
MONETARY POLICY FOR 1993

HEARING

BEFORE THE

JOINT ECONOMIC COMMITTEE CONGRESS OF THE UNITED STATES

ONE HUNDRED SECOND CONGRESS

SECOND SESSION

DECEMBER 30, 1992

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MONETARY POLICY FOR 1993

WEDNESDAY, DECEMBER 30, 1992

CONGRESS OF THE UNITED STATES,
JOINT ECONOMIC COMMITTEE,
Washington, DC.

The Committee met, pursuant to notice, at 10:32 a.m., in room SD-628, Dirksen Senate Office Building, Honorable Paul S. Sarbanes (chairman of the Committee) presiding.

Present: Senators Sarbanes, Riegle and Sasser, and Representative Hamilton.

Also present: William Buechner, professional staff member.

OPENING STATEMENT OF SENATOR SARBANES, CHAIRMAN

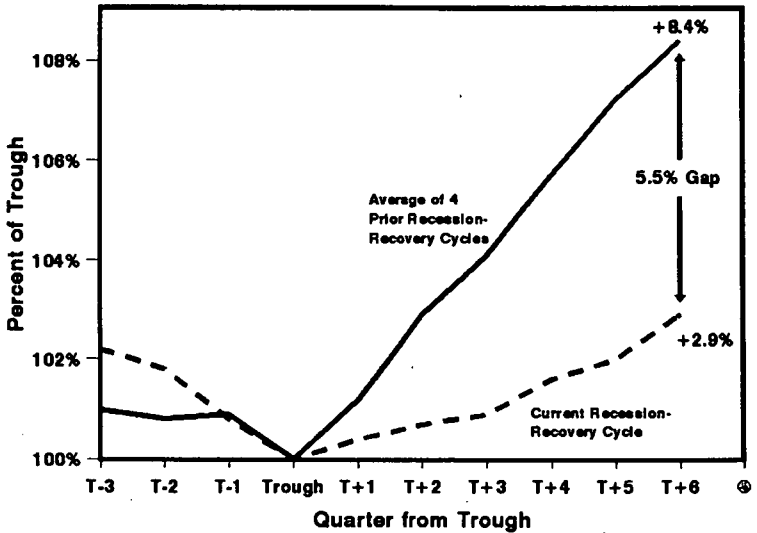
SENATOR SARBANES. The Committee will come to order.

This morning, the Joint Economic Committee convenes for its last hearing of the 102nd Congress. On next Tuesday, the 5th of January, the new Congress will be sworn in, and the 103rd Congress will commence.

This morning's hearing is on the topic of appropriate monetary policy for 1993, looking ahead. As we begin the new year, the American economy is in the midst of the weakest economic recovery in the postwar period. Since the first quarter of 1991, the economy has grown 2.9 percent compared to an average of 8.4 percent in the four previous recoveries.

This chart shows the real growth of gross domestic product. This is the average of the four previous recessions, which is 8.4 percent growth from the trough. In this recession, we have had growth of 2.9 percent. There is a gap of 5.5 percent in contrasting the growth of real GDP coming out of this recession—this is the average of the four previous recessions. (See chart below.)

Growth of Real Gross Domestic Product Following Post-War Recessions



Source: U.S. Department of Commerce, Joint Economic Committee

For the past 20 months, I think it is fair to say that we have been in a protracted jobs recession where the rate of economic growth has been too anemic to create new jobs or put people back to work.

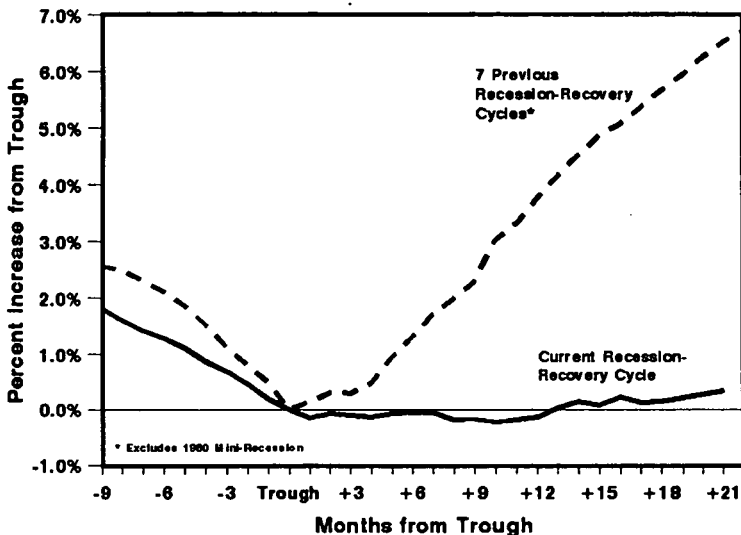
Following the seven previous postwar recessions, an average of over 220 percent of the lost jobs have been restored during the first 20 months of economic recovery, and that is a range of 152 percent jobs restored to a high of 387 percent jobs restored.

By contrast, in this recovery, we have restored less than 17 percent of the jobs that were lost during the recession.

As demonstrated in this chart, it shows a growth of payroll employment from the trough. (See chart below.) In other words, as you go down into the recession, the red line is the recession recovery cycle; the blue line is the recession recovery cycles of all of the seven postwar, World War II, recession recoveries. As we can see, we recovered jobs back to where they were, and then go beyond it at this point in the recovery.

The Jobs Recession

Growth of Payroll Employment from Trough



Source: Bureau of Labor Statistics and Joint Economic Committee

In this recovery, we have failed to do that. We are trailing along and have recovered only 17 percent of the jobs lost during the recession. So we are not coming out of this recession.

I find this chart, which shows the jobs, and this, which, of course, is a corollary that shows the growth in GDP, to be really stunning figures in the contrast between what is happening this time compared with what happened in the previous postwar recoveries.

In jobs, we are talking about a 300,000 growth in business payrolls coming out of this recession thus far, compared to an average job growth of more than six million during the past seven recessions when scaled to match the present size of our economy.

Furthermore, job prospects still seem to be dim in many respects. Dozens of major firms have announced additional layoffs and job cuts in 1993, including such industry giants as American Express, GM, Du Pont, Pratt & Whitney, Bristol Myers and AT&T. The American Management Association testified before this Committee not too long ago that 25 percent of the Fortune 500 firms that it surveyed planned reductions in 1993. The American Management Association called this figure alarming and said it was the highest number of planned reductions since the survey began six years ago.

Now, given this sluggish performance, I am deeply disturbed by the recent statements of the chairman of the Federal Reserve Board, Alan Greenspan, that the Federal Reserve may lower targets for money growth next year. It was reported in the press that he had indicated that

position in a letter to Chairman Gonzalez of the House Banking Committee. According to a summary of the November 17 meeting of the Federal Open Market Committee—released just last week—the Federal Reserve is moving to do just that. And I quote from the summary:

During the discussion, the members generally agreed that developments since mid-1992 had reinforced the case for some reduction in the 1993 range for M2, and they indicated that they probably would support proposals for a lower range.

The Fed took a "this way, that way" position on what should happen in the inter-session period between that meeting and the one scheduled for February. Many people believe that much of the responsibility for the recent recession and today's tepid recovery rests with the monetary policies of the Federal Reserve.

In fact, just about a year ago, we held a hearing with Paul Samuelson and Jim Tobin—two winners of the Nobel Prize in economics on monetary policy. In a devastating critique of the Fed's stewardship of monetary policy, both laid responsibility for the recession on monetary policy, which was inappropriately restrictive.

Dr. Samuelson said then that, "Dr. Greenspan and his associates have, in my judgment, not been responsible and optimal stewards of monetary policy in the 1989 to 1992 period. They have been repeatedly too little and too late." And Dr. Tobin agreed with Paul Samuelson on that point.

In February, the chairman of President Reagan's Council of Economic Advisers, Dr. Martin Feldstein, wrote in the *Wall Street Journal* that, "The monetary growth targets should be raised by a third to assure a viable recovery."

More recently, other prominent economists have raised the same concerns. On October 23, a third Nobel Prize Winner and an adviser to the Reagan Administration, Dr. Milton Friedman, wrote a *Wall Street Journal* article titled, "Too Tight for a Strong Recovery." In the article, he pointed out that, and I quote:

The Fed's inflation objective is close to being achieved. Indeed, the Fed has temporarily overshot. Continuation of M2 growth at 2 percent per year would imply actual deflation, not negligible inflation. Given its departure from its own policy, the Fed now needs to speed up sharply monetary growth to bring M2 back to its target range and then hold it there.

And on November 30, Dr. McCracken, chairman of the Council under President Nixon, expressed similar concerns in the *Wall Street Journal*, saying:

The basic drag on the economy, however, more than anything else accounting for the unusually anemic expansion of output and employment since early last year, is an insufficiently expansive basic monetary policy in 1991 and 1992.

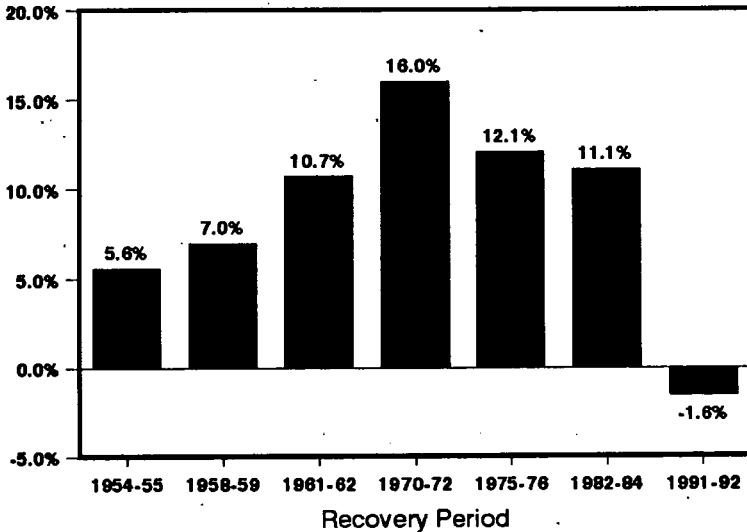
Last February, the Federal Reserve set a target range of 2.5 to 6.5 percent growth for the money supply during 1992, with a goal of reaching a midpoint of 4.5 percent. For most of this year, however, money growth failed to reach even the lower target.

These were the target ranges in 1991—2.5 to 6.5 percent. The actual performance that ran here by the end of the year was very close to the bottom of the target range. For 1992, with the same target range, the actual performance is now well below the lowest level of the target range.

In other words, it's beneath the 2.5 percent M2 target. In fact, since the recession trough, the real money supply—the money supply corrected for inflation—has fallen in contrast to past recoveries when the Fed aggressively expanded real M2 in the range of 6 to 14 percent, thereby fostering much stronger economic growth.

That is shown in this chart, which shows the growth of real M2 during the first 19 months of recovery. (See chart below.) This is the 1953-54 recovery, 1957-58, and so forth: 5.5 percent growth of real M2 in 1953-54, 6.8 in 1957-58, 9.9 in 1960-61, 14.8 in 1969-70, 11.2 in 1973-75, 11 percent in 1981-82. These are all growth of real M2 in these previous recessionary periods. In 1990-91, there was not only no growth in real M2, but actually a decrease of 1.6 percent.

Growth of Real M2
During First 20 Months of Recovery



Source: U.S. Department of Commerce, Joint Economic Committee

This is a stunning contrast. We have had growth of real M2 in all of these previous recession recovery periods. This time, it has been negative on real M2, which helps to explain the gap that exists in the growth

of GDP, the sharp contrast between the performance in this recession with the performance in previous recessions.

SENATOR SASSER. Mr. Chairman, the chart that you just utilized a moment ago, the gap between growth in this recession and previous recessions, would you amplify and explain that chart just a little bit?

SENATOR SARBANES. This is the growth of real GDP. This is the average of four previous recessions. So, coming out of the trough, it grew at 8.4 percent as we moved through to the sixth quarter from the trough. In this recession, it has grown only 2.9 percent.

SENATOR SASSER. I see.

SENATOR SARBANES. And there is also a job chart. It is even a more marked demonstration when you look at the recovery of jobs in this recession. This is the previous recession recovery, growth of payroll employment, again from the trough. You see we recovered all the jobs that had been lost when we went into the recession coming out, and then went on to pick up more jobs. In this recession, we are running along down here.

The gap that exists there is extraordinary. Now, there are a number of possible explanations, but as I just indicated, I can't help but believe that this has something to do with it—this difference in the growth of the money supply. And look at this, it is actually negative real M2.

Experts from both sides of the political spectrum, as I have just quoted, agree that money growth has been too slow and monetary policy too tight for much of the recent past. In my view, there is no justification for a downward revision in monetary targets at this time. Inflation is both low and stable, with no evidence of impending acceleration. To follow the suggestion voiced by Mr. Greenspan and contained in the minutes of the meeting of the Open Market Committee, that we lower our targets for money growth, would only compound the policy mistakes of the past and condemn millions of Americans to continued unemployment.

As we consider the question of what the Federal Reserve should do in the year ahead to help assure a strong recovery that will put people to work and reduce unemployment, we are very pleased this morning to have three distinguished witnesses: Paul Samuelson, Professor of Economics at the Massachusetts Institute of Technology and winner of the Nobel Prize for Economics in 1970; Paul McCracken, Professor of Economics at the University of Michigan and former Chairman of the President's Council of Economic Advisers; and Lee Hoskins, President and CEO of the Huntington National Bank of Columbus, Ohio, former President of the Federal Reserve Bank of Cleveland, where he served as a member of the Federal Open Market Committee.

Before turning to our witnesses for their opening remarks, I am very pleased to note that we have been joined by Senator Sasser of Tennessee, the Chairman of the Senate Budget Committee, and I yield now to Senator Sasser for any opening statement that he may wish to make.

**OPENING STATEMENT OF SENATOR SASSER, CHAIRMAN
SENATE BUDGET COMMITTEE**

SENATOR SASSER. Thank you very much, Mr. Chairman. I will be brief this morning because I am eager to hear from this distinguished panel, as I know you are and our viewers who are watching these proceedings through the television camera.

I would like to take just a moment, Mr. Chairman, if I may, to call attention to the fact that this is the last hearing of the 102nd Congress of the Joint Economic Committee under the chairmanship of my friend and colleague, Senator Sarbanes of Maryland. I want to commend and congratulate you, Mr. Chairman, for the splendid manner in which you have conducted the affairs of the Joint Economic Committee during this Congress. It was in this Committee, under your leadership, that we first heard the alarm bells ringing as to the severity and long duration, or anticipated long duration, of the recession that has plagued the country now for so long and for which, hopefully, at long last we are emerging.

Under your leadership, Mr. Chairman, this Committee has been the first to try to focus the attention of the Congress and the outgoing Administration on the problems that beset the economy and on some of the solutions that we should be moving to act upon. Your performance and leadership here, I think, have been outstanding, and I want to commend and congratulate you for that, and I hope we will continue to have your benefit, as I am sure we will, on economic matters in the coming 103rd Congress.

I think also, Mr. Chairman, the hearings that you have called on monetary policy are very, very timely indeed. I would like to call attention to a letter that I directed to Dr. Alan Greenspan, the Chairman of the Board of Governors of the Federal Reserve System, on December 7 of this year. In that letter, if I may quote, Mr. Chairman, I said, and I quote:

The Federal Reserve's annual range for M2 may be lowered when the Federal Open Market Committee meets in February to formally set the range for money supply growth. ... I believe that lowering the targets for money supply growth would be a mistake. The Fed should try to meet its targets for M2 and continue to focus monetary policy on economic growth. I am concerned that if the Fed lowers it range from M2, the economic recovery could be impeded. Slow growth in the money supply slows economic growth.

Considering that the economic recovery is not particularly strong [and your charts that you have introduced here today, Mr. Chairman, are graphic and vivid evidence of that] lowering the target could set the economy back just as it is starting to regain vitality.

Now, I might say this for the benefit of our distinguished panel here this morning. In the budget summit agreement that was entered into between the Congress and the Administration in the fall of 1990, the Congress in that agreement relinquished all of the tools that it had by way of fiscal stimulus, or most of the tools by way of fiscal stimulus, in dealing with a recession, and we reposed our confidence in the assurances of the Federal Reserve Board that in the event there was a problem with the economy, in the event there was a downturn, the Fed would come to the rescue with appropriate monetary policy.

The economy went into a downturn, and the Fed was always too little, too late, and very, very reluctant to take the appropriate steps to try to move the economy out of the recession that ensued. Now, we find that as we are just starting to come out of the recession in a very tepid recovery, the Fed once again is indicating that they want to screw down the monetary valves, lower the growth of the money supply and, I fear, if not send us back into a recession, will further dilute this already overly anemic recovery.

So, for those reasons, Mr. Chairman, the calling of this hearing and focusing public attention on what is occurring, or likely to occur, and getting the views of this very distinguished panel, I think is most appropriate and timely. I want to welcome Dr. Samuelson and Dr. McCracken and Mr. Hoskins before the Committee today. Thank you very much.

SENATOR SARBANES. I just want to point out again to my colleague that the Fed is talking about lowering the range for the money supply growth when the performance is below the low figure of their current range. In other words, they have not even met the bottom of the current range. Now, of course, one way to say that you have met your range is to lower it. You see, if you drop this line down here far enough, then this line is going to be above it. But other than that, I can see no reason for the lowering of the range, given the nature of the recovery that we are in, or lack of recovery.

I am very grateful to my colleague for his generous comments about the work of the Committee in this Congress, and I see we have been joined by Senator Riegle of the Senate Banking, Housing and Urban Affairs Committee. We are very pleased to have Chairman Riegle with us.

Mr. Chairman, if you have any opening comments, we would be happy to hear from you.

**OPENING STATEMENT OF SENATOR RIEGLE, CHAIRMAN,
SENATE BANKING, HOUSING AND URBAN AFFAIRS**

SENATOR RIEGLE. Thank you, Mr. Chairman. I will try to make just a few observations.

I want to welcome particularly Paul McCracken, from the University of Michigan, here today—an old dear friend and colleague, if you will—and also Professor Samuelson and Mr. Hoskins. I am delighted to see all three here.

Interestingly, the three of us who are seated here now served together on the Senate Banking, Housing and Urban Affairs Committee, and we have in that committee the oversight of monetary policy and the Federal Reserve System. Interestingly, if you look at all of the financial regulators that we have in our system, we are going to be seeing virtually all of them, apart from the Fed, appointed in the next few weeks, because all of the chief regulatory positions are either vacant or about to be vacant—all of the members of the FDIC, the Comptroller of the Currency, the head of the OTS, the head of the SEC, and so forth.

The one area where the new Administration will not have an opportunity to bring in new people with a fresh perspective and a fresh point of view will be at the Federal Reserve. The Federal Reserve, of course, has no vacancies at the present time, and as the terms of the present members expire in the future, that is the one area where the existing decisionmakers will stay in place.

I thought the chart that Chairman Sarbanes had up earlier, demonstrating what we have seen in the way of growth in M2 and previous periods after a recession when we are trying to get the economy going again, is really a very stunning presentation. I would be interested in the reaction of all of you.

Now, obviously, as we come down through history, no two situations are exactly the same. But I am struck by the fact that that is such a powerful anomaly, in terms of what we have seen in previous occasions, in that it raises a very serious question as to whether or not our problems have been made worse than they might have been by a failure to not provide the kind of supportive policies that we have seen in other times with a changing cast of characters.

If you go over the period of time covered here—from the early 1950s up through the 1990s—you had a rolling group of people at the Federal Reserve Board. So it's not as if you have a static comparison of one situation to another, but actually you've had, I think, a composite of judgments stretching over several decades that gave one kind of policy prescription and response and something quite different as we look at the 1990-91 period.

I think that is particularly relevant because I have more and more come to conclude that the most important asset that a country can have is a robust job base, and it can't be something that is fabricated; it has to be authentic. I think increasingly around the world what other economies are concentrating on is making sure that they have a robust job base and job growth to absorb the talents and the abilities of their people and to provide the personal and family incomes and the national income.

We have not paid sufficient attention to that, and I think part of the slow growth, the failure to recover properly on the job front in this long-running recession that we have been coping with, is an illustration of this problem.

I would just say, in addition, in terms of monetary policy, we have had since this recession started, 23 adjustments in monetary policy—23 of them. I dare say that each time the Fed adjusted policy, they thought they were, in a sense, catching up to and getting ahead of the problem. They probably thought as they were making adjustments that they, maybe, would get done after the fourth adjustment, or the sixth adjustment, or the 12th adjustment, or the 18th adjustment, instead of needing 23 adjustments.

When Alan Greenspan spoke recently in Europe—and I don't know if you all would have seen his comments—he, in effect, made what I thought was a public confession that in fact the economic models, which he and the Fed have used in the past, have not behaved in the way in which they have in other times. And, therefore, he himself was saying that he was unsure why it was that economic growth and circumstances were not responding more favorably to monetary policy adjustments.

I dare say, if we had a car that wasn't running right, and we took it down to the service station and had somebody adjust the car, and we brought it home and it still didn't run right, and we took it back again and we took it back 23 times, I think about that time we would say, do we need to go somewhere else for help, or is there something fundamentally wrong in terms of the analysis and the problem that we are dealing with and what has to be done about it.

In looking ahead, the issue the country most wants dealt with is, they want to see a strong, growing, robust job base so that young people who go to college—often at great family sacrifice—when they come out can find a job. Or, if somebody is coming out of a defense facility that's closing down, and maybe they have a Ph.D. in some advanced field, can find replacement work. Or, like the letter I got the other day from an unemployed person down in Texas, he had been through three job retraining programs, has a graduate degree, and still can't find a job.

I must say, I have gotten very tired of people who have jobs being sanguine about the problem out there for people who can't find them. And monetary policy, it seems to me, is a key element of the mix. As Senator Sasser says, if we're getting a signal now that the Fed feels that, maybe, it's time to lower the targets and even go further below their own self-established, low-end range, it's awfully hard for me to see how we're going to get the kind of natural growth in the economy and the increase in the job base that the country desperately needs. We need jobs in America. I mean, we have just got to have them, and the Fed has to help and do the part that it can do to make that possible.

So I am very interested in listening to the statements, and I want to commend Senator Sarbanes for putting the focus on this issue and for his great leadership of this Committee.

SENATOR SARBANES. Thank you very much.

We will hear now from Dr. Samuelson. Then, we will go to Dr. McCracken, then we go to Mr. Hoskins. At the conclusion of the three statements, we will have questions from the members of the panel.

Dr. Samuelson, we are very pleased to have you with us this morning.

**STATEMENT OF PAUL SAMUELSON, PROFESSOR OF ECONOMICS,
MASSACHUSETTS INSTITUTE OF TECHNOLOGY, AND NOBEL
LAUREATE, ECONOMICS**

DR. SAMUELSON. Thank you, Mr. Chairman.

Monetary policy in 1992 missed an important opportunity to lean against the wind of a disappointing American economic recovery. Economic history textbooks of the future, I am sure, will attribute George Bush's defeat and William Clinton's victory to Federal Reserve actions which, from mid-1990 to mid-1992, were repeatedly too little and too late.

In 1993, if fiscal policy turns out to be incrementally overactive, if, in consequence, the vitally needed long-term reduction of the structural budget deficit is delayed in timetable, then it will be an irony of history that overconservative monetary policy in the early 1990s entailed in the end the reverse of what it sought: the reverse of elimination of inflation by 1995, the reverse of the reattainment of high employment, the reverse—and this is very important—of increased U.S.-owned real capital formation.

The low grade earned in 1990-92 by our Fed is not unique to America. The 1990s have been bad years for rational central banking. The Bank of Japan and the Bundesbank have earned even lower grades for performance than the American Fed. In particular, Japan's wounds are real and are mostly self-inflicted.

Well, past is past. What is important for the future is that an improved recovery in 1994 should be optimally effectuated in 1993 by Federal Reserve monetary ease—however you care to measure that term—coupled with a tightened budget policy. Nothing could be more serendipitous for the Nation than a pact between the independent Federal Reserve, the Congress, and the Executive branch in which, one, the Fed pursues credit policies designed to aim for a 4.0 percent real GDP growth in the four quarters of 1993; and two, the Administration and Congress, in consequence, eschew delays in the tax and expenditure changes designed to target the wiping out of the structural budget deficit over the five years of 1993-98.

Now, that's easy for me to say, but I have no confidence that the Federal Reserve would agree to such a social compact. Instead, my

probability estimates are that it will let market interest rates tighten when and if the economy gains in growth momentum. For my sins, I deal with active money market traders all the time, and their explanation for the very steep Treasury yield curve is precisely their confident expectation that that is what the Fed is going to do. And I may say that the Fed is right on target in its every statement, to wit the discussion of how the M2 targets should be lowered.

Such a continuation of its too little and too late ideology will force on America's democracy a second-best policy of some short-term fiscal expansionism. That will be better than continuing tolerance of a recovery that for the third time during 1991-1992 has stagnated at around 2.0 percent real growth rates, which is barely one third the usual rate of a postwar recovery and which runs risks of relapse.

Three vital points underlie the present recommendation. I may say that the position from which I am speaking today—the biblical text—is neoclassicism, not Keynesianism and certainly not Model T Keynesianism. These points have, in my judgment, received inadequate recognition in the speeches and reports of the Federal Reserve and in some of the congressional hearings on macroeconomic policy.

Point one: An extra 1 percent of real growth during 1993-94, brought about by monetary activism, as compared to that same increment of real growth brought about by fiscal activism—I am speaking as a neoclassicist—will not appreciably alter the 1995 American price level or its trend growth rate then. This is crucial.

Two, monetary stimulus is the way to promote America's needed enhancement of private capital formation owned by Americans. I emphasize owned by Americans, because the persistence of our chronic balance-of-payments problem can paper over some of the crowding out of capital—but at the cost of the future capital being owned by foreigners and its fruits, its yields, having to be paid over to those foreigners.

By contrast, America's overall post-1980 excess devotion of resources to consumption—incident to reduced private family and corporate thriftiness—is comparably exacerbated by feasible fiscal expansionism.

Three, it is a misreading of recent economic history and of end-of-century macrotheory to believe that monetary policy has been used to the point of losing its further potency. Actually, each unit of Fed expansionism has shown and will show incremental potency. 1989-1992 Fed ease has been too little in comparison with the structural loads to be combated: the aftermath of a real estate collapse, the overextended banking system, the indebtedness accumulated in frenzied Wall Street finance, and most important of all—beyond politics—the changing comparative advantage that has moved good American manufacturing jobs to distant parts of the world and which requires major layoffs of labor.

Each Fed action has been very effective compared to its magnitude. The Fed most definitely has not been "pushing on a string." It has repeatedly been doing too little, repeatedly acting after the economy weakened or sputtered, repeatedly been getting behind the wave, and repeatedly by word and deed been undermining its own potency by convincing investors that it, the Fed, lacks the will to do what Paul Volcker's Fed did so well in the early 1980s; namely, lean prudentially against both the winds of inflation and stagnation.

I shudder to think what would have been the 1989-92 American history if the Fed had not lowered the short-term interest rates 24 times. The bank and real estate crises would have been much worse. The structural loss of permanent good jobs—from the United States to the Pacific Basin, Europe, and the developing world—would have been much greater, much faster. The medicine of central bank ease was not ineffective. It was very effective, but its dosage was misgauged.

My emphasis today on monetary policy—I hasten to emphasize—represents no senile conversion to that extremist dogma known as "monetarism." Yes, money matters. But this does not mean that money alone matters. Experience confirmed what neoclassical economic reasoning hypothesized: No money measure—M1, M2, M0, M17—can be relied on to predict and optimally control nominal and real GNP.

Actually, Mjs are mere mantras used selectively to justify performed ideologies and conventions. If you think that you have been given some mandate to create an inflation-less America by 1995, even if the cost of that is a half a decade loss in jobs and job opportunity, then you will be able to find an M to justify that action.

It is dogma, based neither on historical experience nor on plausible reasoning, that the Fed has been solely or primarily the function of minimizing price-level change. Nature and Darwin gave Federal Reserve decisionmakers two eyes so that they could observe and act to improve both real aggregate outputs and the aggregate price level. It is dogma, constantly repeated dogma, which rules out a pragmatic policy of central bank leaning against the winds of macroeconomic misbehavior.

The only grain of truth in the new classical paradigm which has stood up to empirical testing and to plausible scientific reasoning is that monetary policy's substantive effects on real variables do weaken as the time horizon ahead lengthens. In the short and intermediate runs of time, a Chairman Volcker can improve the economy's functioning and a Chairman Greenspan can muffle an opportunity to do so.

Now, of course, I recognize that 19 and not one person votes on the Open Market Committee in the course of any business cycle phase. But I also understand that "leadership" is an important duty of one who is first among equals and that a long-term batting average and not fine-tuning perfectionism is what counts.

Well, the future is longer than the past. As the Bank of Japan and the Bundesbank belatedly begin to ease in the attempt to undo the harm their 1990-92 tightness has perpetrated, the American central bank policy has a window of new opportunity. We can lower mortgage and other market interest rates. We can counter a dollar rise that threatens to float upward and to choke off American exports.

I detect no signs that the Fed understands its 1993 opportunity. All the straws in the wind suggest that as real GDP growth reaches the 3 percent per annum range, the Fed will countenance rising short- and intermediate-term interest rates. It will preach against fiscal activism, but by errors of omission and of commission, the Fed will make inevitable the excesses it fears.

Now, it's easy to be wise after the fact. My strongest sight is hindsight. But this has been a period in which repeatedly in financial journals from Seoul to Madrid to Rome, all over the world, one has had to say exactly what is being said now, and one has had then to say, "I told you so."

The Federal Reserve is "independent," yes. But beyond its day-to-day autonomy, the Federal Reserve is answerable to Congress. In 1982, prior to Chairman Volcker's wise antirecession activism, there were three bills in Congress to curb the Fed's powers, two backed by Republicans. If this contributed to the prudential—and, I may say, very lucky—1982-83 recovery effort, I judge that to have been a salutary case of American democracy at work.

Prudential monetary policy is a two-way street. Maybe, our economy is poised for 5 percent growth in 1993. Despite the odds against that, that could happen. In that case, I would counsel the Fed to begin gently to press on the brakes. The beauty of monetary policy is that it can be flexible. Short-run fiscal policy is like a barbed harpoon: If you turn out to have done too much, alas, you can't pull back on that instrument. Credit policy can and should shift tack as the wind is revealed to change. It is a virtue, not a crime, to change your mind when your data change. No finetuning is needed or feasible. What is needed is monetary policy that balances society's desire for sustainable recovery and employment opportunity. Congress, the Executive, the White House—and, I would say, the electorate—are partners in that quest for macrostability.

Thank you.

[The prepared statement of Dr. Samuelson follows:]

PREPARED STATEMENT OF PAUL A. SAMUELSON

Monetary policy in 1992 missed an important opportunity to lean against the wind of disappointing American economic recovery. Economic history textbooks of the future will attribute George Bush's defeat and William Clinton's victory to Federal Reserve actions which, from mid-1990 to mid-1992 were repeatedly too little and too late. If in 1993 fiscal-policy turns out to be incrementally overactive, if in consequence the vitally needed long-term reduction of the structural budget deficit is delayed in timetable, then it will be an irony of history that overconservative monetary policy in the early 1990's entailed in the end the reverse of what it sought--the reverse elimination of inflation by 1995, the reverse of high employment, the reverse of increased U.S.-owned real capital formation.

Past is past. What is important for the future is that an improved recovery in 1994 should be optimally effectuated in 1993 by Federal Reserve monetary ease coupled with a tightened budget policy. Nothing could be more serendipitous for the nation than a pact between the independent Federal Reserve, Congress and the Executive Branch in which:

1. The Fed pursues credit policies designed to target four percent real GDP growth in Calendar 1993.

2. The Administration and Congress in consequence eschews delays in the tax-and-expenditure changes designed to target wiping out the structural budget deficit over the five years of 1993-1998.

I have no confidence that the Federal Reserve would agree to such a social compact. Instead my probability estimates are that it will let market interest rates tighten when and if the economy gains in growth momentum. Such a continuation of its "too-little-and-too-late" ideology will force on America's democracy a second-best policy of short-term fiscal expansionism. That will be better than continuing tolerance of a recovery that for the third time during 1991-1992 stagnates at around two percent real growth rates-which is barely one-third the usual initial pace of a post-war recovery!

Three vital points underlay the present recommendation. They have, in my judgment, received inadequate recognition in the speeches and reports of the Federal Reserve and in the many Congressional hearings on macroeconomic policy.

1. An extra one percent of real growth during 1993-1994 brought about by monetary activism, as compared to that same increment of real growth brought about by fiscal activism, will not appreciably alter the 1995 American price level or its trend growth rate then. This is crucial.

2. Monetary stimulus promotes America's needed enhancement of private capital formation owned by Americans. By contrast, America's overall excess devotion of resources to consumption-incident to reduced family and corporate thriftiness-is only exacerbated by feasible fiscal expansionisms.

3. It is a mistreading of recent economic history and of end-of-century macro theory to believe that monetary policy has been used to the point of losing its further potency. Actually, each unit of Fed expansionism has shown and will show incremental potency. 1989-1992 Fed ease has been too little in comparison with the structural loads to be combatted. But each action has been very effective compared to its magnitude. The Fed

has not been "pushing on a string." It has repeatedly been doing too little; repeatedly acting after the economy weakened or spurred; repeatedly gotten behind the wave; and repeatedly, by word and deed, been undermining its own potency by convincing investors that it lacks the will to do what Paul Volcker's Fed did so well in the early 1980's--namely lean prudentially against both the winds of inflation and stagnation.

I shudder to think what would have been 1989-1992 American history if the Fed had not 24 times lowered short-term interest rates. The bank and real estate crises would have been much worse. The structural loss of permanent goods jobs--from the United States to the Pacific Basin, Europe, and the developing world--would have been much greater. The medicine of central bank ease was not ineffective. It was very effective but its dosage was misgauged.

The future is longer than the past. As the Bank of Japan and the Bundesbank belatedly begin to ease in the attempt to undo the harm their 1990-1992 tightness has perpetrated. American central bank policy has a window of new opportunity. We can lower mortgage and other market interest rates. We can counter a dollar rise that threatens to float upward and to choke off American exports.

I detect no signs that the Fed understands its 1993 opportunity. All the straws in the wind suggest that, as real GDP growth reaches the three percent per annum range, the Fed will countenance and encourage rising short-and intermediate-term interest rates. It will preach against fiscal activism but by errors of omission and of commission, the Fed will make inevitable the "excesses" it fears.

The Federal Reserve is "independent". Yes. But beyond is day-to-day autonomy, the Federal Reserve is answerable to Congress. In 1982 prior to Chairman Volcker's wise anti-recession activism, there were three bills in Congress to curb the Fed's powers, two backed by Republicans. If this contributed to the prudential (and lucky!) 1982-83 recovery effort, I judge that to have been a salutary case of American democracy at work.

Prudential monetary policy is a two-way street. Maybe, our economy is poised for 5 percent growth in 1993. Despite the odds, that could happen. In that case, I'd counsel that the Fed begin gently to press on the brakes. The beauty of the monetary policy is that it can be flexible. Short-run fiscal policy is like a barbed harpoon. If you turn out to have done too much, alas you can't pull back on the instrument. Credit policy can--and should--shift tack as the wind is revealed to change. It is a virtue, not a crime, to change your mind when your data change.

No fine tuning is needed or feasible. What is needed is monetary policy that balances society's desire for sustainable recovery and employment opportunity. Congress, the Executive, the White House, and the Electorate are partners in the quest for macro stability.

SENATOR SARBANES. Thank you very much, sir, for a very powerful statement.

Dr. McCracken, we would be happy to hear from you.

**STATEMENT OF PAUL McCracken, PROFESSOR OF ECONOMICS,
UNIVERSITY OF MICHIGAN, AND FORMER CHAIRMAN AND MEMBER,
COUNCIL OF ECONOMIC ADVISERS**

DR. McCracken. Thank you very much, Mr. Chairman. I welcome this opportunity to appear before your Committee today; a Committee before whom I have spent a good many hours, particularly when I was in Washington.

This Nation has made two basic and quite explicit declarations of our national economic objectives. One is found in section 2 of the Employment Act of 1946, which, by the way, emerged out of early hearings before the Senate Banking Committee, chaired by Senator Wagner. This section 2 is a long sentence, over 100 words, beginning with the words:

The Congress hereby declares that it is the continuing policy ... to promote maximum employment, production, and purchasing power.

The intervening verbiage alludes to many other, not trivial, concerns, but the beginning and ending words are clearly the central commitment.

The later Full Employment and Balanced Growth Act of 1978 is a somewhat more prolix restatement of the objectives of national economic policy, perhaps in some cases too detailed and too specific. But unlike its predecessor, the 1978 act makes specific reference to the price level, stipulating as one objective of national policy, and I quote, "reasonable price stability."

The central question now is: How are we doing relative to the objectives of economic policy to which we have explicitly committed ourselves? If we are falling short, we should reexamine our policies to see what has gone wrong, or reexamine our objectives to see if they are unrealistic.

It is difficult to look at the record of the U.S. economy's performance and not conclude that for some time we have been off the right path. Since 1973, hourly earnings in real terms have been declining. During those years, the average unemployment rate was almost 7 percent. And during that same period, our price level tripled—an average rise of about 6 percent per year, or a little over.

By contrast, from 1910 to 1929—a period of comparable length—the price level rose at a 3 percent per year rate, the average unemployment rate was 4.8 percent, and the increase in real output per employee was almost four times what has been delivered since 1973.

Now, some comments about monetary policy, in the more immediate sense. I believe the management of U.S. monetary policy thus far in the

1990s will not go into the annals of central banking as a distinguished performance. It has been inappropriate for the economic conditions of the country. And the Federal Reserve *de facto* has been making decisions about fundamental objectives of national policy that should be made by and are the responsibility of the Congress and the President.

Your opening remarks and these charts make, in dramatic fashion, the obvious fact that the economy has been doing particularly poorly in trying to struggle out of the low point that was reached in early 1991.

Now, I do want to make one other statement here. My criticism of monetary policy does not mean that we need monetary policies, in some micromanagement sense, managed by the Congress and the President. A look around the world makes it clear that in countries where the government has rather direct control of monetary policy, the results do not work out well.

It is where the central bank has substantial insulation from shifting political winds, but manages within the broad framework of policy objectives established by government, that things work out best. It is for this reason that, in my judgment, the time has come for another basic and major review of these broad objectives of national economic policy.

Does the clear disjunction between our stated objectives and the performance of the economy indicate that our objectives need to be reformulated? Do we need to make changes in the economic policies themselves? A thorough review of these questions—and by this, I mean more than even just our hearings this morning—a quite thorough review of these questions is urgently needed.

We particularly need a major inquiry into what the Nation's objectives for the price level should really be. Some vague and pious pronouncement that our objectives should be rapid growth, full employment, a stable price level, and a further laundry list of good things will, of course, no longer do. If, for example, we go for zero inflation in the interim, what level will the unemployment rate reach, and for how long? How do we fit together our various objectives?

During the last quarter of this century, we seem to have been very much out of phase. In the 1970s, we were almost pathologically fearful of unemployment if we imposed any restraint on expansion. As a result, by the early part of 1980, we found ourselves with a price level rising at an 18 percent per year rate. Today, we and the European economies are mired in persisting and high unemployment, and the war being waged is against inflation. Like generals, we keep fighting the last war.

Our focus on the objectives and the management of economic policy is lacking in balance, and that balance very much now needs to be restored.

If I may add one other comment. In a conversation this morning, Mr. Price observed that I hadn't been very specific about what the Federal Reserve ought to do. The basic thrust of my testimony is that this is

something that needs a thorough examination before the pertinent committees of the Congress.

But let me make one or two comments. I think our basic objectives—indeed, I mentioned this in a *Wall Street Journal* article—our basic objective ought to be to reduce the unemployment rate by about a half a percent per year over the next four years. Now, that sounds rather modest. According to my arithmetic, that would take about a 4 percent per year rate of growth in real terms, to which Professor Samuelson also alluded. Now, those are the basic objectives.

What we now need is a monetary policy consonant with that basic objective. I am not sure how interested I am in whether the target range for the growth in the money supply is raised or lowered, but I am very much interested in whether the policies we are pursuing are delivering the increase in the money supply that would be needed. And, quite obviously, they have not been.

Federal Reserve policy reminds me of that old story of the man who stopped for gasoline at a station and noticed many targets on a building, each with the bullet right through the bull's-eye. And he said, "My word, who is the marksman who can hit it that way?" The station attendant said, "Well, he's the village simpleton, and he's standing right there. Ask him how he does it." And so he was asked, and he said, "Why, it's very simple. I shoot, and then I draw the target right around it."

[Laughter.]

It seems to me that's what we have been having. But I would like to conclude by urging you to pursue this matter further of what the basic objectives ought to be, because the objectives and the policy and the performance delivered are simply not in sync, and haven't been for some time.

[The prepared statement of Dr. McCracken follows:]

PREPARED STATEMENT OF PAUL W. McCracken

Mr. Chairman. I welcome this opportunity to appear before the Joint Economic Committee today. The Committee's great influence over the years owes much to its early having established as its basic raison d'etre lifting the level of public understanding of economic policy issues, rather than of being simply an arena for partisan sparring. The broad objective of economic policy, first articulated in Section 2 of the Employment Act of 1946 (now not far from its 50th anniversary) is neither Democratic nor Republican--it is American. As it happens, however, my basic suggestion to the Congress is that the time has come for it to re-examine carefully the over-arching, general objectives of national economic policy, within which decisions about the instruments of economic policy should be made.

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First, however, some comments about monetary policy in the more immediate sense. I believe the management of U.S. monetary policy thus far in the 1990s will not go into the annals of central banking as a distinguished performance. It has been inappropriate for the economic conditions of the country. And the Federal Reserve de facto has been making decisions about fundamental objectives of national policy that should be made by and are the responsibility of the Congress and the President. More on that issue later.

If we peg July 1990 as the peak month before moving into the 1990-91 recession (and which months turn out to be identified as the peak and trough would make little difference to the basic argument here), this November was 28 months after that 1990 peak

Increase In Real M-2, Cyclical Peak
to 28 Months Later

| <u>Cyclical Peak</u> | <u>Increase</u> |
|----------------------|-----------------|
| 1960-April | 14.8% |
| 1969-December | 14.2 |
| 1973-November | 1.5 |
| 1981-July | 14.7 |
| 1990-July* | -2.6 |

Source: Basic date from "Handbook of Cyclical Indicators (Commerce, 1984). p.99; Federal Reserve, and Department of Labor *preliminary.

peak. During the last three decades, the typical enlargement of the money supply in real terms during comparable periods was 14-15 percent. There have been two exceptions. In the mid-1970s the rise in 28 months following the November 1973 peak was only 1.5 percent, and the money supply in real terms today remains below that in mid-1990. In both cases the recovery in real output was quite disappointing relative to that during other business cycles since 1960, with the performance this time the worst during the three decades.

At this point, however we confront another argument. Do we calibrate monetary policy by rates of increase in the money stock or by the level of short-term interest rates? In various incarnations this an old argument, and we will not do much to settle it

here. Indeed, I would put the matter more emphatically. This is not the place to try to resolve this issue.

The probability that a reasonably vigorous expansion could be initiated or sustained with a money stock in real terms declining, history would suggest, is quite low. We have had, in short, about the kind of economic performance that the monetary policies we have pursued could have been expected to produce. In the judgment of the citizenry, as expressed last month, this performance has not been acceptable, and I share that evaluation.

There is a job for the Congress here, but it is not to try to manage the specifics of monetary policies. A look around the world makes it clear that in countries where "the Government" tries to micro-manage central bank policies the results are not good. It is where the central bank has substantial insulation from the shifting winds that blow on the elected officials of government that the management of economic policy has the superior track record.

The Congress does, however have a responsibility here of major importance--a responsibility of far more fundamental significance than whether open market operations or the discount rate or member bank reserve requirements should be changed.

In a very real sense the Congress, in fact cannot evade responsibility here because Article I. Section 8 of the constitution allocates to Congress the responsibility to coin money and regulate the value thereof. Indicative of this basic responsibility is the fact that the Federal Reserve's annual reports are not to the President but to the Speaker of the House. If the Congress has this basic responsibility, but should not try to manage open market operations, discount policy, and other such specifics, what should it do?

The time has come, I believe, for another basic review of what the broad, overarching national economic objectives are to be. What are the objectives that the managers of economic policy should be trying to achieve? Almost a half-century ago hearings were convened that came to fruition with the Employment Act of 1946. Later came the Full Employment and Balanced Growth Act. We now need a major inquiry into what the nation's objectives should be, and particularly about the price level. Just some vague and pious pronouncement that our objective is growth, full employment, a stable price level, and a further laundry list of things in themselves good will not do. If we were to go for a stable price level, for example, how high would unemployment be and for how long? How do we fit together the basic objectives of economic policy? What do we even mean by a reasonable stable price level?

During the last quarter of a century we seem to have been entirely out of phase. In the 1970s we were almost pathologically fearful of unemployment, if we imposed any restraint on expansion, and as a result by the early part of 1980 found ourselves with a price level rising at an 18 percent per year rate. Today the industrial world is stuck with major unemployment and we (here and in Europe) are waging war on inflation. Like generals, we keep fighting the last war.

One thing seems clear as we look at the nearly half-century of experience since World War II. Our focus on the objectives of economic policy has lacked balance. Our price level for the decade 1957-67 was 1.7 percent, but from 1967-80 the price level was rising at the average rate of 7.2 percent (and by early 1980 at an 18 percent per year

pace). More recently the United State, Europe, and now Japan have had a poor employment record, but we all keep fighting inflation.

Once the Congress speaks to its responsibility for articulating what we want our economic policies to accomplish, those managing these polices then must be left to manage the instruments of policy without meddling from either end of Pennsylvania Avenue.

SENATOR SARBANES. Thank you very much.
Mr. Hoskins, we would be happy to hear from you.

**STATEMENT OF W. LEE HOSKINS, PRESIDENT AND CEO,
HUNTINGTON NATIONAL BANK, AND FORMER PRESIDENT,
CLEVELAND FEDERAL RESERVE BANK**

MR. HOSKINS. Mr. Chairman, members of the Committee, I am pleased to participate in the hearings on the appropriate direction of monetary policy in 1993.

In my prepared remarks this morning, I want to focus on three issues. The first is an evaluation of monetary policy during the past few years, with a comment about the year ahead. The second issue is what monetary policy can and cannot be expected to do. The third issue is the appropriate role of Congress in overseeing the activities of our Nation's Central Bank.

Now, in order to judge whether recent monetary policy has been appropriate, standards against which policy ought to be judged are needed. In my view, the objective of all macroeconomic policies, including monetary and fiscal, is to promote an environment conducive to achieving the highest standard of living that our endowment of real resources and human capital will permit. From this long-term vantage point of maximum sustainable economic growth, monetary policy is vitally important.

The role that monetary authorities can play in achieving maximum sustainable growth is to provide a stable purchasing power for the Nation's currency; that is, a stable price level. When households and businesses worry about inflation, they engage in activities that waste resources. Moreover, uncertainty about future inflation precludes otherwise sound decisions, reduces the efficiency of resource use, and lowers potential output.

I believe very fundamentally that a stable price level is central to ensuring the highest possible standard of living for our Nation's citizens. And there is evidence from this country and elsewhere around the world that my belief is well-founded.

Over time, for both the United States and other countries growth of the money supply has been reliably related to the rate of inflation and the rate of total spending in the economy. For the United States, the broad measure of money—M2—has had the most reliable long-term relationship with the behavior of prices. Specifically, over periods of three to five years, the average rate of inflation tends to be about the same as the growth of M2 minus the growth of long-run output potential. Over long periods, this relationship suggests that growth of M2 at about 3 percent will be roughly consistent with price stability.

There is no evidence that the growth of M2 has any positive influence on the growth of long-term output potential.

Now, given the objectives of price stability, how has the Federal Reserve performed? Well, after the longest peacetime expansion in our history, economic activity peaked in the third quarter of 1990. The cause of the subsequent recession, the sluggish recovery that followed, include the imbalances that built up in our commercial real estate, defense, retail and automobile industries, which, when combined with widespread debt burdens and problems with some financial institutions, depressed spending throughout the economy. The Gulf War certainly disrupted people's plans and interfered with the pattern of economic activity. And, although I do not personally hold this view, I recognize that some critics of the Federal Reserve think that monetary policy in the period leading up to the recession and during the recession was too tight.

The United States went into the 1980 recession with an inflation in double digits and accelerating. We emerged from that recession with inflation in the 4 to 5 percent range. That rate did not accelerate throughout the balance of the decade. This was the first time in 30 years that inflation at a business cycle peak did not rise above the rate established at the previous cycle peak.

We now find the economy emerging from the last recession with an inflation rate in the 2 to 3 percent range, with a reasonable prospect for sustaining this pattern throughout the current expansion. From this perspective, I think the Federal Reserve is to be applauded.

The Federal Reserve made strong efforts to push M2 growth up into its target ranges this year. Bank reserves were expanded by more than 20 percent. Moreover, other measures of monetary policy—notably M1 and the monetary base—grew very rapidly, suggesting a highly expansive policy by any historical standard. Short-term interest rates declined substantially throughout the past two years as reserves were pumped into the financial markets. Despite these steps, M2 growth appears to have fallen about a half percent below its target ranges for the year.

As Chairman Greenspan indicated in his July testimony, much of the weakness in M2 can be explained by unprecedented shrinkage in the thrift industry, resulting in a large and continuing decline in the public's holding of time deposits. Accordingly, shortfall in M2 this year is at least partly attributable to technical factors.

My own preference was for a lower target in 1991 and 1992, but not having adjusted the target for either technical or policy reasons, I think the Federal Reserve could be faulted for allowing M2 to fall short of its target range.

Failing to achieve stated target ranges damages credibility with the public and with Congress. Despite the remarkable progress that the Federal Reserve has made toward achieving price stability and restoring long-term growth, public skepticism about the future is a serious problem hampering the recovery. Much more needs to be done to clarify the Federal Reserve's intentions to the public.

Let me turn my attention to monetary policy in the year ahead. From my earlier remarks, it should be clear that I would like the Federal Reserve to reinforce publicly its commitment to price stability. The Nation is so close to a stable price environment that it would be a shame to tolerate any regression.

While I do not presume to tell the Federal Reserve what its short-run objectives should be, I think that an M2 target range of 1 to 5 percent, centered on 3 percent, is consistent with price stability. Monetary policy keyed on this target range and based on an explicit price stability goal would ensure maximum sustainable economic expansion and a restoration of prosperity.

To the contrary, there is every reason to believe that monetary policy designed principally to accelerate the economy next year would be a source of poor economic performance and public dissatisfaction in the years to come. Unless the framework surrounding the monetary policy process is altered, the Federal Reserve's statements and actions about 1993 will lack credibility. Then, both price stability and continued economic expansion will be at risk because the Federal Reserve actions are not anchored by any explicit long-run price-level target. Consequently, should the FOMC take even more rapid and aggressive actions to promote vigorous growth, the public will naturally question the Federal Reserve's commitment to keep a lid on inflation.

The failure of long-term interest rates to fall in line with short-term rates during 1992 indicates that this concern is real.

The existing policy process, with its focus on short-term economic and financial developments, does not provide an adequate basis for sound judgment or thoughtful evaluation. Nor does it engender credibility. Critics are correct to suggest that the process reflects a weakness in the policies of the Federal Reserve. But the problem is not that the system has too much independence to pursue its policy goal. The problem is that the Central Bank is not held accountable for goals that are clearly and consistently articulated.

Congress has an important role in monetary policy. To exercise this role effectively, it must agree on a clear, specific and attainable objective. The only objective which will maximize economic well-being is price stability. Congress should not tell the Federal Reserve whether the federal funds rate, or nonborrowed reserves, or total reserves, or various measures of the monetary policy base, or the money stock are the right measures to focus on. Congress should not tell the Federal Reserve what is the appropriate funds rate on a month-to-month basis, let alone a day-to-day basis. Nor should Congress tell the Central Bank whether the discount rate of reserve requirements should be higher or lower than they are currently.

But Congress should hold the Central Bank responsible for providing price stability and allow it the independence to achieve it. In this spirit, passing the Neal resolution would be constructive.

However, I would be inclined to go even further and suggest an amendment either to the Federal Reserve Act or the Constitution itself, specifying price stability as the sole, overriding objective of monetary policy.

In addition, Congress needs to ensure that the objective is in fact achieved. Congress should be prepared to discipline Central Bank officials if that objective is not maintained over time. In short, Congress should establish a form of an employment contract with Central Bank officials.

The Federal Reserve needs to remain independent within the Government to accomplish its objectives. The system was designed over 75 years ago to be insulated against the political winds that sometimes blow up and down Pennsylvania Avenue. Although Congress has occasionally considered altering the nature of that independence, on deep reflection, it has always left the fundamentals intact, and with good reason. Evidence from around the world indicates that countries with the most independent central banks also have the best record on both inflation and economic growth over time.

Members of this Committee are, understandably, interested in improving performance of monetary policy. With the benefit of hindsight, it is not difficult to find fault in the Federal Reserve's actions during any business cycle, and the last recession is no exception. In fact, the perennial criticism of the Federal Reserve is based on the misconception that the Central Bank can be all things to all people, that it can safeguard the economy from all evils. My own view, based on history and experience, is that price stability is the only result that any central bank can attain and the only result the Federal Reserve should be expected to attain. Price stability is an essential precondition for maximizing our economic well-being.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Hoskins, together with an attachment, and a paper written by David Archer, follows:]

PREPARED STATEMENT OF W. LEE HOSKINS

Mr. Chairman, and Members of the Committee, I am pleased to participate in this hearing on the appropriate direction for monetary policy in 1993. This morning in my prepared remarks, I want to focus on three issues. The first is what monetary policy can and cannot be expected to do. The second is an evaluation of monetary policy during the past few years, with a comment about the year ahead. And the third is the appropriate role of Congress in overseeing the activities of our nation's central bank. Congress must play a constructive role in ensuring that monetary policy is conducted in such a way as to achieve the highest attainable standard of living for the American people. I would urge legislators and the monetary authorities to reach a common understanding about the long-run objectives of monetary policy, and also to hold the Federal Reserve accountable for achieving those objectives.

What Monetary Policy Can and Cannot Do

In order to judge whether recent monetary policy has been appropriate, standards against which policy ought to be judged are required. The objective of all macroeconomic policies, including monetary and fiscal, is to promote an environment conducive to achieving the highest standard of living that our endowment of real resources and human capital will permit. From this longer-term vantage point of maximum sustainable economic growth, monetary policy is vitally important, but monetary policy cannot be actively used to fine-tune the performance of the economy over the business cycle.

Try as we will, people cannot accurately forecast short-term movements in business activity, and even if we could, monetary policy cannot be used reliably to influence these fluctuations. Nor should monetary policy be used to favor some sectors, regions, or industries over others, or to alter the distribution of income. Historical experience in this country, and elsewhere around the world, suggests that inflation, as a deliberate policy either to promote economic growth or to affect sectoral or income distribution objectives, produces perverse results and eventually leads to poor economic performance. It is the responsibility of the Congress to ensure that the nation's monetary authorities provide a sound and stable currency capable of both creating an environment for maximum sustainable growth and avoiding the adverse effects on the public that accompany inflationary policies.

This point deserves emphasis: the role that monetary authorities can play in achieving maximum sustainable growth is to provide a stable purchasing power for the nation's currency, that is, a stable price level. When households and businesses worry about inflation, they engage in activities that waste resources. Moreover, uncertainty about future inflation precludes otherwise sound decisions and reduces the efficiency of resource use and potential output. I believe very fundamentally that a stable price level is central to achieving the highest possible standard of living for our nation's citizens, and there is evidence from this country and elsewhere that my belief is well founded.

To achieve a stable price environment, the central bank must rely on a variety of monetary indicators. Their tools--open-market operations, reserve requirements, and the discount rate--do not have any immediate direct connection with either the rate of inflation or total spending in the economy. Therefore, although the Federal Reserve may be

reasonably confident that it can hit its declared monetary targets, in actuality it must use those targets as intermediate indicators of the inflation potential in the economy.

Over time, for both the United States and other countries, various measures of the money supply have been reliably related to the rate of inflation and the rate of total spending (nominal GDP) in the economy. For the United States, M2, the broad measure of the money supply, has had the most reliable, long-term relationship to the behavior of prices. Specifically, over periods of three to five years, the average rate of inflation has tended to be about the same as the growth of M2 minus the growth of long-run output potential. Over long periods, therefore, M2 growth of about 3 percent will be roughly consistent with price stability. There is no evidence that the growth of M2 has any positive influence on the growth of long-term output potential.

An Evaluation of Monetary Policy

Given the objective of price stability, how has the Federal Reserve preformed, and what should it seek to accomplish in 1993? After the longest peacetime expansion in our history, economic activity peaked in the third quarter of 1990. The causes of the subsequent recession and the sluggish recovery that followed include the imbalances that had built up in our commercial real estate, defense, retail, and automobile industries, which, when combined with widespread debt burdens and problems with some financial institutions, depressed spending throughout the economy. The Gulf War certainly disrupted people's plans and interfered with the pattern of economic activity. And, although I do not personally hold this view, I recognize that some critics of the Federal Reserve think that monetary policy in the period leading up to, and during, the recession was too restrictive.

The U.S. economy went into the 1980 recession with inflation in double digits and accelerating. We emerged from that episode with inflation in the 4 to 5 percent range, and that rate did not accelerate throughout the balance of the decade. This was the first time in the past 30 years that inflation at a business cycle peak did not rise above the rate established at the previous cyclical peak. We now have an economy that has emerged from recession with inflation in the 2 to 3 percent range, with reasonable prospects for sustaining this pattern throughout the current expansion. From this perspective, I think the Federal Reserve is to be applauded.

That said, monetary policy during this period has not been perfect. For example, many, including some members of this Committee, have blamed slow M2 growth during 1991 and 1992 for the economy's weakness this past year, and perhaps for pessimism about 1993. Such a view, however, is inappropriate. The linkage between M2 growth and economic activity is loose and unpredictable over the short run. Monetary policy experts inside and outside the Federal Reserve are unable to use M2 to predict year-to-year changes in total spending in the economy accurately.

The Federal Reserve made strong efforts to push M2 growth up into its target range this year. Bank reserves were expanded by more than 20 percent. Other measures of monetary policy, including M1 and the monetary base, grew very rapidly, at 14 and 10 percent, respectively, suggesting a highly expansive policy by any historical standard. Short-term interest rates, which can be a measure of liquidity strains and squeezes, declined substantially during the past two years, as reserves were pumped into the financial markets. Despite these steps, M2 growth appears to have fallen about 0.5 percent

below its target range this year. As Chairman Greenspan indicated in his July testimony, much of the weakness in M2 can be explained by the unprecedented shrinkage in the thrift industry, resulting in a large and continuing decline in the public's holding of time deposits. Accordingly, the short fall in M2 this year is at least partly attributable to technical factors.

My own preference was for a lower M2 target range both in 1991 and 1992. I believe that it was a mistake for the FOMC to have left the M2 target unchanged for three consecutive years. The target growth range of 2.5 to 6.5 percent was first set in 1990, down from 3 to 7 per cent in 1989. I would have preferred to have lowered the target range to 2 to 6 percent in 1991, to 1.5 to 5.5 percent in 1992, and finally, to 1 to 5 percent in 1993. The 3 percent midpoint of that range is roughly consistent with price stability.

In not adjusting the targets either for technical or for policy reasons, the Federal Reserve, I think, can be faulted for allowing M2 to fall short of the bottom end of its actual target range. Failing to achieve stated targets damages credibility with the public and with Congress. Despite the remarkable progress that the Federal Reserve has made toward achieving price stability and restoring longer-term growth, skepticism about the future continues to be a serious problem hampering the recovery. Much more needs to be done to clarify the Federal Reserve's intentions to the public.

Monetary Policy in 1993

Let me turn my attention to monetary policy in the year ahead. From my earlier remarks, it should be clear that I would like the Federal Reserve to reinforce publicly its commitment to price stability. The nation is so close to a stable price environment that it would be irresponsible to permit inflation to reaccelerate. While I will not presume to tell the central bank what its short-run objectives should be, I think that an M2 target range of 1 to 5 percent, centered on 3 percent, is consistent with the objective of stable prices. Monetary policy keyed on this target range, and based on an explicit price stability goal, would ensure maximum sustainable economic expansion. To the contrary, there is every reason to believe that a monetary policy designed principally to boost the economy next year would be a source of poor economic performance and public dissatisfaction in years to come.

Unless the framework surrounding the monetary policy process is altered, the Federal Reserve's statements and actions about 1993 will lack credibility. Then both price stability and continued economic expansion will be at risk, because Federal Reserve actions are not anchored by an explicit long-run price-level target. Consequently, should the FOMC take even more rapid and aggressive actions in an effort to promote vigorous growth, the public would naturally question the Federal Reserve's commitment to keeping a lid on inflation. The failure of long-term interest rates to fall in step with short-term rates during 1992 indicates that this concern is real. The steepest yield curve in history tells us that financial markets believe inflation will be higher in the future than it is at present.

In view of the conflicting signals from the monetary aggregates, discretionary monetary policy actions are all the more difficult to predict and to interpret because policy objectives and the accountability for them are unclear. The recent policy process, with its focus on short-term economic developments, has not provided an adequate

basis for sound judgment or thoughtful evaluation, nor has it engendered credibility. Critics are correct to suggest that this process reflects a weakness in the current policies of the Federal Reserve. But the problem is not that the System has too much independence to pursue its policy goals; the problem is that the central bank is not held accountable for goals that are clearly and consistently articulated.

Congress' Role in the Monetary Policy Process

My experience in the Federal Reserve and the private sector has led me to think a great deal about management of monetary policy in particular. All organizations need to be focused on accomplishing an objective, and the people working in those organizations need both to be independent enough to do their jobs and to be held accountable for the results. As a chief executive, I cannot make decisions for my loan officers, my credit managers, or my branch office managers. What I can do is give them very clear, specific objectives and then hold them accountable for achieving them. In other words, I measure their performance by the results they achieve, not by the actions they take to achieve those objectives.

Congress has an important role in the monetary policy process. To exercise this role effectively, it must agree on a clear, specific, and attainable objective. The only attainable objective that will maximize economic well-being in price stability. Congress should not tell the Federal Reserve whether the federal funds rate, or non-borrowed reserves, or total reserves, or various measures of the monetary base, or the money stock are the right measures to be focusing on. Congress should not tell the Federal Reserve what is the appropriate federal funds rate on a month-to-month basis, let alone on a day-to-day basis. Nor should Congress tell the central bank whether the discount rate or reserve requirements should be higher or lower than they are currently. But Congress should hold the central bank responsible for providing price stability and allow it the independence to achieve that result.

In this spirit, passing the Neal Resolution would be constructive. However, I would be inclined to go even further and suggest an amendment of either the Federal Reserve Act or the Constitution specifying that price stability is the sole overriding objective of monetary policy. In addition, Congress needs to ensure that the objective is, in fact, achieved. Legislators should be prepared to discipline central bank officials if the objective is not maintained over time, in effect establishing a form of employment contract with central bank officials.

The Federal Reserve needs to remain independent within the Government to accomplish its objectives. The System was designed over 75 years ago to be insulated against the political winds that sometimes blow up and down Pennsylvania Avenue. Although Congress has occasionally considered altering the nature of that independence, on deep reflection it has always left the fundamentals intact, and with good reason. Evidence from around the world indicates that countries with the most independent central banks also have the best record on both inflation and economic growth over time.

Members of this committee are understandably interested in improving the performance of monetary policy. With the benefit of hindsight, it is not difficult to find fault in the Federal Reserve's actions during any business cycle, and the last recession is no exception. In fact, the perennial criticism of the Federal Reserve is based on the misconception that the central bank can be all things to all people--that it can safeguard the

economy from all evils. My own view, based on history and experience, is that price stability is the only result any central bank can attain, and the only result the Federal Reserve should be expected to attain. Price stability is an essential precondition for maximizing our economic well-being.

VIEWS ON MONETARY POLICY

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 Federal Reserve Bank of St. Louis
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I. Introduction

The ideal monetary policy requires a credible and predictable commitment to maintain the purchasing power of a currency over the long term. The performance of central banks, which have traditionally been entrusted with monetary policymaking, is far from this ideal. The simple reason is the absence of a clear mandate for price-level stability--zero inflation. In practice, central banks serve as instruments for governments to pursue multiple objectives that they believe to be in their own interests. Therefore, central banks pursue monetary policies that at best have only a fragile commitment to price stability. Currently, governments are pursuing strategies of policy coordination or monetary union that are little more than attempts to implement a regime of monetary protectionism for the global economy. The future for monetary policy rests on the continuing struggle between politicians seeking policies that serve their own short-term agendas and global financial markets that limit the actions of an individual central bank.

In my remarks today, I will discuss why central banks have been established, their bias towards inflation, and the importance of independence and accountability to their effectiveness. I will also argue that zero inflation should be the dominant objective of a central bank and that current efforts to coordinate monetary policies are likely to conflict with that objective.

II. Why Central Banks?

What is the justification for a central bank? Can some configuration of private institutions, in a so-called "free banking" environment, better perform the functions of a government-sponsored monetary authority? Are central banks necessary?

A classic statement of the economic rationale for the existence of central banks was provided by Milton Friedman in his 1959 Millar Lectures at Fordham University, subsequently published as *A Program for Monetary Stability*. Professor Friedman's argument appealed fundamentally to the costs inherent in a pure commodity-standard system (e.g., gold). These costs arise both from pure resource costs and perhaps more significantly from substantial short-run price variability resulting from inertia in the adjustment of commodity-money supply to changes in demand. The inefficiencies represented by these costs are a significant disadvantage of commodity-money exchange systems.

* This paper is given in honor of Ted Balbach and his service to the Federal Reserve Bank of St. Louis. His resolute pursuit of sound economics as the bedrock of monetary policy making and his indomitable spirit, even when the policy process ran amok, has served us all well. I thank John Davis, Sandra Pianalto and members of the Research Department of the Federal Reserve Bank of Cleveland for helping to shape and advance my views on monetary policy during my four years with them.

As a consequence there is a natural tendency, borne out by history, for pure commodity standards to be superseded by fiat money. But particular aspects of fiat money systems--such as fraudulent banking practices, "natural" monopoly characteristics, and tendencies for localized banking failures to spread to the financial system as a whole--resulted in the active participation of government. We have come to know this active participation as central banking.

These rationales for the existence of central banks have not gone unchallenged, not even by Professor Friedman.¹ Disruptions in payments can be costly, but so are the instabilities and inefficiencies caused by the lack of an effective anchor for the price level in fiat money systems.

Moreover, theoretical discoveries in the area of finance and monetary economics, closer attention to the lessons of historical banking arrangements, and advances in information and financial technologies have contributed to a healthy skepticism about the superiority of central banks and government regulation to alternative market arrangements. For example, some of the financial backstop functions performed by central banks and banking regulators may have weakened private market incentives to control and protect against risk.²

Still, those who argue for alternative monetary structures must at least recognize that their case rests on untested propositions. Yes, it would be wrong to accept unthinkingly our current central banking system as the best alternative for performing the monetary functions of advanced economies, but it would also be wrong to claim that the current central banking system does not reflect society's choice of an institutional arrangement to perform those functions.

It is not sufficient to argue that market-oriented alternatives to our current central banking systems functioned better in other times and places; for example, in eighteenth-century Scotland.³ This begs the question of why such a system did not prove to be sustainable. Nor is it sufficient to argue that this system would have prevailed if not for government intervention and interference. This line of debate fails to consider whether a political equilibrium exists anywhere that would support a market-oriented system in an advanced economy.

It is premature to claim that some hypothetical monetary system can, or should, come to dominate institutional arrangements that have already evolved from extended political and economic experience. I believe that the prudent first course is to seriously consider the advantages of improving the performance of central banks. The benefits of a properly managed fiat currency are considerable, and the issue is, or should be, how to provide the central bank with a proper charter to insure policy action that generates price-level stability in the long term. If such efforts fail, then market alternatives should be sought.

Since I am most familiar with the Federal Reserve, let me use it as an example. Before the creation of the Federal Reserve in 1913, the country prospered without a central bank. Broadly speaking, the impulse for the Federal Reserve's creation was a series of banking panics that led to contractions in money and credit that, in turn, caused serious disruptions in economic activity. The nation sought to improve the functioning of its banking system by establishing a means for providing an "elastic money" in the context of a monetary standard based on full convertibility into gold. The gold link was severely weakened by the Gold Reserve Act of 1934.

The Federal Reserve was born out of a compromise between those who would have kept the banking system entirely private and those who wanted government to assume a prominent role in a rapidly growing economy. Other nations have grappled with the same problems and created similar institutions. Today, many republics of the former Soviet Union and several eastern European nations are facing these same issues. We now have a world monetary system in which governments, through central banks, monopolize the supply and management of inconvertible fiat monies.

The displacement of the commodity standard that prevailed at the time the Federal Reserve was founded has exposed problems not otherwise envisioned in 1913. For example, the price level has no anchor except for that provided by the resolve of Federal Reserve policymakers. The quadrupling in prices since 1950 dramatically demonstrates the failure of Federal Reserve policymakers to provide such an anchor for the monetary exchange system. Fed policymakers' commitment to price stability is neither as explicit, nor as strong, as necessary for the successful management of a fiat currency. If the benefits of a fiat currency are to be achieved without large offsetting costs, then the gradual demise of our convertible monetary standard has brought us to a point that requires a basic change to the framework within which the Federal Reserve functions.

The evolution of the global monetary system reflects a common, even if unstated, acknowledgment that the benefits of a fiat monetary standard are substantial. Wise administration of that standard requires a central bank in some capacity. In this context, the essential issue is this: How can nations achieve the benefits of a fiat money standard and simultaneously constrain the exercise of that power to the service of the public good? To put it another way: How can a nation prevent its central bank from debasing the monetary standard it is charged to protect?

III. Inflationary Bias of Central Banks

The answer to these questions seems to elude us; witness the universal debasement of currencies by central banks since the loss of a commodity standard as a price-level anchor. If the answer is to be found, surely we must review the charters of central banks and the incentives provided to those with their hands on the monetary printing presses. Public choice economists have focused on this issue and developed a rich literature; however, I feel they fail to provide a fully satisfactory explanation of the secular bias toward inflation among central banks (with different charters and varying degrees of independence from political influence). Moreover, this approach fails to explain why in earlier periods governments did not consistently exploit the opportunities to inflate by realigning their currencies against gold or dropping their convertibility.

Another explanation for persistent inflation that has some appeal is "policy mistakes," or inappropriate targets or operating procedures of central banks. This explanation also leaves some unanswered questions. Why are "policy mistakes" not symmetrical? That is, why don't they cause deflations as well as inflations, leaving the average price level unchanged over time? Perhaps the "policy mistakes" are biased toward inflation because of the operating procedures employed, such as interest rate targeting. Yet, the Bundesbank which uses monetary aggregate targets produces a rising price level. The Bank of Japan uses interest rate targets and has generated a similar increase in its price level over the past two decades. If a central bank is dedicated to price-level stability over time, then the choice of targets or operating procedures probably only influences the variability of inflation rates around a zero mean. In short, a

central-bank that truly wants to achieve price-level stability can do it with any number of operating techniques, as long as they control money growth over time.

Perhaps a simple, and less elegant, explanation is that central bankers are suffering from a Keynesian hangover. Central bankers, politicians, and the public are merely reflecting the prevailing economic dogma that government has the responsibility and ability to manage aggregate output and employment, as well as inflation. I have argued and continue to believe that a major source of the problem comes from multiple objectives assigned to central banks--economic growth, employment, price stability and exchange rates. It is true that politicians pressure central banks to achieve different objectives at different times. Such political pressure can produce inappropriate policy actions; however, the responsibility for assigning multiple objectives to central banks rests as much with the economics professions as it does with politicians. For the last fifty years, many in the economics profession have supported various theories of business cycle management, requiring the central bank to shift from one objective to another. Today, businessmen, politicians and most economists continue to believe that if the economy is weak, the central bank should respond regardless of the cause of the weakness. And so it does.

Some of the current discussions about monetary policy and the Federal Reserve suggest that the lessons of the 1970s may be fading from our memories. Calls for lower interest rates, or more rapid money growth, are not at all unusual. More often than not, those suggestions seem impelled by desires for more growth, or to offset the problems of particular sectors of the economy. They seem based on the notion that there is a tradeoff between inflation and output, or employment, that can be exploited by the central bank. Some of us learned from the experience of the 1970s that such a tradeoff does not exist over time. Instead, higher inflation only added to uncertainty, distorted resource allocation, and reduced economic performance below the maximum sustainable level possible with price stability.

Members of a central bank policy committee, such as the Federal Open Market Committee (FOMC), reflect what is believed by the mainstream. In January 1990, the National Association of Business Economists surveyed its members and asked "Is reducing the inflation rate to zero over the next five years the appropriate objective of monetary policy?"⁴ More than 80 percent of the respondents answered "no." Their responses indicate that they believe that the FOMC should be trading off inflation for some other objective, presumably economic growth. At about the same time, the House Subcommittee on Domestic Monetary Policy surveyed 500 members of the American Economics Association who list monetary economics as either their first or second specialty. The unpublished survey shows that only a slight majority of those who responded favored zero inflation over the next five years.

I believe that much of the inflationary bias of central banks over the past fifty years reflects the prevailing view that output and employment fluctuations can be smoothed with monetary policy. Currently, prior to each FOMC meeting, members of the Committee are presented with the policy views of several prominent economists. Either explicitly or implicitly, these views invariably present the policy choice in terms of a Phillips curve tradeoff. Staff projections at the FOMC meeting also imply such a tradeoff, as do the statements by some FOMC members. Moreover, policy actions, such as a reduction in the federal funds rate, often follow the release of employment or output statistics, further reinforcing the notion that the Federal Reserve can manage real variables. To the extent that this explanation of central bank behavior is valid, inflationary

bias will not be eliminated until there is agreement within the profession on price-level stability as the dominate objective for central banks.

IV. Independence and Accountability

The problems that emanate from multiple, and often incompatible, objectives are well known. To contribute to maximum economic growth over time, central banks must achieve price-level stability. Achieving this goal requires central banks to be free from political expediencies--to have independence within government. Substantial evidence indicates a link between central bank independence and the ability to achieve price stability. Recent studies show that countries whose central banks have a greater degree of independence have experienced lower rates of inflation.⁵ Even taking into account other sociopolitical factors that might cause inflationary pressures, the degree of central bank independence appears to have an important effect on a country's inflation rate.

However, with independence must come accountability. Even the clearest of objectives will prove elusive without accountability; independence without direct accountability is a dangerous brew for those who drink it. Great harm has come from well intentioned, independent central bankers with little or no accountability--witness the United States in the 1930s. Many mechanisms exist today to bring accountability to central banking; for example, the employment contract of the Governor of the central bank of New Zealand contains a price stability requirement.

The objectives, degree of independence, and accountability of the central bank are substantially determined by its legal structure. For example, a clear legislative directive to achieve price-stability goals above all others, and the freedom to pursue them, would all but eliminate potential conflict with other objectives. The vexing question of what extent, if any, a central bank should compromise the objective of price stability in order to pursue auxiliary goals, such as smoothing real output fluctuations or stabilizing exchange rates, should be resolved and dictated in the legislative charter. True independence and strict accountability can only be attained legislatively.

In the case of the United States, the Federal Reserve is better structured than the central banks of some countries to effectively execute monetary policy, but not as well positioned as others. The Federal Reserve is charged with multiple, often incompatible objectives, which at least include price stability. It is functionally independent within government, but faces intermittent challenges to its autonomy. Its independence comes from both its charter and its practice. Independence is essentially a delineation between the responsibilities of Congress and the Executive Branch on one side, and the monetary authority on the other, in order to limit the motive and means to debase the value of a nation's money.

The source of tension between monetary and fiscal authorities is the central bank's ability to create money. Because the creation of fiat money imposes an implicit tax on money balances, the monetary authority is one source of government revenues. For the most part, the long-run viability of the government's fiscal operations requires that its real current debt burden plus the present value of its expenditures equal the present value of revenues. Thus, if the path of debt plus expenditures diverges from the path of explicit tax revenues, fiscal viability requires that the discrepancy be satisfied by seigniorage from monetary growth. This scenario is typically referred to as "fiscal dominance" over the monetary authority.

The original charter of the Federal Reserve left many doors open for the Executive Branch to influence monetary policy. These were partially closed when the Banking Act

of 1935 removed the Secretary of the Treasury and the Comptroller of Currency from the Board of Governors of the Federal Reserve System. In addition, the law established the FOMC, with the seven Governors and five Federal Reserve Bank Presidents as voting members, insuring that power within the Federal Reserve would be shared between political appointees and regional bank presidents. Thus, the "fire wall" that made the Federal Reserve, and not the Executive Branch, responsible for monetary policy objectives was reinforced. It was strengthened further by the Treasury Federal Reserve Accord of 1951, which served as a clear statement that the Fed would not be coerced into solving the Federal Government's debt management problems. The institutional structure was designed to insure enough Federal Reserve independence within the government to carry out this mandate without interference.

This independence in principle has held up in practice. The dramatic increases in federal deficits in the early- and mid-1980s prompted fiscal dominance believers to predict the impossibility of achieving and maintaining inflation rates below the disastrous levels of the decade's start. So far, this prediction has not come to pass. In 1983, the federal budget deficit was 3.8 percent of GNP, a level far above the post-World War II average and nearly equal to the postwar peak realized in 1975. In the same year, inflation measured by the CPI fell to 3.2 percent a sixteen-year low. As the decade proceeded, the deficit relative to GNP rose, fell, and rose again to its present level above 5 percent. The inflation rate was impervious to these patterns.

Astute observers might question the relevance of this period to the fiscal dominance proposition, because deficits--as they are conventionally measured--do not necessarily reflect the government's long-run fiscal operations. To name just a few of the problems, the value of long-run government net liabilities is inherently ambiguous, the path of future revenues is uncertain and the appropriate method of discounting future tax and expenditure flows is problematic. Although sympathetic to this view, I am still left with the very strong suspicion that if any period in recent history was ripe for the emergence of fiscal dominance, it was the last ten years.

Indeed, as the decade progressed and the predictions of the fiscal dominance theory failed to materialize, more sophisticated variants of the relationship between fiscal and monetary policy began to find their way into economic research. The fiscal authority's reign over the subservient monetary authority was replaced by a more subtle and complicated institutional structure, a world in which fiscal and monetary authorities engaged in a game of "chicken," the outcome of which left both parties less than fully satisfied.⁶ While deficits may be detrimental to economic performance, the ability of the Federal Reserve to resist monetizing debt has protected the economy from even worse consequences. The Federal Reserve's ability to resist monetizing the federal debt provided lower inflation and contributed to fiscal reforms that started with the Gramm-Rudman-Hollings legislation.

In my view, the Federal Reserve has sufficient independence to achieve price stability. The core of the problem is that the Federal Reserve lacks accountability for that objective, without which, the policy process will be neither credible nor predictable. The more credible the commitment to the policy goal, the fewer wrong decisions will be made by the markets. The more predictable the policy reaction to unforeseen economic events, the more limited will be the market reaction to those events. Credibility and predictability can substantially lower the costs of achieving and then maintaining a stable price level. Yet, with the disintegration of the monetary aggregates as intermediate policy guides, discretionary monetary policy actions may seem especially hard to predict

because policy objectives and the accountability for them are unclear. The existing policy process, with its focus on short-term economic or financial developments does not provide credibility.

How can we change the process to reinforce the credibility of a consistent goal? I think the most secure way would be to give the FOMC a legislative mandate to meet a consistent, attainable, and unchanging economic goal. Passage of House Joint Resolution 409, introduced by Congressman Stephen Neal, would provide that crucial reinforcement. The Neal Resolution simply directs the Federal Reserve to make price stability the primary goal of monetary policy and to achieve that goal within five years. History gives us little basis for expecting price stability or even a stable rate of inflation because the FOMC has had no mandate to produce that result. Giving the FOMC that mandate, knowing that the FOMC had the intention of stabilizing the inflation rate at zero, would provide one gigantic piece of policy information to any rational decision maker in any dollar-denominated market. The Federal Reserve would remain independent; it would retain complete discretion about how to carry out policy. The only change would be that Congress would be providing more direction about the basic policy objective, and the Federal Reserve would be accountable for achieving it. True accountability would also require an incentive or enforcement mechanism for achieving the objective.

The FOMC can deliver lower inflation without a legislative mandate. Of that you should have no doubt! Inflation is a monetary phenomenon, and the FOMC is the sole custodian of the quantity of money in the United States. Short-term deviations from zero inflation may occur, but, one way or another, the FOMC can provide a stable price environment. As many scholars have urged, the FOMC might impose accountability on itself by tying policy actions to some intermediate target variable by an agreed-upon formula that should assure achieving price stability. These days, the most popular candidates for an intermediate policy target seem to be nominal GNP and M2, either of which is thought capable of producing reasonable price stability. Another approach would be for the Committee to specify achieving the ultimate policy goal as the rule, while using discretion in choosing actions to achieve the goal.

Of course, having today's FOMC impose accountability on itself (by adopting an explicit rule tying an instrument to a goal) is not a foolproof way to assure achieving an official policy goal. Credibility would have to be earned through predictable actions consistent with the goal. To adopt an explicit rule, at least a majority of today's FOMC members not only must agree on an overriding macroeconomic goal, but also must renounce some discretion to pursue other goals. Moreover, tomorrow's FOMC could decide to change the goal and hence the rule. In the current policy regime, there is no way today's policy choice can bind tomorrow's. Unless directed by society through specific mandate, tomorrow's FOMC always has the discretion to change the goal. And with shifting goals there is no accountability. The lack of accountability for a dominant policy goal of price stability is, I believe, the major cause of the inflationary bias in the U.S. economy since World War II.

While the specifics of the Federal Reserve charter differ from those of other central banks, the problems of conflicting objectives and the lack of secure independence and explicit accountability are common to all central banks in varying degrees. Experience around the world and through time repeatedly demonstrate that central banks require independence from day-to-day political life to perform their price-stability role. If legal and cultural conditions could be created that truly fix a central bank with accountability

for anchoring the price level, the structure of the central bank itself would become less important. Those circumstances would be a joy to behold, but I am afraid they will be some time in coming.

V. Why a Zero Inflation Objective

I believe very strongly that the dominant objective of monetary policymakers should be price stability for three reasons. First, a central bank can, in the long run, control the price level of goods and services denominated in its own currency, but it cannot control the growth of output (potential or actual). Second, a credible commitment to a price-stability objective enables a central bank to promote economic efficiency and growth (potential and actual). Third, price-level stability, popularly called zero inflation, is superior to inflation-rate stability.

Among economists, support for the first reason is nearly universal. There is also widespread agreement on the second point. A central bank that pursues price stability promotes economic efficiency and growth. I would venture further to say that experience shows that central banks that have sought to directly enhance economic growth have failed miserably at providing stable price levels and ironically have undercut economic growth in the process. It is the last reason—that no inflation is preferable to stable, non-zero inflation—that is most contentious, particularly when people attempt to compare the transitional costs of achieving price stability to the costs of stabilizing the inflation rate at the status quo.

There are two dimensions to the argument that the cost of pursuing a zero-inflation target would outweigh the benefit of reaching that target. The first is that the benefit of achieving zero inflation would be small. The second deals with the costs of moving from a 4 percent trend rate of inflation to zero inflation. This is the transition-cost argument, which essentially says that even if zero is the place to be, getting there is not worth the ride. I believe that the benefits of zero inflation are great and that the transition costs can be reduced if the Federal Reserve commits to an explicit plan for achieving zero inflation.

The interaction between inflation and our current tax system, especially as it applies to income generated by capital, represents one of the more significant channels through which non-zero inflation can exact economic costs.⁷ This channel of distortion is often not taken seriously because people think that its effects are minimal or that it would be easy to index the tax system. Correcting the tax code is a good idea, of course, but until that happens, what possible excuse is there for not letting the monetary authorities do what is necessary to improve social welfare?

It is clear that the horrendous U.S. inflationary experiences of the 1970s and early 1980s induced the limited inflation indexation of the current tax system; however, the job is far from complete. Capital gains, corporate depreciation and interest expenses, and personal interest income remain untouched by efforts to index the tax system for inflation. Even the bracket indexation implemented by recent tax reform does not fully protect taxpayers from "bracket creep" (non-legislated increases in marginal tax rates created by inflation). Complete indexation of the tax code, however desirable it may be, will be extremely difficult to achieve. Will another inflationary experience like that of the 1970s be required to induce further progress on tax indexation? I fail to understand why some feel that these inflation/tax interactions are a significant drag on the economy, yet argue that only Congress should be concerned with the problem. The problem exists because of the interactions between inflation and a tax system based in current

dollars. Therefore, it seems to me that the responsibility for minimizing these costs lies as much with the monetary authorities as with Congress. Doesn't it make more sense for monetary authorities to try to correct the inflation part of the problem, rather than simply hope that Congress will implement changes that it may be unable or unwilling to pursue? We speak about the costs of achieving zero inflation, but what about the costs of fully indexing the tax system? Surely they would be significant.

Another area of concern is the role of uncertainty as a source of inflation costs. How important are the distortions that arise from price-level uncertainty? There is a class of models--the market-clearing, imperfect information paradigm associated with Robert Lucas and others--in which inflation uncertainty harms the economy by distorting the period-to-period relative price signals that facilitate the efficient allocation of scarce resources.⁸ Despite the pervasive intellectual influence exerted by the Lucas framework to this day, the empirical evidence accumulated since the development of the paradigm in the early 1970s has not been entirely supportive. This point is not lost on critics, who think that the lack of evidence on short-term distortions should persuade us that inflation uncertainty is simply not that important to social welfare. Surely the relative-price/aggregate-price confusion stressed by the Lucas-type models is a special type of uncertainty. The failure to find significant effects arising from uncertainty that is resolved within the frame of a few quarters tells us next to nothing about the type of long-run uncertainty with which the zero-inflation position has always been fundamentally concerned.

Indeed, it seems likely that it is precisely the uncertainty occurring over extended time horizons that is most affected by the average inflation rate.⁹ This is one reason why I favor a price-level target. An inflation-rate target enables the price level to drift without bound, and with no enforcement mechanism to ensure that inflation "mistakes" will be corrected, the long-run variance of the price level is infinite. When people have reason to believe that this standard will erode over time, they invest numerous resources to protect themselves. Those who have nominal debt outstanding will drag their feet in paying it back, while creditors will invest in ways to accelerate the collection of funds. The private gains to self-protection are clear, as are the social costs.

Recent experience is the best testimony to the real resource cost of inflation. During the 1970s, people could see that inflation accelerated with each passing year. They guessed, reasonably at the time, that financial assets were of limited value in protecting their wealth from the inflation tax. Consequently, farm land, commercial and residential property, and precious metals became much more expensive as people sought to shelter their wealth. Not only was time spent seeking out these investments, which was socially wasteful, but the resource misallocation itself resulted in a much greater waste of land, labor, and capital that society is still paying for today.

It is difficult to comprehend how efficient planning within the public and private sectors could not be inhibited by this type of long-run uncertainty. Furthermore, the intuition that long-run inflation uncertainty is costly has empirical support; in cross-country comparisons, economic growth is negatively related to the variability of inflation.¹⁰ One finds that the case for reducing price level uncertainty is far more compelling than a cursory analysis might indicate.

In evaluating the costs of attaining zero inflation, economists almost always use models in which markets do not clear, or do not clear without cost. Gone is the market-clearing, flexible price, rational expectations model. In its place is a model with price

contracts that make the transition to zero extremely costly. The source of the friction is usually not entirely explicit, but the implication is that we must assume some frictions. It is these frictions, coupled with the inability of markets to clear, that make ending inflation appear so costly.

Isn't it sensible to assume that the implicit sources of frictions that make lowering the inflation rate costly would also contribute to making inflation costly in and of itself? For instance, a variety of explicit and implicit nominal contracts already exist among people, and a transition to zero inflation could alter the real values of payments from those that were originally intended. But surely the entire institutional apparatus that generates these contracts must involve resource costs that are positively related to the average rate of inflation.

One should not compare the costs of getting to zero inflation in non-market-clearing models, where such costs are high, to the benefits of being at zero inflation in frictionless, continuously clearing models, where the benefits are low. If we are going to use a model with frictions to measure the cost of getting to zero inflation, then we should also use such a model to examine the benefits of being there. This is one reason I am skeptical of so many "cost/benefit" estimates of reducing inflation.

I am also skeptical about transition cost estimates that do not account for the possibility that a price-stability objective will be regarded as credible by the public. Economic theory and reasonable model simulations persuade me to believe that with credible precommitment, a central bank can greatly minimize private-sector planning errors during the transition period. I think that much of the disagreement among economists on the size of transition costs revolves around the ability of a central bank to credibly commit itself to achieving its objective. Until I see some hard evidence to dissuade me, I plan to continue my advocacy of price stability as the overriding objective of central banks.

It still puzzles me that volumes of research have been published on central bank operating procedures and management of monetary aggregates, yet relatively little research has been published on the value of a credible precommitment to a price-stability objective. My intuition tells me that the latter is far more important than the former in terms of economic welfare. Of course, credibility depends on policy information available to market participants so that they can monitor progress toward the objective.

One major benefit of imposing an explicit intention on monetary policy is that policy actions in the money market would become far less momentous than they are now. Currently, detecting a change in the federal funds rate target from the pattern of open market operations is a crucial activity because it provides markets with one of the few clues as to what monetary policy the Federal Reserve is pursuing. Canvassing the positions of individual FOMC members is a way of predicting future policy. However, if policy intent were explicit and credible, finding the clues in open market operations would have less significance.

I see the greatest payoff in more information about policy intentions. An explicit FOMC commitment to price stability would allow markets to shift resources from watching the Federal Reserve to watching the economy for productive investment opportunities. Focusing on the intent of policy is in marked contrast to conventional concerns for more certainty about the current degree of reserve restraint. There are many ways to reduce uncertainty about the immediate funds rate implications of policy, just as there are many time schedules by which the FOMC directive might be released.

Being more certain about the immediate federal funds rate implications of policy might make Fed watching a bit easier, but would not do much to help identify policy intentions beyond the shortest of horizons. Releasing the directive early might provide a slightly brighter glimmer of policy intentions, but only for a slightly longer policy horizon. What is needed is not better information about the latest directive, but better information about the process through which all future directives will be crafted--policy intentions. Nothing would provide more insight than a clearly stated goal.

VI. Monetary Policy and Monetary Protectionism¹¹

Let me turn now to the effects of international policy coordination on the pursuit of zero inflation. Exchange rate regimes and attempts at monetary union are currently undermining the objective of price stability. Many actions taken by central banks are not aimed at price stability, but rather are attempts to establish monetary protectionism. By monetary protectionism, I refer to attempts to alter real exchange rates through a manipulation of monetary policies, with the hope of ultimately promoting a balance-of-payments objective. In the case of a deficit country, monetary protectionists call for an expansion of money growth (or lower nominal interest rates). A monetary expansion, other things being equal, will produce a nominal depreciation. If individuals are unable to adjust prices immediately, or if they are slow in perceiving the inflationary aspects of this policy, a real depreciation will accompany the nominal depreciation. As most economists realize, however, the inflation rate will eventually respond to the monetary expansion, offsetting the nominal depreciation and returning the real exchange rate to its initial position. Nevertheless, the tenuous, short-lived relationship between money and the real exchange rate is seductive enough to convince politicians and other "fine-tuners" that monetary policy can serve mercantilist designs.

My focus on this issue stems from a firm belief that central banks can do no better than to guarantee long-run price stability and that any efforts to limit this guarantee are not likely to raise world welfare. Central banks can juggle a real exchange rate and inflation target no better than they can slide back and forth along a stable Phillips curve. A central bank that attempts to maintain price stability and a nominal exchange-rate target has more policy targets than policy instruments. At times, these two objectives might be compatible. For example, in the late 1970s, limiting rapid dollar depreciation through intervention could have been compatible with a contractionary monetary policy to eliminate inflation. As often as not, however, these two policy objectives will be incompatible, and the central bank must trade one objective against the other.

Under such conditions, markets will view neither price stability nor exchange-rate stability as a credible policy. The knowledge that central banks will deviate from a policy of price stability to pursue an exchange-rate objective will raise uncertainty about real returns and will distort the allocation of resources across sectors and through time. The resources devoted to protecting wealth from possible inflation could be applied to more productive uses under a policy of price stability. Moreover, attempts to maintain nominal exchange rates will not eliminate exchange-rate uncertainty, since countries inevitably will resort to periodic exchange-rate-realignments. Hedging exchange risk will remain an important aspect of international commerce.

Although monetary protectionism seems most prevalent under the present system of floating exchange rates, one should not conclude that floating exchange rates promote its use. Monetary protectionism can result any time a government accepts non-market criteria for exchange rates. In principle, a gold standard, or a fixed exchange-rate

regime, can limit the scope of monetary protectionism, because if all countries play by the rules of the game, they link money supplies closely to the flow of international reserves. In practice, however, such regimes do not destroy the political motives for monetary protectionism, and examples of monetary protectionism under fixed exchange rates abound. By allowing some discretion in the choice of exchange-rate adjustments, fixed exchange-rate regimes often produce a mechanism that weakens the allocative efficiency of exchange markets and promotes mercantilist objectives.

In contrast to the interventionist literature, which presupposes an all-wise government acting in the public's best interest, a rich, growing literature on political economy characterizes elected officials as seeking to enhance their own power, prestige, and wealth by maximizing their ability to gain votes. Politicians and bureaucrats attempt to extend the scope of their influence by responding to the demands of the most politically active constituencies.¹² A political justification for exchange-rate manipulation is that it defers criticism and postpones more fundamental actions. For instance, in 1985 dollar exchange rates were at their zenith, the U.S. current account was deteriorating rapidly, and evidence suggested that the United States was becoming a debtor country for the first time since World War I. U.S. manufacturers, facing increasingly stiff competition worldwide, besieged Congress for trade legislation. Most important, analysts increasingly linked the deterioration in the external accounts with the fiscal policies of the Administration and Congress. The opportunity cost of government inaction, measured in terms of votes lost, seemed to rise sharply in the early 1980s.

The U.S. current-account deficit reflected imbalances between savings and investment in the United States, and in West Germany and Japan. Politicians, however, cannot easily redress such structural relationships through fiscal policies because of strong vested interests in maintaining various tax and expenditure patterns. Lacking an ability to address these structural problems directly and quickly, policymakers might resort to exchange-market intervention. When coordinated through the Group of Seven, such intervention offers a highly visible signal that governments are responding to the desires of their constituencies.¹³

Exchange-rate policies can also offer temporary benefits to specific constituencies. When goods prices are slow to adjust, a nominal currency depreciation is equivalent to a temporary, across-the-board tax on imports and a subsidy to exports. With the terms of trade temporarily altered, certain groups in the traded-goods sectors can realize benefits from monetary protectionism similar to those afforded by more traditional forms of protectionism. Ultimately, any benefits from monetary protectionism dissipate with a high inflation rate and with reduced credibility of monetary policy. The inflation costs of monetary protectionism, however, are dispersed across a wider spectrum of individuals and over a longer time horizon than the benefits. A constituency that receives net benefits from monetary protectionism (export- and import-competing firms) can exist. Such a constituency is likely to be politically more cohesive than any constituency for price stability. Consequently, a policy that seems myopic from an economic perspective can be politically attractive.

Another seemingly attractive aspect of monetary protectionism is that Congress and the administration can justify it in terms of broader macroeconomic considerations, such as exchange-rate "misalignment" or current-account "imbalance," rather than industry-specific considerations, such as automobile and steel employment. Consequently, the rent-seeking aspects of monetary protectionism are less obvious than those of standard protectionist policies.

Countries interested in establishing exchange-rate targets have a strong incentive to collude in their efforts with foreign governments.¹⁴ In the case where countries attempt to alter nominal exchange rates, such collusion provides tacit foreign approval of these policies and limits the chances that a foreign government will take steps to neutralize the exchange policies of another government. Sometimes such collusion involves having cartel members delay policy negotiations, or exchange-rate adjustments, when individual cartel members face critical elections. Bretton Woods and the European Monetary System (EMS) are examples of collusion that were fairly successful for a period. The competitive currency devaluations of the 1930s show what can happen when governments attempt to fix a price, but the cartel breaks down. Coordinated efforts to fix exchange rates can allow individual countries to influence the policies of others and to defer some of the adjustment burdens of maintaining the peg. Such mechanisms are found in the EMS and figure in some proposals for target zones and for fixed exchange rates. Many support the proposal for a European Central Bank for just this reason. The alternative is to sacrifice monetary sovereignty in order to maintain a fixed exchange rate and to follow the monetary policy of a major trading partner.

Under floating exchange rates, a rapid depreciation in the nominal exchange rate in response to such inflationary policies signals the market's displeasure and constrains governments. Through collusion to fix the exchange rate, however, governments can temporarily blunt the exchange-rate reaction to their policies and reduce the political costs of pursuing inflationary policies. Coordination to limit exchange-rate fluctuations is politically attractive because it eliminates an important, immediate barometer of the market's opinion of government policies.

For their part, central banks often are willing participants, viewing exchange-rate management as a legitimate aim of monetary policy. Exchange-rate movements can impart useful information for policymaking and, as already noted, exchange-rate targets can sometimes be consistent with a monetary policy of price stability. As often as not, however, exchange-rate policies conflict with price stability. For example, U.S. purchases of foreign currencies in 1990 seemed inconsistent with a goal of price stability. When these objectives conflict, the Federal Reserve System faces a dilemma between its independence and its accountability to the broad national policy goals set by Congress and the administration. The Federal Reserve does not wish to appear unresponsive in the eyes of the public to the objectives of Congress and the administration. Participation also enables a central bank to influence policy formulations that it is powerless to prevent. Such reasoning is a certain sign of a central bank unsure of its objective and insecure about its independence.

In countries with independent central banks, intervention policies might enable fiscal agents to extend their influence beyond the foreign exchange market to domestic monetary policy. Elected officials often seek more stimulative monetary policies than central banks, hoping to lower nominal interest rates and to stimulate real growth and employment. In choosing a nominal exchange-rate target, engaging in intervention, and encouraging the central bank not to sterilize the intervention, fiscal agents have a mechanism for such an influence. This channel of influence would not usually be open. At times, however, such as when the central-bank policy committee is not in unanimous agreement, such an influence, marginal though it may be, could prove decisive in charting future monetary policy actions.

VII. Integrated Markets and Policy Constraints

I have attempted to instill a healthy skepticism for exchange-market manipulation, arguing that it is a form of monetary protectionism that harms economic welfare. Monetary protectionism stems, as a near-term palliative, from the political interactions between policymakers and constituencies with vested interests in particular market outcomes. Any international monetary order willing to accept non-market criteria for exchange rates and failing to bind governments with a price-stability objective is ripe for monetary protectionism. To counter the political incentives toward monetary protectionism, nations should adopt monetary-mandates, along lines similar to the Neal Resolution in the United States, which focus monetary policy on achieving and maintaining long-term price stability.¹⁵ This would do more to eliminate exchange-market uncertainty and foster the efficient worldwide use of real resources than any program to manipulate nominal exchange rates.

My comments are not meant as a blanket condemnation of international policy cooperation. I strongly support cooperation that makes price stability the dominant objective and recognizes market-determined exchange rates. Only cooperation based on these conditions seems both feasible and credible, because it recognizes the fact that nations will pursue different economic policy objectives and desire monetary sovereignty.

Contrary to what some might infer, this approach does not preclude European monetary unification, in the future, but it suggests a different approach than currently seems to be favored. European governments are not likely to relinquish national monetary sovereignty upon adoption of a single market. Consequently, greater exchange-rate flexibility than the EMS currently provides seems necessary to insure that exchange rates do not interfere with the efficient flow of goods, labor, and capital following the removal of restrictions. The free flow of resources, if it occurs, will foster a convergence of policy preferences within Europe as governments compete for these resources by providing stable economic and political environments. Governments that fail to provide such an environment will lose resources, as markets "vote" on policies. The resulting convergence of monetary and fiscal policies will lead to greater exchange-rate stability. If in time, governmental competition for resources attains a convergence of macroeconomic policy, then issues of national policy sovereignty, will be muted. Only then will monetary union augment the efficiency gains of a single market. As seems obvious from recent developments in Europe, efforts to rush monetary union are efforts that put the cart before the horse and may well interfere with the progress toward a single market.

To fix exchange rates prior to a convergence of policy preferences within the European Economic Community seems to ensure that interest rates and prices will bear more of the adjustment burden. Moreover, judging from the experience of Bretton Woods, fixed-exchange rates would seem to guarantee speculators periodic exchange-rate adjustments and to encourage governments to impede the flow of goods and capital through the reintroduction of restraints. The dynamics of achieving monetary union are as important as the goal, and price stability is a more important goal than either.

Scores of new nations are busy constructing central banks to implement monetary policy. Using history as a guide, these new central banks will try to pursue objectives other than price stability, especially since they are being counseled by central bankers with weak records on price stability. Short-term political agendas will likely dominate their policy actions and push them away from the pursuit of price stability. Yet, it seems

to me that there are powerful market forces that will crimp the efforts of central banks to mismanage their currencies.

The integration of world markets, particularly financial markets, is limiting the degree to which policymakers are willing to drift away from price stability, at least for the major economies. Twenty years ago the Federal Reserve paid scant attention to the impact of foreign markets on the price of U.S. government securities and interest rates in the United States. Yet, when I participated in the FOMC deliberations, we almost always discussed the impact of a policy action on long-term Treasury rates, currency values or the shape of the yield curve. The FOMC now looks at how world financial markets assess the credibility of its policy actions with respect to inflation expectations. This process, in effect, limits the degree to which the FOMC is willing to risk inflationary policy actions.

In Europe, smaller countries often peg their currencies to the German mark, allowing the Bundesbank to determine their monetary policies. The German central bank is also limited by world markets in terms of the inflation path it chooses to pursue. I am not so bold as to argue that markets will cause central banks to wither away to agencies that simply pump out monetary growth rates that provide price stability. However, it does seem to me that market forces are strengthening the hand of central banks in fighting political pressures for short-term "quick fixes" to economic problems. Perhaps even politicians will learn the limits of governments in solving economic problems.

If this view proves incorrect, then central banks will face the prospect of market participants developing private money to a much greater degree than exists today. When government management of particular institutions results in failure, private sector alternatives appear--witness the "privatization" trend in U.S. schools and courts. Perhaps those who yearn to revisit the Scottish system of free banking may live to see a version of it replace central banking. If so, we are likely to pay a heavy price along the way.

- ¹ See Milton Friedman and Anna I. Schwartz, "Has Government Any Role in Money?" *Journal of Monetary Economics*, vol. 17, no. 1 (January 1986), pp. 37-62.
- ² See, for example, the discussion in Charles Goodhart, *The Evolution of Central Bank*. Cambridge, Mass.: MIT Press, 1988.
- ³ For a discussion of the free banking era in Great Britain, see Lawrence H. White, *Free Banking in Britain. Theory, Experience, and Debate, 1800-1845*. New York: Cambridge University Press, 1984.
- ⁴ See NABE Policy Survey, January 1990. *Economists Expect Further Monetary Easing. Do Not Favor FOMC Restructuring; Oppose Government Action to Curb Stock Market Volatility*. Cleveland, Ohio: National Association of Business Economists.
- ⁵ See Alberto Alesina, "Macroeconomics and Politics," *Macroeconomics Annual* (The MIT Press for the National Bureau for Economic Research, 1988), pp. 38-43 and table 9. See also King Banalan, Leroy O. Laney, and Thomas D. Willett, "Central Bank Independence: An International Comparison," *Federal Reserve Bank of Dallas, Economic Review*, (March 1983), pp. 6-8.
- ⁶ See Thomas J. Sargent, "Reagonomics' and Credibility," in Albert Ando et al., eds., *Monetary Policy in Our Times: Proceedings of the First International Conference Held by the Institute for Monetary and Economic Studies of the Bank of Japan*. Cambridge, Mass.: MIT Press, 1985, pp. 235-52.
- ⁷ See David Altig and Charles T. Carlstrom, "Inflation and the Personal Tax Code: Assessing Indexation," *Federal Reserve Bank of Cleveland, Working Paper 9006*, July 1990.
- ⁸ See Robert E. Lucas, Jr., "Expectations and the Neutrality of Money." *Journal of Economic Theory*, vol. 4 (April 1972), pp. 103-24.
- ⁹ See Laurence Ball and Stephen G. Cecchetti, "Inflation and Uncertainty at Long and Short Horizons," *Brookings Papers on Economic Activity*, vol. 1 (1990), pp. 215-54.
- ¹⁰ See Kevin B. Grier and Gordon Tullock, "An Empirical Analysis of Cross-National Economic Growth, 1951-80," *Journal of Monetary Economics*, vol. 24 (September 1989), pp. 259-76. David E. Lebow, John M. Roberts, and David J. Stockton make the same point in "Economic Performance under Price Stability," unpublished manuscript, Board of Governors of the Federal Reserve System, December 1990.
- ¹¹ This section summarizes ideas presented in W. Lee Hoskins and Owen F. Humpage, "Avoiding Monetary Protectionism: The Role of Policy Coordination," *Cato Journal*, vol. 10 (fall 1990).
- ¹² See M.G. Quibria, "Neoclassical Political Economy: An Application to Trade Policies," *Journal of Economic Surveys*, vol. 3, no. 2(1989), pp. 107-36.
- ¹³ The Group of Seven countries are Canada, France, Italy, Japan, the United Kingdom, the United States, and West Germany.
- ¹⁴ See Roland Vaubel, "A Public Choice Approach to International Organization," *Public Choice*, vol. 51, no. 1 (1986), pp. 39-57.
- ¹⁵ See W. Lee Hoskins, "The Case for Price Stability," *Economic Commentary*, Federal Reserve Bank of Cleveland, March 15, 1990.

INCENTIVE MECHANISMS FOR PRICE STABILITY:

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ORGANIZING A CENTRAL BANK TO CONTROL INFLATION: THE CASE OF NEW ZEALAND

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1. INTRODUCTION

In the year to March 1992, New Zealand recorded an inflation rate of 0.8 percent. This is in stark contrast with New Zealand's previous inflation record. Between 1934 (when the Reserve Bank of New Zealand was established) and now, the price level in New Zealand rose by over 3500 percent.

In fact, for all countries the 20th century's inflation performance compares badly with earlier times (Bernholz, 1987). The New Zealand focus is because the particular purpose of this paper is to describe new central banking arrangements in New Zealand, as an example of one way of approaching the issue of structuring political and bureaucratic decisionmaking in pursuit of price stability.

2. PRE-1984 MONETARY POLICY APPROACH

In the decade before 1984, New Zealand had one of the slowest growth rates in the OECD group, persistent balance of payments problems that led to a very rapid accumulation of external debt, the beginnings of a strong uptrend in unemployment, and high and variable rates of inflation. Causes of these problems included external influences, but poor fiscal, monetary, and structural policies carry a substantial burden of blame.

The main features of monetary policy over this period were as follows:

- a. A pegged exchange rate regime in which occasional adjustments were made to the rate as foreign exchange reserves came under pressure. For some of the period (1979 to 1982), a crawling peg regime was experimented with, whereby an attempt was made to allow the rate to depreciate in line with the relatively more rapid rate of inflation in New Zealand than in trading partners.
- b. Extensive financial market controls, including: foreign exchange controls; entry restrictions to various markets (e.g. banking); frequent resort to interest rate controls of varying complexity and severity; forced takeover by core financial institutions of

¹ The views contained in this paper are the personal views of the author, and do not purport to represent the views of the Reserve Bank. Grateful acknowledgement is given to Michael Reddell and Arthur Grimes for helpful comments, but as always the usual disclaimer applies.

government debt at below market interest rates via the mechanism of reserve asset ratio requirements; and occasional use of directives to financial institutions on rates of credit growth and sectoral credit allocation.

c. Monetary policy settings that were determined by the government, and implemented by the Reserve Bank. The formal objectives of monetary policy were wide ranging, and in practice policy was dominated by the government's concern to keep interest rates low (for growth and employment reasons), but punctuated by an occasional swing towards concern about accelerating inflation.

d. The implementation of monetary policy via direct intervention techniques, using non-market instruments such as variations on ratio settings, directives, and adjustments to government debt interest yields against the background of controlled private sector interest rates.

3. SOURCE OF INFLATION PROBLEMS

Understanding the issue of the appropriate structuring of decisionmaking incentives obviously requires an understanding of the origins of the inflation problem. At the very least, we have to know incentives we are trying to structure.

Several potential explanations of inflation have been proffered in the international literature; most of these have also been put forward in the New Zealand context.

a. Originating with the monetarist questioning of the Keynesian tradition, problems of business cycle management failure appeared at one stage to provide part of the answer (Friedman and Schwartz, 1963). But although an inability to pick the turning points and to manipulate the lags successfully can account for wider and more variable business cycles, poor business cycle management does not account for a secular tendency towards inflation.

b. Somewhat more complete an answer comes with the addition of political economy considerations to the business cycle management failure explanation. A community-wide lack of awareness or understanding of the costs of inflation undermines enthusiasm for inflation reduction. Couple that with a strong consciousness of the costs of inflation reduction, and one has a fairly potent recipe for turning business cycle errors into an upwards inflation ratchet. Though similar in flavour to arguments put forward by Nordhaus and others, the above explanation is to be distinguished by degree from the public choice arguments (Nordhaus, 1975). The latter are outlined in e. below.

c. At various times, some monetary policy academicians and practitioners have paid considerable attention to the question of techniques of monetary control. The debates in the United States about various regime changes in the late 1970's and early 1980's are an illustration. It is somewhat difficult to see, however, how control mechanism problems provide an explanation for a persistent upward bias in international inflation rates for most of the 20th century. Virtually all of the available monetary control techniques are capable of hitting a price stability target on average, if not operated blindly and mechanistically. The differences between the alternatives relate to the size and persistence of errors around the target, and the efficiency of the instruments being used.

d. A more convincing explanation for inflation bias is available in the time consistency literature. Public perceptions of an incentive to generate surprise inflation will lead to a non-zero expectation of surprise inflation. In the absence of an ability for the authorities to pre-commit to a zero inflation policy strategy, a positive inflation rate will

be expected. Accordingly, the time consistent policy equilibrium will feature the policy that generates the rate of inflation expected. No gains are available from choice of an alternative inflation rate.

However, recent models of time consistent policy allow that the concept of pre-commitment includes considerations of the reputation of the authorities with regard to inflation preferences (for example, Backus and Driffill, 1985). It is entirely plausible that a zero inflation time consistent equilibrium can be established, if sufficient investment has been made by the authorities in a reputation as an inflation hater. This is because the costs of loss of reputation are factored into public assessments of the likelihood of a surprise inflation. Pre-committing, or raising the costs of renegeing on promises to pursue price stability, are both methods of reducing inflation bias.

e. A more serious, and worrying, explanation for inflation bias is explanation from public choice economics. This takes a step further the political economy considerations referred to earlier. In these models, politicians (and to a lesser extent, bureaucrats--see next section) actively choose higher inflation, because of their personal/political preferences and their own in relation to those incentives.

In the time consistency branch of the literature, the source of the incentive to inflate is in principle irrelevant to the existence of an inflation bias. But if there are perceptions of a public choice incentive for politicians to generate a surprise inflation, the time consistent policy equilibrium would feature a higher inflation rate. The ability of a monetary authority to establish a solid reputation for price stability is helped by the absence of conflicting public choice incentives, and the capacity to signal that absence of conflicting incentives (Grossman, 1991).

f. From two distinct perspectives--the free banking debate and the bureaucratic incentives of central bankers--the rough coincidence of secular inflation and the advent of central banking within fiat currency systems seems to point to something in central banking as a cause of inflation bias.

Fundamentally, the free banking line does not differ much in its analysis of the origin of inflation from the public choice line (although the policy prescription can be quite different). Ultimately, government choices on the monetary constitution determine whether the central bank has monopoly power in base money creation. Thus the incentives of the government are at issue.

Bureaucratic incentives of central bankers are also amenable to analysis within the public choice field, and thereby also potentially contribute to a time consistency/reputation problem. But in practice the small literature on the special contribution that the bureaucracy of central banking might make to an inflation bias (see, for example, Toma, 1982) does not seem to take us very far. Again, in most instances, central bankers have been beholden to the government of the day. Nonetheless, when central banks are given almost constitutional independence, the question of marrying the incentives of central bankers with the public interest attains renewed prominence.

In choosing amongst these alternative explanations of the 20th century disease, it is useful to think not only about what makes sense now, but also about whether the explanation also fits earlier time periods. The public choice and time consistency viewpoints by themselves appear to provide an incomplete-explanation of the pre-20th century experience.

For long periods in the 18th and 19th centuries, some countries--notably the United Kingdom and France--maintained price stability. The mechanism used--the gold

standard²--was not itself a guarantor of price stability, as evidenced by the fact that several other countries realigned against gold on several occasions. It is unlikely that the incentives to inflate facing the United Kingdom and French authorities were systematically weaker than those facing other countries. For instance, after 1815 when the United Kingdom faced a substantial debt overhang from the Napoleonic wars, the choice to repeg to gold at the former rate meant foregoing an opportunity to inflate away a problem. Further, if the time consistency argument is to be believed, as the UK's and France's reputations as inflation-proof locations grew, the incentive to generate a surprise inflation should have grown ever stronger. Eventually, a point would have been reached where an uncoupling of sterling from the gold standard would have occurred, well before it actually happened.

A satisfactory public choice style explanation of the absence of inflation in these countries between the late 16th century and the early 20th century would have to invoke sizeable costs to reputation or personal wealth. But one would then be left with the task of explaining why such checks on the political choices that favour inflation have been reduced in power in the most recent time period.

Rather than relying solely on the existence, or perceived existence, of a fundamental inconsistency between the incentives facing the monetary authorities and the interests of society, it appears sensible to craft a less elegant explanation that incorporates also the influence of policy mistakes. The explanation that draws on the theories of business cycle management failures mentioned earlier, and a lack of understanding of the costs and benefits of attempting actively to tradeoff growth, employment, and inflation.

With the tendency to regard active business cycle management and the management of the Phillips Curve tradeoffs as part of the legitimate role of governments, and with little attention paid to optimal instrument-objective assignment within the institutional machinery of government, central banks around the world have generally been given wide ranging and potentially internally inconsistent objective functions. Such objective function assignments reflect both political incentives and interests, and what is perceived at the time as sensible arrangements of objectives and instruments.

The Reserve Bank of New Zealand was no exception. The previous version of the legislation required the Bank to "give effect to the monetary policy of the Government ... which shall be directed to the maintenance and promotion of economic and social welfare in New Zealand, having regard to the desirability of promoting the highest level of production and trade and full employment, and of maintaining a stable internal price level". No attention was paid in the legislative framework to relative priorities amongst these objectives; to the coordination of multiple instruments wielded by the range of government agencies accorded overlapping objective sets; to the implications of non-trivial information costs for the optimal design of policy; or to the establishment of an accountability framework that focused the attention of individual bureaucrats.

Given such fundamental design flaws in the structure for decision making, it would have been fortuitous if price stability had eventuated. Such a context allows excessive scope for central bankers to get waylaid by an unrealistic faith in their own technical competence to dampen the business cycle at the same -time as controlling inflation. It

² The term "gold standard" is used here generically. There were in fact a wide variety of arrangements, with considerable evolution through time.

also allows central bankers to give freer reign to their hearts than their heads. Nobody in public service wants always to be seen as depressing income growth, and it is very easy to be tempted by apparently obvious--but ultimately illusory--opportunities to avoid doing so. Such considerations shape policy decisions, whether directly or indirectly, via the nature of the advice given by bureaucrats to political decisionmakers. All these things tend to produce a bias towards higher inflation, without higher inflation being the active objective of monetary policy.

In short, the prevailing thinking about what is sensible policy plays a significant role in the explanation of the 20th century inflation bias, in addition to the insights obtained from the public choice and time consistency literature. However, in thinking about solutions, these two broad strands have shared roots in some of the principal/agent literature, in that the focus is on establishing decision making structures such that the decision makers make choices consistent with the public interest.

4. THE ROLE OF CENTRAL BANK INDEPENDENCE

Central bank independence has often been advocated as an appropriate vehicle for the achievement of price stability. Bade and Parkin's pioneering analysis of the linkage between central bank autonomy and inflation outcomes was certainly strongly suggestive of a relationship between independence and price stability (Bade and Parkin, 1987), though an inability to nail down precisely the concept of independence makes empirical analysis fraught with difficulty. Nonetheless, other studies using different definitions of independence produce similar results (see, for example, Alesina, 1989, and Alesina and Summers, 1991).

One can approach this argument from (at least) two angles.

A number of authors have focussed on the problem of inconsistent political incentives and argued that a sufficient solution is to establish complete independence for the central bank. In some versions of the argument, the important factor is that the time horizon of central bankers is longer than the focus of politicians who are dominated by the electoral cycle. However, this line of argument does not come to grips with the issue of marrying the interests of central bankers with the price stability objective (Capie, Mills, and Wood, 1992). An independent central bank chasing confused and competing objectives unlikely to produce societally desirable outcomes. In other versions of the argument, central bank independence is the vehicle for distancing the implementation of monetary policy from political decisionmaking incentives, while various devices are used to solve the problem of structuring the central bankers' incentives (for example, Neumann, 1990).

A second line of analysis has its origins in the rules vs. discretion debate. Flood and Isard (1987), for example, set out an analytical framework that features uncertainty about the structure of the macro-economy, and about the nature of the shocks hitting the system. Flood and Isard define the task of monetary policy in relation to a joint objective function, including growth and price stability. In this world, fully state-contingent rules are unworkable for practical reasons. Such systems are just too complicated. Simple, or partially-contingent, rules do not necessarily work better than the alternative of complete discretion. It depends on where the shocks are coming from, and the state of knowledge of the policymakers. In principle, a mix of discretion and a partially state-contingent rule could perform better than each of the alternatives. The trick is to find institutional structures that give strong enough incentives for the policymakers to follow

the rule in normal times, but not so strong incentives that major disturbances are not accommodated by way of a departure from the rule.

Central bank independence is not a useful construct within the full discretion alternative, since full discretion means leaving all judgements, including that on the appropriate target (or tradeoffs between the targets, in the multiple targets case), to the central bankers. There is nothing genetic about central bankers that makes for a superior capability to sort out the right objective. But within a mixed rule/discretion approach, an independent central bank could provide a strong candidate for the institutional structure most supportive of price stability. The idea is to precommit to the use of monetary policy in pursuit of price stability (the "rule") in most circumstances, allowing discretion on the choice of monetary policy techniques, but to provide for departures from the rule in extremis. By providing for discretion on choice of technique, the excessive inflexibilities of a simple rule system are avoided. And by pre-determining in some way the circumstances in which the departure will take place, the chances of successfully signaling the continued longterm commitment of the authorities to price stability might be enhanced.

But again, the problem is to actually arrange the decisionmaking structure so that the discretion exercised by the central bank on (1) actions within the price stability rule (i.e. in normal times), and (2) actions in extremis, are consistent with the price stability objective.

5. THE RESERVE BANK OF NEW ZEALAND APPROACH

Emerging from the foregoing discussion is a number of key institutional design issues associated with establishing a decision making framework conducive to the achievement of price stability. Most notably, these design issues relate to setting a clear and uncompromised objective, and setting individual accountabilities consistent with that objective. Recent changes to the legislation governing the Reserve Bank of New Zealand were made with these key considerations in mind.

Personal incentives play a role within the new structure in both an active and a passive sense. That is, the accountability mechanisms involve reputational and pecuniary sanctions tied to performance vis-a-vis the objective, and attention is also paid to avoiding incentives that would conflict with or distract from the main objective. However, despite the concern to structure appropriately the financial and personal incentives, experience to date with the new arrangements would suggest that it is the adoption of a clear objective that has been the main factor, changing behaviour, rather than the incentives per se.

With these considerations in mind, the next few sections describe the new arrangements in New Zealand.

a. Appointment of officers

The formal powers of the Bank are vested in the Governor, who is both Chief Executive and chairman of a Board of Directors. Considerable thought was given to the choice between focusing responsibilities and accountabilities on a single individual, or spreading those responsibilities and accountabilities across the Board and/or committees of the Board. In the event, it was considered preferable to make one person responsible, in order to sharpen the accountability mechanism.

In addition to the Governor/Chairman, the Board consists of between 6 and 9 other members, a majority of whom must be non-executive directors. Non-executive directors

are appointed by the Minister of Finance for terms of 5 years (in the context of an electoral term of 3 years), with terms arranged such that not more than 2 non-executive directors' terms expire in any one year.

The Governor is also appointed by the Minister of Finance, but on the recommendation of the Board. Unless the Minister has been able to arrange the appointment of political supporters as non-executive directors (a process that would take some time), the Minister is thus unable to force the appointment of a Governor who, in the opinion of the Board, will not pursue the Bank's statutory objective. The Governor's term is also 5 years, renewable any number of times up to age 70.

One or two Deputy Governors/Executive Directors are appointed by the Board, on the recommendation of the Governor, again for terms of 5 years.

b. Statutory objective

The price stability objective is now entrenched in law as the single primary objective of the Bank. The statute says "the primary function of the Bank is to formulate and implement monetary policy directed to the economic objective of achieving and maintaining stability in the general level of prices". The only caveat to that is that in pursuing the primary objective, the Bank should "have regard to the efficiency and soundness of the financial system". While the meaning of this caveat is not particularly clear, it is intended to cover the diverse considerations of the choice of monetary policy instruments and of the Bank's prudential supervision role.

c. Accountability

With the authority of the Bank vested in the person of the Governor, it is natural that accountability structures are also focused on the Governor. And, consistent with the earlier discussion, accountability is structured around the price stability objective.

The legislation requires that the Governor sign an agreement with the Minister of Finance that specifies in more exact terms than "price stability" what the policy target is. The "Policy Targets Agreement" (PTA) under which the Governor is currently acting establishes the target as a rate of increase in the Consumer Price Index (CPI) of between 0 and 2 percent per annum by December 1993, and maintenance of inflation within that range thereafter. (A copy of the existing PTA is attached.)

The Governor can be dismissed, or his contract not renewed, in the event of failure to meet the target rate of inflation specified in the PTA. In addition, if the Board (effectively, the group of non-Executive Directors) is satisfied that the Governor's performance is inadequate in relation to the policy target, it is required to advise the Minister in writing "and may recommend to the Minister that the Governor be removed from office."

Thus the Governor is clearly responsible for achievement of the target, not only ex post but also in terms of the vigour with which the Bank pursues the target. In order to make these accountability provisions effective, the structure places the Board as the monitoring agent of the principal in the relationship--the Minister of Finance.

The Governor's terms and conditions of employment are fixed in agreement with the Minister of Finance, after consultation with the Board. There is scope to include additional incentive mechanisms (over and above the dismissal provision of the legislation) such as tying the Governor's salary to inflation outcomes. But, despite the often repeated myth, there is no such provision in the current Governor's terms and conditions. Such a provision was considered, but was discarded as counterproductive from a

public relations perspective during the disinflation phase (when the dislocation costs of tight monetary policy were likely to be most prominent).

It should be noted that the legislation prevents any term or condition of employment "[having] effect if it is inconsistent with the Bank's functions or limits or prevents the Governor from ensuring that those functions are carried out."

A second accountability mechanism for the Bank involves the requirement that the Bank publish, no less frequently than every 6 months, a comprehensive accounting for its monetary policy actions, and a clear statement of how it proposes to formulate and implement monetary policy during the next 5 years. The policy statement is automatically referred to the House of Representatives, and specifically to the Finance and Expenditure Committee of the House which then examines the Bank on the document's contents. This mechanism makes a significant contribution to the information set that the public and financial markets use as the basis for a judgment on whether the Bank's actions are consistent with the achievement and maintenance of price stability.

d. A more detailed policy target

As noted above, the Bank's prime statutory function is the pursuit of price stability. But "stability in the general level of prices" is too vague to act as an objective against which someone can be held accountable. For example, it could be argued that effective stability is attained when the rate of inflation is such that it does not figure actively in the plans of decisionmakers, which leaves open a variety of actual inflation rates.

As also noted above, the Policy Targets Agreement is the mechanism that provides for more detailed specification of the objective.

The CPI is used in the PTA, not because it is any more perfect a measure of changes in the general level of prices than other indices, but because it is the most widely known and best understood index. (The PTA also requires the Bank to monitor the range of other price indices.) The above-zero rate of inflation specified reflects index number problems, the survey methodology, and the difficulty of adjusting for new goods or for improvements in quality. Effectively, a judgement has been made that 1 percent CPI inflation is consistent with stability in the general level of prices.

Provision is made for inflation outcomes outside this 0-2 percent band. Large exogenous supply shocks, such as oil shocks, or direct shocks to the price level arising from indirect tax changes by the government, would force a shift in monetary policy if there were no caveats that provided for departures from the target. Forcing monetary policy to offset the effects on the price level of such shocks would, it is believed, cause real costs that would be out of all proportion to the benefits of short-run price stability. But it is clearly important that caveats to the price stability target are not so all encompassing, or so loosely defined, as to let domestically sourced inflationary pressures be accommodated. To this end, the Bank is required to set out in the published six-monthly Monetary Policy Statement the basis on which an exogenous shock was allowed for, and to return to the 0-2 percent target after the shock.

Notwithstanding the caveats relating to handling large exogenous shocks, the objective of price stability is unusually well specified, both in terms of its quantitative meaning, and in terms of the time frame provided for its achievement.

It should be noted that the choice of the 1993 target date represented one of the points at which the government can exercise its ultimate right to determine the tradeoffs between monetary policy and other policy objectives. The initial Policy Targets

Agreement signed in March 1990 called for achievement of 0-2 percent inflation by December 1992 and maintenance of price stability thereafter. Partly as a result of a view that the output and employment costs of the speed of adjustment implicit in this time frame were too high, the new government elected in October 1990 deferred the target date, with the agreement of the Bank, by one year.

However, in principle at least, perpetual deferral of the target date does not provide an easy way out for the government. The PTA is an agreement between the government and the Governor of the Bank. The Governor must be satisfied that the Agreement is consistent with the Bank's statutory price stability objective. If s/he is not satisfied that the Agreement is consistent with price stability, the Government must explicitly and publicly over-ride the price stability objective. A mechanism is provided in the legislation for doing this, as described below.

e. Government override of the price stability objective

In any system, governments retain the capability of making price stability subservient to other objectives, or attempting to play the tradeoffs, or even using surprise inflation tax to generate temporarily higher incomes. Fundamentally, governments can change the legislation on which any particular arrangements are based. Even going beyond the legislative approach of New Zealand to the step of embedding the price stability objective at a constitutional level would not remove the capability of renegeing on a price stability commitment, although it would greatly reduce the ease with which political choices could be exercised. It is simply not possible to achieve the theoretical binding precommitment.

In the New Zealand case, apart from the ever-present possibility that the legislation may be overturned, the legislation itself provides for a government override of the price stability objective. But the Act also stipulates that any override of the objective must be in writing and public, and can only last for one year before it has to be explicitly renewed. As with a change in the legislation, therefore, the use of the override provision must be public and obvious.

Two implications follow. First, assuming that the achievement of price stability actually generates the benefits ascribed to it, the longer that the current arrangements stay in place, the greater the political cost attached to the use of either mechanism. With early gains evident, a gathering constituency for price stability within the business community and the financial sector has already increased the political costs of reversal.

Secondly, because of the public character of any departure from the price stability objective, the output gains from an inflation surge are reduced.

For both reasons, the net gains from--and therefore the likelihood of--a surprise inflation associated with a political reversal have been greatly diminished by the transparency of policy produced by the legislation.

f. Consistency of internal financial arrangements

Though by no means the foremost consideration, attention has been paid to the structuring of the financial arrangements applying to the Bank and to Bank staff.

In terms of revenue generated by seigniorage, the legislation now provides that the income surplus over and above a predetermined amount is passed over to the government. Previously, by default the Bank was able to determine how much of the seigniorage revenue that the Bank would use for its own purposes, and how much to pass over

to the government. A continuation of that arrangement could have been inconsistent with the main objective of price stability.

The predetermined amount extracted from the seigniorage is the Bank's income source, and is set for 5 years at a time by way of a "funding agreement" with the Minister of Finance that must also be ratified by Parliament. By being set for five years, the prospects of government control over the Bank's income being used as leverage in a dispute about Bank policy actions is diminished. At the same time, not giving the Bank the capability to determine its own income assists with establishing appropriate incentives to manage the taxpayers' resources effectively. Related to the change to the legislation, a substantial reorganisation of the Bank's structure and range of activities took place, with the effect that the staff has virtually been halved, and the level of expenditure been reduced in real terms by more than a third over the last four years.

The current quinquennial funding agreement sets the level of Bank income static in nominal terms for the full period. Again, though not relied on as a primary incentive mechanism, the agreement is consistent with an aversion to inflation, although it is open to the possibility that the Bank could profit from deflation. It is not likely, however, that this incentive to deflate would by itself be powerful enough to overcome the disincentive associated with the prospect that the Governor could be dismissed for undershooting the 0-2 percent inflation target.

6. CONCLUDING COMMENTS

While considerable advances have been made in the institutional arrangements for monetary policy in New Zealand, the focus on price stability is not irrevocable, and the potential for political interference remains. Such may be considered inevitable given New Zealand's Westminster style democratic process. But nor should the potential problems arising be overrated, for two reasons.

a. First, if price stability does turn out

to generate positive net benefits, the institutional arrangements now in place do create higher costs of political reversal. Given the significantly greater transparency of the policy process, and given that both major political parties have supported the new arrangements, a departure from the price stability objective could only be politically popular where the constituency for price stability does not grow alongside experience of price stability. (If this were the case, a departure from the price stability objective might even be optimal.)

b. Secondly, the fact that the system remains open to political reversal is of greatest concern when the main driving forces behind government policy choices are the crude public choice, personal interest, type. While the presence of such driving forces must be acknowledged and taken into account, other factors are probably more relevant. For example, as discussed earlier, wrong notions of what is possible in terms of business cycle and Phillips curve tradeoff management also lead to an inflation bias, in the presence of political economy considerations. It is perfectly conceivable, in fact, that governments can be supportive of price stability as an objective, despite the fact that some political "degrees of freedom" might be lost in the process.

Logically, it is hard to escape the conclusion that New Zealand politicians are in fact supportive of price stability. If the personal interests of politicians were the main reason for an inflation bias, then it would become very difficult to explain why politicians would support a reform of the monetary policy structures in New Zealand.

Machiavellian notions of support for such arrangements in order to maximise future gains from surprise inflation would seem to stretch the arguments too far. Nor would such notions seem to explain the pre-20th century experience.

Finally, the idea that governments might find a mostly independent central bank focused on price stability to be desirable is itself compatible with the time consistency literature. The main lesson from the literature is that a zero inflation, time consistent, equilibrium requires policy credibility. Policy credibility in turn is supported by appropriate institutional arrangements, for all the usual reasons. Moreover, distancing the apparent monetary policy choices from the politicians might be seen to reduce chances of policy reversal by diverting the adverse allout from tough policy onto some other agency.

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RESERVE BANK OF NEW ZEALAND
POLICY TARGETS AGREEMENT

This agreement replaces that signed under section 9(2) of the Reserve Bank of New Zealand Act 1989 (the Act) On 2 March 1990.

In terms of section 9(4) of the Act, the Minister of Finance (the Minister) and the Governor of the Reserve Bank of New Zealand (the Governor) agree as follows:

1. Price Stability Target

Consistent with section 8 of the Act and with the provisions of this agreement, the Reserve Bank shall formulate and implement monetary policy with the intention of achieving a stable general level of prices by the year ending December 1993 and maintaining price stability beyond that date.

2. Measurement of Price Stability

(a) In pursuing the objective of a stable general level of prices, the Bank will monitor prices as measured by a range of price indices. The formal price stability target will be defined in terms of the All Groups Consumers Price Index (CPI), being the measure that is monitored most closely by the public.

(b) For the purposes of this agreement, annual rises in the CPI of between 0 and 2 per cent will be considered consistent with price stability.

(c) The CPI is unusual amongst OECD consumer price indices in its treatment of housing costs. The Bank is to continue to publish quarterly its housing-adjusted (consumer) price index (HAPI), which incorporates a different approach to the measurement of housing costs compared with the CPI.

3. Deviations from the Targets

(a) There is a range of possible price shocks arising from external sources, certain Government policy changes, or a natural crisis which are quite outside the direct influence of monetary policy. The Bank shall generally react to such shifts in relative prices in a manner which prevents general inflationary pressures emerging.

(b) This approach means that the CPI inflation rate can be expected to move outside the 0-2 percent range in response to particular shocks. The principal shocks are considered to be:

--significant changes in the terms of trade arising from an increase or decrease in either import or export prices:

--an increase or decrease in the rate of GST, or a significant change in other indirect tax rates:

--a crisis such as a natural disaster or a major disease-induced fall in livestock numbers which is expected to have a significant impact on the price level:

--a significant price level impact arising from changes to Government or local authority levies: and

--a significant divergence between the CPI and HAPI inflation rates.

(c) In the event of such shocks, the Reserve Bank shall be fully accountable for its handling of the price effects, and, in particular, for any movements outside the 0-2 per cent band. In each Policy Statement made under section 15 of the Act, the Bank shall detail fully its estimate of the direct price impact of any such shock and the impact on the Bank's achievement of the price stability target. The Bank shall also detail what measures it has taken, or proposes to take, to ensure that the effects of such shocks on the inflation rate are transitory.

4. Renegotiation of the Targets

The policy targets are established on the understanding that the monetary policy instruments available to the Bank are adequate to achieve the objective. The Governor shall inform the Minister if he considers that any changes in these policy instruments impair the effective conduct of monetary policy. The Minister and the Governor may then set new policy targets.

5. Implementation

(a) The Bank shall implement monetary policy in a sustainable, consistent and transparent manner.

(b) Each Policy Statement released by the Bank under section 15 of the Act shall contain a statement of how the Bank proposes to formulate and implement monetary policy to ensure that price stability is achieved and maintained over the succeeding five years. The Policy Statement should also contain a projected path for inflation for each of the years until the price stability target is achieved.

SENATOR SARBANES. Thank you very much.

We have been joined by Congressman Hamilton, vice chairman of the Committee.

We are very pleased, Lee, to have you here. Did you have any statement that you would like want to make? Do you want to go ahead with your questioning then?

REPRESENTATIVE HAMILTON. No, you go ahead.

SENATOR SARBANES. All right.

Mr. Hoskins, I am curious, when you talk about amending the Constitution of the United States, to put price stability as the sole, overriding objective of monetary policy, what is your definition of price stability?

MR. HOSKINS. I have long argued that price stability means price-level stability; that is, no increase in price level over time. To give you an example of Central Bank behavior since the end of World War II, even the highly regarded Bundesbank, in terms of its inflation-fighting abilities, has allowed the price level to double since 1950. The United States has allowed its price level to quadruple.

I would argue that we should have a stable price level today and on into the future.

SENATOR SARBANES. What do you mean by stable price level?

MR. HOSKINS. Zero inflation—in the popular vernacular.

SENATOR SARBANES. So you would have prices remain the same? Is that it?

MR. HOSKINS. The average price level would remain the same. Relative prices would change. Prices of oil could rise; other prices would fall. It's very important to make that distinction because the essence of a market economy is change in relative prices.

SENATOR SARBANES. I would like to ask Dr. Samuelson and Dr. McCracken what they think of that single-minded objective.

DR. SAMUELSON. I think it would be very unfortunate for the Nation if, in some momentary aberration of politics, the Constitution were amended because of a minority view of one wing of macroeconomists. We don't even have a Switzerland or a single case where this remedy has been tried and has met the test of economic history. When one discusses both in terms of cross-sectional and time-series evidence on the relationships in the short run, in the intermediate run, and in the longest run between real variables price levels and Central Bank actions, we must conclude that to concentrate on the price level only, it is not only alien to our Democratic/Republican tradition, it is also alien to the practice of American economic history.

I may say that the concern-yourself-with-price-level-only is resistant to all evidence. I am an old boy, and I got a very young start. So I actually go back to economics in the Great Depression. And I can assure you—and you can commandeer them from the files—there are statements after statement in President Harrison's New York Federal

Reserve Bank cautioning against undue activism because long-run price stability is the goal, and if you move to put out this fire, you will be creating down the road inflation! And this was in the 1930s the greatest mismanagement of any market system that has ever occurred. It almost ruined the political system. By the dogmas you have just heard, the Bank of Japan is doing fine. It is keeping its eye, in the short run and in the intermediate run, on long-term price stability, and it doesn't matter that in the Japanese case, precisely like the Russian case, people are kept at work under the long-lifetime employment contracts, not having goods to produce.

Now, if I am asked, do I think that money in the short run should always be pushed so strongly as to get tomorrow and day after tomorrow's increment of job opportunity and to hell with what happens three years from now, then my answer is "no." That is not stable behavior. And if I am asked whether in the post-World War II period, in the, if you will, post-Keynesian period, there have been whole economies and societies which have made the error on that side of overstimulation, then I would say "yes," and let's avoid those errors. But I don't believe in either-or strong choices.

Let me also say that in the last three years, I have used a clipping service to bring information on how the American people feel about the Neal resolution and what mandate the Federal Reserve has been newly given in this regard. The result is almost nothing of any groundswell for price stability, regardless of cost.

I think the Fed made the same mistake repeatedly, and it is not a question of hindsight. If you take the Blue-Chip Indicators, which surveys bank and corporation economists, or take any survey in the middle range of American experts, they have generally been telling the Federal Reserve that they were making their error on the side of tightness.

SENATOR SARBANES. Dr. McCracken?

DR. MCCRACKEN. Well, first of all, I would like to extend my admiration to Lee Hoskins, because I suspect he suspected that there might be a certain amount of disagreement here with his point of view, and his courage is certainly to be commended.

Two points: First of all, I don't think the evidence is very clear that you have to have a stable price level. And, of course, Lee made a good point. That is not the same as that each price has to remain constant. You're talking about stability over time in the CPI or in some other index. But I don't read history as indicating that that is necessary. There has been a generally upward drift in the price level during this century. Generally it has been a period of fairly full employment with the major exception, of course, in the 1930s. So I just don't think the empirical evidence will support the case that we have to hang tough until we get the CPI moving absolutely laterally before we can have full employment and economic progress.

There is a second point, however, and here is a point on which, perhaps, Mr. Hoskins and I are closer together. I think a part of our difficulty at the present time is that the Congress needs to speak explicitly as to what our price level objective ought to be. The Humphrey/ Hawkins bill does indicate reasonable price stability. That's not a bad phrase, by the way.

But the Congress not having spoken to this issue, the Federal Reserve is tending to establish its own economic objective. In my judgment, the responsibility for establishing the broad, overarching objectives of economic policy are inherently here on the Hill and, of course, at the other end of Pennsylvania Avenue. Within that framework, then, the Federal Reserve ought to be free to manage monetary policies in a way to achieve the specified economic objectives.

SENATOR SARBANES. Mr. Hoskins, you say that there is no evidence that growth of M2 has any positive influence on the growth of long-term output potential. What about actual output in closing the gap between potential—leave aside the question of whether you can raise the level of potential output—let's address the question of closing the gap between actual output and potential output, whatever that line might be. Do you think monetary policy can have an impact on that?

MR. HOSKINS. I think the operative word here is over the long term. I suspect, if I were to ask both of my colleagues what money impacts over time, their answers would be: prices over long periods of time, and not real variables.

SENATOR SARBANES. Well, let me ask them.

Do you think that monetary policy can impact actual output, closing the gap between actual output and potential output?

DR. SAMUELSON. I believe that the "leaning against the wind" strategy, where the behavior of the wind is judged by smoothed short-term trends, can lead over time to a closer adherence of the actual to the potential. The potential itself is primarily dependent upon international competition, upon capital formation, including human capital formation, and most of all on scientific and managerial productivity changes.

Now, I don't know what wisdom there is among the 19 people who vote on Federal Reserve policy, but I think there is very little wisdom in that group that bears on the supply-side factors that I have been mentioning. But that is not relevant to what constitutes good intermediate-run and long-term and short-term monetary policy. The long run itself, which is the long run of history, will be judged by averaging over all of the short and intermediate runs.

I don't believe that the Great Depression was at all necessary. I don't believe that Japan, with tremendous international reserves, because it had a land boom and a stock market boom that burst at the beginning of 1990, needs to go through half a decade of being below its optimum. And by the way, if you tolerate that, you will actually change the trend potential; we already see that the amount spent upon research by

American corporations does go down under chronic low-buoyancy conditions. The same thing happened during the Great Depression itself.

But I don't see any need to take a strong ideological position, and I warn against that. If you forget the price level part of the problem, I assure you that it's going to come back and remind you of it. It's like the wisdom in the quantity theory of money: It's so important when it is in season that you should not forget it out of season.

But to guide policy over a four-year period by $MV = PQ$ —which, by the way, nobody at this table or elsewhere that I know of is suggesting, but I was taught at one time that that was how it should be done—would be the height of unwisdom.

Could I suggest something specific? We do want a responsive Federal Reserve. We want an autonomous Federal Reserve in its day-to-day activities. I think that we might look into what was never looked into carefully in 1913 and again in 1926. Quite by accident, the banks owned the Federal Reserve. My father-in-law thought he owned the Federal Reserve. He was president of the First National Bank of Berlin, Wisconsin. He had the stock to prove it.

We have 12 members of the Open Market Voting Committee who are picked somewhat the way local Chamber of Commerce people are picked, and I think that a staggering of those terms, maybe, six-year terms, where they're responsive to senatorial confirmation and where it will be recognized that when the electorate changes, not in a two-year period but in a more long-run period, that the membership of the Federal Reserve should be able to be responsive.

I was an adviser to President-elect John F. Kennedy. Theodore Sorenson, his assistant, said to me, "What can we do to make William McChesney Martin not misbehave?" And I said, "There isn't much you can do. He has his own budget. He's supporting you, not you supporting him." He said—this is frivolous talk—"Can we turn off the heat or something?" I said, "No, I think they have their own cooling and heating system." Well, America, it turned out, had a dollar problem. We were defending an overvalued dollar. There was a liaison between White House and the Fed maintained, give-and-take. The Federal Reserve had its independence, but it was not able to run against the wind of the country over a longer period of time.

If you're going to be meddling with the system that doesn't work all that badly, I think Congress ought to look into that aspect of the problem.

SENATOR SARBANES. I am going to yield to Congressman Hamilton in a moment. But I want to pick up on that, because all of us here at the table have some proposals to try and address the Federal Open Market Committee by making the heads of the reserve banks nonvoting so that monetary policy is done by the Board of Governors, all of whom have to be nominated and confirmed, or an alternative approach would be to require confirmation.

Mr. Hoskins, you were on the Federal Open Market Committee, weren't you?

MR. HOSKINS. That's correct.

SENATOR SARBANES. You made a lot of decisions that were really, in a sense, public decisions, don't you think?

MR. HOSKINS. Yes.

SENATOR SARBANES. How did you get to be on the Open Market Committee?

MR. HOSKINS. A president of a Federal Reserve Bank is selected by the board of directors of that Federal Reserve Bank, subject to approval by the Board of Governors of the Federal Reserve System, which are the political appointees within the Federal Reserve.

SENATOR SARBANES. So you first got yourself on the board of directors of the Cleveland Federal Reserve Bank?

MR. HOSKINS. No, Senator. I was selected through a search process. The board of directors, when an opening occurs, establishes a search committee and often they use a search firm. They will look inside the system, outside the Federal Reserve System, and they will find people who they think are qualified. They will interview a number of them, and then they will make a selection and send that individual candidate's name in to the Board of Governors for approval.

SENATOR SARBANES. Who are the board of directors of the Cleveland Federal Reserve Bank? I mean, where do they come from who make this decision?

MR. HOSKINS. They come from the Fourth District, which is the State of Ohio, Western Pennsylvania, Eastern Kentucky, and the Panhandle of West Virginia.

SENATOR SARBANES. That is where they come from geographically. But where do they come from?

MR. HOSKINS. Oh, pardon me. They are broken into classes. Class A directors are elected by bankers. There are three Class A directors. The three Class B directors are elected by bankers—member banks of the Federal Reserve System. They are usually business people; they can be academics. The third group, Class C directors, is appointed by the Board of Governors of the Federal Reserve. They are usually individuals from industrial firms, savings and loans and consumer groups.

SENATOR SARBANES. How many of those are there?

MR. HOSKINS. Three. It's three, three and three.

SENATOR SARBANES. So six of the nine are elected by the bankers?

MR. HOSKINS. That's correct.

SENATOR SARBANES. One way or another?

MR. HOSKINS. That's correct.

SENATOR SARBANES. And the other three are appointed by the Board of Governors?

MR. HOSKINS. Yes.

SENATOR SARBANES. So, in other words, this nine-member board that picked you—I mean it could have been, I assume the process is the same for all of the regional Federal Reserve Banks, is that correct?

MR. HOSKINS. That's correct.

SENATOR SARBANES. So, in other words, this nine-member board of six, chosen by bankers, picked you to be the president of the Cleveland Bank. Is that right?

MR. HOSKINS. That's correct.

SENATOR SARBANES. What were you doing at the time?

MR. HOSKINS. I was a chief economist for a bank in Pennsylvania.

SENATOR SARBANES. I see. Is that for a term for a president?

MR. HOSKINS. Yes. The term is a five-year term. All bank presidents were up for reappointment in March of 1991. So that means they'll be up again in March of 1996.

SENATOR SARBANES. So they have all just been chosen?

MR. HOSKINS. Yes. Unless someone leaves or retires from a Federal Reserve Bank, then the new president will complete the remainder of that term.

SENATOR SARBANES. At the time they established the Federal Reserve System, they didn't have the Open Market operation, so we don't have the situation that we're confronting now. But Woodrow Wilson was very concerned about how this was going to work. And there was some effort to have the members all picked by the banks. He resisted that because he said that there wouldn't be accountability.

Do you understand our concern in this regard? Where does your legitimacy come from to be on the Open Market Committee and to be making what, in effect, are public decisions or have a heavy public involvement? I mean, where did you understand your legitimacy to come from?

MR. HOSKINS. The short answer comes from the Federal Reserve Act, as amended in 1935, which put presidents on the Federal Open Market Committee; five voting presidents, the rest as participating but nonvoting. The act also established, at that time, seven governors to be on the Committee, appointed by the President and approved by the Senate. It did remove, at that time, the Secretary of Treasury from the Board of Governors, as well as the Comptroller of the Currency. So Congress very consciously did a balancing act at that point in time. The idea was to disburse power around the country and not have it concentrated in any one geographic area. I believe that was a conscious decision by Congress at that point in time to go forward with a very regionalized system.

I would argue that that is the basis of how the Federal Reserve Banks have their legitimacy.

SENATOR SARBANES. There was a compromise made in the 1930s in this regard. Many of us are now questioning that because we think people, such as yourself, are without any accountability. You are not

nominated by the President to make this kind of decision, nor are you confirmed by the Senate.

Now, these seven members of the Board of Governors of the Federal Reserve are nominated by the President and confirmed by the Senate, although for very long terms. But you do get some accountability there. But the presidents of these reserve banks, who serve on this Open Market Committee and make these very important decisions, really represent private interests.

MR. HOSKINS. I regarded my job as serving the public interest.

Let me suggest what I mean by accountability. I tried to make clear in my statement that Federal Reserve officials or officials of the Board of Governors should be held accountable to an objective, not to an appointment process. It seems to me, if Congress focuses on the objectives, leaves the Central Bank independent enough to carry out those objectives, and has an enforcement contract or an employment agreement with Central Bank officials, as is done for example in the Reserve Bank of New Zealand today, then you would have the very accountability that you want.

It seems to me that you should want accountability for the result, not for how the result is achieved or for picking particular individuals. It seems to me that what you want for the American people is consistent job growth over time. The way you achieve that is to have continuous low inflation.

SENATOR SARBANES. What would be the nature of the accountability?

MR. HOSKINS. Pardon me, sir?

SENATOR SARBANES. What would be the accountability that you envision on this theory?

MR. HOSKINS. The accountability would be to a very specific objective.

SENATOR SARBANES. But if you failed to meet the objective, what would be the nature of the accountability?

MR. HOSKINS. There are various kinds of incentive contracts that can be written. The Reserve Bank of New Zealand's contract has been in place since 1990. That Reserve Bank has one governor. That governor is the CEO. He is responsible for attaining the price-stability objectives written into the contract. If he does not achieve those objectives over time, the finance minister has the right to remove him from office.

The law also has some other vaguely worded ideas about incentives and performance pay. These ideas are not implemented in the New Zealand case, but could certainly be used.

SENATOR SARBANES. You mean, they would pay him more money if he reached the goals?

MR. HOSKINS. Or less.

SENATOR SARBANES. But he also can lose his job?

MR. HOSKINS. That is the way it is written right now in the Reserve Bank of New Zealand's charter. It is a statutory authority.

SENATOR SARBANES. Now, that's interesting. Now, suppose we write the goals to be somewhat broader than just price stability. Suppose we're concerned about maximum employment, production, as well as reasonable price stability. We want maximum employment and production, and we write those. And if they weren't met, then the person could be terminated from their position; is that correct?

MR. HOSKINS. Under the rules of the Reserve Bank of New Zealand, they could not be removed because there is only one objective, and that is the objective of price stability.

SENATOR SARBANES. I understand that. But I am premising that we are going to have more than one objective. Along the lines that Dr. Samuelson and Dr. McCracken have indicated, you have to have some balance here in your goals, and we're going to have some balance. Now, under your theory, if we have that balanced package and you failed to achieve it, then we could terminate your employment. Is that right?

MR. HOSKINS. That would be correct. However, I would not support or advocate legislation of that nature. I believe the way to get balance, the way to have sustained job growth over time clearly is to not have it disrupted by bouts of countercyclical policy that end up followed by long bouts of inflation. If we went back to your first chart and showed monetary growth rates, in terms of real M2 growth, I could plot a line two years later behind each one of those bars and show you a surge in inflation.

SENATOR SARBANES. Yes, but what would your line show if you showed me what would happen to employment and output if we followed your goal?

MR. HOSKINS. I would argue, have argued, and continue to argue, as I did at this table today, that the American people would be better off over time with a government that did not have an activist policy with respect to trying to foster employment growth through monetary policy. If we want employment growth, we ought to address some of the issues that Professor Samuelson mentioned. Some of those are regulatory. We should reduce the regulatory burdens on the economy.

SENATOR SARBANES. Let me ask you this question.

MR. HOSKINS. Yes?

SENATOR SARBANES. If you plotted the inflation after this surge in real M2 of 11 percent in 1981-82, what would it show us?

MR. HOSKINS. The inflation rate after that particular bar came down sharply because money growth later on——

SENATOR SARBANES. You just told me that if you did it, you would show an increase, didn't you?

MR. HOSKINS. Right. Correct. Go back to every other bar, and I will show you that.

SENATOR SARBANES. No, but what about that one?

MR. HOSKINS. That one is also the lowest that you're showing in the last three years. We're showing a decrease in the rate of increase of

monetary growth in the last three cycles. What we're getting there is a reduction over time in the average growth rate of money. And that is what lowers the inflation rate over time, and that is what will lead us to a policy where we do not shock the economy with perverse countercyclical policy.

SENATOR SARBANES. No.

MR. HOSKINS. The story of the 1960s and 1970s is clear. That's what occurred.

SENATOR SARBANES. Do you think that you should be able to go on the Board of Governors of the Federal Reserve without being, in effect, approved for that post by elected public officials?

MR. HOSKINS. The law clearly states that I would need to be.

SENATOR SARBANES. No; aside from the law, what's your view about that? Do you think that is a desirable thing?

MR. HOSKINS. I think there has been a very good balance between the political appointees, in terms of Washington's involvement, as well as what I would call the regional involvement of the board of directors of reserve banks and the selection of participants on the FOMC.

SENATOR SARBANES. So you think that the Board of Governors should have to pass through a public screening, but not the presidents of the banks?

MR. HOSKINS. I think that the Congress, in its wisdom, decided to do so, and I think that was a judicious and wise decision.

SENATOR SARBANES. Congressman Hamilton?

REPRESENTATIVE HAMILTON. Thank you very much, Senator Sarbanes.

First, I want to say to Chairman Sarbanes how much I have appreciated his leadership of the Joint Economic Committee these past two years. I really think he has used the Committee in a most appropriate way, challenging the Congress, challenging the country on economic policies, and I am indebted to him and I think many in the Congress are indebted to him for his leadership.

SENATOR SARBANES. Thank you very much.

REPRESENTATIVE HAMILTON. We appreciate it very, very much.

Dr. Samuelson and Dr. McCracken, both of you endorse a target of 4 percent real GDP growth for 1993. Am I correct in that?

DR. SAMUELSON. Yes. That would be the desirable level.

REPRESENTATIVE HAMILTON. Now, is monetary policy being conducted at the present time to achieve 4 percent growth?

DR. SAMUELSON. I think not.

REPRESENTATIVE HAMILTON. And why not?

DR. SAMUELSON. I believe that the Federal Reserve, in its actions from 1989 to the present time, can best be rationalized by a philosophy that we should be aiming for price stability in 1995, and not be deflected by what the costs are between 1989 and 1995, 1990-95, 1992-95. There are some changes in the Open Market Committee. The Cleveland

president is now a different president, but I don't think the center of gravity of the philosophy of the Fed has moved.

REPRESENTATIVE HAMILTON. Dr. McCracken, do you agree that monetary policy today is being conducted in such a way as to not aim at the 4 percent real growth figure?

DR. MCCRACKEN. I think we would be courting the risk of a rate of growth that falls substantially below that. One can never be sure. These relationships are not precise and one-to-one, but we have not been on that kind of a track.

REPRESENTATIVE HAMILTON. What are they aiming at? Three percent growth?

DR. MCCRACKEN. What are they aiming at?

REPRESENTATIVE HAMILTON. Yes. What's the Fed aiming at?

DR. MCCRACKEN. I don't know.

REPRESENTATIVE HAMILTON. When they decided to lower the target range of M2 in 1993—and the *Wall Street Journal* reported that the other day—does that mean that they think the major threat to the economy today is inflation and not slow growth or unemployment?

DR. MCCRACKEN. I would interpret the lowering of the target range as indicative of their concern that otherwise inflationary pressures would begin to reemerge.

REPRESENTATIVE HAMILTON. Now, hold on just a minute. Excuse me for interrupting you. Does that mean then that the Fed is more worried about inflation than they are worried about slow growth and unemployment?

DR. MCCRACKEN. Well, I don't know. I guess, I am impressed with the extent to which the reemergence of inflation seems to be a central concern at a time when it seems to me that the emphasis ought to be getting back to reasonably full employment.

REPRESENTATIVE HAMILTON. Do you see any reason at the moment to anticipate that inflation is going to accelerate in the very near future, in 1993?

DR. MCCRACKEN. I would not be able to make the case that it is going to. I think the evidence is that we are on a rather stable kind of path.

REPRESENTATIVE HAMILTON. Well, do you agree with that, Dr. Samuelson?

DR. SAMUELSON. Yes. I think the background, with respect to inflation, particularly taking into account the international competition, is such that we can expect less inflation in a recovery of modest vigor this time than in the past. But I want to make clear that—just to come into court with clean hands—if we got Dr. McCracken's four years of 4 percent real growth and the reduction in unemployment that he is envisaging, then that would be a good reason not to be aiming at the end of that period for 4 percent real growth. And it is not realistic to hope to get the unemployment rate down below 5 percent, for example.

SENATOR SARBANES. Let me ask you, to be clear, you would not be aiming at it at the end of the four-year period as you move toward achieving that objective. Now, at that point, you're bringing unemployment down because you were saying a half a point a year, I think. So you would have unemployment down to 5 to 5.5 percent. It looks like you are saying that you would then move off of the 4 percent growth. Is that correct?

DR. SAMUELSON. And that's why I used the 4 percent rate for the four calendar quarters of 1993. But I think it is a virtue to look early in 1994 at the idle resources, at international competition, at the movements of volatile prices, and then to decide what is the prudent center of gravity of real output.

REPRESENTATIVE HAMILTON. Dr. Samuelson, how do you interpret this move of the Fed to lower the target range on M2? Do you think that the Fed sees the major threat to the economy now as inflation?

DR. SAMUELSON. I think the amount of tightening that they think they might want to create, or acquiesce in, might be embarrassed by keeping the present targets, because there would be a good chance that the M2 would fall out of those targets. Therefore, they don't want to have that embarrassment.

REPRESENTATIVE HAMILTON. Now, I am not sure I understood your answer.

DR. SAMUELSON. Let me try it again.

REPRESENTATIVE HAMILTON. Do they worry more about inflation, or do they worry more about slow growth and unemployment right now?

DR. SAMUELSON. I think they think that it's their duty to undo some of the 24 interest moves that they acquiesced in as the recovery gains modest vigor.

REPRESENTATIVE HAMILTON. So they're more worried about inflation?

DR. SAMUELSON. Inflation around the corner.

REPRESENTATIVE HAMILTON. Okay. Now, Mr. Hoskins, how do you interpret the recent target change? Are they worried about inflation?

MR. HOSKINS. They haven't changed the target yet. They will be discussing and presenting to you, I believe in February sometime, the new target. So they are probably in the process now of discussing the target ranges that they want in place in 1993. And I believe they gave you a preliminary during the July Humphrey/Hawkins meeting as to what the target would be in 1993.

REPRESENTATIVE HAMILTON. Are you saying in this November meeting that they did not move to lower the target range?

MR. HOSKINS. I didn't see anything in the minutes that have been released that would indicate to me that they did anything of that nature.

REPRESENTATIVE HAMILTON. You think it's a false report of the *Wall Street Journal*?

MR. HOSKINS. No, I think those issues were probably discussed.

REPRESENTATIVE HAMILTON. Well, they just said, flat out, I believe, that they moved to lower the target range.

MR. HOSKINS. I have been away from the FOMC for a couple of years, but if I remember correctly, it was generally the December meeting when we began the intensive discussions about what the target range ought to be, and then we would firm it up—that is, the FOMC would firm it up in time—for the presentation to Congress in February as requested by Humphrey/Hawkins.

REPRESENTATIVE HAMILTON. Now let me ask you —

MR. HOSKINS. I will be happy to answer your question. I am not trying to get around it.

REPRESENTATIVE HAMILTON. No, I understand. I was just trying to understand what the Fed was doing.

So far as you are personally concerned, what is the major threat to the economy—inflation, or slow growth and unemployment—right now?

MR. HOSKINS. Right now, my major concern is about how we are going to get out of the structural problems that we currently have, which are causing us to have some difficulty in terms of job growth. I don't believe those are associated with monetary policies. In my statement, I tried to make that clear. A number of structural problems have come about and hit us, as well as others abroad. This property problem is not simply a problem confined to the United States. The defense cuts have caused major dislocations in the economy as well.

REPRESENTATIVE HAMILTON. Do you have any reason to anticipate that inflation is going to accelerate right away?

MR. HOSKINS. No. As I said in my statement, I thought inflation would probably stay in the 2 to 3 percent range where it has been.

REPRESENTATIVE HAMILTON. Do any of you favor a cut in interest rates right now?

DR. SAMUELSON. I would favor it. If a reduction in intermediate interest rates occurred right now, I would greet that with pleasure and approval on behalf of the American people.

REPRESENTATIVE HAMILTON. If you were on the Fed, you'd vote to lower interest rates?

DR. SAMUELSON. Yes. I would do it. I'm not sure that you were in the room when I began my testimony.

REPRESENTATIVE HAMILTON. No, I was not.

DR. SAMUELSON. I would do it as part of a social compact, forgoing quantitative dosages of short-run fiscal expansion in a tradeoff with a more liberal Federal Reserve policy. I might be aiming at the same total stimulus, but with a heavier emphasis upon the monetary policy part of it. This is not an attempt to goose up the rate of growth to 6 or 7 percent.

REPRESENTATIVE HAMILTON. I understand.

DR. SAMUELSON. I think some of those past period growth rates are not attainable now.

REPRESENTATIVE HAMILTON. Would you vote, Dr. McCracken?

DR. MCCRACKEN. May I make a comment on that?

REPRESENTATIVE HAMILTON. Yes.

DR. MCCRACKEN. I would not try to manage monetary policy by focusing on the interest rates. I think that is one place where, perhaps, the Federal Reserve has gotten off the track. I would favor having monetary policy managed so that the M2, which is actually delivered, falls reasonably within the range of the targets. Until they can do that, I'm not very much interested in the targets; I am interested in what they deliver.

I think monetary policy ought to be a little more expansive. I would expect interest rates to respond, particularly the short-term rate, a bit, but I wouldn't have any specific target for short-term rates.

REPRESENTATIVE HAMILTON. I have used my time. I want to just ask one question. I think the answer would be brief.

Dr. McCracken, in your statement, you said, "The Congress should articulate what we want our economic policies to accomplish." How does the Congress articulate that? I mean, do we say, "Okay, for 1993 the growth rate should be 4 percent, or some figure?" How specific are we?

DR. MCCRACKEN. The Congress could do that at various levels. There would be the very general level of the section 2 in the Employment Act and the preamble to the Humphrey/Hawkins Full Employment and Balanced Growth Act. At any specific point, I would think that perhaps the Joint Economic Committee, certainly the pertinent committees of Congress, ought to press the Federal Reserve hard as to the objectives for employment and output, which they would see as one of the important guidelines to their management of monetary policy.

Now, what specifically that would mean, in terms of Open Market Committee policy and discount policy and that sort of thing, has to be left within the Federal Reserve. But I would like to know what kind of a target for the economy they are talking about, or have in mind.

I guess I would introduce a bit of caution here. I am not sure how much of this problem you can solve by having the presidents of the Federal Reserve Banks confirmed by the Senate or by something like that. My guess is that if you went that route, a few years later you would wonder whether you had accomplished much.

I think what you have to do is to establish these overarching objectives of national economic policy within which the Central Bank operates.

REPRESENTATIVE HAMILTON. It seems to me that if you ask the Congress to articulate the policies, what you are going to get every year is the same thing. We're going to tell the policymakers to hit 4 or 5 percent growth and zero inflation.

DR. McCracken. Well, in that case, the Congress is not doing its job.

REPRESENTATIVE HAMILTON. Pardon?

DR. McCracken. In that case, you and the Congress are not doing your job.

REPRESENTATIVE HAMILTON. You think we should be much more specific and say that you ought to hit 5 or 4 percent? Let's say, in 1993 we ought to hit 4 percent growth. Is that right, is that the way you would articulate the target?

DR. McCracken. I think one of the basic sources of the problem that we now have is that we have been too vague about these broad objectives, and the Federal Reserve, therefore, is starting to make decisions about those things. I haven't talked to my friends in the Federal Reserve—or at least they used to be my friends; I'm not sure whether they still are—but it seems clear that establishing zero inflation has had a significant amount of support. In my judgment, that is the kind of issue that ought to be settled by the Congress.

REPRESENTATIVE HAMILTON. Thank you, Dr. McCracken.

DR. SAMUELSON. I think the jawboning by Congress would be ineffective to an independent Federal Reserve that consists of seven governors, with a mean duration of tenure ahead of them of one-half of 14 years, with a chairman who does not change when the presidency changes, and where the 12 bank presidents are appointed by a most curious and perfunctory process, from the standpoint of rational political responsibility. I do not know of a single president of a Federal Reserve Bank who, at the end of five years, has been removed from office by failure to reappoint because his votes on the Open Market Committee were not responsive to the last two presidential elections.

What keeps the Fed reasonably in a turnover is that the pay is too little at the board level and at the president's level. If you're good enough to run an organization that large, you owe it to your spouse to not stay in the job a long time. That gives us some turnover. But you can be sure that all of the people who make these decisions have an ideology which makes them sleep well at night, and if they have a little jawboning of an unpleasant sort—like what's going on here a little bit, once or twice a year—that goes with the territory.

It would be better to have a change in the voting composition in an orderly way that does not interfere with the short-run, day-to-day, month-to-month autonomy of the Federal Reserve. If we turn to the independent central banks abroad—take the Bundesbank—they use a very political process on a regional basis. There need be no sacrifice of regionalism when you reduce a banker representation. There are many ways of getting the Boston region represented. You can have Mayor Curley make the decision. I don't commend that to you. But to have information coming in from the 12 districts, which the boilerplate of the Federal Reserve for 50 years has talked about, that is a very valuable

thing and can be secured without preserving the present situation of banker dominance.

To talk of something sacred about the 1935 legislation on banking is a joke. The whole economics profession is convinced that most of that legislation was conceived in sin and created monsters that we had to get rid of by gradual evolution over time. That they could have then been right in this matter defies credibility.

MR. HOSKINS. Could I say one word in defense of my former colleagues? Some of them do actually have a public service spirit and are willing to take a discount, in terms of what they could earn in the marketplace, to pursue the public interest.

Also, it is true that the regionalism in the Bundesbank is political. That is, it's basically a political appointment process at the regional level. But there is an overriding objective written into the statutes in Germany, and that overriding objective is that if other objectives get in the way of price stability—price stability dominates.

DR. McCracken. Yes, I think that's a very important point. I mean, one could argue whether that is the right objective. But Germany is a case of where the basic objective has been established, and the Bundesbank's directive then is to carry out monetary policy to achieve that objective.

DR. SAMUELSON. That's what I would like to see here.

MR. HOSKINS. It's the objective, not how we get there.

DR. SAMUELSON. Not the policies.

SENATOR SARBANES. Well, Dr. McCracken, you do not think that that should be the objective, as I understand your testimony here today. Is that correct?

DR. McCracken. No. At various times, the emphasis may be on expanding employment and output; at other times, we may want some other emphasis.

SENATOR SARBANES. You would think a monetary policy that achieved price stability but had 10 or 12 or 15 percent unemployment was falling short of what it ought to be doing, wouldn't you?

DR. McCracken. Are you asking me?

SENATOR SARBANES. Yes.

DR. McCracken. Sure.

SENATOR SARBANES. Dr. Samuelson?

DR. SAMUELSON. Yes.

SENATOR SARBANES. How about you, Mr. Hoskins?

MR. HOSKINS. It would depend on what caused the 10 or 15 percent rate of unemployment. We have many examples around the world where we have countries that run very aggressive monetary policies and have 15, 16, 17 percent unemployment. That's my point. If you run high inflation rates, you're going to run high unemployment rates. There's just no difference between the two.

DR. McCracken. Mr. Chairman, may I comment on that?

SENATOR SARBANES. Yes.

DR. McCracken. I can recall, back in the early 1960s, there was great concern that what seemed to be high unemployment at that time was fundamentally structural, that it would not respond to just generally expansive policies. The fact is that we deployed generally expansive policies, and we got back to full employment. Whenever we have unemployment, one can always look at various things that seem to be a little out of adjustment, out of whack.

But what this economy needed at that time and right now is a generally more expansive policy.

SENATOR SARBANES. Senator Sasser?

SENATOR SASSER. Thank you, SENATOR SARBANES.

I was amused by Dr. Samuelson's reference to Mayor Curley. Perhaps, it wouldn't hurt to have a little input from a Mayor Curley in the Fed. At least we'd be concerned about putting people to work and expanding the economy, and not totally concerned, as some are, about protecting the interests of what I perceive to be long-term bondholders.

Dr. Samuelson, let me just propose this to you, and the hour is late, so I will be brief, Mr. Chairman. But let's just suppose, let's conjecture for a moment that this new 103rd Congress, with all of these new people coming into the House of Representatives—whom I am sure Congressman Hamilton is welcoming with open arms and looking to for new directions—and this new Administration came together and adopted a program of long-term deficit reduction. They were very proud of it.

And then the Fed looked at it, and they went two different ways. There was one school in the Fed that said, "Let's offset this fiscal contraction of this long-term deficit reduction. Let's offset that and strive for a 4 percent real economic growth with our monetary policy," as you described in your testimony. But within the councils of the Fed, there were also those who said, "No, let's continue on, and let's strive for zero inflation policy."

Now, would you describe for us this morning what you would see as the economic ramifications if either of these two policies were followed by the Fed, if, at the same time, the Administration and Congress were following a long-term deficit reduction program?

DR. SAMUELSON. Yes. I think you would have had what a Perot victory and an adherence to the announced Perot program would have created if the Fed thought that its proper posture would be the same under a drastic cutting out of the whole budget structural deficit, built up over a dozen years, in a five-year period of time, including the Cold War relaxation of government spending.

I think that it's the aggregate that must be maintained, and if the fiscal budget is being contracted in an austere way, then it is proper for monetary policy to be more stimulative.

I have also understood that the chairman of the Federal Reserve repeatedly gave warnings against fiscal activism, that this ought to be a philosophy that he would embrace. If the Fed says we have nothing to put in the game's pot, then that is a way of saying we will delay and slow down the progress made toward bringing our fiscal house in order. And that is the prime economic long-run problem.

The long-run problem that haunts America is not a recurrence of two-digit price inflation, like the end of the 1970s. It is that we are an overconsuming nation on private account, compounded by negative saving on public account; and, if monetary policy is not ready to take that into account, then there is a gross aberration of good policy.

SENATOR SASSER. Which do you think would be the more likely scenario for the Fed, as presently constituted, to embark on a program of 4 percent real economic growth through some sort of expansive monetary policy, or to pursue a zero inflation policy course?

DR. McCracken. I think that the 19 "voters" would take a middle position between the two objectives that would eventuate an increase in short-term interest rates, which would result in upward pressure on mortgage rates. All the good things that were accomplished by these 24 so-called policy changes in any case, largely market responses and insufficient in terms of the load that they had to counter, would begin to go in reverse, and that would slow the expansion down, and would encourage rash overly aggressive fiscal actions.

SENATOR SARBANES. Actually, it would cut the recovery off at the knees.

DR. McCracken. Yes. At that point, behind the wave, the Fed would do a 25th and a 26th reduction—largely market responses and not really policy actions.

SENATOR SARBANES. That is right. So the recovery doesn't really move. In a sense, it is being hobbled. Would not that be the case?

DR. McCracken. Right.

SENATOR SASSER. I think that's a point well made by the chairman. And given the likelihood, then, Professor Samuelson, that the Fed would follow the course of restrictive policy in an effort to control inflation, what would you advise the Congress to do in that situation? We have a scenario here where, if the Congress and the President come up with a long-term deficit reduction——

DR. SAMUELSON. It's to weep.

SENATOR SASSER. Sir?

DR. SAMUELSON. Weep.

[Laughter.]

SENATOR SASSER. Well, our constituents wouldn't respect us much for weeping. By the time they got through at the ballot box, we'd be weeping. And what they want us to do is to take some action here.

The question is: If you have a Congress and a President who say, "Yes, we're going to come up with a long-term deficit reduction

program," and then you have the Fed over here that says, "Well, we're still worried about inflation. We're like the generals who fought the last war. We're still concerned about the inflation that we saw in the early 1980s, and we have to get to zero inflation; we have to get the long-term price stability," then what's the Congress to do?

I think, given the present makeup of the Fed, it's likely that they would continue down the path of what they perceive to be long-term price stability, and particularly given the signals that are coming from Dr. Greenspan, they want to lower the annual range for M2. I mean, where does that leave us? And what should we do?

DR. SAMUELSON. Well, it leaves me thinking that this recovery will not achieve the even modest vigor that it could achieve.

SENATOR SARBANES. Then, the Fed is going to get exactly what you outlined in your statement. By hobbling the recovery, which is critical because you're talking about putting people back to work, the Fed, through its recalcitrance, will help to precipitate a more activist fiscal policy on the part of the Congress than would otherwise be the case, the very thing the Fed keeps saying they don't want to see happen, but they won't provide the proper monetary policy mix in order to bring that about.

DR. SAMUELSON. Precisely.

DR. MCCrackEN. But, Mr. Chairman, isn't that an indication that the basic structure of governance is breaking down here, and that it's not only the derelictions of the Federal Reserve, but the Congress itself must be clear about the overarching objectives of economic policy. If there is a central bank mechanism that then can't be persuaded to get in line, then it may have to be changed.

SENATOR SASSER. That was my next question, Dr. McCracken. You have anticipated it. My next question would be: In the event that the Fed was not responsive to these bona fide efforts, made by the Executive and the Legislative branch, to deal with the problem of the long-term deficit, if the Fed wouldn't belly up to do its share, then wouldn't Congress be justified in trying to pressure the Fed, through legitimate legislative means, to bring them along?

DR. MCCrackEN. I would certainly hope that through consultation and through the hearings process and all of that, they could be persuaded. Who was it, was it Peter Findley Doone who observed once, "Even the Supreme Court reads the headlines?"

DR. SAMUELSON. Follows the election returns.

DR. MCCrackEN. Was that it?

And I would hope that it doesn't go that far. But Article I, section 8, gives to the Congress the authority to coin money and regulate the value thereof. The *Annual Report* of the Federal Reserve goes to the Speaker of the House, not the President. So, in a way, the ball then ultimately is in the court of the Congress. This is why I kept emphasizing that you people here on the Hill have to step up to articulating the

objectives within which the Central Bank then must be free to figure out what the implications are for policy.

SENATOR SASSER. One final statement, and I will cease and desist here, Mr. Chairman.

You are quite right, but I think Dr. Samuelson put his finger on it when he said that taking some backwash from the Congress is part of the job description. In other words, they anticipate that they're going to take some flak from the Congress two or three times during the course of their tenure of service. So simply getting them up here before the committees, and discussing it with them or even browbeating them—and we have had some very vigorous discussions before the Senate Banking Committee, so ably chaired by Senator Riegle here—but without many concrete results that followed therefrom.

DR. SAMUELSON. May I just say this, it isn't just rhetoric that needs to be clarified. In the past, there have been similar situations. Usually the Federal Reserve adjusts itself to the facts of the changes in Congress and in the electorate. But when it's slow to do that, as in the New Deal period—the non-Central Bank took over more and more of the functions of the Central Bank—you can have the equivalent of Open Market operations done by differential Treasury finance the way you auction off long-term bonds as against short-term bonds.

SENATOR SASSER. A point well made.

DR. SAMUELSON. Reconstruction finance. Within the Federal Reserve, it was forced to meet the capital rationing problem that took place during the Depression by Congress creating a mandate for the Federal Reserve to do that. It's a horrible thing to contemplate a Fed that worries only about inflation, because pretty soon you have the Central Bank presiding dogmatically over a narrower and narrower area of the economy, emasculating itself, as an outside of the Central Bank, the central banking functions get done. And I do not think the system is broke so badly that that's the way to fix it.

SENATOR SASSER. Thank you very much.

SENATOR SARBANES. I would just make this observation. You know, eventually you may be driven to it if the Federal Reserve continues to be following a policy that, in effect, hobbles or undercuts the efforts to get economic recovery. I disagree with Mr. Hoskins very strongly. I do not think it is relevant only to the price level. I think it has an impact upon economic activity and is therefore relevant to output and jobs. That, too, is part of the mix in terms of the objectives which they should seek to accomplish by monetary policy, recognizing all the time the particular importance of the price of the purchasing power question in that mix.

But there is an output and a production and an employment factor very much involved as well. And if the Fed defaults on that, by the very nature of the crisis that results, we will be driven to try to find ways to overcome that, either directly toward the Fed or around the Fed,

somehow or other. And that simply ought to be understood. And, in fact, by being recalcitrant and narrow and rigid, the Fed may in fact provoke or prompt many of the very things that it constantly seems to worry about and warn against, and they will be the proximate result of the Fed's activities, ironic as that may be.

Senator Riegle?

SENATOR RIEGLE. Thank you very much, Mr. Chairman.

Could I have the chart on job loss put up in order to lay a foundation for a point that I want to raise?

I understand that while I was away that there was a discussion about the fact that the job loss in this recession and the lack of recovery of jobs is running starkly different than we have seen in the other postwar recessions. It's like that earlier chart on the M2 growth, the deficiency in M2 growth. And I think that there is a cross-relationship here.

We have a major job crisis in the country, and it's obvious anywhere you look, when somebody can go to college today to find work, come out with a degree, not find a job in the area that they're trained for; when somebody can come out of a defense industry with an advanced degree in computer science or whatever and can't get reslotted; a lot of banking people wandering around. Mr. Hoskins has a job right now, but there are a lot of good bankers that are getting washed out because of consolidations and are finding it very hard to get back into the work system. So we have a major problem out there in terms of loss of jobs and a failure to recover jobs.

Now, when you look at Federal Reserve policy, the fact that the Fed has made 23 adjustments in monetary policy during this time period, none of which, separately or together, seem to have helped very much on the margin to get us back on a stronger growth curve, I think, and when you take Greenspan's own acknowledgments that, in fact, somehow, the world is working differently and the old levers don't seem to produce the results that they once did, I think you have a finding that Fed policy is not proving to be effective.

I am struck by the fact that Dr. McCracken and Dr. Samuelson have both said that in their statements. You have been very explicit about it. You think Fed policy has not worked effectively. And that is a very powerful commentary from each of you, because you don't come from precisely the same points of view and are out there as independent observers. I put Mr. Hoskins in a somewhat different category because he is a banker and he runs a bank, and he's entitled to his view and he states it well.

SENATOR SARBANES. And he was part of this Fed policy, too.

SENATOR RIEGLE. I understand.

SENATOR SARBANES. So there is some interest in defending it, I am sure.

SENATOR RIEGLE. Well, I am sure.

SENATOR SARBANES. To be very candid about it.

SENATOR RIEGLE. That is true as well.

But when two economists of the stature of Dr. Samuelson and Dr. McCracken, coming from different philosophic points of view, come to the same bottom line about the deficiency of monetary policy, and that it has in fact hurt the economy and the economic recovery, I think that is a very powerful finding.

I want to go to the way Fed decisions are made and to the way the Open Market Committee operates. I am struck by the fact that Mr. Hoskins said earlier that the political winds blow through the system, and they do, I guess, everywhere. I think they do at the Fed. I think they do on the regional governors of the Fed. I have yet to meet anybody in that business that doesn't have a political point of view. I don't say that that drives all their decisions, but they don't walk in as, you know, devoid of political views and political feelings and political attitudes. Quite the contrary.

I am somewhat concerned about the way the decision process is made on the Open Market Committee, because you have, in addition to the Fed governors, at any particular time, five of the regional bank presidents also sitting in making these decisions. And, quite frankly, there is no direct line of accountability there. These are not people that are elected as such by the public. They're not subject to Senate confirmation.

In fact, they are quite anonymous, I would say, generally speaking. If you were to stop citizens going up and down the street, even well-informed citizens on economic matters, I doubt that one in a thousand would be able to say that there are Federal Reserve regional bank presidents sitting in on a rotating basis, setting monetary policy, whose names almost never surface in any meaningful way.

But they are very, very important people. Now, the head of the New York bank sits as one of those five on a regular basis, but the other four rotate. I think some thought, at a minimum, ought to be given to some level of accountability as to who it is that's setting the decisions, making the policy. We see the Federal Reserve governors. They come in, we confirm them, and we have hearings in the Senate Banking Committee where the three of us sit. There is a public record. We end up voting, and there is a certain accountability, and there is a period of time by which they serve.

I think everybody that is part of this decision mix, including these regional bank presidents, have to come out into the light of day. And I think that's one thing that, at a minimum, ought to be done here so that this discussion is not just across this table, but directly at the people who are involved in the decisionmaking—the active, on-line decisionmaking—particularly because the decisionmaking hasn't worked very well. And we have two of the top economists in the country coming in here today to say that from their point of view, it has not worked very well.

Now, I want to pose this question, and it will be very interesting to see what the difference in perspective might be. We have had a record year in bank profits in this country, and we have needed that because the banking system has been under great stress—a lot of problems there. The bank insurance fund went broke and had to be refinanced with a very substantial federal loan line of credit.

I would assert that, from my vantage point, the Fed policy has in its own way helped the banking system. It may not have helped the rest of the economy very much, but I think the record will show that it has been quite helpful to the banking system.

Now, that isn't terribly surprising if one accepts that premise, because the Fed has certain regulatory responsibilities over part of the banking system, and we want a healthy banking system. But, as I read the numbers coming in, it looks to me as if one effect of the monetary policy decisions has been to not help the general economy, but in its own way to work to help the banking system.

Would that be accurate, Dr. McCracken, or Dr. Samuelson? Do you see how Fed policy, in the period that we have been talking about, may in fact have worked in its own way to help the banking system?

DR. SAMUELSON. Well, a steep yield curve, which means that the return on long-maturity treasuries is unusually high compared to shorter-term maturities, works powerfully for the banks while it persists because they borrow cheap and they lend dear.

SENATOR RIEGLE. Isn't that precisely what they're doing? Doesn't the data show that?

DR. SAMUELSON. Yes. Yes. But I don't want to suggest that there is any conspiracy here. But one of the effects of this is that not only is it good for bank profits—and, God knows, many of those banks can use some extra profits—but it means that there is a substitution away from the banking of my father-in-law and from what I learned in the banking textbooks, which was that the bank's prime function was to make local loans to productive business, agriculture, industry and trade. Today, it's become better to be a passive holding company and hold treasuries.

So a part of the rationing of credit is not due to a lack of confidence, but that there is a better profit opportunity in the inert stuff that is treasuries.

Now, your view of the IQ of the Open Market Committee will be higher than mine if you think that they foresaw this, contrived it, and was their responsiveness to where they came from and where they're going to go when they leave the job. That would be a gross misreading, I think, of cause and effect.

However, it is part of the picture as to why there isn't more Fed self-reproach. Most of the people on the Open Market Committee think, "Well, maybe we made a small mistake, particularly with the politics of the situation. Maybe we got behind the wave, but which of us is

perfect?" And they say, "But there are compensations. The banks are doing better because of the interest rate cuts."

SENATOR RIEGLE. Yes.

DR. SAMUELSON. Besides, they can say and believe that the steep Treasury curve is not due to us at all, it's due to the cool money in Japan, in Germany, comparing rates that the Bundesbank sets, and that it's a perfectly efficient market response.

I think a lot of it is due to unintended consequences of the Delphic seminar method of Chairman Greenspan. I am always being called up by market participants: "Now, what did he mean when he said this," and I say, "Well, mostly he didn't mean anything there." But they are convinced, and they have not had any reason to change their mind, that the present Federal Reserve, if we get a good recovery, people used to say, "if peace broke out"—

SENATOR RIEGLE. "If a recovery really broke out." Yes.

DR. SAMUELSON. If it ever broke out, then the Fed is going to worry about the next major problem—which it has been worrying about all the time, of course—which is price-level stability, and they're going to let rates rise. Now, anyone who knows economic history knows that there have been many periods—1958 being notably one—where the National Bureau called the turning point in April and the Fed was tightening in June. We mustn't complain too much because it was part of what elected Senator John F. Kennedy of Massachusetts to the presidency. But who knew that?

So I don't think it is a plot.

SENATOR RIEGLE. Yes. I am not saying it's a plot. But it's interesting that that's how it has worked out, isn't it? I mean it's worked out that way, whether completely for reasons of unintended consequences or not. The fact is, the policy has helped the banks greatly. The banks have in fact been loading up on government securities. We just had all the bank regulators tell us that that's so.

DR. SAMUELSON. It's helped the Resolution Trust greatly. It's helped the FDIC greatly. It's helped the insurance companies greatly. And that is a mixed—

SENATOR RIEGLE. But it has not helped business lending, insofar as you can tell. You think it has had an adverse effect on business lending to small businesses?

DR. SAMUELSON. Well, I think that the steepness of the curve is not a plus for business lending. But I think we have had lots of healthy mortgage refinancing—the middle part of the curve. By the way, that's a fictitious number that we journalists and economists make up, how you identify exactly 24 incidents. That has all been to the good and it has been part of what I have been saying, that monetary policy has not shown itself to be impotent and that we have used it to the extreme.

I think I testified before this same committee on how easy should credit and money be. And I said, "I give you the answer that Abraham

Lincoln gave when asked how long a man's leg should be: "Long enough to reach the ground."

I don't think that a 3 percent short-term money rate is, in some absolute sense, low or high. It wasn't low enough to combat the winds of Japanese and Korean competition, of real estate liquidation, of corporation indebtedness. That's how central banking, in the economic history books, 30 years later is going to be judged: What was the effect; what was the incremental effect; what could they have done; what did they seem to do? And, of course, the identifications will not be completely agreed on by all the different textbook writers.

SENATOR SARBANES. I want to be clear on one point with respect to this steep yield curve. As I understood your testimony earlier, making reference to the money traders with whom you have been in contact, the high rates on long-term securities, as you understand it from them, is attributable, at least, in part, to their expectation that the Fed will tighten monetary policy in order to combat some inflation that they might see coming, or conjure up as coming, as you begin to get a recovery. And, therefore, given that position of the Fed, the longer-term securities are staying at a higher rate. Is that correct?

DR. SAMUELSON. Yes. And it is incorrect, in my experience, that these smart people in the money market see bottlenecks in the production process, which is going to raise prices as soon as output rises, see a resurgence of militant union wage activity. That's the explanation usually given.

SENATOR SARBANES. That's the explanation Mr. Hoskins gives here today.

DR. SAMUELSON. I don't want to comment on that.

SENATOR SARBANES. All right. But go ahead.

SENATOR RIEGLE. I would like to comment on it.

SENATOR SARBANES. All right.

SENATOR RIEGLE. May I just say that the number of unionized workers today in the civilian work force is below 15 percent nationally. I mean, the notion that union wages can drive the economy at this point is, on its face, an absurdity. There is really no data that would show otherwise, although it still gets trotted out as a red-herring.

Excuse me.

SENATOR SARBANES. You say the steepest yield curve in history tells us the financial markets believe that inflation will be higher in the future than it is at present.

DR. SAMUELSON. Not necessarily in my interpretation.

SENATOR SARBANES. How does that square with the fact that you have had previous times when the fear of inflation was much more rational and you did not have yield curves anywhere near as steep as this one, in terms of explaining the phenomenon?

MR. HOSKINS. I think it shows two things, Senator. One is the aggressiveness of the Fed easing in terms of pushing down short rates. Two

years ago in August, the Fed funds rate was at 8 percent. The long bond, the Treasury 30-year, was also at 8 percent. We are now talking about an interest rate level of 3 percent on the overnight rate. The long bonds have moved, at best, 50 to 60 basis points—a half a percent or a little bit more. That's a very aggressive easing.

Now, if Professor Samuelson's analogy is correct, those smart traders would have anticipated that Fed easing and bid the bond rate down. It should be symmetrical on both sides, and it doesn't appear to be in the case of his analysis.

It seems to me that markets have some concern about long-term inflation trends in this country, and I believe they ought to. But I don't believe that a yield—

SENATOR SARBANES. How do you square the fact that by any rational judgment, the apprehension about inflation should be less now than at other times in our history and yet the yield curve, according to your statement, is the steepest that it has ever been? I mean, that would only square if one could rationally argue that the apprehension of inflation now was the worst it has ever been.

That is clearly not the case, going back through this postwar period. So you have had other periods of time when the apprehension of inflation was reasonably much greater than it is now and the yield curve was not as steep. Now, does not that lend credence to the point that is being made, that maybe a contributing factor to the steepness of the yield curve is a perception that the Fed is going to embark on this policy and the interest rates are going to go back up again?

MR. HOSKINS. I would argue that we have one of the lowest short-term interest rates that we've had in 20 years.

SENATOR SARBANES. Real?

MR. HOSKINS. Nominal interest rates.

SENATOR SARBANES. Real interest rates. What about interest rates?

MR. HOSKINS. If we take real interest rates, they're probably higher than they've been in a long time.

SENATOR SARBANES. Right.

MR. HOSKINS. There is a bet going on right now. What is the bet? The bet is that inflation is going to be higher. That's the market's bet. The Federal Reserve is pursuing a policy—

SENATOR SARBANES. No, the market may be betting that the Fed will tighten the policy to address this supposed problem, which is not really there, and if they make the right perception that that is what the Fed is going to do, then from their point of view, it is a smart move to play the game the way they're playing it. But the Fed is contributing to them by playing that game.

MR. HOSKINS. The analogy doesn't hold. It didn't work the other way around, which was the point of my discussion about the funds rate being at 8 percent at the same time the long bond rate was at 8 percent. People would perceive a weak economy; they would perceive a

weakening of short-term interest rates, and the Fed would lead rates down. They did not bid the bond rate down. There is a fundamental problem. I will give you why I think rates are where they are.

SENATOR SARBANES. Well, let me just make this point, because we talk about low interest rates, and we're talking nominal. The real interest rates in fact are not that low. You probably can't see this chart from there, but these lines follow the 91-day T-bills and the long-term T-bonds. Now, these are real interest rates, and this is zero. So the real interest rates are down in this range. This is from 1970 through 1980. And the real interest rates are up in this range from 1980 through 1992. So, while you may have a nominal rate that looks low, the real rate is in fact higher than it used to be.

MR. HOSKINS. That's because of those negative real interest rates. Those came about because of high inflation. People in the market have associated high inflation with loss of principle on bonds. Therefore, they don't want to take the risk. They're uncertain about owning 30-year governments when there is a possibility that inflation is going to rise 5, 6, 7 percent over that time period.

SENATOR SARBANES. Would you say that it is irrational for a trader to look at the situation and calculate to himself: "Well, I just went home last night"—this is a trader talking to his colleague—"and I read the Federal Reserve Board and Federal Open Market release on the attached record of policy actions taken by the Federal Open Market Committee at its meeting on November 17, 1992. And the way I read that, I think they're going to start taking these rates back up again, and that's what I think is going to happen. So I am going to play the game that way. I am going to expect these rates to go back up."

Is that an irrational calculation on their part?

MR. HOSKINS. No, it is not. I cannot discount that as a possibility. Certainly they would ask themselves what would cause the Fed to take short rates back up? So what are they watching for? They're watching for the first sign of inflation. What's the first sign of inflation? More-rapid money growth.

We have a big discussion within the profession now as to which measure of money is appropriate. Two of them are growing at double-digit rates, which is causing the FOMC to have some concern.

Another aggregate, M2, as we pointed out, is below target. I happen to pursue M2. I think the M2 target is the one that we ought to continue to pursue.

But if market participants also believe that the Fed will have to tighten when money growth comes because money growth leads to inflation, then you're absolutely correct.

DR. SAMUELSON. May I make an addendum on the bank profits?

SENATOR SARBANES. Yes, Dr. Samuelson.

DR. SAMUELSON. I want to indicate that there is one element of danger in the last two years' increase in bank profits. The banks have been

taking a position that is subject to risk. If the long-term rates do begin to go up, their total return will have a large negative element in it, and many of the banks that were teetering—really engaging in moral hazard at the expense of the FDIC—took just such risks before, extended out like a bank teller who goes to the races to try to pay back. And they lost, that time. And so the chess game isn't over. It's never over. There is something to possibly be concerned about, depending upon how the steepness of that curve unwinds or doesn't.

SENATOR RIEGLE. Let me say that I appreciate that point. There is an interest rate risk problem that is building up there, and it's something that we are endeavoring to have taken into account in the whole regulatory supervision area so that we don't get blindsided by a problem like that, where swinging interest rates could suddenly make safe investments very much investments that carry large losses with them.

But let me ask you, MR. HOSKINS. You served for a time as one from the Cleveland District on the Open Market Committee. Would you have any objection, as a matter of policy, that when someone steps into that position, they undergo Senate confirmation?

MR. HOSKINS. I think I have tried to answer that already, and I will do it very directly. If we had a clear congressional mandate in the law, a statutory provision that required price stability as the overriding, if not the sole, function of the Central Bank, as does Germany, then I would have far less concerns about the appointment process.

SENATOR RIEGLE. Well, let's take that caveat to the side. I can see why you personally might say, unless I have that as a guiding star that's fixed and I can guide by, I wouldn't want to go through the confirmation process. But let me just leave that to the side.

MR. HOSKINS. Sure.

SENATOR RIEGLE. I will tell you why I think it would be useful. I think it would be useful because I think persons like yourself, or whoever it might be, ought to have the opportunity, and there ought to be some requirement to put viewpoints on the table, to discuss these things. We have to decide whether to vote on Federal Reserve Board members, and part of the way we do that is based on what they say when they're questioned on these issues.

Why should someone be in the position that you were in be thought of as less important and less deserving, say, of a confirmation process and vote, and the dialogue that precedes that than somebody who sits on the board as a governor and does engage in the same kind of decisionmaking?

MR. HOSKINS. I think there was an intended balance between the political appointees in the system and the private-sector appointees that stems, I think, as Professor Samuelson mentioned, from the inception of the Federal Reserve back in 1913. We revisited that, Congress did, in 1935 on a number of occasions, and Congress has brought out bills to alter how the Federal Reserve appointment process works. The

legality of the process has also been tested in court. I believe you were party to one such test.

It is in the hands of Congress to decide whether it wants to bring into the political fold the Reserve Bank presidents. You must admit, the agenda of Congress is focused around elections. The short-term policies that are necessary to have an economy, which is in good form by election time, often are inimical in the long term. I think Congress, in its wisdom, recognized that.

SENATOR RIEGLE. Where is the accountability?

SENATOR SARBANES. This issue was never addressed. First of all, it's not correct to say it was decided in the teens. I mean, I am shocked.

MR. HOSKINS. I was referring to the Federal Reserve Act origination.

SENATOR SARBANES. No, I thought you were talking about the Open Market Committee.

MR. HOSKINS. Oh, no. That didn't come about until 1935.

SENATOR SARBANES. That's for sure, because the Federal Reserve Act of 1913 did not provide any Federal Reserve organ to guide Open Market operations. It was left up to the individual Federal Reserve Banks, which gave you a lot of chaos and worked at cross purposes. And then, in 1922, under pressure from the Treasury, the governors—as the bank presidents were then called—of the banks in New York, Boston, Chicago, Cleveland and Philadelphia—that's prior to 1935—formed what came to be called the Open Market Investment Committee. It had no binding authority over the other banks. It wasn't until 1935 that a political compromise that responded to the pressure that was brought to bear by the banks occurred, and a lot of us are now questioning the wisdom of that political compromise.

We have proposed to resolve it in one of two ways: either take the presidents off the Open Market Committee and then let the Open Market Committee decisions be made by the governors of the Federal Reserve—all of whom are nominated by the President—because there is a presidential involvement in this policymaking as well, and confirmed by the Senate; or, alternatively, subject them to confirmation. They could be an advisory committee in the first instance.

Now, you can go either way on the thing, but it seems to me that a lot of thought ought to be given to it. When they first passed the Federal Reserve Act, they were going to put bank representatives directly on the Federal Reserve Board itself. That's what Congressman Carter Glass wanted. It was opposed by Senator Owen, who was chairman of the Senate Banking Committee, and opposed by President Wilson. And President Wilson, in a discussion with Glass and Owen, said that he didn't see any basis on which the private interests would be represented on a government board that had to make public decisions, that the people that go on that board ought to have received a public screening and attained a public legitimacy.

According to Glass's 1927 book—this is Carter Glass, "Adventures in Constructive Finance,"—when a group of bankers went to the White House to protest Wilson's decision, the President turned to the bankers and said:

Will one of you gentlemen tell me in what civilized country of the Earth there are important Government boards of control on which private interests are represented?

After what Glass tells us, there was a painful silence, and President Wilson inquired, "Which of you gentlemen thinks that railroads should select members of the Interstate Commerce Commission?"

Now, we have the problem of the Open Market Committee. It's quite true that the banks put on a lot of pressure at the time. It was originally proposed that the board would consult periodically with representatives of the banks. The banks put the heat on; they didn't want that. And finally they got the provision where rotating members would be included on the board.

I, amongst others, are now questioning the rationale of that. You make very important decisions. Maybe you should have been on the Open Market Committee, maybe you should not. But you should not have gotten there, casting a very important vote on what is, in effect, a public decision, without having gone through a public screening process. If you're not going to go through the public screening process, you ought not to be there making the decision. Now, that might be the best way to resolve it. If you are going to be there making the decision, you ought to go through the public screening process.

DR. McCracken. Mr. Chairman, may I make a comment on that? If I were having to cast a vote on whether the bank presidents should be confirmed, I am not sure which way I would vote. I would reserve judgment. But I would make two comments. First, I think it might be interesting to look back over the record of Open Market Committee meetings, review the votes of the presidential members relative to the governors, and see if there is any pattern there that suggests a different point of view.

SENATOR SARBANES. Well, that is a reasonable point. This is prompted, in part, by the fact that Greenspan had to fly to Chicago in order to try to get an easing of policy afoot. Do you recall that incident?

DR. McCracken. Yes.

SENATOR SARBANES. Yes.

DR. McCracken. The other point I would make is that I found myself thinking, during this colloquy, if that procedure had been in place during the last several years, how much of the current economic problem, which we are looking at, would it be reasonable to assume would not be here.

SENATOR SARBANES. Well, that is a reasonable point. But you are now moving me back to the substance. My point is that even if there were no question about the substance, although the problems with the

substance have obviously provoked this consideration, but when you think about the process, it clearly is, in my view, deficient to have a process which puts people in significant policy judgments who are picked by private interests and are making public decisions. Now, they may have made all of the right public decisions, but still, once you open the issue up and you really begin to come to terms with it, you have to conclude that these people lack the public legitimacy to be making these kinds of decisions.

I can't guarantee that the people who are nominated and that we confirm will make the right decisions. In fact, I have been quite critical of some of their decisions. But, at least, I recognize that they got there, in a sense, on a legitimate basis. They are there making public decisions having gone through a public screening with a certain degree of public accountability, although, unfortunately, people going on the Fed have made a mess out of the 14-year term. Some get on there and use it, I think, to advance their careers, and others get on there and stay for a while and then off they go again, which may be a good thing—you may get more responsiveness and more flexibility.

I think there is another troubling development and one which we haven't examined this morning, and that it was considered a very significant appointment for people who used to go on the Fed. It was presumed they were going to stay the 14-year term, or something close to it, and we are getting more and more of a revolving-door syndrome at work on the membership of the Fed. Not so much the chairman; the chairman still continues to be seen as a significant position. But there has been a devaluing, it seems to me, of the importance of the members of the Federal Reserve Board.

DR. McCracken. I would urge the Committee to lean in the direction of focusing on substance, partly because I think it's more difficult. That was my only point.

SENATOR SARBANES. Sometimes you get a good substantive result if you focus on the process.

DR. McCracken. But it is also easier to focus on the process than on substance.

SENATOR SARBANES. Well, not necessarily.

SENATOR RIEGLE. But, you know, either way, either side of that argument you want to take, if you need more definition and more in the way of fixed standards and you don't have them, then I think the question of accountability becomes even more important because you're bringing people in who are going to guide by their own stars, and you may have a zero-inflation man that comes in and there's nothing in the written law that, in a sense, lays that out, but that's the star he guides by. So he comes in and votes that way, and he may or may not be the critical vote on the margin, and there really is no public accountability.

There is no way the public, as such, can say "yes" or "no" to the stars that he may guide by. And I know, for one, in a situation where, if the

law is ambiguous, if the written instruction and standard is unclear, in the absence of that, it's very important to know what kind of stars people are guiding by. And that's why when we have the Federal Reserve appointees in, that's what we talk about. We don't talk about the football scores; we talk about what they have written, if they've written anything, and what their views are; what's the orientation that they bring, because these are highly significant decisionmaking positions.

What is interesting is that somebody can come into the Federal Reserve Board as a governor, go through that kind of screening, be subjected to the President having to make a judgment and all of his advisers, and the Congress and the Senate having to affirm that judgment, that person goes in then with the right to cast a vote. And then lo and behold, down a different track, willy-nilly, comes Mr. Hoskins or Mr. Jones, or Ms. Jones, or whoever it happens to be, comes in with exactly the same weight of power when they get into that Open Market Committee, and there is, in effect, no public screening and there is, in effect, no public accountability.

That vote not only counts every bit as much as the other vote, it may in fact be the deciding vote, and it may in fact tilt the policy in a way that gives us a bad result. And we have two of the premier economists in the country coming in here today and saying, "you know, I think, quite dutifully and respectfully, that the Fed hasn't done a very good job these last few years."

That's the weight of your testimony, and, well, who is the Fed? Who makes these decisions? It's not just Alan Greenspan or Arthur Burns and others before him, but it's people like Mr. Hoskins, who, decent as he is, never sees the light of day. Who knows Hoskins, I mean, outside of the Huntington Bank and the people in his circle of friends and family?

MR. HOSKINS. My wife and my cat.

[Laughter.]

SENATOR RIEGLE. Yes. Your cat and your dog and so forth and so on.

But the point is, it's a critical decisionmaking position and it ought to be seen as such, and he ought to be out in the light of day so that we understand what his thinking is. If he's guiding by the star of zero inflation to the point—and if one can make a plausible argument that adhering to that in a case where we have a lot of deflation going on right now in the economy, you may sink the economy, and there are people who would argue that that goes overboard in the wrong way—at a minimum, it ought to be put on the table. Let him defend the proposition. Let's make a judgment as to whether we want a person who has that as a fixed star that they guide by, regardless of any other consideration.

I would rather know this, in the open light of day, than end up having the economy hobbled by a monetary policy that is, in part, made by individuals who have no public accountability. And it seems to me that's what we have.

Now, you can say, "Well, let's not blame him." I am not saying necessarily blame him. Maybe we should, maybe we shouldn't. I don't know. All I know is that you two have come in today and said that we've had a defective monetary policy the last while. And we have a person sitting here, representative of many others, who was part of that decision process and who isn't confirmed by anybody.

We probably learned more about what Mr. Hoskins thinks today in this session—and, of course, this is after his service—than we ever would have known beforehand.

DR. SAMUELSON. May I make two points?

SENATOR SARBANES. Yes.

DR. SAMUELSON. I don't think the emphasis should be on two economists—powerful as Dr. McCracken and I may be.

[Laughter.]

DR. MCCRACKEN. I agree.

DR. SAMUELSON. This is what Michael Boskin, the chairman of the Council of Economic Advisers—and not in his capacity of trying to get his boss reelected, but long before that—has been saying publicly and, I would predict, privately. This is what a vast proportion, by a nose count of modern macroeconomists, would be saying in this instant in history. That's the first point, just for the record.

Second, to go back to how we got into this in 1935, you can have the congressional legislative reference look into the matter. There was no smidgen of, "We will bring in the 12 bank presidents because we have an understanding that price-level stability is a clear and objective guide." On the contrary, if you study that period, you will see that in all of the congressional discussions and in all of the editorials, it was how do we get back to the price level of 1926? It was still holding back rational discussion of wartime planning when Barney Baruch was asked, "Well, how can you be for holding prices stable when we're not yet back to the 1926 level?"

Price-level stability is a leading tenet by one group of economists. Leading tenets come and go in the long lifetime of any economist. The 1913 Federal Reserve, if they could have operated on the Constitution, would have put in formulas about lending to self-liquidating loans on Main Street, and they did put in differential requirements. It would be ridiculous if I, because the political winds are going my way, convinced Congress to put in the Constitution my kind of flexible central banking policy. I don't think that it's different whether we're talking about somebody from Cook County or from some other school of economics. These are things that a democracy, which changes its response to problems, must expect to impinge upon its responsible central bankers.

SENATOR SARBANES. Gentlemen, we thank you.

SENATOR RIEGLE. Dr. McCracken, did you want to add something?

SENATOR SARBANES. I'm sorry.

SENATOR RIEGLE. I thought you were seeking to speak to that.

DR. MCCrackEN. Purely as a footnote to our earlier discussion. I would like to check the record to see how much of our problems would turn out to be created by those who, in fact, did come before the Congress to get confirmed and then created the problem.

SENATOR SARBANES. We have done some of that research because we're interested in that problem. Apparently, what happens is that they work very hard to develop consensus views and, therefore, an analysis of the votes that are taken—as few as they may be where there are splits—don't tell you that much. Because what you have is some people pulling very hard in a particular direction, and apparently you get an accommodation of that in order to hold together a consensus. So it's a very complex decision-making process, as I understand.

I think your question is a good one. In fact, it occurred to me at an earlier time. We tried to take a look at that, and what we were able to glean from talking to a number of people is that the dynamics of it were such that you could not really read it that way. In other words, one or two people on the Open Market Committee could move the board to accommodate them in order to hold together a consensus, and they try very hard to avoid splits and straight votes. Now, occasionally they have votes and you can see something there. But it is obviously a good question.

DR. MCCrackEN. My major point was that I wouldn't like to see so much attention directed to these structural matters that we didn't give adequate attention to the substance of the economic problem.

SENATOR SARBANES. I thought we spent a lot of time in the beginning on the substance. We may have gotten off into the process a little bit here. But our view on the substance, essentially corroborated by the two of you, is that the Fed's policy has contributed to the economic difficulties, and if, in fact, they tighten monetary policy in 1993, that's working directly against what ought to be done to try to get this recovery moving.

I feel that very strongly. I think, if the Fed, in effect, moves to hobble or to cut down this recovery in 1993, it would be a highly irresponsible act on their part.

With that, I will adjourn the hearing. Gentlemen, thank you very much.

[Whereupon, at 1:37 p.m., the Committee adjourned, subject to the call of the Chair.]

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