income growth, at least in the short run. And concerns about debt-servicing burdens as well as about economic prospects sustained a reluctance on the part of businesses and consumers to borrow and increase spending.

Despite their cautious planning, some businesses experienced inventory backups in the late summer and fall, necessitating another round of production adjustments. In part, the impact of these adjustments was felt abroad as businesses cut back their imports of foreign goods. However, domestic adjustments were evident as well, and, apart from atypical weather patterns that temporarily increased the demand for electricity, industrial production was flat over the



second half of the year. The sluggish pace of activity in the industrial sector was joined by weakness in other parts of the economy, and overall, the nation's real gross domestic product is estimated to have risen a scant $\frac{1}{4}$ percent at an annual rate in the fourth quarter of last year. In the labor market, layoffs proliferated once again, and the civilian unemployment rate rose to 7.1 percent at the end of 1991.

The deterioration in both industrial activity and nonfarm employment extended into this year, with factory production down sharply in January and private payrolls edging beneath the low of last April. On the other hand, housing market activity appears to have picked up somewhat since the beginning of the year, and nominal retail sales rose about $\frac{1}{2}$ percent in January.

Inflation slowed in 1991, with consumer prices up 3 percent over the year, much less than the 6 percent rise posted during 1990. In part, the slowing in inflation reflected the sharp drop in oil prices early in the year: consumer energy prices in December were $7\frac{1}{2}$ percent below their level at the end of 1990, with the decline concentrated in the first quarter of the year. Food price inflation also moderated considerably, amounting to only 2 percent last year after three years of increases in excess of 5 percent.

Even apart from food and energy, inflation now appears to be on a downward trend. To be sure, there were sizable increases in the CPI excluding food and energy early in the year, as higher federal excise taxes and a passthrough of the sharp rise in energy prices boosted prices for a variety of goods and services.

But, with the subsequent reversal in oil prices and no further major tax hikes, price pressures eased visibly beginning in the spring. On balance, the CPI excluding food and energy rose less than 4 percent at an annual rate in the second half of 1991, well below the 5 percent pace of 1990. Labor cost pressures also diminished last year, although substantial increases in health care expenses remained a problem for employers. As measured by the employment cost index, nominal compensation per hour rose about 4½ percent over 1991, somewhat less than the increases recorded in each of the three previous years.

Household Spending—Consumption and Residential Construction

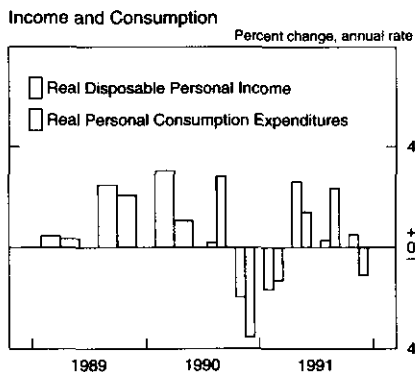
With household finances adversely affected by job losses and declining real incomes, real consumer spending rose just ¼ percent over the year, the same as in 1990. At the beginning of the year, consumer purchasing power already had been sapped by the rise in energy prices and by declines in employment. And, while the retreat in oil prices then in progress and an improvement in consumer confidence following the end of the Gulf war provided a boost to spending in the spring, the failure of the recovery to take hold and concerns about financial prospects and debt burdens restrained spending in the second half of the year. On balance, real consumer outlays edged down between July and December, retracing part of the rise that had occurred during the spring and early summer.

The weakness in consumer spending over the past year was particularly evident for durable goods. A sharp drop in motor vehicle purchases accounted for

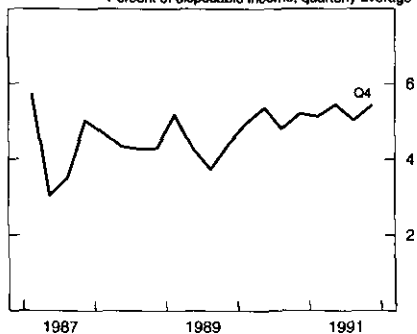
much of the overall decline in spending on durables; indeed, the level of motor vehicle sales in 1991, at 12¼ million units, was the lowest since 1983. Outlays for other durable goods were down slightly over the year, after a 1½ percent decline in 1990. As with total spending, purchases of other durables picked up somewhat in the spring and early summer, but then fell in the fourth quarter as consumers retrenched. Spending on nondurable goods also declined last year, with expenditures down sharply in the fourth quarter, especially for apparel. In contrast, outlays for services continued to trend up at a pace similar to that registered in the two previous years.

The patterns of change among the components of consumer spending—particularly the steep decline in outlays for “big ticket” durable goods—underscore the role of household balance sheet concerns in restraining economic growth last year. Household debt burdens rose substantially during the 1980s, when consumers stepped up spending on motor vehicles and other consumer durables, often financing their purchases with credit. In some parts of the nation, this spending boom spread to residential real estate as well, with the associated borrowing, which was often predicated on expectations of rapidly rising family incomes, adding further to the financing burdens of households. As income growth weakened over the past year and a half, consumers struggled to meet the monthly obligations on their accumulated debt, and apparently deferred some discretionary spending in the process. This financial stress also was evidenced by an increase in delinquency rates on consumer and mortgage loans last year to levels comparable to those experienced in the previous two recessions.

A renewed pessimism on the part of households may also have contributed to the reluctance of consumers to step up spending over the latter part of 1991. As noted previously, consumer confidence, which was quite low at the beginning of the year, rose markedly upon the conclusion of the Gulf war. However, as it became apparent that the anticipated recovery in the economy was not materializing and announcements of layoffs resumed, confidence turned down, dropping especially sharply toward the end of the year. In January 1992, the Survey Research Center's index of consumer sentiment stood at the levels of last winter, while the Conference Board's confidence index was below that seen in the 1981–82 recession. Many analysts observed that consumers appeared to be more apprehensive than normally might be expected, given the broad macroeconomic circumstances—for example, the unemployment rate has remained well below that reached in the early



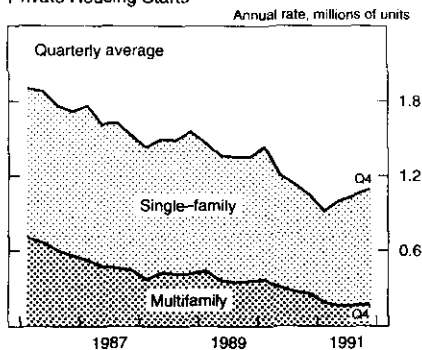
Personal Saving
Percent of disposable income, quarterly average



1980s—suggesting that concerns about longer-run economic prospects may have contributed to the heightened anxiety among households last fall.

After dropping sharply in January, housing starts posted a moderate recovery over the remainder of the year, fueled by a reduction in mortgage rates to their lowest levels since the 1970s. Sales of new and existing single-family homes rose over the year, with the pickup in demand reportedly especially pronounced from first-time buyers. Reflecting the strengthening in demand, the excess supply of unsold new homes diminished, and the pace of single-family housing starts moved above 900,000 units at an annual rate by the fourth quarter, an increase of more than 16 percent from a year earlier. Nevertheless, production was well

Private Housing Starts
Annual rate, millions of units



below that of earlier years, and, despite the upturn in activity, the single-family housing market remains softer than would be expected given recent mortgage rates and the rising number of households in prime homebuying ages. Continued lender caution about granting land-acquisition and construction loans reportedly has damped production in some locales. However, given the absence of significant price pressures in the housing market, restraint on the demand for single-family homes, stemming from weak income growth, concerns about employment prospects, and poor conditions for home selling, likely has been a more prominent influence on homebuilding than supply constraints.

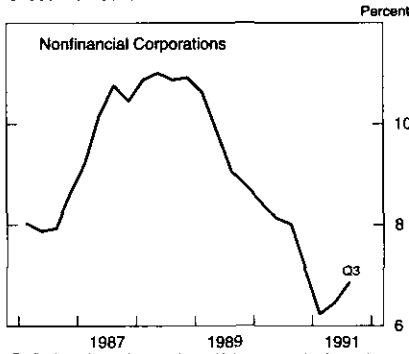
In the multifamily housing market, an excess supply of vacant units and restraints on credit availability continued to depress construction last year. Starts of multifamily units fell about 30 percent over the twelve months of 1991, and the number of starts during the year was the lowest since the 1950s. There have been numerous reports of restrictive lending practices damping activity in this sector. But vacancy rates for rental units remain exceptionally high—and rents soft—suggesting that in many areas new projects might well be of questionable economic viability. Until market supplies begin to tighten discernibly, activity in this segment of the market is unlikely to show appreciable improvement.

Business Spending—Investment in Inventories and Fixed Capital

In early 1991, the investment climate was dominated by the effects of the decline in the demand for business output and the jump in energy prices during the second half of 1990. With profit margins down sharply and inventory imbalances emerging in a number of sectors, businesses reduced production and employment substantially between October 1990 and March 1991. Cutbacks were especially sharp in the motor vehicle sector over that period, although output of most other types of goods and materials turned down as well.

By the spring, inventories generally were better aligned with sales, and operating profits, while still low, had turned up. As a result, the improvement in aggregate demand in the second quarter was accompanied by an increase in business output, and industrial production rose an average 0.7 percent per month from April to July. Despite the firming in sales, businesses remained cautious, and inventory levels continued to decline through midyear.

Before-tax Profit Share of Gross Domestic Product*

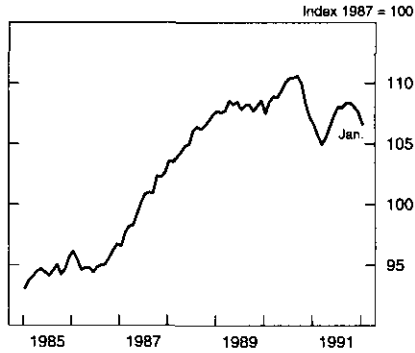


*Profits from domestic operations with inventory valuation and capital consumption adjustments divided by gross domestic product of nonfinancial corporate sector.

In late summer, however, final demand slackened, and after seven months of decline, business inventories accumulated at a substantial rate from September through December. The rise in inventories was centered in wholesale and retail trade, and inventory-sales ratios there moved into ranges that appeared undesirably high in light of carrying costs and expected sales. A portion of the accumulation appeared to consist of goods ordered from abroad; indeed, a partial reaction to the overhang may have been visible in the sharp drop in nonoil imports in November. Nonetheless, retailers evidently also reduced orders

from domestic suppliers, contributing to the sluggish pattern of manufacturing output in the fourth quarter. By January of this year, factory production had dropped back to its level of a year earlier, and the operating rate in industry was back down to levels that, prior to last winter, had not been seen since the brief industrial slump of 1986.

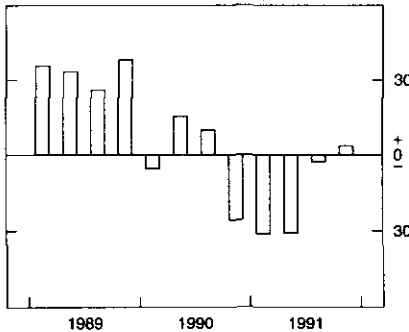
Industrial Production

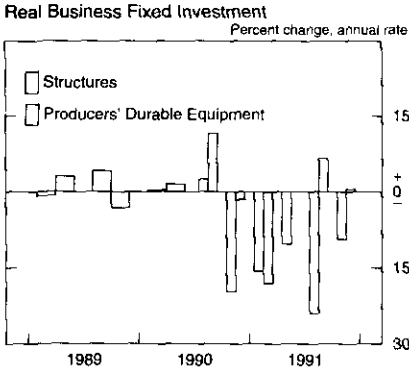


Business investment in fixed capital fell 7 percent in real terms over the four quarters of 1991. As is typical during recessions, spending was inhibited by weak profits, a rise in excess capacity, and uncertainty regarding the outlook for sales. However, investment outlays last year also were depressed by a desire on the part of many businesses to reduce debt burdens and by a continued oversupply of office and other commercial space. Even adjusting for cyclical considerations, last year's weak pace of investment appeared to extend the relatively slow rate of capital formation evident for some time. The capital stock in the nonresidential business sector, net of depreciation, has risen about 2¼ percent at an annual rate over the past decade—down from 3¼ percent annually during the previous decade. In part, this pattern has owed to a shift toward shorter-lived assets—such as computers—that depreciate more quickly. However, such outlays, by generating a relatively high flow of capital services per dollar of investment, have cushioned the impact on productivity of the slowing pace of capital formation. Even so, the quantity of investment, which has also been depressed by large federal budget deficits and the resulting low level of national saving, has

Changes in Real Nonfarm Business Inventories

Annual rate, billions of 1987 dollars





been inimical to productivity growth and thus to the advance of living standards.

Real spending for equipment fell 3¼ percent over 1991, as outlays plunged in the first quarter and showed only limited improvement on net over the remainder of the year. The strongest area in investment spending was computers, for which real outlays increased more than 40 percent at an annual rate over the second half of the year; these gains were driven by new product introductions and by the substantial price cuts offered by computer manufacturers. In contrast, business investment in other types of equipment generally declined, on balance, over the year. Outlays for industrial equipment continued to deteriorate as excess capacity limited expansion in the manufacturing sector, and business purchases of motor vehicles dropped off sharply. In addition, domestic orders for commercial aircraft plunged after midyear, as a number of domestic airlines trimmed investment plans. Although the large backlog of unfilled orders that still remains should sustain production and shipments for some time, the slackening in demand indicated by the sharp downturn in aircraft orders suggests that the growth surge in this sector may have run its course.

Nonresidential construction plummeted 15 percent in real terms over the four quarters of 1991. The contraction was broadly based, but especially large declines in outlays were evident for office buildings and other commercial structures. Despite the sharp cutbacks in construction in recent years, prices of existing commercial properties have continued to fall, contributing to the substantial stress evident in the financial sector. Of course, the fundamental problem is the space overhang from the earlier overbuilding; indeed, the vacancy rate for office buildings nationwide was still close to 20 percent at the end of the

year. However, a lack of liquidity in this market—in particular, the reluctance of lenders to finance acquisitions of commercial properties—has made the adjustment still more difficult. Such problems are especially acute in the market for office buildings, where appraised values have declined nearly 30 percent since 1985 and where lenders and developers generally have shown little interest in new projects. For other commercial structures—primarily shopping centers and warehouses—the outlook is slightly less downbeat, with the data on new contracts and building permits suggesting that the steepest declines may have already occurred. Spending for industrial structures also generally declined over the year, as low rates of capacity utilization curtailed plans for new factory construction. Petroleum drilling activity, meanwhile, dropped sharply in response to the decline in oil prices.

Federal banking regulators have taken a number of steps to ensure that supervisory pressures do not unduly restrict real estate lending. The agencies have, for example, addressed issues relating to accounting and appraisal, to make sure that illiquid real estate exposures are evaluated sensibly and consistently. And, they have issued guidance to examiners—and simultaneously to bankers—emphasizing that banks should not be criticized for renewing loans to credit-worthy borrowers whose real estate collateral has fallen in value—even when the banks need to build up capital or reduce loan concentrations over time. However, with so adverse a supply-demand imbalance in the property market, lenders understandably have remained reluctant to bear the risks of real estate exposures.

The Government Sector

Budgetary pressures were widespread in the government sector in 1991. At the federal level, the unified budget deficit increased to \$269 billion in fiscal year 1991, up \$48 billion from the 1990 deficit. In large part, the rise in the deficit was attributable to the slowdown in economic activity, which reduced tax receipts and increased outlays for income-support programs such as unemployment insurance and food stamps. However, as in 1990, the fiscal 1991 deficit also was affected by special factors: a pickup in net outlays for deposit insurance added to the deficit, while one-time contributions from our allies to defray the costs of Operations Desert Shield and Desert Storm reduced it. Excluding deposit insurance and these foreign contributions, the 1991 deficit totaled \$246 billion.

On the revenue side, federal tax receipts rose just 2 percent in fiscal 1991, the smallest increase in many years. The slowing in receipts largely stemmed from weak *nominal income* growth; indeed, personal income tax payments in 1991, which accounted for nearly half of total receipts, were about the same as in 1990 despite changes in tax provisions that were projected to raise \$16 billion in new revenues.

Meanwhile, spending rose nearly 6 percent in fiscal 1991. Part of the \$71 billion increase in nominal federal outlays reflected the slightly more rapid pace at which the Resolution Trust Corporation resolved insolvent thrift institutions last year. In contrast, outlays were reduced by allied contributions to the Defense Cooperation Account. These contributions, which are scored as negative outlays in the budget accounts, exceeded the outlays made in 1991 for U.S. involvement in the conflict; the excess will be put toward the replacement of munitions in 1992 and beyond. Excluding deposit insurance and contributions of allies, outlays rose about 9 percent in fiscal 1991. Spending for health programs continued to rise rapidly, elevated by large increases in health care costs and in outlays for the Medicaid program. Among other entitlement programs, outlays for social security and other income-support programs, which together account for one-third of total federal spending, rose more than 11 percent in fiscal 1991, reflecting substantial increases in the number of beneficiaries. In contrast, declining interest rates reduced the growth of interest payments on the federal debt. Defense outlays—excluding foreign contributions—were up 5½ percent between fiscal years 1990 and 1991, as the additional U.S. outlays for the Persian Gulf conflict were only partially offset by the spending cuts enacted in the 1990 budget agreement and in previous years.

Federal purchases of goods and services, the portion of federal spending that is included directly in GDP, fell 3¼ percent in real terms over the four quarters of 1991. Defense purchases jumped sharply early in the year to support operations in the Persian Gulf, but declined substantially over the remainder of the year as the effects of scheduled cuts in defense outlays were augmented by a dropoff in purchases for Desert Storm; on net, defense purchases were down about 4½ percent last year. In contrast, nondefense purchases were up slightly in 1991; increases in law enforcement, space exploration, and health research offset a drawdown in inventories held by the Commodity Credit Corporation.

The fiscal position of state and local governments, which had deteriorated sharply in 1990, remained

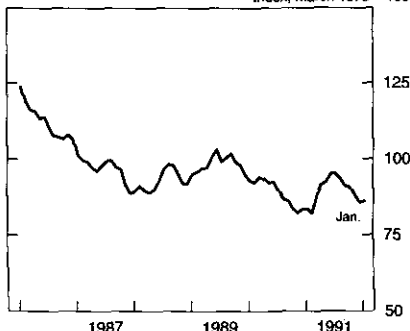
poor in 1991. The deficit in the combined operating and capital accounts (excluding social insurance funds) narrowed to \$34 billion in the third quarter from a high of nearly \$47 billion in the fourth quarter of 1990; the shrinkage of this deficit represents the first major improvement since 1984, when the state and local budget surplus peaked. Even so, relative to GDP, the deficit still is quite high on a historical basis. The credit quality of state and local government debt also continued to deteriorate last year, as illustrated by the downgrading of the general obligation debt of eight states by one rating agency; most of the rating changes were the direct result of budgetary imbalances.

The poor fiscal position of state and local budgets led to both severe restraints on spending and sizable tax hikes. Overall, real purchases of goods and services edged down over the four quarters of 1991. In nominal terms, total expenditures by these governments were up 4 percent last year, less than one-half the average pace of recent years. Receipts rose an estimated 7 percent over 1991, as numerous jurisdictions imposed a variety of new tax measures and federal aid to state and local governments—especially for Medicaid—increased substantially. Nonetheless, many state and local governments continue to report revenue shortfalls and spending overruns for the current fiscal year, setting the stage for another round of budget-balancing measures ahead.

The External Sector

Measured in terms of the other Group of Ten (G-10) currencies, the trade-weighted foreign exchange value of the U.S. dollar appreciated 14 percent, on balance, from December 1990 to July 1991, reversing more than one-half of the decline that had occurred from the middle of 1989 to the end of 1990. In large part, the rise in the dollar over this period reflected the quick end to the Gulf war and expectations of a recovery in the U.S. economy, as well as developments in Eastern Europe that initially weighed on the German mark. However, as the U.S. economic recovery faltered in late summer and market participants viewed further easing actions by the Federal Reserve as more likely, the dollar again turned down, averaging in December 1991 only about 3 percent above its level in December 1990. The dollar rebounded somewhat in January on market perceptions of a diminished likelihood of an additional easing in U.S. interest rates and expectations that German authorities would not push their interest rates up further.

Foreign Exchange Value of the U.S. Dollar *



*Index of weighted average foreign exchange value of U.S. dollar in terms of currencies of other G-10 countries. Weights are 1972-76 global trade of each of the 10 countries.

On a bilateral basis, the dollar rose 19 percent against the mark between December 1990 and July 1991, amid disappointment about the effect of German unification on German inflation and trade. During the second half of last year, German monetary policy tightened, and the dollar gave up much of its previous gains, finishing the year just 4 percent above its December 1990 level. Other currencies in the European Monetary System generally moved with the mark during 1991, although sterling slipped somewhat near year-end. The dollar declined about 4 percent on net against the yen in 1991, as increasing Japanese trade surpluses led to the view that an appreciation of the yen would be welcomed by the authorities.

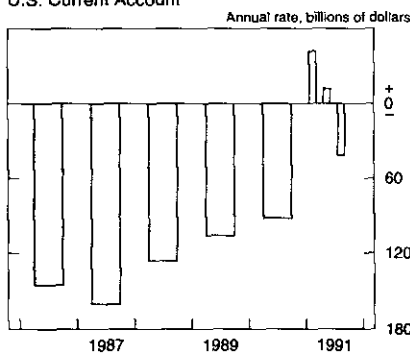
The merchandise trade deficit narrowed to less than \$75 billion in 1991, compared with \$108 billion in 1990; the trade deficit last year was the smallest since 1983. An especially large decline in the deficit was registered early in the year, as the drop in oil prices sharply reduced the value of imports. In addition, trade flows during the first half of 1991 were influenced by the weakening of U.S. activity (which reduced demand for imports), by continued growth abroad (which boosted exports), and by the lagged effects of the decline in dollar exchange rates that had taken place in 1990. However, imports rose sharply in the third quarter, and the trade deficit widened somewhat in the second half of the year. The current account balance recorded a small surplus, on average, during the first three quarters of 1991, a sharp improvement from the \$92 billion deficit in 1990. How-

ever, about half of that improvement resulted from cash grants from foreign governments to support operations in the Persian Gulf; excluding these transfers, the current account showed an average deficit of \$48 billion at an annual rate over the first three quarters of 1991. The improvement in the current account (excluding transfers) was somewhat greater than that in the trade balance owing to a strengthening of net service receipts in areas such as travel, education, and professional services.

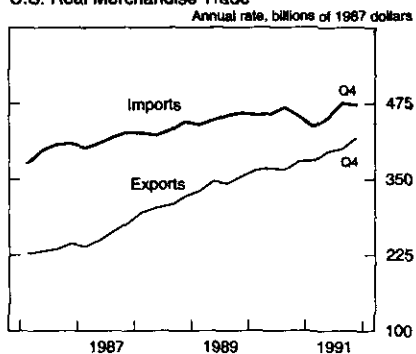
U.S. merchandise exports grew about 10 percent in real terms over the four quarters of 1991, tempering the production declines associated with the weakness in domestic demand. Exports rose fairly strongly in the second quarter, as high levels of investment in countries such as Germany and Japan boosted exports of computers and other capital equipment. Economic activity in the major foreign industrial countries weakened as the year wore on, however, and with a deterioration in the competitive position of U.S. companies following the appreciation in the dollar over the first half of the year, export growth slowed markedly in the third quarter. Exports surged again in the fourth quarter, led by sales of computers, aircraft, and other capital goods. However, some of the recent increase appears to represent a bunching of sales rather than an increase in economic activity abroad.

Merchandise imports excluding oil grew about 4 percent in real terms during 1991. Imports declined early in the year as weak domestic spending reduced the demand for foreign goods. As domestic demand in the United States turned up in the spring, imports rose—especially for automotive products, computers, and consumer goods—and remained strong through

U.S. Current Account



U.S. Real Merchandise Trade



the summer. With the subsequent weakening in demand, however, some of the additional import volume apparently ended up on retailers' shelves. In response, U.S. businesses reduced orders from abroad, and import growth slowed sharply over the fourth quarter. The quantity of oil imports, which had plunged after the sharp rise in oil prices in the fall of 1990, generally moved up through the third quarter as refiners moved to rebuild inventories. However, oil import volumes turned down again in the fourth quarter, reflecting sluggish U.S. activity and unseasonably warm weather.

The sharp reduction in the recorded U.S. current account deficit in the first three quarters of 1991 was mirrored by changes in recorded capital inflows and the statistical discrepancy. The statistical discrepancy in the international accounts, which had jumped to \$64 billion in 1990, declined to virtually zero in the first three quarters of 1991.

Inflows of official capital were about matched by outflows of private capital in the first three quarters of 1991. Net official inflows amounted to \$16 billion despite net intervention sales of dollars in foreign exchange markets by the G-10 countries and a draw-down of reserves held in the United States by countries helping to cover the costs of Desert Storm; some countries also financed their contributions by borrowing and liquidating investments in the Euromarkets. Net private capital outflows were \$18 billion in the first three quarters, largely accounted for by banks. In part, these outflows reflected the increased net demand for funds in the Euromarkets associated with Desert Storm transfers. In addition, the elimination by the Federal Reserve of certain reserve requirements in

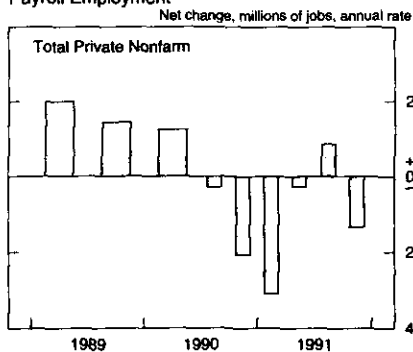
December 1990 led some U.S. agencies and branches of foreign banks to increase their issuance of large time deposits in the United States and to reduce their reliance on borrowing from abroad.

Securities transactions in the first three quarters of 1991 reflected the continued internationalization of financial markets. Although the net inflow was modest, private foreigners added substantially to their holdings of U.S. stocks and bonds, while U.S. residents bought a large volume of foreign stocks and bonds. Reflecting interest rate developments that encouraged shifting from short- to long-term financing, issues of foreign bonds in the United States and issues of Eurobonds by U.S. corporations were both strong. Capital outflows associated with U.S. direct investment abroad also were sizable, as U.S. investors positioned themselves to take advantage of EC 1992 and participated in the privatization of previously state-owned enterprises in countries such as Mexico. In contrast, foreign direct investment in the United States was far below recent peaks; foreign takeovers of U.S. businesses declined and reinvested earnings were depressed by the recession.

Labor Markets

Labor market conditions generally deteriorated in 1991, and the unemployment rate rose above 7 percent by the end of the year, the highest level since 1986. Employers had moved quickly to shed workers when the recession took hold during the second half of 1990, and this pattern continued into 1991, with nonfarm payroll employment down sharply over the first four months of the year. Economic conditions improved in the spring, and labor demand turned up

Payroll Employment



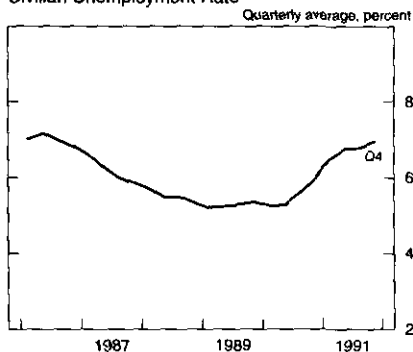
for a time. But the subsequent weakening in activity in the late summer led to a renewed bout of layoffs that has continued into early 1992, retracing the job gains recorded during the spring and summer.

The net job losses last year were widespread by industry and reflected both the cyclical weakness in labor demand associated with the recession and more fundamental efforts by many businesses to restructure operations and permanently reduce the size of their work force. Employment in manufacturing, which began its decline in 1989, fell more than 400,000 over 1991 with most of the losses in the durable goods sector. The continued contraction in commercial building depressed construction employment despite the moderate recovery in residential housing demand. Efforts to restructure existing operations and to downsize workforce levels were evident in the finance, insurance, and real estate sector as well, where job losses last year stood in contrast to the past pattern of continued hiring during recessions. Employment in trade establishments also fell substantially over the year, pushed down by the decline in consumer spending and the high degree of financial distress among retailers. In contrast, employment in services continued to trend up over the latter part of the year, as steady gains in health services more than offset sluggish hiring in the more cyclically sensitive business and personal service industries.

Reflecting the substantial declines in output and employment over the past year and a half, the unemployment rate rose more than 1½ percentage points between July 1990 and December 1991. Moreover, the distribution of job losses was especially wide as compared with previous episodes of rising unemployment. Increases in unemployment were broadly based across regions, industries, and occupations, and an unusually large proportion appeared to constitute permanent layoffs.

Nonetheless, the rise in the jobless rate has been less than in prior episodes of increasing unemployment. This is, in part, because labor force growth has been unusually slow over the past two years. In particular, the labor force participation rate, which stood at about 66 percent at the beginning of this year, is ½ percentage point below its average during the first half of 1990. This decline in participation appears to contain some elements of a cyclical pattern: the number of discouraged workers rose over the year, and sizable increases were reported in the number of retirees, perhaps reflecting to some extent a spate of early retirement programs. However, the weak labor force growth of recent years may also represent a downshift in the trend rate of increase in labor supply

Civilian Unemployment Rate

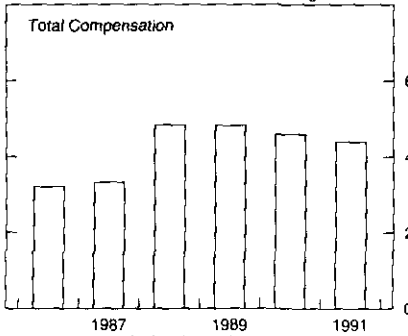


that—if not offset by productivity gains—could translate into a reduction in the rate of trend potential output growth. In this regard, the composition of the corresponding increase in nonparticipants is, in part, a favorable long-term development. There has been a sharp rise in recent years in the number of individuals who have left the labor force in order to attend school. Although that increase may, to some degree, reflect declining opportunity costs associated with the poor job prospects of last year, recognition of the longer-term decline in relative wages among lower-skilled workers may also have played a role. As these individuals reenter the labor force upon completion of their schooling, their increased skills should boost labor productivity and potential output in future years.

Efforts to increase labor productivity have also intensified in the business community. If the aforementioned plans to reorganize corporate structures and to downsize the labor force requirements of existing operations are successful, the possible outcome is a significant improvement in the productivity trend, much as occurred in the manufacturing sector after the considerable compression of manufacturing organizations in the early 1980s. The performance of productivity, which rose about 1 percent in the nonfarm business sector in 1991, has been somewhat better than is typical in a weak economy. However, last year's advance came after a decline in 1989 and no change in 1990, and it is difficult at this stage to distinguish more fundamental changes in productivity trends from the apparent cyclical tendency last year for employers to reduce labor inputs aggressively in response to deteriorating sales.

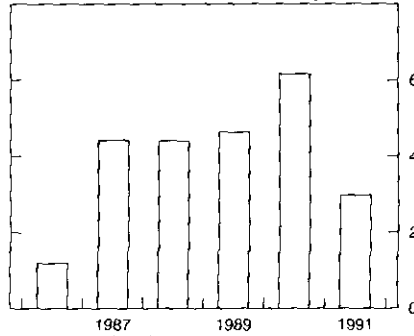
With widespread layoffs and the unemployment rate rising throughout the year, the upward pressures

Employment Cost Index* Percent change, Dec. to Dec.



*Employment cost index for private industry, excluding farm and household workers.

Consumer Prices* Percent change, Dec. to Dec.



*Consumer price index for all urban consumers.

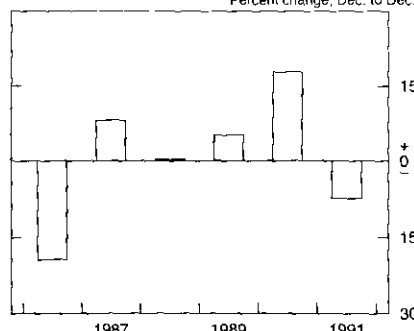
on wages that had intensified between 1987 and mid-1990 diminished somewhat over 1991. As measured by the employment cost index, increases in hourly compensation for private *nonfarm* workers rose 4½ percent over the four quarters of 1991, down from more than 5 percent in the first half of 1990. The wage and salary component of hourly compensation, which rose 3 percent at an annual rate over the second half of last year, exhibited the most deceleration. Although employer costs for benefits have also decelerated from their mid-1990 peak, increases in benefit costs—at 6¼ percent in 1991—remained well above those for wages alone. Expenses for health insurance have continued to spiral despite considerable efforts on the part of employers to control costs by negotiating directly with providers and by increasing workers' share of health expenditures. Employer premiums for workers' compensation insurance also rose sharply last year, reflecting both a swelling in the number of claims and the rapid pace of medical care inflation.

Price Developments

Evidence mounted over this past year that a significant slowing of inflation is under way. The consumer price index rose 3 percent over the year, about half the rate of increase in 1990. A sharp swing in energy prices accounted for a major part of this deceleration. However, the elements of a more fundamental diminution of inflation were in place: labor cost increases moderated; expectations of inflation eased; and upward pressures from import prices and industrial raw material prices were virtually absent during the year.

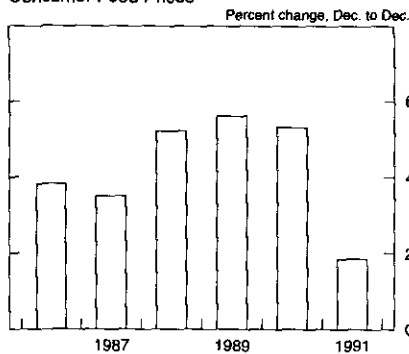
Energy prices dropped sharply in 1991, mirroring the changes in oil prices over the year. The CPI for energy fell 30 percent at an annual rate in the first quarter of last year, as the sequence of events in the Middle East reduced the posted price of West Texas Intermediate crude oil from a peak of about \$39 per barrel in October of 1990 to less than \$20 by February of last year. Oil prices subsequently held near that level, but gasoline prices firmed somewhat during the summer as reduced imports and domestic refinery problems led to some tightness in inventories. However, these forces were offset by declines in natural gas and electricity rates, and energy prices changed little, on balance, in the second and third quarters.

Consumer Energy Prices* Percent change, Dec. to Dec.



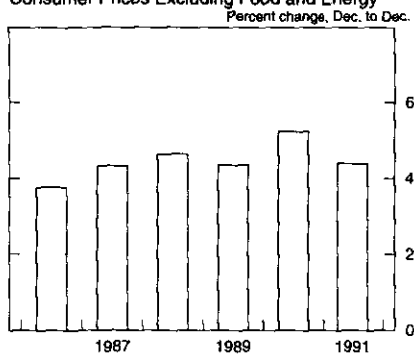
*Consumer price index for all urban consumers.

Consumer Food Prices*



*Consumer price index for all urban consumers.

Consumer Prices Excluding Food and Energy*



*Consumer price index for all urban consumers.

Price pressures again emerged in the fall as crude oil prices trended up in September and October on concerns about supplies from the Soviet Union. Since October, however, oil prices have retreated again, with the most recent quotes at about \$18 per barrel. These latest reductions probably will show up at the retail level in the first quarter of 1992; indeed, the energy component of the producer price index fell nearly 3 percent in January, and other preliminary information points to sizable declines in both retail gasoline and heating oil prices.

The CPI for food rose just 2 percent over 1991, well below the increases of 5 to 5½ percent observed in the three previous years. In part, the subdued pace of food price inflation reflects an increased supply of livestock products. Beef production turned up last year in response to the strong prices that prevailed in the preceding few years, and supplies of pork and poultry rose sharply; in response, meat and poultry prices fell about 2 percent over the year. The deceleration in food prices also extended to food groups where prices are influenced more by the cost of non-farm inputs than by supply conditions in agriculture; for example, the increase in the price of food away from home last year was the smallest since 1964. Elsewhere, there were large monthly variations in prices for fruits and vegetables, as adverse weather conditions temporarily boosted prices in the first half of the year and prices for some fresh vegetables jumped toward the end of the year because of the whitefly infestation in California.

The consumer price index for items other than food and energy rose 4½ percent in 1991, about ¾ percentage point less than in 1990. The index was boosted

early in the year by increases in federal excise taxes on cigarettes and alcoholic beverages and by an increase in postal rates. Price increases last winter also were enlarged by the passthrough of the rise in energy prices into a wide range of nonenergy goods and services. However, the subsequent decline in energy prices soon spread to the nonenergy sector, and except for an uptick during the summer associated with some bunching of price increases, this measure of core inflation moderated significantly over the remainder of the year.

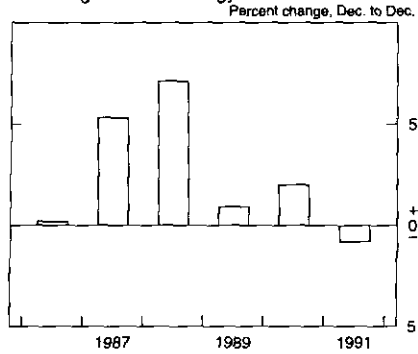
Prices for nonenergy services decelerated considerably last year, rising 4½ percent after an increase of 6 percent in 1990. Reflecting weak real estate markets, rent increases slowed sharply, with both tenants' rent and owners' equivalent rent up less than 4 percent last year. The drop in interest rates pushed down auto financing costs more than 7 percent. And, after a brief spurt early in the year, airfares receded as energy costs fell and the weak economy cut into demand; more recently, however, airfares have turned up again as carriers have reduced the availability of and increased restrictions on low-end "super-saver" fares. In contrast, prices for medical care services rose 8 percent over the year, while tuition costs and other school fees were up nearly 10 percent.

The CPI for commodities excluding food and energy rose 4 percent in 1991, about ½ percentage point faster than in 1990. In large part, the more rapid rate of inflation in goods prices reflected the aforementioned hike in excise taxes and, despite weak sales, larger increases in prices for both new and used cars. However, a slowing in price increases was evident for

a number of other goods, notably apparel, household paper products, and personal care items.

The easing of inflationary pressures has been even more evident at earlier stages of processing. The producer price index for finished goods edged down over 1991 after an average 5 percent annual rate of increase over the three preceding years; this index posted another small decline in January of this year. Falling prices for energy and consumer foods accounted for much of the overall deceleration last year. But even apart from food and energy, producer prices slowed to a 3 percent pace. Prices for intermediate materials excluding food and energy declined $\frac{3}{4}$ percent over the year, reflecting declining fuel and petroleum feedstock costs, an easing of wage pressures, and weak demand. The downturn in economic activity also depressed industrial commodity markets last year. After dropping sharply in the fourth quarter of 1990, spot prices for these commodities continued to decline gradually over most of 1991.

Producer Prices for Intermediate Materials
Excluding Food and Energy



Section 3: Monetary and Financial Developments in 1991

The principal objective of monetary policy this past year has been to help lay the groundwork for a sustainable expansion, without sacrificing the progress against inflation that had already been set in motion. The Federal Reserve progressively eased money market conditions in 1991 amid signs of continued sluggish economic activity, weak growth in the broader monetary and credit aggregates, and diminishing inflationary pressures. A more generous provision of reserves through open market operations, coupled with five separate reductions in the discount rate—which now stands at its lowest level in nearly 30 years—brought the federal funds rate and most other short-term interest rates down about 3 percentage points over the course of the year. These actions, building on earlier easing efforts, pushed the federal funds rate down to 4 percent, its lowest sustained level since the 1960s and nearly 6 percentage points below its most recent peak in the spring of 1989.

The faltering of the economic recovery in the second half of 1991 owed in part to an unusually cautious approach to credit on the part of both borrowers and lenders. Efforts by debt-burdened households and businesses to pare debt in order to strengthen balance sheets that had been strained by the general slowdown in income and by declines in property values exerted further damping effects on credit demands and on aggregate spending. Faced with deteriorating asset values and pressures on capital positions, depositories and other lenders maintained tighter lending standards and were somewhat hesitant to extend credit. The

more circumspect attitude towards credit and spending on the part of borrowers and financial intermediaries was manifest in the behavior of the aggregate debt of domestic nonfinancial sectors, which grew near the bottom of the Federal Open Market Committee's monitoring range despite burgeoning U.S. Treasury borrowing. Not only was overall credit growth subdued, but credit flows continued to be rechanneled away from depositories, reflecting the more restrictive lending standards at banks and thrifts as well as efforts by borrowers to make greater use of longer-term debt and equity in order to strengthen their balance sheets. Partly as a result, the monetary aggregates M2 and M3 also finished the year near the bottoms of their target ranges.

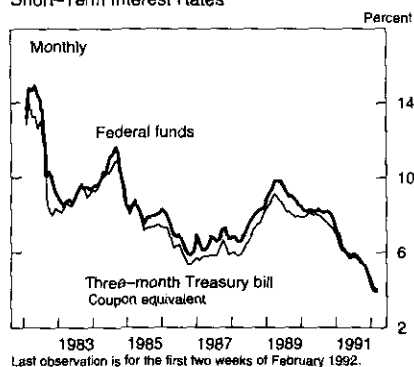
To prevent these forces from stifling the recovery, the Federal Reserve eased money market conditions aggressively in the latter part of the year. In light of weak aggregate demand and reduced inflationary potential, long-term interest rates—which had largely failed to respond to monetary easings earlier in the year—came down substantially towards the end of 1991. This decline prompted a flood of mortgage refinancings and additional corporate and municipal bond offerings, which helped reduce the financing burdens of nonfederal sectors. Lower interest rates also contributed to a major stock market rally, which induced firms to boost equity issuance and pay down debt, partially reversing the trend of the 1980s towards increased leverage that had severely stretched corporate balance sheets.

On the whole, the nation made considerable progress in strengthening its balance sheet in 1991. Less reliance on debt, greater use of equity, and lower financing costs have helped ease debt-servicing burdens for many financially troubled households and corporations. Although, to date, the trend towards deleveraging has exerted a restraining effect on aggregate spending, over time, this trend should help put consumers, firms, and financial intermediaries on a sounder financial footing, paving the way for healthy, sustainable economic growth.

The Implementation of Monetary Policy

The Federal Reserve eased money market conditions several times in the first few months of 1991, extending the series of easing moves initiated in the latter stages of 1990. Against a backdrop of further declines in economic activity, abating price pressures, weakness in the monetary aggregates early in the

Short-Term Interest Rates



year, and continuing credit restraint by banks and other financial intermediaries, a more expansive open market posture was adopted, in conjunction with two one-half percentage point reductions in the discount rate, to engender a 125 basis point decline in the federal funds rate over the first four months of the year. Short-term Treasury rates generally followed suit, and banks reduced the prime rate in three 50 basis point increments to $8\frac{1}{2}$ percent.

Long-term interest rates, by contrast, were roughly unchanged on balance over the first few months of the year. At first, these rates fell somewhat in response to the continued downturn in economic activity and declining energy prices, especially in light of initial successes in the Gulf war that ensured an unimpeded flow of oil. Success in the initial phases of the war also prompted a brief dip in the exchange value of the dollar, as safe-haven demands that had been propping up the dollar's value in the face of falling interest rates in the United States dissipated.

In March, bond yields drifted up on the post-war rebound in consumer confidence and other evidence, particularly from the housing industry, that an economic upturn was at hand. The improving outlook for recovery also contributed to narrowing risk premiums on private securities, especially on below-investment-grade issues, which had reached very high levels in January. The debt and equity instruments of banks performed especially well over this period, responding to lower short-term interest rates and the likelihood that an economic rebound would help limit the deterioration in their loan portfolios. Moderate official support for the dollar, better prospects for a U.S. economic recovery, and a rise in U.S. long-term inter-

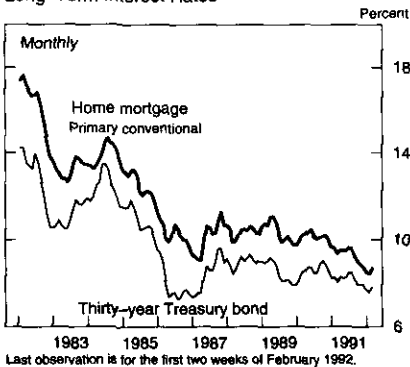
est rates relative to those abroad, together with an uncertain economic and political situation overseas, especially in the Soviet Union, helped to reverse the dollar's slide on foreign exchange markets.

As evidence of a nascent economic recovery cumulated through the remainder of the spring and into early summer, interest rates and the dollar converged to firm, and quality spreads narrowed further. Although the increases in rates during this period were most pronounced at the long end of the maturity spectrum, short-term rates backed up a bit as well as prospects for additional monetary easings faded. Indeed, with the pace of economic activity apparently quickening, and with the broader monetary aggregates near the middles of their target ranges, the Federal Reserve held money market conditions steady, as the stimulus already in train seemed sufficient to support an upturn in aggregate spending.

As the summer passed, however, the strength and durability of the recovery appeared less assured. Aggregate spending, production, and employment began to falter, easing wage and price pressures. In addition, the broader monetary aggregates suddenly weakened dramatically, with M2 coming to a virtual standstill and M3 actually declining in the third quarter. The softness in the aggregates was symptomatic of a warier approach to spending and borrowing on the part of households and corporations, whose balance sheet problems were exacerbated by the stagnant economy. In addition, credit standards at financial intermediaries remained restrictive, and spreads between loan and deposit rates remained high by historical standards, reinforcing households' inclinations to pay down debt rather than to accumulate assets.

To help ensure that these forces did not imperil the recovery, the Federal Reserve moved to ease money market conditions further during the latter part of the year. Pressures on reserve positions were reduced slightly in August and again in September, with the latter move accompanied by a 50 basis point reduction in the discount rate. With the economic climate remaining stagnant, price pressures subdued, and the broader monetary aggregates still mired near the bottoms of their target ranges, the System's easing moves became more aggressive in the fourth quarter, culminating in a full one-percentage-point reduction in the discount rate on December 20. All told, these moves combined to drive the federal funds rate down from $5\frac{3}{4}$ percent in July to 4 percent by year-end. Most other short-term interest rates declined by similar magnitudes and the prime rate was reduced by 2 percentage points, to $6\frac{1}{2}$ percent.

Long-Term Interest Rates



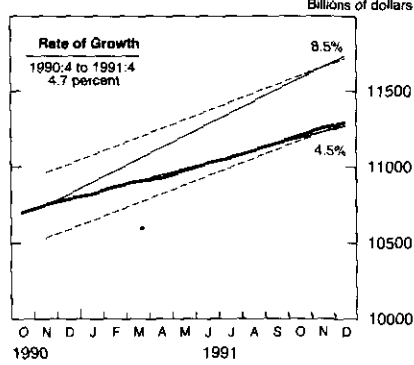
The decline in short-term interest rates, in combination with flagging economic activity, depressed credit demands, and prospects for lower inflation, contributed to bringing long-term interest rates down significantly in the latter part of 1991. The thirty-year Treasury bond rate dropped about a percentage point over the second half of the year, and mortgage interest rates tumbled to their lowest levels in many years. Declining interest rates prompted a spate of mortgage refinancings, corporate and municipal bond offerings, and a major stock market rally, which propelled most indexes to record highs. Although monetary growth bounced back a bit in the fourth quarter, both M2 and M3 remained near the lower ends of their respective growth cones. The dollar, which had begun to lose ground in foreign exchange markets in the summer—when the weakness in money and credit raised the specter of additional easings of U.S. monetary policy—depreciated further in the fourth quarter as the economic situation deteriorated and the pace of policy easings quickened. Rising interest rates in Germany also put downward pressure on the foreign exchange value of the dollar. In January 1992, the dollar rebounded somewhat, reflecting an emerging view that interest rate declines in the United States and interest rate increases in Germany, might have come to an end. The former view was also reflected in the U.S. bond market, where rates retraced a portion of their earlier declines, partly on brightening prospects for the U.S. economy but also on concerns that impending fiscal stimulus may increase federal government demands on credit markets.

Monetary and Credit Flows

Patterns of credit usage and financial intermeditation, which began to shift even before the onset of the economic downturn, continued to evolve in 1991, distorting traditional relationships between overall economic activity and the monetary and credit aggregates.

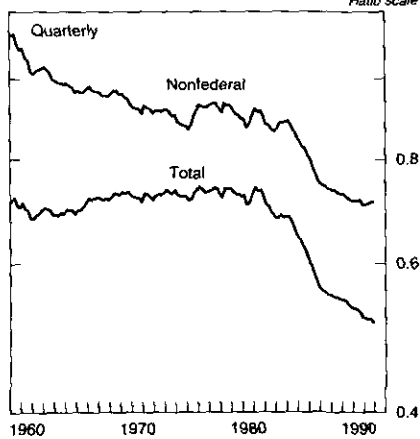
These changes were evident in the behavior of the aggregate debt of nonfinancial sectors, which expanded 4¼ percent in 1991, leaving this aggregate near the bottom of its monitoring range. Robust growth in federal government debt, owing to the economic downturn and to additional outlays for federal deposit insurance, masked an even weaker picture for nonfederal debt. Households, nonfinancial corporations, and state and local governments accumulated debt at an anemic 2¼ percent rate in 1991, the slowest advance in decades and below even the sluggish growth rate of nominal GDP.

Debt: Monitoring Range and Actual Growth



The small rise in nonfederal debt velocity last year runs counter to the pattern seen in the 1980s, when the accumulation of debt vastly outstripped growth in nominal GDP. The rapid buildup of debt in the 1980s was likely a result of the deregulation of interest rates and financial innovations, which combined to lower the cost of borrowing to households and businesses, spawning a surge in leveraging activity. Greater debt burdens may also have been accumulated under the assumption that nominal income growth would be sustained at the elevated pace of the mid-1980s and

Debt Velocity



that the prices of assets purchased with credit would continue to climb.

In recent years, however, asset values and income growth have fallen short of these expectations. In particular, depressed commercial and residential real estate values, coupled with slower income growth,

have eroded the net worth of some borrowers and severely strained the ability of highly-leveraged households and corporations to service debt. These difficulties, in turn, have fed back on to the strength of the financial intermediaries that extended the credit. In an effort to bolster depleted capital positions, reduce financing burdens, and shore up weakened bal-

Growth of Money and Debt (Percentage Change)

	M1	M2	M3	Debt of domestic nonfinancial sectors	
<i>Fourth quarter to fourth quarter</i>					
1980	7.5	8.9	9.5	9.2	
1981	5.4 (2.5)*	9.3	12.3	9.9	
1982	8.8	9.1	9.9	9.2	
1983	10.4	12.2	9.9	11.3	
1984	5.4	8.0	10.8	14.1	
1985	12.0	8.7	7.6	13.8	
1986	15.5	9.2	9.0	13.8	
1987	6.3	4.3	5.9	10.4	
1988	4.3	5.2	6.4	9.4	
1989	0.6	4.8	3.6	8.2	
1990	4.2	3.8	1.7	6.9	
1991	8.0	3.1	1.3	4.7	
<i>Quarterly growth rates (annual rates)</i>					
1991	Q1	5.2	3.5	3.3	4.5
	Q2	7.4	4.3	1.8	4.0
	Q3	7.5	1.1	-1.1	4.9
	Q4	11.1	3.3	1.2	5.2

*Figure in parentheses is adjusted for shifts to NOW accounts in 1981.

ance sheets, both borrowers and lenders have adopted a more chary attitude towards additional credit.

This more cautious approach to leverage has interacted with the sluggish pace of economic activity to restrain borrowing across nearly all sectors of the economy. Nonfinancial business sector debt, held in check by the decline in financing needs associated with weak aggregate demand and by efforts of debt-laden firms to restructure their balance sheets, grew only ½ percent in 1991. Taking advantage of a buoyant stock market, particularly in the latter part of the year, corporations turned to equity financing; net equity issuance for the year was positive for the first time since 1983, and the ratio of the book value of nonfinancial corporate debt to equity, which had soared in the 1980s amid a flurry of corporate restructurings, actually turned down in 1991. Firms also took advantage of lower interest rates to refinance higher-rate long-term bonds and to reduce uncertainty about their future financing burdens by substituting long-term debt for short-term borrowing. Overall, the mixture of less debt, more equity, and lower interest rates had a salubrious effect on the financial positions of many firms. Indeed, the ratio of interest payments to cash flow for all nonfinancial firms declined in 1991, reversing some of the runup seen in the late 1980s. Consistent with an improving financial picture and prospects of an economic rebound, quality spreads on corporate issues narrowed considerably from their peaks in early 1991, especially on below-investment-grade securities. In addition, downgradings of corporate bonds dropped sharply in the third and fourth quarters, although they still ran higher than the pace of upgrades.

Deleveraging was also evident in the household sector in 1991. Consumer credit declined as households reined in expenditures, curbed their accumulation of financial assets, and pared existing debt burdens. Households took advantage of declining interest rates, particularly in the fourth quarter, by refinancing outstanding mortgages; they also substituted home equity loans for installment debt and other consumer credit which carry higher financing costs and are no longer tax deductible. By reducing their net accumulation of debt and refinancing a substantial volume of their remaining borrowings at lower rates, households were able to ease their financing burdens, reducing the ratio of scheduled debt payments to disposable personal income, which had risen sharply in the 1980s. Even so, loan delinquency rates rose through much of 1991, albeit to levels not out of line with what was seen in previous cyclical downturns. On the other side of the ledger, many households with net creditor

positions saw their interest incomes decline last year.

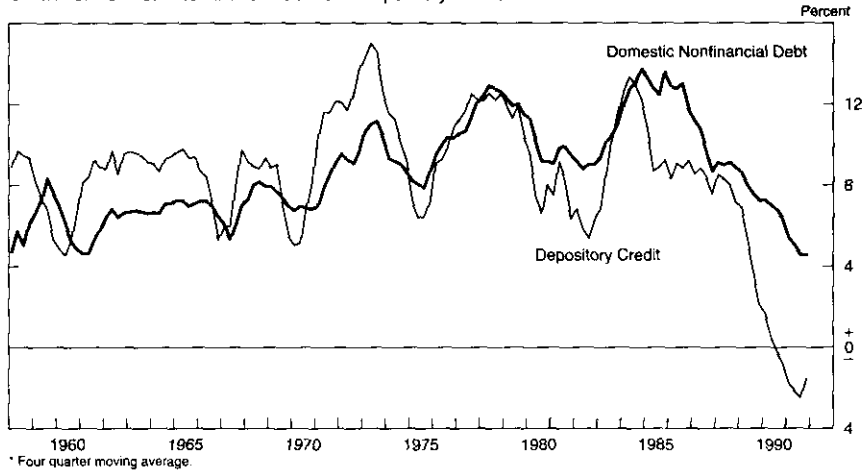
Faced with intensifying budgetary pressures and numerous downgradings, state and local governments also put only limited net demands on credit markets in 1991. The outstanding debt of this sector grew but 3 percent last year, the smallest increase in more than a decade. Gross issuance of municipal bonds was substantial, however, as states and localities moved to refinance debt at lower rates.

Efforts by borrowers to restructure balance sheets by substituting long-term debt and equity for short-term borrowing, along with more restrictive credit standards by some lenders and the closing and shrinkage of troubled thrifts, have affected the channels through which debt flows. In particular, in recent years there has been a major rerouting of credit flows away from depository institutions. The decline in the importance of depositories, when measured by the credit they book relative to the total debt of nonfinancial sectors, has been striking, and this trend was extended in 1991. Not only did the thrift industry continue to contract, as the direct result of RTC resolutions as well as the retrenchment of marginally-capitalized institutions, but commercial banks cut back on their net credit extensions. Indeed, bank credit increased only 4 percent, not even enough to offset the continued runoff at thrifts. Weakness was particularly evident in bank lending, which shrank ¼ percent last year; banks' holdings of government securities, by contrast, expanded at a rapid clip.

Although the shifting composition of bank asset flows in 1991 was reminiscent of patterns seen in previous periods of languid economic activity, the magnitude of the downturn in loan growth last year was more pronounced than the usual experience. Apparently, loan growth was depressed not only by reduced credit demands, but also by a more restrained bank lending posture. Faced with deterioration in the quality of their assets, higher deposit insurance premiums, and more stringent requirements for capital, banks retrenched, adopting a more cautious attitude regarding credit extensions. Concerns about capital, especially in light of rising loan delinquency rates and mounting loan loss provisions, induced many banks to continue tightening lending standards through the early part of 1991 and to maintain fairly restrictive standards over the balance of the year.

A more prudent approach to capitalization and lending decisions is, in the main, a positive development that ultimately will result in strengthened balance sheets for the nation's depositories. Reflecting this improved outlook, prices of outstanding bank debt and equity increased markedly from their lows in late

Growth of Domestic Nonfinancial Debt and Depository Credit*

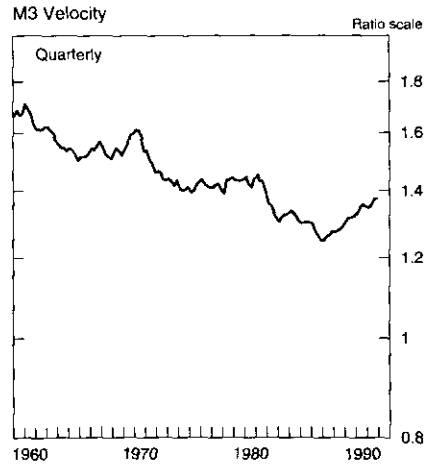


1990 and early 1991, outperforming broader market indexes. Bank profits, benefiting from wide spreads between loan rates and deposit rates, also showed improvement relative to the depressed levels of recent years, although they remained low by broader historical standards.

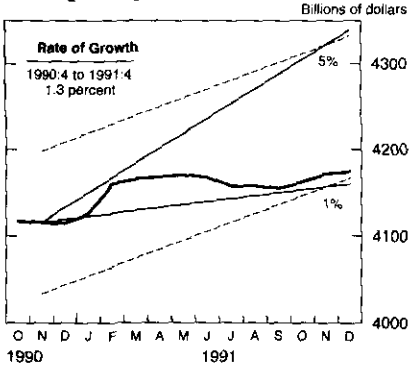
To date, depository retrenchment appears to have had some restraining effects on aggregate borrowing. Of course, in some areas, much of the credit formerly extended by banks and thrifts has been supplanted by other intermediaries and by credit advanced directly through securities markets, at little if any additional cost to borrowers. For example, growing markets for securitized loans largely have filled the vacuum created by depository restraint in the areas of residential mortgage and consumer lending. Similarly, many large businesses have turned to stock and bond markets to meet credit needs and to restructure balance sheets, reducing their reliance on banks as well. Both banks and thrifts have cut back on other types of lending that can less easily be rechanneled, however, including construction and nonresidential real estate loans, loans to highly leveraged and lower-rated borrowers, and loans to small and medium-sized businesses. Other financial intermediaries, including life insurance companies, have been afflicted by some of the same balance sheet problems plaguing depositories and have also curbed their lending to these sectors. As a result of the pullback in credit supplies,

these borrowers now face somewhat more stringent borrowing terms.

As in 1990, the retrenchment of banks and thrifts and the associated redirection of credit flows away from depositories continued in 1991 to have profound



M3: Target Range and Actual Growth



effects on the broad monetary aggregates and their traditional relationships with aggregate economic activity. M3, which comprises most of the liabilities used by banks and thrifts to fund credit expansion, has been most affected by the reduced importance of depository credit in funding spending. The velocity of this aggregate, which declined through much of the 1980s, has trended up in recent years; this trend continued in 1991, as M3 rose only 1¼ percent, well below the pace of nominal GDP, leaving this aggregate near the bottom of its target range.

In the first few months of the year, M3 showed surprising strength, boosted in part by a firming of its M2 component, which benefited from declining interest rates. The most important single factor contributing to strong M3 growth in the early part of 1991, however, was the rebirth of the market for "Yankee CDs"—large time deposits issued by foreign banks in the United States. After the 3 percent reserve requirement against nonpersonal time deposits and net Euro-borrowings was lifted at the end of 1990, foreign banks showed a distinct preference for funding with such instruments, rather than borrowing from their overseas affiliates or in the federal funds or RP markets. Domestic depositories, by contrast, faced with high and rising U.S. deposit insurance premiums, exhibited no inclination to alter their funding strategies in favor of large time deposits.

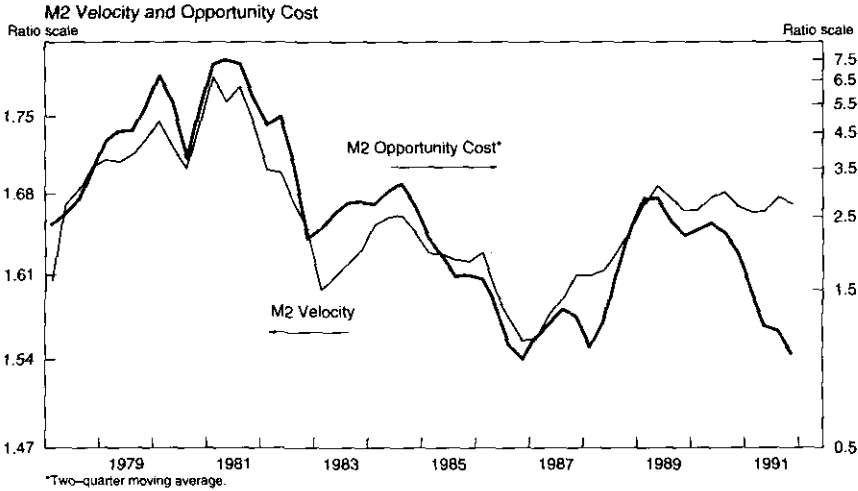
The surge in Yankee CD issuance, which totaled nearly \$40 billion over the first quarter, began to taper off a bit as the year progressed, revealing the underlying weakness in M3. After slowing somewhat in the second quarter, this aggregate contracted at a ¼

percent annual rate in the third quarter, reflecting feeble loan demand in a tepid economy as well as the restructuring of depositories. The Resolution Trust Corporation played a direct role in damping M3 growth by taking assets formerly held by thrifts and funded with M3 deposits onto its own books and financing them with Treasury securities. Although M3 rebounded a bit in the fourth quarter, in line with some firming of bank credit, its growth remained subdued.

The effects of depository restructuring on M2 remain imperfectly understood. In the past, the velocity of M2 has tended to move in tandem with changes in a simple measure of the opportunity cost of holding this aggregate—that is, with changes in the returns on alternative short-term investments relative to those available on assets included in M2. Typically, when the opportunity cost of holding M2 declines as decreases in money market interest rates outpace drops in yields on deposits, holdings of M2 strengthen relative to expenditures—and velocity drops. In recent years, however, this relationship appears to have broken down, with the velocity of M2 holding up despite a steep, persistent drop in this measure of opportunity cost. This was particularly evident in 1991, when M2 expanded at about the same pace as nominal GDP despite a significant decline in such opportunity costs. M2 finished the year near the bottom of its target range and much weaker than would be expected on the basis of historical relationships among income, interest rates, and the public's appetite for monetary assets.

In the early months of the year, M2 growth accelerated somewhat from its lackluster pace of late 1990. Narrowing opportunity costs generated substantial inflows to liquid deposits, particularly those in M1, which more than offset continued runoffs in small CDs. Money growth also was temporarily boosted by strong foreign demands for U.S. currency as a safe haven during the crisis in the Persian Gulf. Through May, M2 growth remained broadly consistent with the general configuration of opportunity costs and income, and near the middle of its target range.

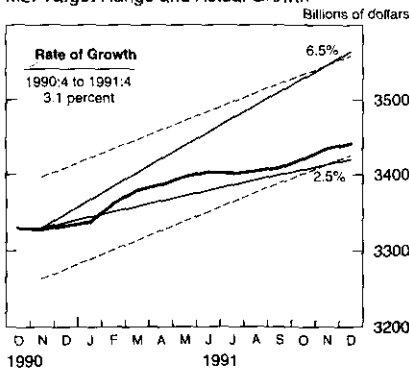
M2 began to slow in June, however, and stalled in the third quarter, despite expansion in nominal income and further declines in opportunity costs. Growth in this aggregate resumed in the following quarter, fueled by a surge in transactions deposits owing to additional declines in opportunity costs, but inflows to M2 remained fairly weak, and this aggregate ended the year only a little above the bottom of its target range.



Although the unusual behavior of M2 relative to income and opportunity costs has not been fully explained, it surely is related to the restructuring of financial flows and to the downsizing of the banking system. With inflows of M2 deposits apparently tending to be more than sufficient to fund weak depository credit growth, banks and thrifts seem to have pursued additional retail deposits less aggressively than in the past. Although rates offered on these deposits did not,

until very recently, fall unusually rapidly in response to declining market interest rates, depositories seem to have acted in other ways to reduce the cost of funds, including adjustments in advertising and marketing strategies that would not show up in traditional measures of opportunity costs. In addition, by keeping deposit rates very low relative to loan rates, partly in an attempt to bolster profit margins while shrinking their balance sheets, depositories provided households with a greater incentive to finance spending by holding down the accumulation of M2 assets rather than by taking on new debt. This incentive likely reinforced the impetus to borrowing restraint stemming from household concerns about their own balance sheets.

M2: Target Range and Actual Growth



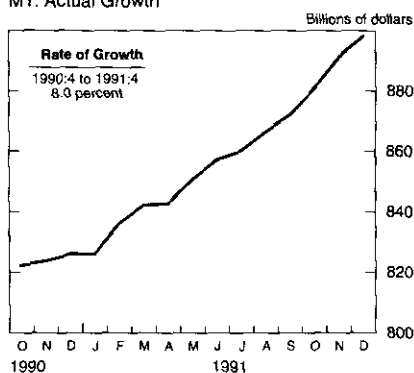
The slowdown in M2 growth, particularly in the third quarter, also appears to have been related to the configuration of returns on financial assets. Yields on small time deposits and money market mutual funds largely tracked the downward path of market interest rates, falling to their lowest levels since the deregulation of deposit rates and prompting significant outflows from these components of M2. Although some of these funds shifted into the liquid deposit components of M2—whose offering rates responded slowly, as they normally do, to the declines in market interest rates—a portion of these funds appear to have left the aggregate. The primary lure seems to have been the stock and bond markets, which offered higher returns,

in part because of the steep upward slope of the yield curve. Indeed, inflows to stock and bond mutual funds were robust throughout 1991, and especially since midyear, when investors seemed particularly intent on reaching for higher yields by lengthening the maturity of their portfolios. Depositories, faced with weak loan demand and pressures on capital positions, seemed disinclined to compete aggressively for these funds by offering competitive rates on longer-term CDs.

The rapid pace of activity by the Resolution Trust Corporation also likely depressed M2 growth in the third quarter, as it did throughout the year. The abrogation of existing retail CD contracts and the disruption of long-standing depositor relationships often attending resolutions of failed thrift institutions may have encouraged investors to reshape their portfolios, substituting nonmonetary financial assets for M2 deposits.

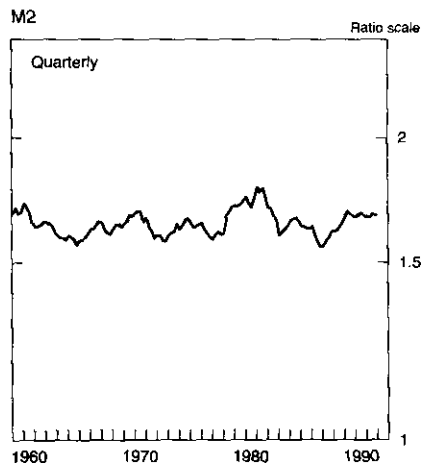
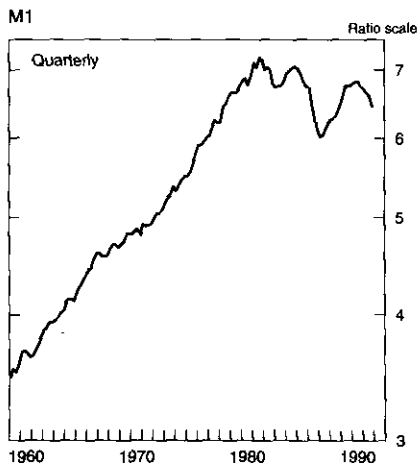
Despite sluggish income growth, M1 expanded 8 percent in 1991, the swiftest advance since 1986. Unlike M2, this aggregate has responded to declining market interest rates about as would be expected given historical relationships. M1 was boosted by large inflows to NOW accounts, whose offering rates responded very slowly, until the end of the year, to declining market interest rates. Falling rates also brought new life to demand deposits, as compensating

M1: Actual Growth



balances to pay for bank services surged. Demand deposits likely benefited as well from the pickup in mortgage refinancings, because the proceeds from mortgage prepayments are sometimes housed temporarily in demand accounts. Rapid growth in currency, owing in part to continued strong foreign demands, also contributed to the strength in M1, as well as in the monetary base, which increased 8¼ percent last year.

Velocity of Money



APPENDIX

March 10, 1992

(179)

Testimony
to the
House of Representatives
Subcommittee on Domestic Monetary Policy
of the Committee on Banking, Finance and Urban Affairs

Dr. Robert J. Barbera
Chief Economist, Lehman Brothers

Tuesday, March 10, 1992
10:00 a.m.

Rayburn House Office Building

I. Introduction

The U.S. is in the process of ending a 40-year debt cycle. I believe we will accomplish this with different results than the disaster of the 1930s -- the last time we were in this situation.

I think the U.S. will unwind this debt cycle without a dastardly result, and that is because we have taken the necessary cushioning steps. The federal government is writing the multi-hundred billion dollar check to put cash where it is needed -- on the left-hand side of bank and thrift balance sheets. And the Federal Reserve Board has taken short-term interest rates down rather dramatically -- real interest rates on cash accounts have essentially collapsed. Taken together, these actions suggest to me that we are about to embark on a fairly brisk recovery. The necessary relief took some time to put in place, but it is there now, and it will likely deliver the same kind surprising economic rebound that we traditionally see at recovery's outset.

My view of the U.S. economy's performance in 1992 in part reflects my belief that one needs to dismiss last year's small rebound in real GDP as a statistical artifact. Our interpretation of the economy's overall performance over the course of 1991 is straightforward. The early summer, momentary liftoff in economic activity was a false start, reflecting postwar euphoria. The subsequent reversal of production and real income gains, and the complete erasure of mid-1991 sales and employment gains over the last six months of the year render the "slow recovery" characterization of second half 1991 a stretch at best. True, real GDP was up fractionally in every quarter but the first. But most every American will tell you that the recession was in place throughout the year, and the job losses, sliding sales, production cutbacks and income declines square neatly with that view. Look at the U.S. index of coincident indicators, and I believe you see a much better representation of 1991.

This composite index of U.S. economic performance had a three-month upward spurt in the second quarter of 1991, rising 0.9% on a wave of postwar euphoria. Over the next seven months, however, the coincident index rolled over in summer and nose-dived in winter, registering a decline of 2.4% that established a new low for this index, well below the March 1991 level that many called -- and still call -- the end of the 1991 recession. Again, the recession didn't end in summer of 1991 in the eyes of most Americans, and it didn't end according to the U.S. index of coincident indicators.

As far as I am concerned, the postwar euphoria three-month rebound was a false start -- doomed to failure because interest rates had not fallen to levels needed to provide sustained economic liftoff.

But the second half resumption of U.S. recession also delivered a second half slide in U.S. interest rates. And this decline holds out the promise of a real recovery. I continue to believe that a recovery with some guts to it will begin this spring.

II. Looking Back

Again, our belief is that the 1990-1991 recession was long and difficult; it was in fact of record length. Why did we suffer through such an extended period of economic duress despite a near universal contention that we would see a short shallow recession? I would suggest that the misplaced forecasts reflected, up until recently, the wrong emphasis. Most economists have been terribly wrong about the severity of the ongoing recession, in my opinion, because they have been wrong in their focus. Their concentration on Mideast oil prices was misplaced; it should have been on debt levels, asset prices and real returns on cash -- not Iraq and the tanks, but debt and the banks. And to understand the dynamics of debt and banking problems from 1990 through 1991, one needs to review the economic performance over the full decade of the 1980s.

There were two great anomalies in the 1980s. First, there was an extraordinary leveraging up of the U.S. economy, and the debt-to-income ratio soared. Second, real rates on cash rose to unprecedented levels. I believe these two developments are linked.

U.S. inflation's striking decline in the early 1980s, its limited late-cycle lift in 1988-1990, and its dramatic slide in the current economic environment suggest that U.S. monetary policy over the past 14 years has succeeded in breaking the back of the rampant price acceleration witnessed in 1965-1980. Nevertheless, debt had one last glorious run over the course of the 1980s as business, consumer and public sector borrowing combined to lift aggregate debt growth to 13%-15%, eclipsing the peak levels of the late 1970s. Again, inflation was all but vanquished by mid-1980, and, as a consequence, income gains slowed markedly from the inflated growth rates of the late 1970s. Debt growth far outstripped income growth, and for the U.S. economy as a whole, the debt-to-income ratio rose a drastic 50%. Thus, the first great imponderable of the 1980s was the debt explosion that occurred in the midst of great disinflation.

What prompted this radical shift in U.S. indebtedness? I have a single, no doubt somewhat simplistic, explanation. I believe consumer and corporate borrowers -- along with the banks, pension funds and investment bankers who engineered their loans -- all failed to embrace the reality of the disinflation of the 1980s. In essence, over the past decade we beat core inflation -- but we didn't get the joke.

In my opinion, the willingness to take on debt at double-digit interest rates reflected a confidence in the ability to generate double-digit increases in income growth, despite mounting evidence that lower inflation generally preordained a downward shift for income streams.

This failure to comprehend the pervasive effects that low inflation would have on income streams, asset prices, and debt service developments took many forms in the U.S. economy in the 1980s. But the key to linking these various developments was the shared belief that for individual income streams or asset prices, advances akin to those of the 1970s were achievable despite the 1980s reality -- low single-digit inflation.

Paradoxically, as I see it, this willingness to borrow aggressively despite limited income gains goes a long way in explaining the second great imponderable of the 1980s -- super high real rates on cash. From 1980 through 1989, U.S. short-term interest rates vascillated in the rarified atmosphere of 3% to 8% above the inflation rate. When Fed policy was restrictive -- that is, when it slowed money, credit and economic growth -- short rates tended to be 5% to 8% above core inflation. Ease generally meant that real rates on cash fell to no less than 3% above the inflation rate. For the period in question, inflation-adjusted yields on 90-day T-bills averaged 3.0%. In no decade except the 1930s have real yields been so high.

High real short rates and aggressive debt use drove us to a day of reckoning, and it arrived. What began as deterioration in the junk bond market soon enveloped many thrift institutions. By late 1989, many regional and money center banks were caught.

And this journey from failing leveraged buyout transactions through collapsing S&Ls to money center banks under siege was rapid. Again, for many leveraged transactions, expectations about asset sales implicitly required revenue gains and real rate declines that did not pan out. In the S&L arena initially, but soon for banks generally, commercial real estate investments went sour, as income from these properties fell far short of interest burdens and the sale of properties became a recipe for disaster. Each sale revised down mark-to-market opinions about the value of real estate financed by banks. With bank regulators catalyzing the sea change in late 1989, a complete overhaul of opinion about real estate values began. The collapse in bank share prices from late 1989 through late 1990, in a real sense, was nothing more than a snapshot of this change in opinion about to mark-to-market values of real estate assets and the dire implications of these revaluations for bank capital adequacy questions. As banks were forced to redefine what constituted a prudent loan, credit availability was soon curtailed. By mid-1990, recessionary forces were evident in the U.S. economy. Iraq's invasion of Kuwait simply acted as a catalyst in the acceleration of this process. With conservatism running full bore, and with Fed ease precluded -- compliments of Saddam Hussein -- recession took hold.

The bust in real estate, the collapse of the junk bond market and the 70% decline in the market capitalization of money center banks from October 1989 to October 1990 were all manifestations of the markets coming to terms with the fact that the returns based on anticipated inflation would fail to materialize.

Again, our sense is that these extraordinary real yields on cash were directly related to the confidence of business and consumer borrowers that future assets price gains and income streams would justify borrowing at interest rates that, by historical standards, appeared exorbitant. U.S. central bank officials had no choice but to find the rate that kept the real economy from overheating. To their chagrin, it was well above inflation.

But once those expectations of inflation or asset price appreciation collapsed, one had to expect real short rates to return to much more traditional levels. That is why I thought last year that we would see

dramatic declines in short rates. Over the course of 1991, the U.S. Federal Reserve tended to see the world in this fashion, and short rates did collapse.

III. Money Rates Matter: The Reliquification Process

So much for looking back. Looking ahead, I think we will get a meaningful recovery because of the collapse in short rates. My contention at this time last year was "cash is trash," meaning short rates would collapse and returns on cash-like instruments would be negligible.

My contention today is "money rates matter." When short-term interest rates are cut in half, the impact is quite pronounced, especially regarding borrowers, lenders and asset prices. And this interest rate dynamic will restore the economy to a robust growth phase.

A. The Banks

The key to understanding the interest rate dynamic that I believe will rescue U.S. economic growth in the 1990s is the seemingly neutral interest rate structure in place when the recession unfolded. With money rates towering over the inflation rate during the 1980s, Fed policy was being conducted in an extraordinarily high real rate environment. There was no need for a sharp spike up in Fed funds. At the outset of the 1990s, bank regulators forced a change in attitude about what constituted a prudent loan. Conservative reassessments of the value of bank loan portfolios, on a mark-to-market basis, pointed to major bank capital adequacy problems; bank lending ground to a halt, and recession followed.

To many, the collapse in bank asset values, mark to market, precludes any meaningful pickup in loan growth for the foreseeable future, in turn suggesting an extraordinary U.S. economic decline. I disagree. While I embrace the notion that bank balance sheet duress was a critical link in today's downturn, a sharp slide in U.S. interest rates -- because it raises the mark-to-market value of any income stream -- can reflate bank balance sheets and allow lending to recommence and expansion to begin again. The debt bears have had the right focus, but the wrong conclusion. The economy does not collapse, short-term interest rates do.

Consider the pattern for New York money center banks over the past three years. In October of 1989, a kinder period for asset valuation, a typical bank had a commercial building on its balance sheet with an asset value of say, for the purposes of example, \$100 million. It was well known that the building was half full, but it was generally accepted that it would fill up over five years. The loan was accepted at its face, or book value. Over the next year, however, perceptions about commercial real estate changed dramatically. That building would not fill up in 5 years, not 12, not 20, never! It wasn't a \$100 million asset, not \$90 million, not \$80 million, not even \$60 million! Bank stock prices weren't \$45 per share, not \$35, not \$25, not \$10. In late October, we had reduced the market capitalization of money center banks by 70%. Mark-to-market calculations suggested negative worth for all but a few banks, loan availability was nil, and recession seemed sure to

deepen much further. The answer? Surely we can agree that no interest rate can rescue commercial building activity in the quarters ahead. Nonetheless, dramatically lower interest rates can substantially raise the value of an asset's income stream. From late-October 1990 through November 1991, short rates fell 3.5 percentage points and long rates fell 2.0 percentage points. The building remained half empty, but its mark-to-market value rose as rates plummeted. Similarly, the collapse in short rates lowered debt burdens to leveraged companies -- these loans on bank balance sheets were also lifted, mark to market. Lastly, banks dramatically increased the value of Treasury holdings over the period. Treasury notes rose from 7% to 14% of bank assets, and the value of these assets surged as short rates collapsed. In turn, bank share prices rose some 35%-65%.

Yes, the credit crunch has been extreme. The depth and duration of today's recession make this point. But an extraordinary decline in interest rates will succeed in reversing bank system duress and U.S. economic decline.

B. Money Rates Matter: Individual Investors Are Forced Out the Risk Curve

Collapsed real short rates have profound consequences for household saving decisions. I believe individual investors over the next five years will shift substantial sums out of cash and into notes, bonds, equities and bond and equity mutual funds. Investors have not changed their risk profile, but the risk-free ride that cash afforded them in the 1980s is over.

A look at the flow of funds data from 1950 to present shows that U.S. savers occasionally change their minds, and when they do, it's dramatic. In 1955, 30% of household financial assets were in equities, 15% were in fixed-income and 15% was in cash. In the late-1960s and early-1970s, the public was burned in both bonds and stocks and left those markets. Equities went from 30% to 15% of household financial assets, bonds from 15% to 10%, and cash from 15% to about 27%. In the 1980s, despite the fact that both the equity and bond markets did very well, the public did not return to equities and took only a half step back to bonds. Households kept 27% of their financial assets in cash. Why? Because in the 1980s, you could get 4% above the inflation rate, government-guaranteed, and with no principle risk. It was preposterous for banks to pay these rates because the returns were not there. That is what the bank bailout is all about. An investor is not supposed to get 4% above inflation and take no risk. Indeed, from 1926 to 1980, cash generally delivered nothing, and holders risked nothing. The 1980s were the exception to the rule. I think that era has ended, that the regime of significant positive returns on cash is over. People will move out of cash not because they want the action, not because they want to extend their risk profile, but because they have to in order to earn acceptable returns.

Why are consumer investment flows important? Because they have driven bond and equity prices to levels that allow major refinancings to occur for both U.S. consumers and corporations. Debt burdens, therefore, will fall, and freed up cash will fuel recovery.

C. The Consumer Relinquishes

How much will consumer interest burdens be reduced by the recent sharp fall in fixed rate mortgages? Were all outstanding mortgages refinanced, an extreme notion to be sure, the saving would amount to \$60 billion annually -- an

extraordinary amount which reflects the fact that home mortgages constitute roughly 71% of outstanding consumer liabilities. To estimate the more likely saving, we at Lehman Brothers Economics Department base our calculation on an average fixed rate of approximately 8.5% -- our expectation for the first half of 1992 -- and assume a modest shift in the mix from fixed to variable rate mortgages. We estimate that in late 1992, mortgage interest burdens will be running at a rate some \$30 billion to \$40 billion lower than in the fall of 1991 -- certainly meaningful interest burden relief. We contend that home mortgage refinancing will be explosive over the first half of this year, with record refi's the rule for many high interest rate mortgages. Our estimate does not presume that low interest rate mortgage debt will replace pernicious auto and credit card debt. These developments could also prove out and would obviously lower consumers' interest burden.

D. Similarly, Corporations Can Now Sell Stocks and Bonds

From 1983 through 1990, corporations retired some \$850 billion of equity, as exceptional real short rates capped equity valuations. With the sharp slide in short rates, equity valuations have soared and equity issuance will be explosive. Initially, equity will be issued to pay down debt. Over time, however, equity offerings will be used to raise cash to invest in profitable lines of business.

IV. Money Rates Matter: The Real Economy Responds

A. Housing Activity Surges

Housing activity is also likely to surge in the near term. The latest leg down for long rates has sparked the kind of *change in sentiment* about home buying that was missing throughout 1991 and that has consistently been associated with sharp rebounds in home sales and housing starts. Demographics suggest that over the next five years this recovery and subsequent expansion will be tame in comparison to previous cycles. Nonetheless, single-family starts fell nearly 50% over the 12-month period from early 1990 to early 1991. That was not demographics -- we did not all stop being born on the same day. The halving of housing activity reflected the credit crunch-induced U.S. recession. Put the right rates in place and housing will respond. In my opinion, today's rates look about right. Sentiment surveys suggest they look right to many consumers. And the chatter we have heard from real estate agents is that more than sentiment about home buying is changing.

B. Consumer Spending Rebounds

Many contend that even if consumers are handed cash, the newfound conservatism of the 1990s will cause them to save it, not spend it. In effect, the argument goes, consumers need to pay for the excesses of the 1980s. I agree that the splurge of the 1980s must be paid for, but as I look at the data, it seems clear that the sacrifice has already been made. Consider the following. The peak-to-trough decline in consumer spending on discretionary goods during the current recession has been larger than in any recession save the 1973-1975 downturn and the one-month dip associated with the 1980 credit

card debacle. In fact, the drop is nearly twice as large as in three of the last five recessions. That means people have foregone purchases in a big way, which explains why sentiment is so low. It also means that there is hefty pent-up demand. A new source of cash flow will give people a chance to recapture some of their lost living standards. As rate relief works its way through the system, spending will rise.

I have been asserting that a fixed rate near 8%, and the mortgage refinancing it will engender, will reduce annual homeowner interest by about \$43 billion. The most recent evidence on the pace of mortgage refinancings -- a spectacular leap in January applications -- squares with our contention. The back-up we have seen in long rates somewhat reduces the potential for refinancings, unless one is willing to speculate that consumers will shift from fixed to variable rate mortgages. Interestingly, there is some evidence of a move to variable rate mortgages associated with this recent rise in long rates. Were that to become widespread, the interest savings would be extraordinary. In any event, the urge to refinance is irresistible, and consumer interest burdens will soon be falling dramatically.

C. Inventories Are Rebuilt

Increased demand will enhance corporations' willingness to hold inventory. Going into this recession, it was widely believed that inventories were lean, which would help the U.S. avoid recession; however, many failed to anticipate how much demand would fall. As a result, further inventory cutbacks contributed meaningfully to recession. Coming out of this downturn, I think inventory restocking will contribute meaningfully to recovery.

V. Money Rates Matter More Than Sentiment: It's Always Darkest Before the Dawn

Why do I think this recovery will have some meat to it? First, because the sliding asset price-induced recession we were in had an important cyclical component to it. Let us take a Geoffrey Moore approach and look at the variable that is most volatile in the business cycle: corporate profits. The average recession decline is 22%, and in this last downturn, they were down 22%. Inventories have declined. Manufacturing and trade inventories, on a percentage basis, have fallen more than average in this recession. Short-term credit has experienced a collapse of unprecedented proportions. It looks like short rates have fallen about average. The only less likely forecast than a saucer recession and a saucer recovery is a "V" recession and a saucer recovery. So I think we will see some meaningful lift.

Lastly, because despair is in the air just about the time recovery surprises, I am going to read something, actually paraphrase, from the Sunday New York Times Late City Edition. It is entitled "The Recovery That Won't Start." Last week the President strained to make his case for the U.S. economy in a televised news conference, relying on sketchy economic information and even misinformation. He cited sharply lower inflation and interest rates as harbingers of recovery just ahead. Notwithstanding his oratory, the prospect that the recovery may amount to nothing more than a few quarters of poultry growth and possibly not even that is gaining credence among economists and the public at large. Opinion polls have begun to show that such a shift would

threaten Republican chances in the November election. This recession in fact has begun to shatter the almost blind faith among economists and many others that this recession like its forbearers would inevitably be followed by recovery. Despite the official data showing two quarters of modest growth, the economy has failed to spurt ahead as many had anticipated it would by now. Furthermore there has been a relentless stream of negative economic indicators in recent weeks. Rising initial claims, disappointing index of leading indicators. Even more ominous to some are the growing doubts whether the economic recovery will and can operate as in other postwar business cycles. Some economists fear that financial illiquidity, both in the U.S and around the world, could hinder or even prevent recovery from taking place. What is different this time from other postwar business cycles is that usually government policy aims at supporting recovery and this time they are not. Jeffery Sacks, Harvard University. That article was published October 3, 1982.

When recessions are in their early stages, the well known fact that economic downturns are temporary provides comfort to economic decision-makers. Paradoxically, this confidence in the arrival of an upturn tends to prolong economic distress. There comes a moment during recession, however, when expectation of recovery fades away. People suspend their belief in the business cycle, decide that depressed business conditions are likely to continue for at least another year, and make severe cutbacks. And this purging process is followed, soon thereafter, by sharp economic rebound.

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Testimony by

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before the

Subcommittee on Domestic Monetary Policy

of the

Committee on Banking, Finance and Urban Affairs

U.S. House of Representatives

March 10, 1992

Thank you, Mr. Chairman. I am pleased to appear before this committee to discuss the Federal Reserve's recent Monetary Policy Report to the Congress.

I am particularly pleased to be here at a time when there are signs that economic activity is beginning to strengthen and that the rate of inflation has shifted down to a lower level than we have had on a sustained basis for more than a quarter of a century. Appropriate monetary policy during the next few years should support the very favorable combination of a falling rate of unemployment and further declines in the rate of inflation.

The Outlook for the Economy and the Monetary Targets for 1992.

The slowdown of economic activity that occurred last fall was a direct reflection of the earlier slowdown in the expansion of the money supply. The M2 aggregate increased only 3.4 percent between the second quarter of 1991 and the second quarter of 1992. It is quite consistent with past experience that the level of nominal GDP then increased at the same 3.4 percent rate over the year from the final quarter of 1991 to the final quarter of 1992. And although such a low rate of increase of nominal GDP accelerated the decline of inflation, the immediate effect was also a sharp fall in the growth of real GDP and an actual decline in the fourth quarter level of real final sales.

By digging deeper, it is possible to find some components of demand that increased more rapidly than the aggregate and others that actually declined over the year as a whole. For example, exports grew rapidly while nonresidential construction declined. Similarly, there were some factors that helped to increase demand (e.g., an increased competitiveness of the dollar) and others that depressed demand (e.g., the level of household and business debt). But these should be seen as components rather than primary causes of the overall pattern of demand.

The Federal Reserve's decision to cut the interest rates at the end of last year has led to a sharp increase of the money supply. M2 has expanded at an annual rate of 8.5 percent since the start of the year. The average level of M2 in February was 6.1 percent higher than the average in December.

If the 6 percent growth of M2 continues, past experience suggests that nominal GDP in the second half of this year will also rise at a rate of about 6 percent, probably bringing with it a 3 percent rate of increase of real GDP and a 3 percent rate of inflation. I would regard such a 6 percent rate of increase of nominal GDP as the best achievable performance for the second half of this year and the first half of next year, the time period most affected by the increase in the money stock during 1992.

It is, of course, possible that the velocity link between the 1992 growth of M2 and the subsequent increase in nominal GDP will not remain constant. If velocity rises enough, the 4.5 percent target for M2 growth that the Fed has selected will be appropriate. But if velocity

actually declines, the increase in M2 needed to support a 6 percent rate of increase of nominal GDP would have to be greater than 6 percent.

While I therefore agree with Chairman Greenspan's statement that "in assessing monetary growth in 1992, the Federal Reserve will have to continue to be sensitive to evolving velocity patterns," I would be more comfortable if the Fed had centered its planned M2 increase for the year at 6 percent. If the Fed persists with a 4.5 percent rate of increase in M2 while the velocity link between M2 and subsequent nominal GDP remains unchanged, the resulting 4.5 percent rise of nominal GDP will not be strong enough to reduce unemployment at all.

Your committee should encourage the Federal Reserve to keep the growth of M2 in the upper part of its target range until there is evidence that a velocity increase has made slower increase of M2 more appropriate.

Improving Federal Reserve Control of M2

I have spoken until now as if the Federal Reserve can achieve whatever M2 target it sets for itself. Experience during the past two years is an important reminder that this is far from the truth. In 1991, for example, the Fed set a goal of increasing M2 at 4.5 percent but achieved only 2.7 percent money growth. With the economy slowing sharply toward the end of the year and with no evidence of a decline in the velocity link between the money stock and subsequent GNP, this shortfall of money growth was clearly undesirable.

Why was the money supply allowed to increase so slowly? There are no doubt some members of the FOMC who do not care about the money stock. Despite the historic evidence and the requirement to report a target for M2 to the Congress, they regard the money stock not as an instrument of Federal Reserve policy to be used in trying to achieve a desired rate of nominal GNP growth, but as either an erratic indicator of current economic activity or simply as a feature of the financial system without any particular significance for the real economy. Such a view leads them to think about monetary policy in terms of the direct effect of interest rates on the real economy and on inflation with no attention to the money stock. That is unfortunate. Experience has shown repeatedly, including last year, that it is easy to misjudge how interest rates will affect the economy and that changes in the stock of money, with adjustments for observed past shifts in velocity, is a better guide to the future performance of the economy.

But even those members of the FOMC who would like to control the money supply as a way of influencing the evolution of nominal GDP are frustrated by the technical inability of the Federal Reserve to control the money supply. The Fed cannot control precisely or even predict accurately how the money supply will behave over the next month or even the next six months.

The Fed's inability to control the money supply has been impaired over the years by the elimination of reserve requirements on all components of the money stock except ordinary checkable deposits. As a result, more than 80 percent of M2 is not subject to reserve requirements and therefore is not directly controllable by the Fed.

This is a serious problems that needs legislative remedy. The inability of the Fed to control the money supply last year led to the relapse of economic activity since last fall. It may adversely affect the recovery and, in some future year, could lead to an unwanted surge of inflation.

The Fed can gain control over the money supply quite simply by requiring reserves against all types of deposits that make up M2. Federal Reserve open market operations could then change the M2 money supply in a precise and predictable way. If, for example, banks were required to maintain reserves equal to 10 percent of all such deposits, a Federal Reserve open market operation that injected \$1 billion of cash into the banking system would increase such deposits and therefore M2 by \$10 billion.

Now, with reserves required only for ordinary checkable deposits, a \$1 billion open market operation has an uncertain impact on the monetary aggregates. Banks can respond to an injection of additional reserves by substituting additional M1 type deposits for other deposits with no increase in M2. Since experience shows that M1 is a much less reliable guide to future nominal GDP than M2, the impact of open market operations has lost its ability to guide the economy.

To improve its control over M2, the Federal Reserve should require that banks maintain reserves against all bank liabilities that are part of M2. (Although in principle it would be good to have reserve requirements against all of M2, excluding the money market mutual funds that are outside the banking system from the reserve requirements does not make the resulting velocity significantly less stable. Indeed, excluding the money market mutual funds but including large CDs of banks would create an aggregate subject to reserve requirements with even more stable velocity than M2.)

Of course, the imposition of such reserve requirements would by itself have a substantial contractionary effect on M2 and therefore on the economy. This effect can, however, be completely and precisely neutralized by open market operations that inject an equal amount of funds into the system.

The increase in reserve requirements would also by itself amount to a tax on the banks since they would be foregoing interest on the funds deposited at the Federal Reserve. This too can be completely and precisely neutralized if the Fed pays interest on the increased reserves deposited at the Federal Reserve. What the banks lose in interest when they sell securities to be able to make their deposits at the Fed, they will gain back in the interest on those deposits. (This also shows that the combination of increased reserve requirements and the payments of

interest on reserve deposits does not alter the relative competitiveness of money market mutual funds and bank deposits.)

The combination of open market operations in which the Federal reserve buys Treasury bills to inject funds into the system and the payment of interest on the banks' deposits at the Federal Reserve leaves no net impact on the budget. The open market operations cause a flow of interest to the Fed (and therefore to the Treasury) from the Treasury bills that are acquired while the interest paid on the additional deposits exactly offsets the budget effect of this revenue.

This is the point where Congress enters the story. Although the Federal Reserve can increase reserve requirements without Congressional approval, it requires legislative action to authorize the payment of interest on reserves deposited at the Fed.

I believe that your action to authorize such interest payments would greatly improve the ability of the Federal Reserve to control the money supply and therefore to guide the economy. It deserves the highest legislative priority if the Fed is to promote healthy growth with declining inflation over the years ahead.

Easing the Credit Crunch

There is a widely shared concern in the government as well as in the private sector that new bank regulations and overly tight supervision have created a credit crunch that is preventing a stronger economic recovery. Although some recent steps have been taken to ease the contractionary effects of supervisory practices, a problem remains with the bank capital requirements. This problem is likely to become even more serious when a stronger recovery increases businesses' needs to borrow to finance additional inventories, increased wages and new equipment.

It is important, however, to require banks to maintain adequate capital to prevent the kinds of excessive risk taking that got so many banks and thrifts into trouble in the 1980s. A compromise is therefore needed to define an appropriate standard for adequate bank capital that avoids excessive capital requirements.

The internationally agreed "Basel capital standards" that became effective at the start of this year are the appropriate foundation for such a capital requirement. But now that they are in effect, it's time to reduce and standardize the extra capital requirements (the so-called leverage capital requirements) that were previously imposed by our domestic bank regulators (the Fed, the Comptroller and the FDIC).

I am providing with this testimony an article that I wrote for the March 6th *Wall Street Journal* that explains how such "leverage" capital standards are now depressing banks' ability to lend and that suggests that the leverage capital requirement be reduced to a uniform 3 percent for all banks.

Although no legislative action is required by the Congress to permit the regulators to make this change, your active encouragement would no doubt make it more likely that this important change will occur. Doing so would increase bank lending, stimulate recovery, and help to provide funds for sustained expansion.

Revise Bank Capital Standards Now

By MARTIN FELDSTEIN

After a series of meetings in the Swiss city of Basel in the late 1980s, the bank regulators of the major industrial countries agreed on a new common standard of capital requirements for commercial banks. These rules became officially effective in the U.S. at the beginning of this year and will be fully phased in by year-end. They require banks to have specific amounts of capital (primarily shareholder equity) for every dollar of their assets (loans, mortgages, bonds and other moneys owed to the banks).

Now that these internationally agreed upon "Basel capital standards" are in effect, it's time to reduce and standardize the "leverage capital standard" that was earlier imposed on U.S. banks by our domestic bank regulators and is still in effect. Doing so would increase bank lending, stimulate recovery, and help to provide funds for sustained expansion.

The Basel standard requires banks to have \$4 of equity capital for every \$100 of "risk-weighted" assets. In calculating its risk-weighted assets, a bank gives full weight to business loans but only a 50% weight to home mortgages and no weight at all to Treasury bonds. Thus a bank with \$800 million of business loans, \$400 million of mortgages and \$200 million of government bonds would have \$1.4 billion of total assets but only \$1 billion of risk-weighted assets; the Basel rules would require it to have at least \$40 million of equity capital. The Basel rules also require banks to have at least \$8 of total capital—including funds raised by issuing bonds and certain preferred stock as well as common equity—per \$100 of risk-weighted assets.

Leverage Capital Requirement

Before this standard became officially effective, the domestic regulators imposed the leverage capital requirement on American banks. The leverage standard varies from bank to bank based on the judgment of each bank's own supervisors. Every bank is required to have at least \$3 of equity capital for every \$100 of loans and assets on its books, with no adjustment for risk differences. But the \$3 is an absolute minimum. In practice, the supervisors generally require banks to have between \$4.50 and \$5.50 of equity capital per \$100 of assets with the amount depending on the supervisors' judgment about the quality of the bank's assets and earnings. The higher this "leverage standard"—i.e., the more equity capital that the bank needs per \$100 of loans—the less that it is able to lend.

It is often easier for a bank to meet the Basel standard than the leverage capital standard. A bank can have more than enough equity capital to expand its lending under the Basel standard but still not be able to lend any more in practice because it could not meet its leverage capital standard if it increased its lending. The \$1.4 billion bank described above needed only

\$40 million of equity capital to meet its Basel standard but would require \$70 million of capital to meet a 5% leverage capital requirement.

If the bank actually had \$50 million of equity capital, it could do an additional \$250 million of lending before it was limited by the Basel standard, but it would be prevented from doing any additional lending because of the leverage standard. Indeed, it would have to shrink in size by \$400 million to comply with its leverage capital requirement.

The combination of significant capital requirements and careful regulatory supervision is important to prevent the kind of excessive risk taking that got so many banks and thrifts into trouble in the 1980s. When financial institutions were allowed to

operate with little or no equity capital, taking big risks was a heads-I-win-tails-you-lose option. As long as the taxpayers continue to protect most depositors, there is good reason to require equity capital as an incentive for prudent behavior and a buffer between loan losses and government deposit insurance.

Board of Contributors

Current bank capital requirements limit the ability of healthy banks to expand their lending. This is a drag on the whole economy and a particularly serious problem in some regions and industries.

operate with little or no equity capital, taking big risks was a heads-I-win-tails-you-lose option. As long as the taxpayers continue to protect most depositors, there is good reason to require equity capital as an incentive for prudent behavior and a buffer between loan losses and government deposit insurance.

But excessive capital requirements also create problems for the economy. Current bank capital requirements limit the ability of healthy banks to expand their lending to businesses and households. This particularly hurts smaller businesses that cannot issue commercial paper or bonds and that are dependent on one or two banks for all of their borrowing needs. The inability of these businesses to borrow is a drag on the whole economy and a particularly serious problem in some regions and industries.

This problem is likely to become even more serious when a stronger recovery increases businesses' needs for capital to finance additional inventories, increased wages, and new equipment. Without additional bank lending, these businesses will be unable to expand and the recovery as a whole will be weakened.

There is a widely shared concern in the government and private sectors that the bank capital regulations and overly tight supervision have created a credit crunch that is preventing a stronger economic recovery. But until now the government ac-

tions to alleviate regulatory stringency have been concentrated on such technical things as the method of evaluating banks' real estate assets and the guidelines for bank lending to borrowers in difficulty. These actions have been rightly criticized as relatively ineffective.

A more fundamental reform would substantially increase the ability of banks to lend without any change in the Basel capital standards. It would change the extra domestically imposed "leverage capital requirement" to a uniform 3% standard. Some recent analysis that I have been doing with Richard Syron, president of the Federal Reserve Bank of Boston, indicates that this change in the leverage capital requirement would more than double the amount of additional lending that New England banks could currently do.

According to the analysis done at the Federal Reserve Bank of Boston, the domestically imposed leverage capital standard (rather than the international Basel standard) limits the lending of four of the five top New England banks and half of all the New England banks with assets of more than \$1 billion. If the New England banks had to satisfy only the international capital standards and a 3% leverage capital ratio (instead of the current variable leverage standard), they could increase their business lending by more than twice as much as they can under existing rules.

A Uniform 3% Ratio

The continuation of some leverage capital requirement is probably justified because the Basel risk-based capital standard makes no allowance for any risk other than default risk. A bank could therefore in principle take substantial risk through an interest-rate mismatch (holding long-term bonds funded with short-term deposits) without having to have any capital if the bonds are Treasury securities. A uniform 3% leverage ratio would prevent this without the adverse effects of the current variable leverage capital standard. The combination of the Basel capital requirement on risk-adjusted assets and a uniform 3% leverage capital requirement on all assets would achieve a sound capital standard without strangling bank lending.

A decision to shift to a uniform 3% leverage standard can be made by America's three banking regulators—the Federal Reserve Board, the Federal Deposit Insurance Corp. and the comptroller of the currency—without legislation and without consulting authorities in other countries. Now that the Basel capital requirements are officially in effect, the time has come to make that revision. Doing so would help banks to provide the loans that will be needed for a healthy recovery.

Mr. Feldstein, former chairman of the president's Council of Economic Advisors, is a professor of economics at Harvard.