

FEDERAL RESERVE'S FIRST MONETARY POLICY REPORT FOR 1988

HEARINGS BEFORE THE COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS UNITED STATES SENATE ONE HUNDREDTH CONGRESS SECOND SESSION ON OVERSIGHT ON THE MONETARY POLICY REPORT TO CONGRESS PURSU- ANT TO THE FULL EMPLOYMENT AND BALANCED GROWTH ACT OF 1978

FEBRUARY 24 AND 25, 1988

Printed for the use of the Committee on Banking, Housing, and Urban Affairs



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FEDERAL RESERVE'S FIRST MONETARY POLICY REPORT FOR 1988

WEDNESDAY, FEBRUARY 24, 1988

U.S. SENATE,
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS,
Washington, DC.

The committee met at 10 a.m., in room SD-538, Dirksen Senate Office Building, Senator William Proxmire (chairman of the committee) presiding.

Present: Senators Proxmire, Riegle, Dixon, Sasser, Shelby, Garn, D'Amato, Bond, and Chafee.

OPENING STATEMENT OF CHAIRMAN PROXMIRE

The CHAIRMAN. The Federal Reserve occupies a unique position in economic policy making in this country at all times. The Fed determines the availability of credit. It has a profound, constant, direct influence on the level of interest rates. As we all know, the level of interest rates very largely drives this economy of ours.

The Federal Reserve Board's power is always a fact of life, but this year more than in any of the 30 years I've served on this committee, this year the Fed's power is especially great.

The Federal Government has two primary tools in guiding the economy. They are fiscal policy—the power to tax and spend—and monetary policy, the determination of the availability of credit.

Fiscal policy that is expansive that holds down taxes and pushes Federal spending can obviously stimulate the economy. Fiscal policy that is restrictive, that reduces spending and increases taxes, can certainly restrain the economy.

This year the President and the Congress are observing an agreement to follow a fiscal policy that was locked in late last year. The President has told the country that he intends to live up to the letter of that agreement. It's quite clear that the Congress will do the same. So fiscal policy is a fixed, established, given factor.

This leaves monetary policy as the only show in town and the Federal Reserve Board as the prime discretionary determinant of our future for the next 12 months or so.

You tell us in your clear and incisive statement this morning that you're going to follow a path that for the time being will follow roughly the same policy the Fed has generally pursued in recent months. That is, the Fed will increase the money supply at a rate close to the present and predicted normal increase in the GNP. But you also tell us that you may have to vary this policy. You will slow the rate of monetary increase if wages, prices and

economic activity generally rise more sharply than expected. In particular, you will act if the capacity utilization rates rise sharply and unemployment continues to diminish.

This language is reassuring. What is not reassuring is that you have widened the range that constitutes your goals for M2 and M3 and that you continue the policy established by your predecessor of keeping the country and the Congress in the dark about your plans for the basic monetary variable, M1. You tell us that M1 is too erratic a variable to be useful because of recent changes in interest-bearing checking accounts and various transaction vehicles.

The Fed and its policies are so important (and especially so this year) that this committee some 15 years or so ago requested the Fed to report to the Congress on its plans for M1—not M2, not M3—Arthur Burns brought those in later—but M1. We specifically requested that the report indicate not a range but a particular, specific figure, as they have for instance, in Germany, I understand, for M1. But today you give us nothing for M1 and the broadest range ever for M2 and M3. For this reason, I get the feeling you're not giving the Congress the information we should have if we are to provide the necessary congressional oversight over the Federal Reserve Board's policies.

Your explanations on pages 9 and following constitute the best, concise discussion of the M1, M2 and M3 measures of monetary policy that I've read. I think they are first class. They are very concise, direct, and excellent. But please give us more information and a more specific goal, if you possibly can.

It would also be helpful to the committee to secure an analysis from the Fed on what seems to this Senator to be an extremely serious overall debt problem that lies beyond even the mammoth Federal Government debt. Household debt is nearly a half trillion dollars higher than the Federal debt, yet household savings remain much lower than in the past, although there's been a modest improvement in recent months.

Business debt is substantially larger than the Federal Government's debt also and is particularly burdensome in relationship to earnings. The healthy \$2.85 of debt for every dollar of earnings in 1955 for example, has swollen to a business debt of \$9 of debt for every dollar of earnings today. Of course, these figures are averages. Tens of thousands of our businesses are today struggling under a debt that is 15 and 20 times their earnings.

It would seem that in the next recession the number of insolvencies and bankruptcies could be very large indeed.

Finally, a Fed policy that holds down interest rates tends to discourage savings and encourage borrowing. In the short run, this policy stimulates the economy; but not in the long run. Only the Fed among our Federal policy making institutions has the kind of institutional basis to consider the long run. The Congress and the President are looking to the next election. Any Congress and any President have to do that. So I hope you will include the overall long-term debt problem in your monetary policy deliberations.

[The complete prepared statement of Chairman Proxmire follows:]

OPENING STATEMENT
FIRST MONETARY POLICY REPORT OF
CHAIRMAN WILLIAM BROUNIERE
FEBRUARY 25, 1988

This morning we will hear from Alan Greenspan, Chairman of the Federal Reserve, who is before the committee to discuss the first monetary policy report to Congress for 1988.

Chairman Greenspan, I am troubled by the extent of the political pressure being put on the Fed by the Reagan Administration in this presidential election year.

One of the virtues of granting the Federal Reserve a greater degree of independence from the political process than many other agencies is to insulate your institution from the pressures to buy stimulus now and pay in inflation later.

I think it is both deplorable and counterproductive for the Reagan administration to pressure you as much as they have in recent months.

The evidence of political pressure on the Fed in recent months is overwhelming. First, on November 5, 1987, the Wall Street Journal reported on the front page that Secretary of the Treasury had guaranteed that he would not let interest rates rise. I do not need to remind Mr. Baker that it is the Federal

Reserve, not the Treasury, that sets our monetary and interest rate policies.

In December, widespread reports in the press left no doubt that Mr. Sprinkel at the Council of Economic Advisors wanted the Fed to ease.

Then, in a letter dated January 21, 1983 Assistant Secretary of the Treasury for Economic Policy, Michael Darby sent a letter to the Federal Reserve Governors and to the Presidents of the Federal Reserve District Banks suggesting that real M2 was growing too slowly. The implication: Ease up on the money.

Finally, The Economic Report of the President complains that money growth was too slow in 1987 and criticizes the Federal Reserve for contributing to the onset of the stock market crash in October. And the final report's substantial criticism was apparently toned down from earlier versions at the request of Secretary Baker.

Chairman Greenspan, the incumbent administration often has a desire to ease money more than would be good for the economy just before the presidential election. You and your fellow governors are entrusted with resisting political pressure and implementing good economic policy. You and your fellow governors are particularly vulnerable to this sort of criticism because all of the current governors were appointed by the Reagan Administration. Your performance will be closely scrutinize:

Ironically, when the Administration badgers the Federal Reserve they may make it harder to formulate sound monetary policy than could be the case if they were silent. Even if you have eased money for sound technical reasons, you will certainly be accused of bending to political pressure. Insinuations of political manipulation harm both your reputation as chairman and the reputation of the Federal Reserve.

The administration's haranguing unnecessarily raises the cost to the Fed of making good policy. Were it not for your integrity, you might actually resist changing monetary policy when it is justified, for fear of undermining the credibility of the Federal Reserve.

Let us hope that in the future Mr. Baker, Mr. Darby, Mr. Sprinkel and the rest of the Reagan Administration will begin to trust the Chairman and the other five governors it has appointed to make monetary policy for the country's best interest. Let us hope that they will develop greater respect for the Federal Reserve's independence and refrain from asking you to make monetary policy for the benefit of the Republican Party. That will make it easier for the Fed to implement good policy. We desperately need good economic policy. It's in such short supply.

The CHAIRMAN. Senator D'Amato.

OPENING STATEMENT OF SENATE D'AMATO

Senator D'AMATO. Thank you, Mr. Chairman.

Mr. Chairman, it's good to welcome Chairman Greenspan to the committee for his first effort to explain the Fed's monetary policy report.

I note that yesterday, Chairman Greenspan delivered this report to the House Banking Committee. It must have been fairly well received because the financial markets of the world which have been relatively fragile lately, remained stable.

Chairman Greenspan and his colleagues at the Fed deserve considerable credit, Mr. Chairman, for their performance. The Fed responded swiftly and I believe correctly to avert the liquidity crisis precipitated by the events of October 19 and 20. Alan, I want to congratulate you for your handling of that very, very precarious and difficult situation.

In his statement today, Chairman Greenspan underscores the need to implement policies which will keep the economic expansion moving in order to avoid a recession, and I couldn't help but agree with him. In fact, this is the most forthright statement by any Fed chairman regarding the Fed's intention in relation to the continued expansion of the money supply. Too often in the past, the Federal Reserve has been less than explicit with regards to its intention in this area and I commend you and your colleagues because I think that's important, that there be some blueprint that is laid out.

Further, I hope that we can get interest rates down a bit lower because lower interest rates will prove to be a beneficial stimulus to this economy. Chairman Greenspan also rates the precarious balance between monetary growth and inflation. However, the experience of the early 1980's I believe has taught us that some inflation, a little inflation, accompanying monetary growth and economic expansion is far better for the economy and the American people than a recession.

Finally, as we've observed during our market crash hearings, the United States and foreign economies are inextricably intertwined. In his statement Chairman Greenspan discusses the prospects for domestic economic growth. However, the statement is relatively silent on the prospects for foreign economic growth and I hope, Mr. Chairman, you might be able to give us some of your insight as it relates to that area because as you know the balance of trade and the deficit is largely dependent upon the ability of foreign governments to purchase U.S. goods and services.

So I look forward to your statement. Again, I want to congratulate you for your efforts and the Fed's efforts at being more straightforward with us, particularly for your actions of October 19 and 20.

Mr. GREENSPAN. Thank you.

The CHAIRMAN. Senator Riegle.

OPENING STATEMENT OF SENATOR RIEGLE

Senator RIEGLE. Thank you, Mr. Chairman.

Let me welcome Alan Greenspan before us today. He's a person we've all known for some time and with whom we all work closely.

There are three things that I would hope you comment on today in the course of your remarks and I will ask you about them when we have the opportunity.

In terms of the Federal deficit for this fiscal year that we are now in, we have so far 3-months of data that have come in. We are expecting the 4th month of data tomorrow. You may have some sense for that, but it's not public today.

If you compare the deficit that we've accumulated in the first 3 months of this fiscal year to the previous fiscal year, already we have logged a 3-month deficit of \$80.4 billion. The previous year through the first 3 months, the deficit was \$64.6 billion. So through the first quarter of the fiscal year we are up \$15.8 billion, almost \$16 billion, above an actual booked deficit, and I find that a very disturbing trend. I would like to know what you make of that and where you think that's taking us.

The second thing is in the President's budget submission to us, for the first time, the net interest costs in the budget which we have to of course pay each year and comes off the top, will exceed the estimated deficit itself, and we are getting into this compound interest problem where past Federal deficits are now running up the annual interest charges even at a somewhat lower level of interest rates to an annual operating amount that is exceeding \$150 billion a year and therefore now running higher actually than the deficits themselves because many of us think the deficit probably will come in above \$150 billion. So I'd like you to speak about that kind of trend if you will as well.

Then finally, our debtor nation problem. And I brought a chart here that I will hope to raise with you in the question period, but as we continue to add international debt, principally driven by the very substantial trade deficit still running in the range of \$160 to \$170 billion a year, we are adding new international debt at the rate of about \$1 billion every 2½ days or about every 60 hours, and that figure is compounding. When I show it to you on a chart, it's a real plunge into this debtor nation circumstance that we're on.

The Council of Economic Advisers the other day said:

Don't worry about this mounting international debt. Even if we're headed to a trillion dollar international debt, we can take it in stride and not to be too concerned about it.

There's even a suggestion that maybe somehow it was good for us, but at a minimum it wasn't something that we ought to lay awake nights worrying about.

I find myself more and more concerned about that international debt accumulation and in turn its implications for upward pressure on interest rates and creating an ever more difficult situation for the Fed down the line. There are other implications to that as well.

If you would, in the course of your comments or responses, I would hope that you would find a way to touch on those three issues.

Thank you, Mr. Chairman.

The CHAIRMAN. Senator Garn.

Senator GARN. Thank you, Mr. Chairman.

Chairman Greenspan, we are happy to welcome you here today and I am absolutely certain that no one, and certainly my colleagues, did not come here to listen to me speak and therefore I will simply ask unanimous consent that my statement be placed in the record.

[The complete prepared statement of Senator Garn follows:]

STATEMENT OF SENATOR JAKE GARN

FEBRUARY 24, 1988

AS WE BEGIN THESE HEARINGS ON MONETARY POLICY, WE CANNOT DENY THE FACT THAT THE UNITED STATES FACES SOME FORMIDABLE ECONOMIC PROBLEMS. HIGH ON ANYONE'S LIST WOULD BE THE BUDGET DEFICIT, THE TRADE DEFICIT AND CONTINUED REGIONAL POCKETS OF RECESSIONARY CONDITIONS.

AT THE SAME TIME, WE SHOULD NOT OVERLOOK THE IMPRESSIVE ECONOMIC ACCOMPLISHMENTS OF RECENT YEARS. THE U.S. ECONOMY IS NOW WELL INTO ITS SIXTH YEAR OF EXPANSION. LAST YEAR ALMOST 3 MILLION NEW JOBS WERE CREATED; AND THE UNEMPLOYMENT RATE HAS NOW FALLEN TO ABOUT 5 3/4 PERCENT. LAST YEAR CONSUMER PRICES ROSE SOMEWHAT OVER 4 PERCENT, A RATE OF INCREASE THAT IS STILL TOO HIGH BUT FAR BETTER THAN THE DOUBLE-DIGIT RATES OF INCREASE AT THE BEGINNING OF THIS DECADE.

I SEE LITTLE TO CRITICIZE IN RECENT FEDERAL RESERVE POLICY. THE FED HAS PLAYED A MAJOR ROLE IN THE ECONOMIC ACCOMPLISHMENTS OF THIS DECADE. THE FED RESPONDED TO THE FINANCIAL- MARKET TURMOIL OF LAST FALL IN A WAY THAT LIMITED DAMAGE TO THE ECONOMY AS A WHOLE. I BELIEVE THAT THE FED'S OUTLOOK AND POLICY PRESCRIPTIONS FOR 1988 ARE REASONABLE. OUR TASK IN CONGRESS SHOULD BE TO SEEK WAYS OF HELPING THE FED TO CONFRONT OUR REMAINING ECONOMIC PROBLEMS. THE PLACE TO BEGIN IS CLEARLY TO WORK ON REDUCING OUR FEDERAL DEFICIT.

WE MAY ALSO ASSIST THE FED BY ENCOURAGING OUR TRADING PARTNERS IN THE INDUSTRIALIZED WORLD TO DO THEIR PART IN HELPING SUSTAIN THE ECONOMIC EXPANSION. THIS, OF COURSE, IS CRITICAL TO CONTINUING PROGRESS ON THE DEBT PROBLEMS OF MANY LDC'S.

FINALLY, I BELIEVE THAT CONGRESS HAS A MAJOR RESPONSIBILITY FOR ASSURING THE LONG-TERM STRENGTH AND COMPETITIVENESS OF OUR NATION'S FINANCIAL INSTITUTIONS. IF WE DO NOT TAKE STEPS TO UPDATE OUR LAWS ON FINANCIAL STRUCTURE, WE WILL SADDLE OUR ECONOMY WITH SEVERELY WEAKENED FINANCIAL INSTITUTIONS, AND THIS IN TURN WILL WEAKEN THE ECONOMY AS A WHOLE.

The CHAIRMAN. Senator Bond.

OPENING STATEMENT OF SENATOR BOND

Senator BOND. Thank you, Mr. Chairman. That's a very difficult act to follow, but I wanted to make a very brief comment saying that as you know we all joked about the difficult job that Mr. Greenspan was undertaking when he was before this committee before, and few of us realized how difficult it would be. During the course of the hearings that we've had on the stock market crash and the activities of October 19 and 20, and afterward, there's been a lot of finger pointing among the various agencies, groups and organizations before us. I think the only institution which has received praise from all quarters has been the Federal Reserve. The Fed provided liquidity, and stability for the system, and I think everyone is in your debt for a job very well done.

In addition to your responsibilities for the financial system, you also have the heavy responsibility of setting monetary policy during a period of turmoil and far-reaching change in our economy. The trade and budget deficits have already been mentioned and have vastly complicated the conduct of our monetary policy, and you're forced to maintain the balance of possibly higher inflation due to the weakening of the dollar against the possible damage that higher interest rates could do to the economy.

Certainly we in Congress, we in the elective branch of this Government, have limited your ability to maneuver and balance these complex forces. I'm cheered by the cautious optimism of your statement and I hope that we here in Congress can benefit from your guidance as to what we can do during this session to assure that that progress continues.

The CHAIRMAN. Thank you, Senator Bond. Before we begin I have statements for the record from Senators Dixon, Sasser, and D'Amato.

FEBRUARY 24, 1988

STATEMENT OF SENATOR ALAN DIXON

SENATE BANKING COMMITTEE OVERSIGHT HEARING
ON
THE CONDUCT OF MONETARY POLICY

MR. CHAIRMAN, I AM PLEASED TO BE HERE THIS MORNING AS THE BANKING COMMITTEE CONDUCTS ITS SEMI-ANNUAL MONETARY POLICY OVERSIGHT HEARINGS AS MANDATED BY THE HUMPHREY-HAWKINS ACT. WE HAVE THE DISTINGUISHED CHAIRMAN OF THE FEDERAL RESERVE BOARD, ALAN GREENSPAN, BEFORE THE COMMITTEE TODAY, AND I LOOK FORWARD TO HIS TESTIMONY.

AT THE OUTSET, I WANT TO SAY THAT I SHARE CHAIRMAN GREENSPAN'S VIEW THAT THE SETTING FOR MONETARY POLICY THIS YEAR "IS MORE THAN NORMALLY COMPLEX". IT SEEMS TO ME THAT THE OUTLOOK FOR THE ECONOMY IS MORE THAN A LITTLE UNCERTAIN, AND I AM SURE THAT UNCERTAINTY MAKES THE FED'S JOB MUCH MORE DIFFICULT.

FUNDAMENTALLY, WE STILL DO NOT HAVE THE KIND OF COORDINATION BETWEEN MONETARY POLICY AND FISCAL THAT WE NEED. MONETARY POLICY CANNOT SOLVE OUR ECONOMIC PROBLEMS BY ITSELF. WE ALSO NEED THE KIND OF SOUND FISCAL POLICY THAT WILL HELP REDUCE OUR TERRIBLE TWIN TRADE AND BUDGET DEFICITS.

STATEMENT OF SENATOR JIM SASSER

MR. CHAIRMAN, TODAY WE RECEIVE THE FIRST BIENNIAL REPORT ON MONETARY POLICY BY FEDERAL RESERVE CHAIRMAN GREENSPAN. DOESN'T SEEM POSSIBLE THAT THIS IS DR. GREENSPAN'S FIRST REPORT TO US ON THIS IMPORTANT ISSUE. HE HAS APPEARED BEFORE THE COMMITTEE ALREADY ON A NUMBER OF CRITICAL ISSUES.

AND DR. GREENSPAN HAS INDEED HAD A GREAT DEAL OF EXPERIENCE IN THIS AREA ALREADY. HIS ACTIONS IN ENSURING THAT THERE WAS ADEQUATE LIQUIDITY IN THE SYSTEM FOLLOWING THE OCTOBER STOCK MARKET CRASH ARE UNIVERSALLY CREDITED WITH AVERTING MUCH MORE SERIOUS ECONOMIC CONSEQUENCES.

TODAY WE WILL HEAR AGAIN THAT THE LINK BETWEEN GROWTH OF THE MONEY MEASURE M1 AND THE ECONOMY IS VERY UNCERTAIN. WE WILL HEAR

10:11 AM

CERTAINLY, OUR ECONOMY IS BECOMING ENORMOUSLY COMPLEX AND INCREASINGLY INTEGRATED WITH OTHERS WORLDWIDE. IN THESE VOLATILE TIMES IT MAKES MORE SENSE THAN EVER TO CONSIDER THE NUMEROUS OTHER FACTORS THAT AFFECT THE ECONOMY, RATHER THAN ADHERING RIGIDLY TO GROWTH IN THE MONEY AGGREGATE.

I AM INTERESTED IN HEARING DR. GREENSPAN'S VIEWS ON OUR ECONOMIC PROSPECTS, AND WHATEVER SUGGESTIONS HE MIGHT HAVE FOR US AS TO HOW WE SHOULD ADDRESS THE BUDGET AND TRADE ISSUES THAT CONTINUE TO PLAGUE US. THANK YOU.

STATEMENT OF SENATOR ALFONSE M. D'AMATO

FEBRUARY 24, 1988

I WOULD LIKE TO WELCOME CHAIRMAN GREENSPAN TO THE COMMITTEE FOR HIS FIRST EFFORT TO EXPLAIN THE FED'S MONETARY POLICY REPORT. YESTERDAY, CHAIRMAN GREENSPAN DELIVERED THIS REPORT TO THE HOUSE BANKING COMMITTEE AND IT MUST HAVE BEEN FAIRLY WELL RECEIVED BECAUSE THE FINANCIAL MARKETS OF THE WORLD, WHICH HAVE BEEN RELATIVELY FRAGILE LATELY, REMAINED STABLE.

TO DATE, CHAIRMAN GREENSPAN AND HIS COLLEAGUES AT THE FED DESERVE CONSIDERABLE CREDIT FOR THEIR PERFORMANCE. THE FED RESPONDED SWIFTLY AND CORRECTLY TO AVERT THE LIQUIDITY CRISIS PRECIPITATED BY THE EVENTS OF OCTOBER 19TH AND 20TH. IN HIS STATEMENT TODAY, CHAIRMAN GREENSPAN UNDERScores THE NEED TO IMPLEMENT POLICIES WHICH WILL KEEP THE ECONOMIC EXPANSION ROLLING ALONG TO AVOID A RECESSION. IN FACT, THIS IS THE MOST FORTHRIGHT STATEMENT BY ANY FED CHAIRMAN REGARDING THE FED'S INTENTIONS IN RELATION TO THE CONTINUED EXPANSION OF THE MONEY SUPPLY. TOO OFTEN IN THE PAST THE FED HAS BEEN LESS THAN EXPLICIT WITH REGARDS TO ITS INTENTION IN THIS AREA.

FURTHER, I HOPE THAT WE CAN GET INTEREST RATES DOWN A BIT LOWER BECAUSE LOWER INTEREST RATES WILL PROVE TO BE A REAL STIMULUS TO THIS ECONOMY. CHAIRMAN GREENSPAN ALSO CITES THE PRECARIOUS BALANCE BETWEEN MONETARY GROWTH AND INFLATION. HOWEVER, THE EXPERIENCE OF THE EARLY 80'S HAS TAUGHT US THAT A LITTLE INFLATION ACCOMPANYING MONETARY GROWTH AND ECONOMIC EXPANSION IS FAR BETTER FOR THE ECONOMY AND THE AMERICAN PEOPLE THAN A RECESSION.

FINALLY, AS WE OBSERVED DURING OUR MARKET CRASH HEARINGS, THE U.S. AND FOREIGN ECONOMIES ARE INEXTRICABLY INTERTWINED. IN HIS STATEMENT, CHAIRMAN GREENSPAN DISCUSSES THE PROSPECTS FOR DOMESTIC ECONOMIC GROWTH. HOWEVER, THE STATEMENT IS RELATIVELY SILENT ON THE PROSPECTS FOR FOREIGN ECONOMIC GROWTH. I WOULD HOPE HE COULD OFFER SOME INSIGHT ON THIS TOPIC SINCE THE BALANCING OF THE TRADE DEFICIT IS LARGELY DEPENDENT UPON THE ABILITY OF FOREIGNERS TO PURCHASE U.S. GOODS.

I LOOK FORWARD TO YOUR STATEMENT.

The CHAIRMAN. Mr. Chairman, can you enlighten the committee on when the vacancy on the Federal Reserve Board is likely to be filled, when the President will nominate a Member to take that position?

Mr. GREENSPAN. The only thing I can see, Mr. Chairman, is that it is under active consideration by the White House and hopefully a conclusion will be reached relatively shortly. I know that nothing, to my knowledge, is immediately pending, but I do know there is active consideration going on.

The CHAIRMAN. Fine. I'm sorry to interrupt your opportunity to read your statement. It's an excellent statement. Go right ahead.

**STATEMENT OF ALAN GREENSPAN, CHAIRMAN, BOARD OF
GOVERNORS, FEDERAL RESERVE SYSTEM**

Mr. GREENSPAN. Thank you very much, Mr. Chairman. I will excerpt from my written remarks and request that the full text be incorporated in the record.

The CHAIRMAN. It will be printed in full in the record.

[The complete prepared statement of Alan Greenspan follows:]

1988

MONETARY POLICY OBJECTIVES

Testimony of Alan Greenspan, Chairman,
Board of Governors of the Federal Reserve System

February 23, 1988

Testimony of Alan Greenspan Chairman, Federal Reserve Board

Mr. Chairman, members of the Committee, I appreciate this opportunity to appear before you to discuss the conduct of monetary policy and the economic and financial situation. You have received the more formal report of the Board of Governors detailing the economic and financial situation and reviewing our policy actions in 1987, and presenting our approach to monetary policy this year.

The setting for monetary policy for the year 1988 and beyond is more than normally complex. While the economy itself is well into the sixth year of expansion, the forward momentum of that expansion has been brought into question, and we continue to run sizable external deficits with associated dependencies on foreign savings; at the same time, inflation rates, while below those of earlier in the decade, are still high in a long-term perspective. Moreover, uncertainties persist about key indicators of policy—the monetary aggregates—and their relation to the performance of the economy. Our approach to monetary policy in 1988 will require a delicate balancing of considerations which must take account of the difficult multi-year challenge we face in seeking to wind down our external deficits in a manner that is consistent with the maintenance of sustainable growth in the U.S. and the world economy in 1988 and beyond.

Toward this end, the Federal Open Market Committee (FOMC) two weeks ago set somewhat lower target ranges for 1988, consistent with a moderate pace of monetary expansion this year. The ranges for M2 and M3 are 4 to 8 percent; for debt, we have set a monitoring range of 7 to 11 percent. The annual ranges are wider than in the past, recognizing that the linkage between money and credit growth and economic performance has become noticeably looser in recent years.

Before discussing our monetary policy plans for 1988 in detail, I would like to review with you the developments of the past year.

1987 in Perspective

The year 1987 was a time of economic transition and, like many periods of change, it had its difficult moments. Nevertheless, clear progress was made in achieving a healthier, more balanced economy. For the year as a whole, output and employment expanded strongly. As measured by the gross national product, production increased nearly 4 percent from the fourth quarter of 1986 to the fourth quarter 1987, according to the Commerce Department's preliminary estimates. Almost 3 million persons were added to payrolls over this period. And the civilian unemployment rate dropped to about 5¾ percent—the lowest level in this decade.

We achieved this growth with a better relationship between domestic spending and domestic production. Growth of private domestic final purchases has slowed progressively from 7¼ percent in 1983 as the economy emerged from recession to about 1 percent last year. Meanwhile, real exports of goods and services rose more than 15 percent over the four quarters of 1987, as our international competitiveness was enhanced by the success of business and labor in increasing productivity and restraining cost pressures. In addition, the lower level of the dollar on foreign exchange markets, because much of it was not passed through into wage and other costs domestically, also helped our firms price more competi-

tively in foreign markets and to compete with imports in the United States. The trade sector improvement accounted for more than a quarter of the overall gain in GNP.

One aspect of the improved trade situation was better balance of our economy internally, with previously lagging sectors showing particular strength. The manufacturing sector revived in 1987; industrial production in manufacturing surged by 5½ percent between December 1986 and December 1987, and capacity utilization rose to its highest level in seven years. For example, output of steel rose especially strongly, which was the main factor in bringing capacity utilization in this industry from about 65 percent at the end of 1986 to above 90 percent at the end of 1987. And other areas of our economy that had been notably depressed earlier in the 1980s, such as farming, mining, and oil extraction, showed some signs of improvement.

The robust growth of the economy—in combination with the budgetary actions of the Congress and the President, and a one-time boost from tax reform—brought about a major reduction in the federal budget deficit last year. To be sure, the flow of federal red ink still was heavy, but last December's agreement was at least a first step in needed actions for the future.

On the negative side, inflation increased in 1987. This development was not altogether surprising, given the bounce-back in energy prices early in the year and the effects on import prices of the decline in the dollar. Although wage gains have remained subdued, we clearly need sustained effort to bring about a more stable price level.

As you may recall, the Federal Reserve set ranges for monetary growth in 1987 that were 1/2 percentage point lower than in 1986. We also noted that we would be conducting monetary policy with an eye toward a variety of economic indicators, including the strength of the economy, pressures on prices, and developments in international markets, as well as money growth relative to the ranges.

Although the aggregates from very early in the year tended to run low relative to the ranges, the challenge as we perceived it through much of 1987 was less to buoy money growth than to prevent one-time price rises related to developments in energy and foreign exchange markets from becoming rooted in a renewed inflation process. Concerns about potential inflationary pressures were clearly manifested in financial markets as well. During the spring and again in late summer, inflation worries pushed up commodities prices and long-term interest rates, and heavy downward pressures on the dollar developed in light of growing pessimism about the prospects for significant improvement in U.S. external balances; concerns about the financing of our external deficit in turn apparently added to pressures on interest rates during these episodes. In view of the inflationary potential, the Federal Reserve increased somewhat restraint on reserves in both episodes, and in September raised the discount rate from 5½ to 6 percent.

The balance of risks shifted following the stock market collapse of October 19. The Federal Reserve immediately modified its approach to monetary policy in light of the turbulent financial market conditions. During the crisis, the System temporarily altered its focus somewhat from reserve positions to more direct measures of money market pressures, and took a number of steps to ensure adequate liquidity in the financial system. Moreover, we encouraged some decline in short-term interest rates, as a precautionary step in light of the possibility that the contraction in financial wealth and the deterioration in consumer and business confidence might lead to a significant drop-off in spending.

These actions helped to restore a degree of confidence in financial markets. As this occurred, the Federal Reserve returned some way toward our earlier focus on reserve positions in the day-to-day implementation of policy. But I think it is fair to say that markets still are exhibiting a certain edginess, and we can't be sure yet that normal market functioning has been fully restored following the events of October. In addition, the effects of the stock market events on the economy may not be fully evident. Indeed, indications of some softening in the economy as the year began, against the background of a more stable dollar in foreign exchange markets, led us to take a further small easing step a few weeks ago.

In the context of a monetary policy that, for much of the year, needed to counter inflationary pressures, and in light of the very rapid money growth in 1986 and marked variations in velocity in recent years, modest expansion of the monetary aggregates in 1987 was viewed as acceptable and appropriate. As market interest rates rose, interest rates on deposits became less competitive. This encouraged a shifting away from monetary assets, and growth of all of the monetary aggregates slowed sharply. In addition, some special factors may also have dampened money growth last year, such as the effects of the new tax law, changes in bank funding sources, and evolving business practices with respect to cash management and compensating balances. M2 and M3 grew 4 and 5½ percent over the four quarters of last year, respectively, leaving them below and just at the lower ends of their annual ranges. M1 increased 6 percent.

Debt growth slowed to the midpoint of its monitoring range. The progress in reducing the federal budget deficit helped reduce borrowing, and debt issuance by the private sector dropped off as well. Debt growth could scarcely be characterized as slow; at 9½ percent, it continued the pattern of increases relative to GNP.

Economic Outlook and Monetary Policy for 1988

In formulating its monetary policy plans for 1988, the FOMC sought to further a number of complementary objectives. The Committee continued to focus on maintaining the economic expansion and on progress toward price stability, which was seen as a necessary condition for long-term sustained economic growth. It also recognized that satisfactory performance of the economy depended on moving over time toward better balance in our external accounts.

For 1988, Committee members generally were optimistic that policy could be geared to meeting these goals. Most members foresee continued economic growth next year with no significant pickup in inflation, although at current levels of resource utilization and with rising prices of imports likely from recent dollar declines, vigilance against signs of a re-emergence of greater inflationary pressures will continue to be needed. The central tendency of FOMC members' and other Reserve Bank presidents' forecasts is for growth in real GNP of around 2 to 2½ percent from the fourth quarter of 1987 to the fourth quarter of 1988—slower than in 1987, but likely close to what is sustainable pace over the longer haul. The unemployment rate may not drop further, but employment gains could again be substantial and better distributed across industries and geographical regions. Much of the impetus to growth is expected to come from a rapid pace of expansion of net exports of goods and services, which would promote the process of adjustment to better balance internally and externally. This should involve slow growth in domestic demand, probably encompassing damped gains in consumption and a much reduced pace of inventory building from the pace near year-end.

Recent patterns of wage negotiations and settlements do not seem to indicate any imminent break from the restrained behavior of the mid-1980s. Although capacity utilization has risen

in our manufacturing sector, bottlenecks are not as yet a problem, and are not expected to become one if growth follows the subdued path of the Committee's outlook for real GNP. Even so, we cannot be complacent about the potential for higher inflation; by the time an acceleration of costs and price pressures were to become evident, the inflation process would already be well entrenched.

With its objectives in mind, as I noted earlier, the FOMC established ranges for M2 and M3 of 4 to 8 percent over the four quarters of 1988, with the debt of domestic nonfinancial sectors expected to increase between 7 and 11 percent. The growth ranges for money represent a decrease from those for 1987—by one percentage point in terms of the midpoints. This reduction is viewed as another step in the longer-term process of reducing targeted money growth to rates more in line with reasonable price stability. Moreover, the lower end of the ranges allows for the possibility of little pickup in money growth, especially M2, from 1987 under certain circumstances. If, for example, inflation expectations were to strengthen, market interest rates would tend to rise, and relatively slow money growth could again be an appropriate policy stance.

The FOMC does not anticipate that circumstances will call for such slow money growth. In fact, it expects some acceleration of monetary expansion in 1988, perhaps to around the middle of the ranges. But changing circumstances could easily require a considerably different outcome. In recognition of the unusual degree of uncertainty in the economic outlook and the large movements of money relative to income in recent years, we have widened the specified ranges for monetary growth from the more traditional three percentage points to four points.

This change was advisable partly because the linkage of money to spending and income appears to have become looser in the 1980s. As you know, most historical experience has suggested a fairly close relationship between spending and the quantity of money and, over a longer run, between money and prices. These relationships established the basis for adopting specific targets for growth of money in order to attain the ultimate goals of macroeconomic policy.

But these relationships appear to have changed considerably in the 1980s, partly reflecting the effects of deregulation, innovation, and changing technology. The spectrum of stores of value is extremely broad, extending from real capital, like plant and equipment and houses on the one hand, through stocks, bonds, and time deposits, to perfectly liquid currency and checking accounts on the other hand. Both households and businesses are continually adjusting their balance sheets and the allocation of their income flows between accumulation of financial assets of different sorts and acquisitions of goods and services.

Transactions balances are on the edge of the exchange of financial claims for goods and services. Regulation and established practices previously acted to enforce a marked separation between transactions money balances and all other balances, and supported a fairly close relationship between spending and the quantity of transactions money—as measured by M1—which allowed it to serve as a monetary policy guide. Businesses and households maintained transactions balances in demand deposits in fairly close relation to their spending requirements, and relied on other forms of deposits to serve as longer-run stores of value.

But now deregulation and improved information and communications technologies have blurred distinctions between transactions balances and other assets. Businesses can move unneeded transactions balances at each day's close into Eurodollars, repurchase agreements, commercial paper, or CDs, at little cost, with the choice among these instruments often depending on yield differentials of only a few basis points. In addition, firms now can maintain balances in hybrid instruments like MMDAs and money funds and retrieve them nearly as easily as they can from a regular checking account. Remaining business demand deposits serve importantly as balances that compensate banks for services, and these arrangements, too, are evolving over time. For households, NOW accounts—interest-earning, fully checkable deposits—are important savings as well as transactions vehicles, and have contributed greatly to the decreasing usefulness of M1 as a monetary target.

This process of innovation and deregulation has affected the behavior of the monetary aggregates in a number of ways, only some of which we fully understand. To some extent, it seems simply to have introduced more "noise" in the money-spending relationship. In addition, though, it appears that one important consequence has been to increase the sensitivity of the demand for monetary assets to changes in market interest rates—at least over the short run. While deregulation has allowed institutions to vary the rates on deposits, in practice returns on many categories of deposits are adjusted sluggishly in response to changes in market rates, giving rise to relatively large swings in incentives to hold these instruments.

NOW accounts may be the most prominent example of this. Because these accounts are close substitutes for other liquid instruments as a store for savings, holders of NOW accounts are highly sensitive to changes in interest rates on these alternative investments. They place a larger volume of funds into NOW accounts when rates on other deposits at banks and thrifts are relatively low and deposit smaller amounts or actually draw down checking account balances when investment opportunities are more attractive elsewhere.

Widespread compensating balance arrangements for businesses imply a strong interest responsiveness of demand deposits, as well. Changes in market interest rates alter the earnings value of these deposits to banks, with resulting adjustments to the balances required to compensate the bank for a given package of services.

M2 is a broader collection of the public's liquid assets, and as a consequence internalizes some of the shifts that have plagued M1. But M2 is still somewhat limited in its coverage of financial wealth held in liquid forms, and shifts between M2 and other financial assets may not by themselves imply changes in spending tendencies. Such shifts have been responsive to movements in the rates on alternative investments relative to returns on M2 balances. This sensitivity, though considerably less than for M1, also seems to have increased since the late 1970s, perhaps as improved information and communications technologies have facilitated transfer of funds between M2 assets and those outside this aggregate. Over the longer run, once rates on instruments in M2 adjust to changes in market rates, this aggregate tends to grow in line with income, as it has on average over the postwar period.

M3 adds to M2 a number of the managed liabilities that banks and thrifts use to supplement their retail deposits in order to fund credit expansion. Unlike M1 and M2, it is highly responsive to the decisions of institutions as to how fast to expand their balance sheets and what particular sources of funds to rely on. Small changes in interest rate relationships can have very substantial impacts on the funding decisions of these institutions and consequently on M3, without major implications for income and prices.

M3, then, is determined largely by the decisions of depository institutions on how many liabilities and of what type they wish to supply to the markets. The managed liabilities in M3 are very close substitutes for other money market instruments in the public's portfolio. M1 and M2, by contrast, can be thought of as depending more directly on the public's desire to hold the assets included in these aggregates, given the returns on various alternative investments as well as levels of wealth and income. Banks and thrifts, of course, do vary the offering rates on their M2-type deposits in order to affect the quantity of these deposits they receive. But these adjustments tend to lag market rates, and while the M2-holding public is sensitive to alternative yields, it is not nearly as sensitive as the money market investors holding managed liabilities. In these circumstances, the connection between M1 and M2 and the economy rests importantly on the effect of interest rates on the demand for these aggregates. For example, a more expansive monetary policy, increasing reserve availability or lowering the discount rate, boosts demand for these aggregates as interest rates decline, and with a lag stimulates economic activity.

Given uncertainties about how financial market pressures in fact may need to vary in response to changing conditions in the economy, it is difficult

in advance to decide on the appropriate growth of an aggregate that is sensitive to movements in interest rates. Such growth could range over a fairly wide spectrum, and still be consistent with satisfactory performance of the economy. In these circumstances, the Committee decided that a modest widening of the ranges for M2 and M3 would better encompass appropriate monetary growth, while still providing a guide to policy.

This analysis also underlies our decision again: not to establish a target range for M1. We have monitored the behavior of M1 and conducted careful analyses of its properties. While some of M1's erratic behavior remains unexplained, we now believe that most of its unusual movements relative to income in recent years is attributable to a heightened and now quite large interest elasticity.

In view of this behavior, our calculations suggest that something like a seven-percentage-point range would be needed for M1 in order to encompass the same range of uncertainties as is captured by our four-percentage-point range for M2. Such a wide range would be of little use in the conduct of monetary policy or in communicating the stance of monetary policy to the public.

One should not conclude from this that the Federal Reserve is giving up on monetary targeting. We are not. The linkages between money on the one hand and prices and spending on the other may have loosened, but that is mainly a problem over the short run. The chain still exists. We are continuing to study these relationships carefully, at some point, the shorter run link could well become tighter again. In any event, economic theory as well as historical evidence are quite persuasive that, over the long run, money, income, and prices tend to move together.

The FOMC expects to achieve its aggregate ranges for 1988. We will, however, need to continue to interpret the incoming information on these measures in light of other data on the performance of the economy and prices, and other indicators of the impact of monetary policy.

The Challenges Ahead

We face formidable challenges over 1988 and beyond in meeting national economic goals of sustaining growth and progress toward price stability. Some of these relate to the short-run outlook for the economy, as the possible effects of the stock market decline and the build-up of inventories late last year work through in 1988.

But our more fundamental task remains managing the process of restoring internal and external balance that is now underway. This is a challenge that cannot be negotiated by the Federal Reserve alone. It will require complementary and consistent actions by our colleagues in the Congress and the administration, as well as by our major trading partners.

For the United States, the most direct and beneficial approach would be to address the problem at its major source—the federal budget deficit. Reducing the deficit further would give us the opportunity to add to domestic saving and reduce dependence on foreign capital, while still encouraging much-needed investment spending. Because the United States is now operating at relatively high rates of resource utilization, domestic demand must be restrained if our international sector is to expand without more inflation. In the absence of fiscal restraint, greater pressures would be felt in financial markets, with negative consequences for investment and other private spending.

While recognizing the need to supply the liquidity required to keep our economy expanding, monetary policy cannot lose sight of the need to keep inflation pressures under control. We cannot permit the price level adjustments associated with restoring external balance to feed through into a renewed inflation process. Escalating prices and costs would reverse the hard-won gains in our

international competitive position, leading inevitably to more difficult and wrenching adjustments down the road. Progress toward price stability is the foundation on which the longest peacetime expansion in our nation's history has been built, and continued efforts along this line will be the framework for future economic advances.

Our gains in international competitiveness have reflected a number of factors. But we should not underestimate the effects of the efforts of business and labor over recent years to enhance productivity and restrain costs. And government has made a contribution through deregulation and through the absence of major initiatives that would involve higher business costs.

Our adjustment process by definition has a counterpart for our trading partners. They must promote expansion in their demands and reduce trade barriers to assure active and receptive markets for exports from the United States and elsewhere.

The build-up of imbalances occurred over a period of years, and has involved major adjustments to the structure of economies here and abroad. These will not be reversed easily—but they must be addressed. We must resist the lure of "short-cuts", such as protectionist measures which would only entrench inefficiencies and reduce living standards at home as well as around the world. We can make this difficult transition, and monetary policy has a key role to play. But if we are to have a chance of doing so without dislocations and detours in our national economic advance, we will have to work together to utilize all the tools at our command.

1988

MONETARY
POLICY
OBJECTIVES

Summary Report to the Congress on Monetary Policy pursuant to the Full Employment and Balanced Growth Act of 1978. February 23, 1988.

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Monetary Policy and the Economic Outlook for 1988

The national economy has scored major gains in the past year. Growth of real gross national product at 3 3/4 percent over the four quarters of 1987 outstripped most expectations, and the unemployment rate dropped below 6 percent for the first time in this decade. With such sectors as agriculture, mining, and manufacturing benefiting considerably from an improved competitive position internationally, the expansion of the economy was better balanced than in 1985-86. Wage increases remained moderate and contributed to favorable cost trends in many sectors. However, a rebound in oil prices, coupled with the effects of the dollar's decline on the prices of imported goods generally, pushed the rate of price inflation back up to the 4 percent range by most measures.

At times last year, soaring commodity prices, sharp declines in the dollar, and bond prices signaled the possibility of greater inflationary dangers. With the economy moving toward higher levels of resource utilization, the Federal Reserve had to be especially alert to these and other indications of pressures that might have led to a significant departure from the longer-run trend toward price stability. In these circumstances, monetary policy was characterized by a tendency toward greater restraint through last October. This was reflected in a moderate rise in money market interest rates, which in turn damped growth of the monetary aggregates. While M3 grew at a pace equal to the lower bound of the range set for the year by the Federal Open Market Committee (FOMC), M2 fell short of its range. After the plunge in the stock market in October, the System focused its efforts primarily on ensuring adequate liquidity in the economy, and since that time interest rates have reversed a good part of the rise that occurred earlier in 1987.

However, conditions in financial markets have yet to return fully to "normal," and the edginess of participants continues to be reflected in volatility and fairly sizable risk premia. Moreover, there have been some signs of weakness in the economy recently. In particular, the fourth quarter of 1987 was marked by a sharp rise in inventories in a few sectors, and there were indications of a slackening in labor demand early this year. Against this backdrop,

the System eased the pressures a bit further on reserve positions of depository institutions in the past several weeks.

But while the Federal Reserve has had to be responsive to the risks of an economic downturn, it has not lost sight of the potential influence of policy actions on longer-term trends in the economy. The United States is in the process of an important readjustment in the balance of economic activity, after a period of several years in which growth of domestic spending outstripped the pace of domestic production. Over that span, the trade balance moved into deep deficit, and the nation began to amass a huge net external debt. It is important to allow room for a significant improvement in our trade balance, especially given that high rates of capacity utilization and low unemployment, evident in many segments of industry, suggest the need for added care in maintaining progress toward price stability.

These considerations underlay the decisions of the Federal Open Market Committee when it met earlier this month to chart its monetary policy strategy for 1988. Such considerations also must be kept in the forefront as decisionmakers elsewhere in the government set policy. In particular, continuing fiscal restraint is crucial if we are to free up resources to finance productivity-enhancing private investment while bringing about an improved pattern of international transactions. Moreover, additional efforts at bringing greater coherence to policies, domestically and internationally, will promote greater stability in financial markets and greater internal and external balance to the economy.

Monetary Policy Plans for 1988

For 1988, the Committee set ranges of 4 to 8 percent for growth of M2 and M3. Expansion of money within these ranges, whose midpoints are one percentage point lower than those of the ranges for last year, would be expected to support economic growth at a pace that is consistent with continued external adjustment and progress over time toward price stability.

Ranges of Growth for Monetary and Debt Aggregates¹

Percent change, fourth quarter to fourth quarter		
	1988	1987
M2	4 to 8	5½ to 8½
M3	4 to 8	5½ to 8½
Debt	7 to 11	8 to 11

Decisions regarding the ranges for money and credit growth in 1988 were shaped in part by the experience of 1987. Last February, the FOMC established annual target ranges of 5½ to 8½ percent for both M2 and M3, both aggregates had increased more than 9 percent in 1986, but slower growth was expected to be consistent with the Committee's goal of sustaining business expansion while maintaining long-run progress toward price stability.

The deceleration proved sharper than anticipated, and in July, the Committee stated that growth for the year around the lower ends of these ranges, or even below them, might be acceptable in certain circumstances. Velocity had increased in the first half of the year partly under the influence of rising interest rates, and the Committee agreed that if inflation forces were to exhibit renewed strength and interest rates were to increase further in the second half of the year, continued slow money expansion might be appropriate. Rates did move upward again in the late summer, including an increase of 1/2 percentage point in the discount rate to counter potential inflation. M2 growth did in fact fall substantially short of the Committee's range, at 4 percent for the year, while M3 growth, at 5½ percent, was at the lower end of its range.

In light of the experience of recent years, which have been marked by large swings in velocity, the ranges for 1988 were widened somewhat. There is continuing "noise" in the relationship of money growth to economic activity; in addition, velocity of money is sensitive to changes in market rates of interest. This sensitivity means that even small changes in rates, caused by variations in spending or prices, can have sizable effects on the quantity of money the public wishes to hold. Combined with an uncertain outlook for the economy and inflation, this implies that wider ranges are needed to encompass possible outcomes for monetary growth consistent with satisfactory economic performance in 1988. Thus, while the Committee at this time expects that growth of M2 and M3 will be around the middle of their ranges, the outcome could differ if significant changes in interest rates are required to counter unanticipated weakness in aggregate demand or an intensification of inflation. In carrying out policy, the Committee will continue to assess the behavior of the aggregates in light of information about the pace of business expansion and the source and strength of price pressures, with attention to the performance of the dollar on foreign exchange markets and other indicators of the impact of monetary policy.

The FOMC will continue to monitor the growth of debt in 1988. The expansion of the debt of domestic nonfinancial sectors is expected to slow somewhat from the 9½ percent pace of 1987, to around the middle portion of a 7 to 11 percent range. Growth of debt however, appears likely to outpace that of income, as it has for the past several years. Although the debt of governmental units may not grow as rapidly as it did last year, continued rapid expansion of private debt is probable, unless the current tide of corporate restructurings ebbs.

The Committee decided not to establish a range for M1 in 1988. It is especially difficult to anticipate the relationship between growth in this aggregate and the performance of the economy. The character of this aggregate had been affected more than the broader monetary aggregates by deregulation, because it now contains a large volume of interest-earning accounts that serve as savings as well as transactions vehicles.

Economic Projections

The uncertainties attending the present economic situation are reflected in a considerable range of forecasts among Committee members and other Reserve Bank presidents. However, the central tendency ranges encompass the vast majority of forecasts and point to growth in real GNP of 2 to 2½ percent in 1988.

This pace of activity would be expected to generate appreciable gains in employment over the year—about in line with labor force growth—and the civilian unemployment rate is projected to change little on balance between now and the end of 1988. Prices, as measured by the implicit price deflator for GNP, are expected to rise 3¼ to 3¾ percent, not appreciably different from the pace last year; consumer prices likely will increase a little faster than the deflator. The central tendency forecasts encompass the Administration's projections for real GNP, but are a bit more optimistic on prospects for price inflation.

Higher real net exports of goods and services are expected to provide a major impetus to U.S. economic activity in 1988. As reflected by the rapid growth of real exports of goods and services of more than 15 percent last year, the international competitiveness of U.S. producers has improved signifi-

cantly. By and large, U.S. manufacturers have let the foreign currency prices of their products decline with the depreciation of the dollar, achieving enhanced profitability through greater volume and aggressive efforts to increase efficiency and control costs. This enhanced competitiveness is expected to provide a further boost to export growth this year, while the increases in the relative prices of foreign goods apparently now in train should curb import growth. As a result, some improvement in the nation's current account balance is anticipated this year.

In contrast, domestic demand is expected to remain relatively subdued in 1988, as the economy moves toward a better balance between domestic spending and domestic production. Consumer demand probably will be damped to a degree by the loss of household wealth associated with the decline in stock prices last fall. Some increase in personal saving would be beneficial to the economy, as it would aid investment and help reduce our dependence on foreign capital. However, a severe retrenchment by consumers could have a significant deflationary effect; fortunately, the indications from surveys of household attitudes are that the sharp drop in confidence that occurred immediately after the October shock has been substantially reversed. *Hoisting activity should pick up some in coming*

Economic Projections for 1988 (percent)

	FOMC Members and other FRB Presidents		Administration
	Range	Central Tendency	
Change, fourth quarter to fourth quarter	Nominal GNP	4 to 6½	5.4
	Real GNP	1.2 to 3	2.1
	Implicit deflator for GNP	2½ to 4	3.9
Average level in the fourth quarter			
Civilian unemployment rate			

* Civilian unemployment rate.

months as a result of the recent decline in mortgage rates. In addition, business spending on plant and equipment should be buttressed by the desire to build upon the progress made in regaining international competitiveness and by already high levels of capacity utilization in a number of major industries.

Although real GNP should rise moderately for the year as a whole, the pattern of growth may be uneven over time. An adjustment to the runup in inventories that occurred in the fourth quarter of 1987 could produce relatively slow output growth during the first part of the year. Such an adjustment appears in process in the auto sector, in light of domestic automakers' current assembly schedules. There may also be similar patterns in a few other sectors, but at this time there are no signs that deep cutbacks in production will be necessary.

Although no significant change is anticipated in the overall pace of inflation this year, the primary source of the rise in prices is likely to change. Assuming relative stability in world oil prices, domestic energy prices should increase only a bit this year after their sharp rebound in 1987. However, prices of non-oil imports likely will continue to rise substantially further in the wake of the decline in the foreign exchange value of the dollar in 1987, providing continuing impetus to domestic inflation. This impulse to prices associated with the dollar's

depreciation is an unavoidable component of the process of correcting external imbalance, as an increase in the relative price of foreign goods encourages exports and discourages imports. However, if we are to maintain and extend the progress made in the 1980s toward price stability, it is crucial that business and labor continue to exercise restraint in price and wage behavior. The forecasts of the FOMC members and other Reserve Bank presidents anticipate that such a pattern will persist through this year. It is important, too, that the Congress remain mindful of the effects of legislation on the cost structure of American industry.

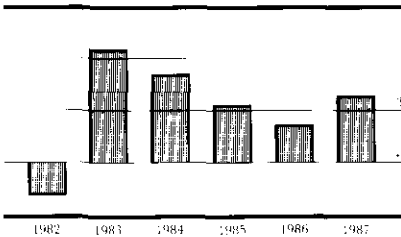
The forecasts of the Federal Reserve policymakers also assume further progress in reducing the federal budget deficit. Continuing evidence of fiscal restraint is viewed as crucial in maintaining financial conditions that are conducive to balanced growth and to an improved pattern of international transactions. It is critical that the package of deficit-reduction measures for 1988 and 1989—agreed to in December—be fully implemented.

The Performance of the Economy during the Past Year

The economy completed a fifth consecutive year of expansion in 1987, with real gross national product increasing about 3 3/4 percent over the four quarters of the year.* The overall growth in output not only was greater than in 1986, but was better balanced across industries and regions of the country. In addition, the rise in activity supported a net gain of more than three million jobs last year, and the civilian unemployment rate stood at 5.8 percent in January of this year, nearly a percentage point below its level a year-ago.

Real GNP

Percent change from end of previous period, annual rate



Virtually all broad measures of inflation—after dropping sharply in 1986—rebounded in 1987 to about the pace seen in 1984 and 1985. In large part, the pattern of price movements over the past two years reflected developments in oil markets, where prices rebounded last year after a sharp drop in 1986. However, prices also rose sharply for some imported consumer goods and, at the producer level, for a number of industrial commodities. In contrast, wage trends remained restrained last year, although tightening labor markets and the faster pace of inflation stemmed the pattern of wage deceleration evident in previous years.

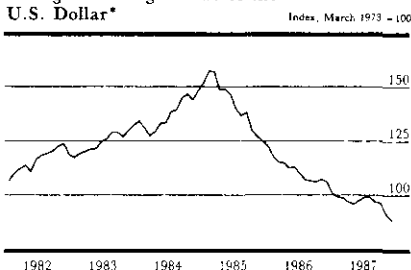
A number of sectors that had been depressed in recent years began to show signs of improvement in 1987. The turnaround was most pronounced in manufacturing, where production and employment, especially in capital goods and industrial materials industries, picked up sharply, both in response to stronger orders from abroad and to higher levels of capital spending by domestic producers. However, improvement also was apparent in the domestic energy sector, where, in response to the partial recovery in oil prices, oil drilling retraced a small part of its earlier precipitous decline. Higher exports and continued federal support in agriculture boosted farm income and helped bring about some firming in land prices.

The improvement in economic conditions last year could be traced to the effects of increased competitiveness on the volume of imports and exports. Nevertheless, the combination of a substantial increase in the value of oil imports and rising prices of non-oil imports more than offset an improvement in real net exports, and the nominal trade deficit widened to almost \$160 billion in 1987. In addition, a further erosion of net income on investments and other service transactions pushed the current account deficit above \$160 billion.

Although economic activity rose at a brisk pace for 1987 as a whole, the October stock market crash added substantial uncertainty to the prospects for continued economic growth at year-end. The sharp drop in stock prices reduced household wealth considerably, raising the possibility of a further slowing in consumer spending, domestic business investment, and housing construction.

*Except where noted, all percent changes are from the fourth quarter of the previous year to the fourth quarter of the year indicated.

Foreign Exchange Value of the U.S. Dollar*

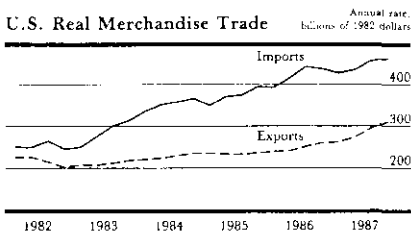


*Index of weighted average exchange value of U.S. dollar in terms of currencies of other G-10 countries (plus Switzerland). Weights are 1972-76 global trade of each of the 10 countries.

The External Sector

The dollar depreciated by 14 percent in nominal terms over the course of 1987 relative to a trade-weighted average of the currencies of the other G-10 countries, leaving the dollar by the end of the year at a level almost 45 percent below its February 1985 peak and close to its 1980 low. The decline in the exchange value of the dollar was resisted by substantial official intervention purchases of dollars and an apparent movement of differentials in long-term real interest rates between the United States and major foreign countries. Nonetheless, some depreciation in the dollar evidently was seen by participants in foreign exchange markets as a necessary element in the adjustment of the huge U.S. current account deficit.

U.S. Real Merchandise Trade



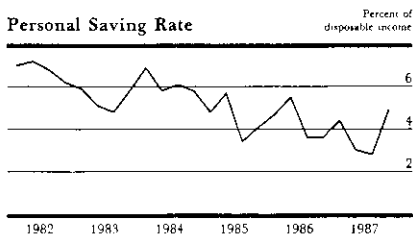
The U.S. merchandise trade deficit widened for 1987 as a whole, but leveled off on balance in the latter part of the year. The volume of imports increased, reflecting a moderate expansion in both oil and non-oil imports. Moreover, non-oil import prices moved up further in response to the continuing decline in the dollar through 1987, and, with oil prices also up sharply, imports rose substantially in value terms. Higher imports were matched, to a large extent, by merchandise exports, which also grew briskly in 1987.

Economic expansion abroad strengthened slightly in 1987 providing only limited support for the improvement in the U.S. trade position. In the other industrial countries, economic activity picked up somewhat by the middle of the year after a slow start, but on average real GNP grew less than 3 percent over the year.

The Household Sector

Spending by households, which had been a major contributor to growth in past years, slowed considerably in 1987. Real consumer spending rose less than 1 percent last year, after a 4 percent gain in 1986.

Personal Saving Rate



In large part, the cutback in spending reflected smaller increases in real disposable income. Substantial employment growth and increases in farm and interest income fueled continued gains in nominal incomes. However, a pickup in consumer price inflation eroded much of that rise and reduced real income growth to about 2 percent last year, versus 3½ percent in 1986.

In general, consumers cut back their expenditures on both durable and nondurable goods, while spending on services continued to increase at about the pace of recent years. Within the durables category, sales of new cars fell from 11½ million units in 1986 to about 7.9½ million units last year. Some of that dropoff can be traced to an especially slow pace of sales in early 1987, as consumers shifted automobile purchases into 1986 to take advantage first of major sales incentives and then of the sales tax deduction available only under the old tax law.

Associated with the more cautious spending pattern of consumers in 1987 was a slowing in household debt accumulation. Consumer installment debt decelerated sharply because of high debt burdens of households and a shift toward home equity loans in response to the new tax law.

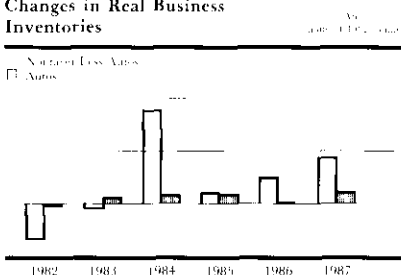
Housing starts totaled 1.62 million for the year as a whole, about 10 percent below the 1986 total and the lowest in five years. Single-family homebuilding began the year at a brisk pace, but weakened considerably as conventional mortgage interest rates rose beginning in April, reaching about 11½ percent for fixed-rate loans by mid-October. Although interest rates on mortgages have dropped substantially since then, the stimulative impact of that change on housing demand may have been offset thus far by stock market losses and reduced consumer confidence. In the multifamily market, activity also weakened over the past year, as near record-

high vacancy rates on rental units and tax-law changes reduced the profitability of rental housing and continued to deter building in that sector.

The Business Sector

Business spending on plant and equipment rose about 3½ percent in real terms in 1987. In large part, investment spending was associated with the overall pickup in economic activity. However, financial conditions also were conducive to spending, with cash flows strong and the costs of external capital fairly attractive through much of the year.

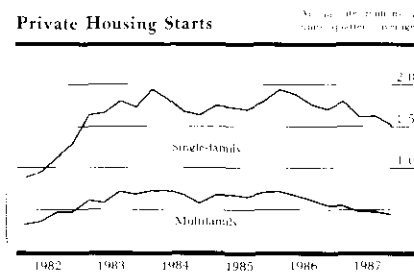
Changes in Real Business Inventories



For equipment, the year began on the weak side, with first-quarter spending down sharply after firms shifted expenditures into late 1986 to take advantage of the favorable treatment of investment under the depreciation provisions of the old tax law. However, investment in equipment rebounded sharply in the second and third quarters of last year.

Outlays for nonresidential structures also turned up last year after a sharp drop in 1986. Much of the turnaround in spending reflected an improvement in the energy sector in response to higher oil prices.

Private Housing Starts



Business inventory investment generally moved in line with sales over most of 1987, but a sharp accumulation of stocks in the fourth quarter suggested the possibility of excess inventory levels at some retailers. In manufacturing, inventories changed little on balance over the first half of the year, but rose considerably in the second half as activity picked up. Stockbuilding was most evident in capital goods industries, where orders and shipments strengthened substantially, as producers added supplies in anticipation of higher production levels. In the retail trade sector, inventories of goods other than automobiles also rose over the year, pushing the inventory-sales ratio to a relatively high level by December. The accumulation was most pronounced for home goods such as furniture and appliances and for apparel. At auto dealers, stocks generally rose in 1987, and, at year-end, supplies appeared to be well above desired levels despite the prevalence of special incentive programs and production cutbacks late in the year.

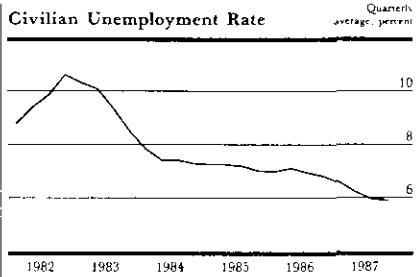
The Government Sector

Last year, there was significant progress toward reducing federal budget deficits. The FY 1987 deficit, at \$150 billion, was about a third lower than the record level of the previous year. The Administration and Congress reached agreement on deficit reduction actions totaling more than \$30 billion in FY 1988 and about \$46 billion in FY 1989. However, a number of factors that raised receipts and lowered outlays in FY 1987 are not likely to be repeated, and—absent further legislative action—deficits could expand again unless there are particularly favorable economic circumstances.

Labor Markets

Employment increased three million over the 12 months of 1987, as the pickup in economic activity led employers to add workers at a brisk pace. In contrast to prior years when the labor market was characterized by sharp disparities across sectors, the strengthening in hiring in 1987 was widespread by industry. In manufacturing, employment edged up over the first half of the year and then rose substan-

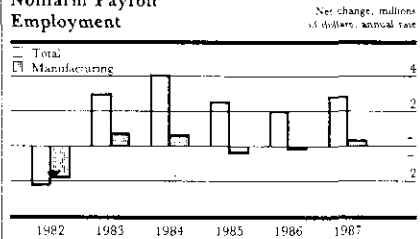
Civilian Unemployment Rate



tially in the second half in response to the sharp gains in industrial production. Moreover, the expansion of jobs in the trade, service, and finance industries remained sizable during most of 1987. Hiring in trade and finance apparently slowed in the latter part of the year in the wake of sluggish consumer spending and the stock market crash.

The demand for labor considerably outpaced increases in labor supply, and the civilian unemployment rate dropped nearly 1 percentage point over the year to 5¾ percent at year-end—the lowest level since 1979. The jobless rate for adult men moved down to about 4½ percent by the end of last year, reflecting strong growth in the industrial sector. The rate for adult women fell to around 4¾ percent early in the year, but changed little in the second half.

Nonfarm Payroll Employment



Unit labor costs in the nonfarm business sector rose only 1.3 percent last year, after a 2 percent increase in 1986. The continued restraint in labor costs primarily reflected moderate compensation growth, as productivity gains for the sector as a whole have improved little from the sluggish pace of the 1970s. In contrast, manufacturers apparently have made significant progress in increasing efficiency and streamlining operations, and output per hour in this sector rose nearly 3.2 percent in 1987.

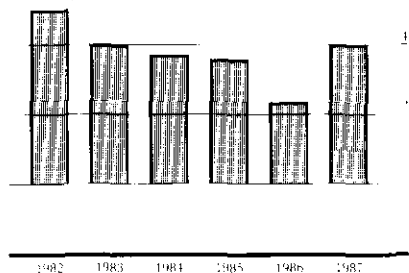
Price Developments

Inflation rebounded in 1987, largely reflecting higher energy prices and continued price hikes for imported goods. The fixed-weighted price index for GNP increased about 4 percent for the year as a

GNP Prices

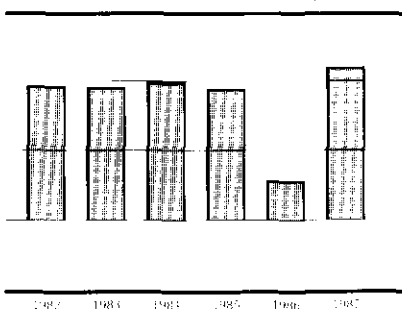
Percent change from end of previous period, annual rate

Fixed-weighted Price Index



Consumer Prices*

Percent change from end of previous period, annual rate



* Excludes prices of new automobiles

whole, after a 2.4 percent rise in 1986. The consumer price and producer price indices suggested an even sharper acceleration in prices over 1987, owing to the greater importance of energy in those indices. The consumer price index was up 4.2 percent in the 12 months ended December, after a 7 percent rise in 1986. The producer price index, which only includes prices of domestically produced goods, rose 2.4 percent over the year, after dropping 2.4 percent in 1986.

Prices for many industrial commodities also rose considerably in 1987. In addition to the increase in crude oil prices, copper prices more than doubled last year, and steel scrap prices were up 36 percent. To some extent, the sharp rise in commodity prices reflects the influence of dollar depreciation on markets for internally traded goods.

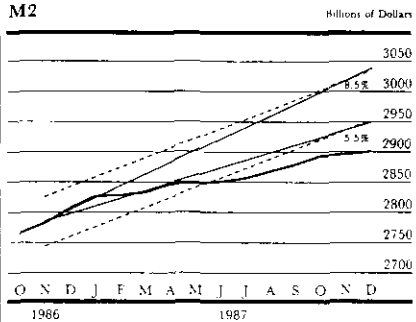
Monetary Policy and Financial Markets in 1987

While the Federal Open Market Committee set targets for some of the monetary aggregates, it was deemed necessary to maintain a flexible approach in conducting its operations. The Committee looked at a broad range of information in judging when or if to adjust its basic instruments—reserve availability and the discount rate—in response to deviations in monetary growth from expected rates. Such factors as the pace of business expansion, the strength of inflation and inflation expectations, as well as developments in exchange markets, played a major role in governing the System's actions. In light of the behavior of these other factors, growth in the targeted aggregates, M2 and M3, was permitted to run at or below the established ranges.

During episodes beginning in the spring and then again in late summer, the dollar came under sustained downward pressure and inflationary expectations appeared to be on the rise, partially in response to the dollar's weak performance. With the economy expanding at rates sufficient to produce rising rates of resource utilization, the FOMC sought some firming of pressures on reserve positions and increased the discount rate in September. When stock prices collapsed in mid-October, the resulting turmoil required that the focus of policy be on ensuring the liquidity of the financial system. Over the remainder of the year, emphasis in the conduct of open market operations shifted toward maintenance of steady and somewhat easier money market conditions to promote a return of stability to financial markets generally and to cushion the effects of the stock market decline on the economy.

Behavior of Money and Credit

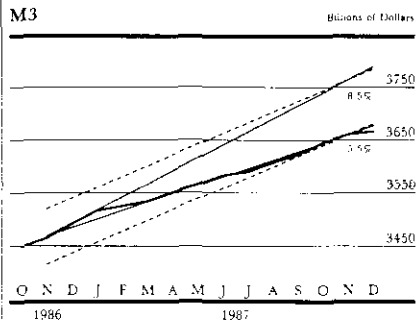
M2 increased only 4 percent in 1987, well below both the lower bound of its 5½ to 8½ percent annual growth range and its more than 9 percent rate of expansion over the preceding two years. The velocity of this aggregate picked up substantially, reversing a portion of the sharp decline that occurred in 1985-86. The rise in velocity may have reflected in part a number of special factors affecting the public's demand for M2 balances in 1987, including a much-reduced rate of saving out of income and a preference for drawing upon liquid assets—rather than using consumer credit—to



finance purchases. The latter preference occurred in the wake of tax reform measures which reduced the deductibility of nonmortgage interest payments.

However, much of the pickup in velocity appears attributable to increases in the competing returns on other assets, which raised the opportunity costs associated with holding M2 balances.

M3 was stronger than M2 over the year, expanding 5½ percent and ending the year at the bottom of its 5½ to 8½ percent annual growth range. Its faster growth reflected heavy reliance by depository institutions on large time deposits and on certain other instruments included in M3 but not in M2.



Both commercial banks and thrift institutions stepped up their issuance of wholesale managed liabilities to fund more asset growth than could be accommodated by greatly reduced inflows of core deposits. Even so, M3 growth was subdued relative to prior years, reflecting in part reduced overall needs for funds as asset expansion at banks and thrifts slowed. In addition, banks relied heavily on managed liabilities obtained from non-M3 sources, especially funds borrowed from their foreign branches.

Growth of M1 slowed to 6¼ percent from the very rapid 15½ percent increase posted the previous year, owing to a small decline in demand deposits and a sharply lower expansion of other checkable deposits. The velocity of M1 increased slightly, after

a record postwar decline a year earlier. The sharp slowing of growth and the abrupt turnaround in its velocity are indicative of the increased sensitivity to movements in market interest rates that has emerged for M1 in recent years. As suggested by its comparatively larger deceleration in 1987, M1 now appears to have a greater sensitivity to changes in interest rates than the broader aggregates.

The debt of domestic nonfinancial sectors grew 9½ percent last year, ending the year at the middle of the Committee's monitoring range of 8 to 11 percent. Debt expansion moderated considerably from the 13¼ pace of the two previous years, but still rose faster than income.

Growth of Money and Debt (Percentage changes)

Period		M1	M2	M3	Domestic Nonfinancial Debt
Fourth quarter to fourth quarter	1979	7.7	8.2	10.4	12.3
	1980	7.5	8.9	9.5	9.6
	1981	5.2 (2.5) ^a	9.3	12.3	10.0
	1982	8.7	9.1	9.9	8.9
	1983	10.2	12.1	9.8	11.3
	1984	5.3	7.6	10.4	14.2
	1985	12.0 (12.9) ^a	8.9	7.7	13.3
	1986	15.6	9.4	9.1	13.2
	1987			5.4	9.6
	Quarterly growth rates 1987	Q1	13.2	6.5	6.5
Q2		6.6	2.9	4.7	8.7
Q3		0.8	2.8	3.5	8.3
Q4		5.9	4.0	5.6	9.7

Implementation of Monetary Policy

During the first half of 1987, monetary policy was carried out in an atmosphere of increasing concerns about the course of inflation, arising in part from heavy downward pressure on the dollar. Growth of the economy was bringing about noticeable increases in resource utilization. Inflation was picking up, reflecting the effect of a weaker dollar on import prices as well as a rebound of oil prices from low 1986 levels. When the dollar came under heavy pressure in late March, previously tranquil credit markets began to exhibit concern about the effect that declines of the dollar would have on prices. Long-term interest rates, in particular, moved up strongly. In conjunction with some easing moves abroad, the Federal Reserve sought somewhat greater restraint in the provision of reserves to the banking system. Initially, this action produced further increases in interest rates, but subsequently, financial pressures eased somewhat. In response to reductions in interest rates abroad, to some flattening in commodity prices, and to better news on the U.S. trade deficit, the dollar firmed and there was a broad decline in interest rates, with long-term rates falling somewhat more than short-term rates.

When the FOMC met in July to review its growth ranges for money and credit, all of the monetary aggregates had decelerated considerably. The weakness in monetary growth did not reflect any evident weakness in the economy. Rather, the slower money growth, and accompanying strengthening in velocity, appeared largely attributable to the rise in market rates of interest fostered in part by the Federal Reserve's response to adverse developments with respect to the dollar and inflation. The Committee decided to reaffirm its 1987 growth ranges for M2 and M3; in doing so, it anticipated some pickup in the growth of M2 over the remainder of the year. It indicated that growth for all of 1987, near or even below the bottom of the target ranges, might be acceptable for both aggregates, depending on the behavior of their velocities and other financial and economic developments, notably the evolving strength of inflationary pressures. The Committee also decided not to set a

target range for M1, given the unpredictability of the behavior of this aggregate relative to economic activity.

For a short time after the July meeting, the dollar rose further, but with the release of trade data in mid-August that disappointed market participants, the dollar again came under substantial downward pressure. Long-term bond yields moved up sharply as the dollar's weakness against a backdrop of strength in the economy spurred concerns about inflation and possible firming of monetary policy. Interest rates in short-term markets also increased, but by lesser amounts. In light of the potential for greater inflationary pressures, in part related to weakness in the dollar, the Federal Reserve sought to reduce marginally the availability of reserves through open market operations, it also raised its discount rate by 1/2 percentage point in early September to 6 percent. After the discount-rate action, interest rates rose further, especially in short-term markets.

Stock prices, which had reached very high levels relative to earnings and had been falling since mid-August, plunged on October 19 in chaotic trading. The stock market drop prompted a marked decline in interest rates as investors sought refuge in the perceived safety of fixed-income assets, especially Treasury securities. Although most stock indexes recovered somewhat in the wake of the crash, financial markets remained turbulent, with bond and equity prices fluctuating widely.

In a financial environment of extraordinary turmoil and apparent fragility, the Federal Reserve shifted the emphasis in the conduct of open market transactions to providing reserves generously to ensure that adequate liquidity would be available to meet any unusual needs. This action helped to calm the financial markets, although conditions remained somewhat unsettled over the rest of the year.

Early in 1988, as incoming data suggested that economic expansion over the first part of the year might be weak, bond rates dropped substantially and the Federal Reserve sought some slight additional easing in desired pressures on reserve positions. Better trade news bolstered confidence in the dollar, and the monetary aggregates showed signs of renewed strength.

Footnotes

1 **M1** is currency held by the public, plus travelers' checks, plus demand deposits, plus other checkable deposits [including negotiable order of withdrawal (NOW) and Super NOW] accounts, automatic transfer service (ATS) accounts, and credit union share draft accounts]

M2 is M1 plus savings and small denomination time deposits, plus Money Market Deposit Accounts, plus shares in money market mutual funds (other than those restricted to institutional investors), plus overnight repurchase agreements and certain overnight Eurodollar deposits.

M3 is M2 plus large time deposits, plus large denomination term repurchase agreements, plus shares in money market mutual funds restricted to institutional investors and certain term Eurodollar deposits.

2. M1, M2, and M3 incorporate effects of benchmark and seasonal adjustment revisions made in February 1988. Certain technical redefinitions affecting only M1 were made at the same time.

3. M1 figure in parentheses is adjusted for shifts to NOW accounts in 1981.

4. M1 figure in parentheses is the annualized growth rate from the second to the fourth quarter of 1985.

A copy of the full report to Congress is available from
 Publication Services, Federal Reserve Board
 Washington, D.C. 20551

FRBES 58 01

The CHAIRMAN. Thank you very much, Mr. Chairman.

CHALLENGE TO FED'S INDEPENDENCE

Chairman Greenspan, there have been a series of challenges to the Federal Reserve's independence in recent months. As you know, we have an election coming up in 8½ months, a Presidential election and a congressional election. Every member of the Federal Reserve Board now has been appointed by the same administration, by the same President. This is the first time I think since Franklin Roosevelt who served for 12 years—and I'm not even sure if Roosevelt had ever done that, because Board service is, a 14-year term. So it's an extraordinary situation, making the Board particularly susceptible to the appearance of this kind of pressure.

The challenges I refer to were first from repeated criticisms of Federal Reserve policy by the Chairman of the Council of Economic Advisers, Mr. Sprinkel, including the latest economic report of the President, which criticized monetary policy openly. Second, Assistant Secretary of Treasury, Michael Darby, sent a letter with analytic work on real M2 to the Federal Reserve Governors and the Presidents of the Reserve Banks just prior to the last meeting of the Federal Open Market Committee [FOMC].

I don't know of any occasion in which this direct effort to influence the policy of the Open Market Committee has been so clear and so overt and the message was obvious that they wanted the Fed to ease.

Chairman Greenspan, you and the members of your Board who were all appointed by the Reagan administration, demonstrated your abilities in October 1987 to the great benefit of our country when the crash occurred.

Why is the Reagan administration so concerned? Do you really need so much help from the administration to figure out what policies to follow?

Mr. GREENSPAN. Well, all I can say, Mr. Chairman, is that when I heard about Dr. Darby's letter, I objected quite strongly. As best I can judge, he was not aware of the implications of what he was doing just prior to an FOMC meeting.

I am reasonably certain that such actions will not occur in the future.

It's difficult to know what to make of anybody's criticism, advice and the like that we get, and we get it from all sources. And I think it's important that we listen because the worst thing that could happen is that we would shut ourselves off from all advice, criticism from any source.

I, myself, am not particularly concerned that we be unduly influenced by the administration. I'm not certain that they really are intent upon pressuring us. I think what's happened is they think they have really strong reasons. I must say to you that I happen to disagree with both Dr. Sprinkel and Dr. Darby on their interpretation of the monetary aggregates in the last year and currently, although in very recent weeks Dr. Sprinkel has indicated that he is satisfied with Federal Reserve policy. But I do fully expect at some point in the future that we will have differences with people in this

and other administrations. I think we will have differences with economists on the outside.

The only thing I hope does not happen is that the concern of our responding to political pressures gets so extraordinary that we will feel a necessity to do precisely the opposite and we could very well be taking actions which would be counter to our best judgment. That is the type of problem which concerns me more than my concern that the current administration will pressure us into doing things that we don't think are appropriate for monetary policy for this country.

The CHAIRMAN. That's a good, solid, sensitive answer. However, I can't recall a situation in which pressure from the administration or the Congress resulted in an overreaction against the pressure that leaned so strongly against the pressure that it was against the public interest. That outstanding Chairman of the Federal Reserve Board, Arthur Burns, that may or may not have been influenced by pressure, but he followed a policy in 1972 that served the interests of the administration.

HOUSEHOLD AND BUSINESS DEBT

Let me ask you about the point I made in my opening statement on household and business debt. Because this debt is much bigger than the Federal debt, it has very serious implications for the vulnerability of our economy in the event of the recession which we must expect at some time.

How serious is a household debt that has grown rapidly to over \$2.8 trillion, and that occurs at a time when savings have diminished sharply?

Mr. GREENSPAN. Well, I am concerned about the issue of debt, although there are certain technical factors in the data which I think are creating something of an exaggeration. We have, as you know, over recent years moved currency to credit card purchases in a number of instances, and that is debt but it's very short-term debt and it's a very marginal change in patterns of purchasing. As a consequence, it is not something I worry about as much as I worry about other types of debt categories.

And similarly, the decline in the published permanent savings figures reflects in part fairly substantial realized capital gains on the sales of existing homes which do not appear as savings in our regular statistics.

The CHAIRMAN. How big a factor is that?

Mr. GREENSPAN. I think it's a percentage point or so. It's not a small number and it's been a factor which I think accounts for part of the decline—I've forgotten exactly how much—but not a insignificant part of the decline in the savings rate over the last year or two.

Having said all that, however, I think that the fundamental point you make, Mr. Chairman, is one which worries me a great deal in the sense that I believe that our economy is overleveraged, that we have built up debt in the business, household and financial sectors. This is a problem that we have periodically. It's not something that I would consider to be of grave immediate concern, but it is certainly the case that when you have excessive debt and very

heavy fixed costs in the system that you have less downside flexibility if the economy wants to make minor adjustments.

It's not something which is a short-term concern, but it is something which should concern us when we look at the longer term and the process by which this economy will evolve over the next 5 or 10 years.

The CHAIRMAN. Thank you very much. My time is up.

Senator BOND.

Senator BOND. Mr. Chairman, I was very interested in that line of questioning and I wondered if there were any further implications that Mr. Greenspan might want to expand upon on the issue of the corporate debt as opposed just to personal household debt.

Have we built up a corporate structure where there is so much debt and so little equity that we are likely to be losing them in undue number if there is a recession? What's the remedy?

Mr. GREENSPAN. I don't want to state that we are in a severely difficult position. Remember, the debt that has been built up in most cases is voluntary. It's decided upon by corporate managements. They have reasonably good judgments in virtually every case that I'm aware of as to what they can afford over the longer term, and with the exception of the merger-acquisitions which I'll get to in a minute, I don't perceive that the debt is crucially overhanging the system.

It is, nonetheless, creating a level of fixed costs within the corporate business sector which is much higher than it's been and, I think, does create some difficulties.

I am particularly concerned, as I've mentioned to this Committee on previous occasions, with this extraordinary amount of shift from equity to debt in our corporate balance sheets which result from a combination of very heavy purchases of company stock by the company—that is buying back one's own stock—mergers, acquisitions and leveraged buyouts. It has created a fairly pronounced addition to the overall debt and at the moment I don't see any immediate falloff in that propensity. But I suspect that we will within some short period see an end to that type of pattern at least in the order of magnitudes that we've been looking at.

Senator BOND. Following up on your point about mergers, I gather when the Fed reviews a contested or uncontested bank merger the Board scrutinizes financial and managerial capabilities of both institutions and looks at the public interest and competitiveness.

Does the Federal Reserve look at any additional factors when it is a hostile takeover? Do you feel that hostile takeovers of banks could cause any public policy concerns and any other type of hostile takeover or any other type of financial institution merger?

Mr. GREENSPAN. Well, I think hostile takeovers create some analytical problems which can be overcome. It's a little more difficult to get information sometimes, but that's a technical problem and I don't think it's a particularly major issue.

Let's remember when we talk about hostile takeovers, the hostility is between the managements of the two organizations, not between the shareholders of either. In fact, the problem that exists is that too often, in my judgment, the managements try to protect themselves from, in effect, their own shareholders, who are essen-

tially their bosses; and I don't think that it is appropriate for us to try in any way to differentiate between so-called hostile and non-hostile takeovers.

I do think, however, that we should apply in all applications the same scrutiny with respect to not only the issues you raised but also capital and a number of other implications that could arise in such mergers. But I would not, myself, draw any really significant distinction between the particular merger of a financial institution as hostile or otherwise.

Senator BOND. What do you see happening to the trade deficit which we have all mentioned is too high, and are there any constructive steps that we might take to improve the situation?

Mr. GREENSPAN. I think that the trade deficit, as I have said in my formal remarks, is expected to decline moderately, but because of the nature of the data, the changes are likely to be erratic from month to month. But I think we've turned the corner and the trend is definitely down from everything we've seen. And I would suspect that if we can increase the stability of the American economy, reduce the Federal deficit, and essentially create the type of economic environment in which capital investment can take place which can be used for export demand, I think that we will find ourselves in a position where the difficulties that we've had in our trade accounts will pretty much be behind us.

Senator BOND. Thank you, Mr. Chairman.

The CHAIRMAN. Senator Riegle.

TRADE DEFICIT

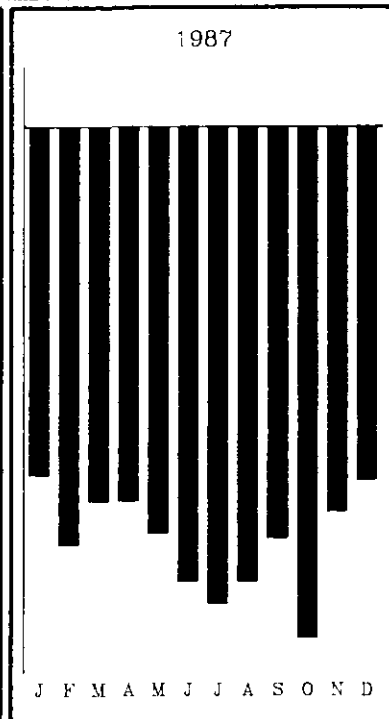
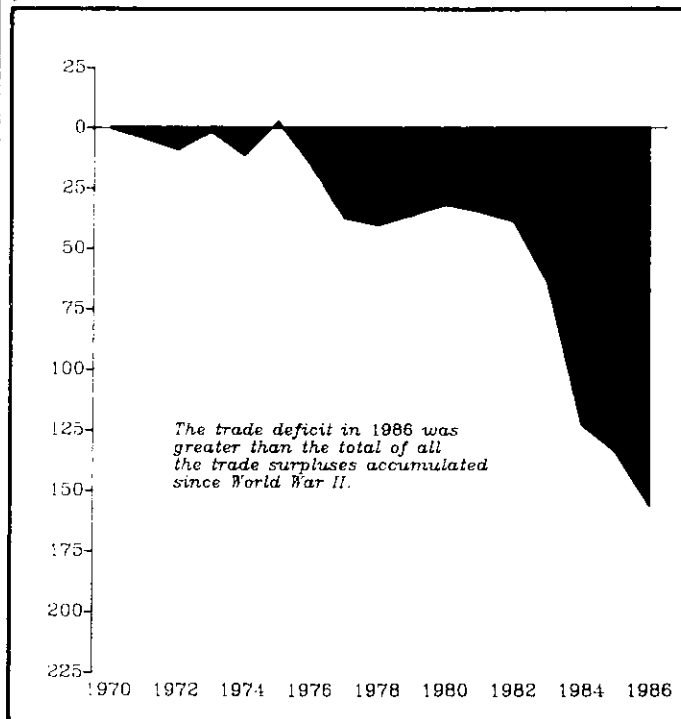
Senator RIEGLE. Mr. Chairman, I want to follow right on in that vein if I may because when you make the comment to Senator Bond that the trade deficit seems to be getting better this is official Department of Commerce data and what it shows is our trade deficit through the end of 1986 is posted at a figure of about \$160 billion, and as the monthly figures have come in through now all of 1987 expressed on an annualized basis, we actually had a larger trade deficit, as I'm sure you know, in 1987 than we had in 1986.

Now one can argue, as perhaps the implication of your comment was, that the last 2 months of data, the last of those which we just got about 2 weeks ago, means that we've finally turned the corner. I hope that's right, although I think if you look at the pattern of the data over the year and the fact that the October data was the worst in our history—\$17.6 billion in 1 month—I really don't know what you hang your hat on when you say we've turned the corner on the trade situation.

U.S. MERCHANDISE TRADE DEFICIT

\$ in Billions

Annualized Rate

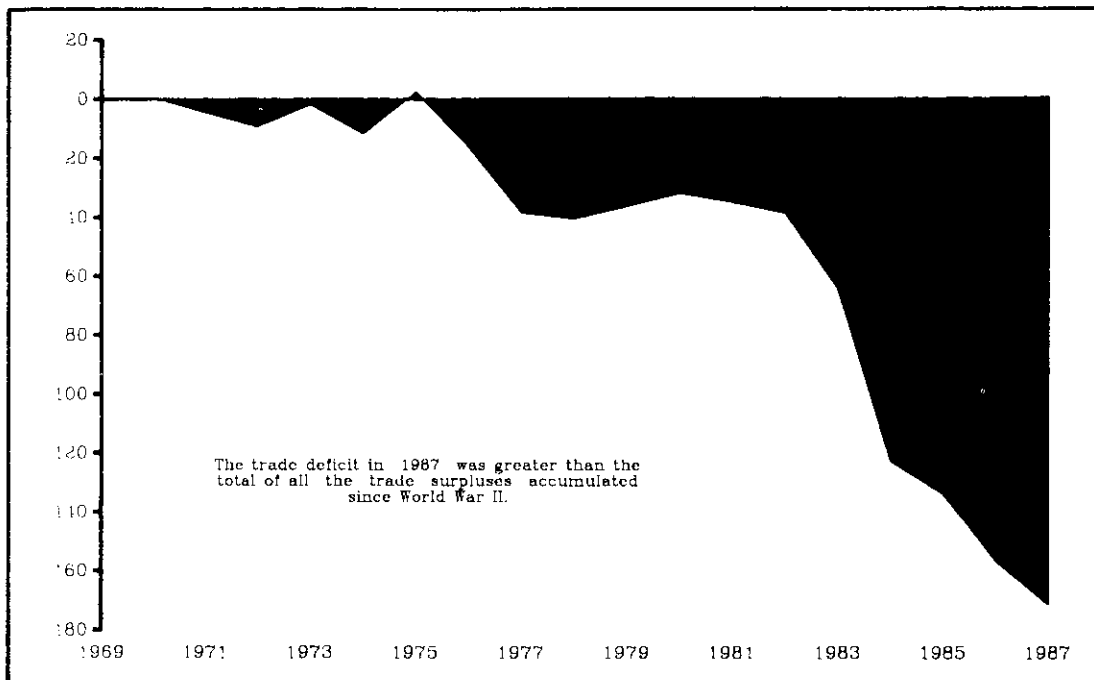


Office of Senator Donald W. Riegle, Jr.

Source: Department of Commerce

U.S. MERCHANDISE TRADE BALANCE IS DETERIORATING AT AN HISTORIC RATE

Dollars in Billions



47

Office of Senator Donald W. Riegle, Jr.

Source: Department of Commerce

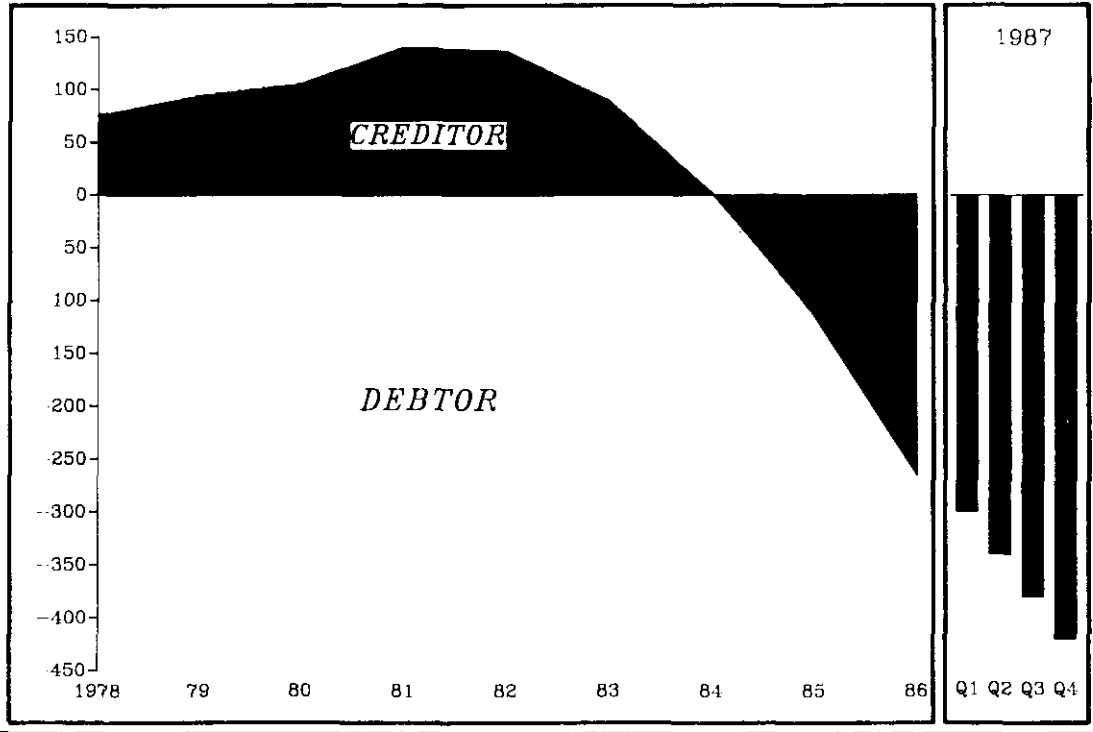
I think the trade problem is a very serious one and I want to pose a couple of questions about this, but I also want to go to the balance sheet, and that is the accumulation of international debt and the degree to which foreigners are going to continue to lend us money to finance that trade deficit.

If you look at the balance sheet, again using Department of Commerce data, what I see here is a trend line that is without precedent and I really don't think it's being addressed and I want to get into it not just in this round but hopefully in the second round.

What this chart shows [indicating] is that we became a debtor nation in roughly 1984 for the first time since 1914. What is disturbing to me as I look at the trend line coming down through the end of 1986 and now we've got the four quarterly figures posted for 1987, is that we are riding this debtor nation curve at the rate—as I say, we're adding new international debt at the rate of roughly 1 billion dollars every 2½ days.

FOR THE FIRST TIME SINCE 1914 THE U.S. IS A DEBTOR NATION

\$ in Billions

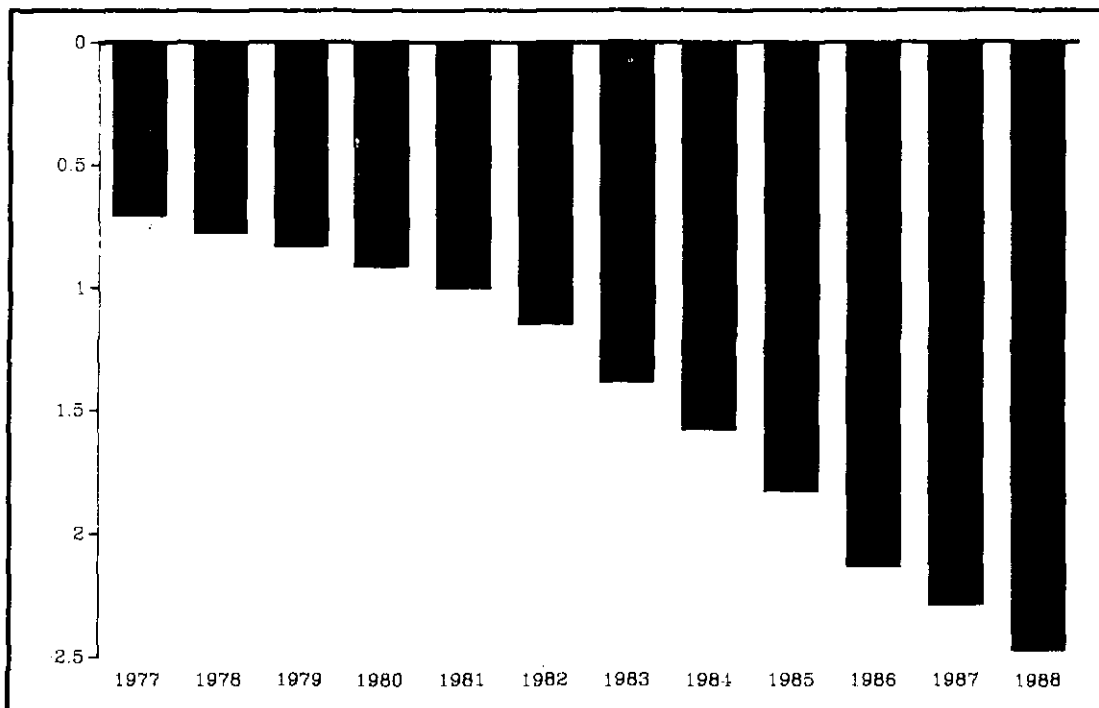


Office of Senator Donald W. Riegle, Jr.

Source: Department of Commerce

TOTAL FEDERAL DEBT

Dollars in Trillions



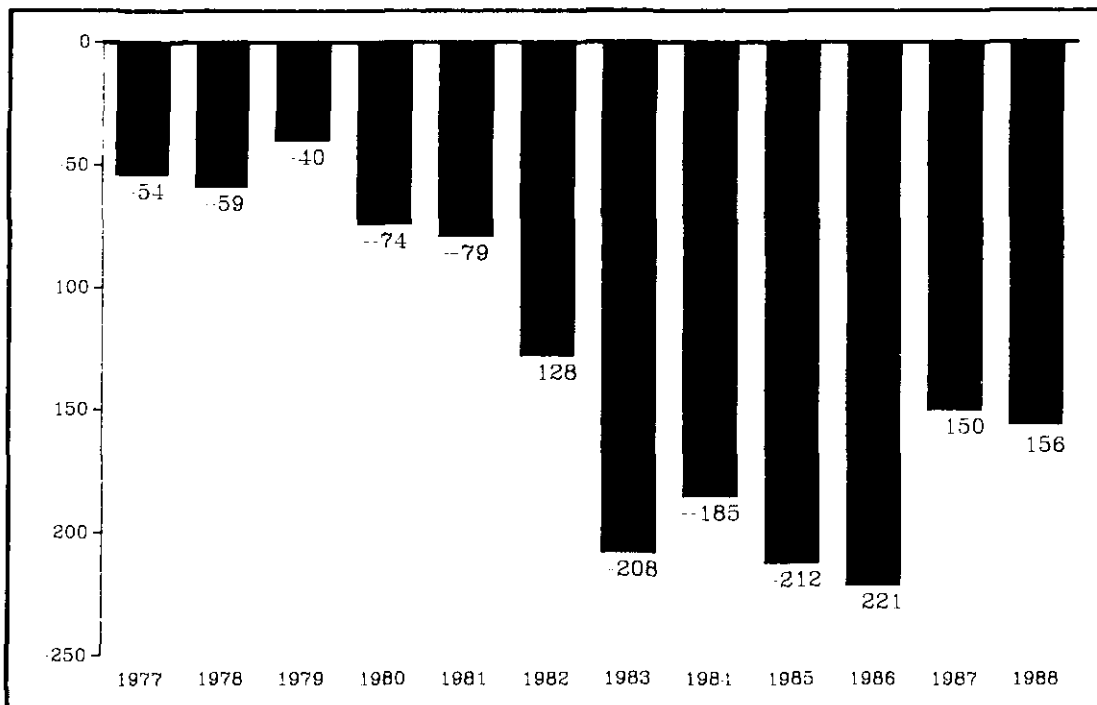
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Office of Senator Donald W. Riegle, Jr.

Source: Economic Report of the President

FEDERAL BUDGET DEFICIT

Dollars in Billions



Office of Senator Donald W. Riegle, Jr.

Source: Economic Report of the President

Now my question really is, can this go on indefinitely? Will foreigners continue to lend us the money to finance that huge trade deficit? Will foreign banks and foreign nations in effect continue to supply the credit that they are doing?

It seems to me that at some point we run a real risk that if they should decide to draw back that we will see upward pressure on interest rates and I'm very concerned about that because the unemployment rate in Michigan now for the last month has just gone over 10 percent. We are at 10.2 percent. So this manufacturing recovery that you speak about is very uneven. If you look at Ford Motor Co., right now they are doing very well. They've paid a large profit sharing payment to their workers. General Motors are not doing so well and paid nothing to their workers.

So I find the picture to be very mixed on the manufacturing side in contrast to the rather upbeat things that you said.

My question really has two parts to it here for openers. No. 1, how do we really anticipate that the rest of the world is going to be able to suddenly take this huge new volume of U.S. exports, assuming that we are now somehow more competitive, and do we even have the capacity to pump out huge additional amounts, but even if we do, are they prepared to buy it in very large amounts, \$50 to \$75 billion a year, if we're going to put much of a dent in that deficit?

No. 2, how much longer are foreigners willing to let us live on their credit card? Is this a problem? Is it something that we just take in stride, this change in national condition; or are we headed in a direction that has some real dangers to it?

Mr. GREENSPAN. Senator, let me just first take a minute to go back and say that our expectations about improving the trade deficit are not based on merely looking at the nominal data, but what we are impressed with is what's happening to the physical volume constituents of both imports and exports. When you look at that in the context of domestic and export prices it gives us a fairly encouraging picture—erratic, but not one which I would find discouraging.

As I said on another occasion, I thought that that extraordinary October figure was an aberration and not anything specific to a trend; and as a consequence, I think that we have, hopefully, a little more than just merely tracing the nominal trade figures to give us some confidence that we have turned the corner.

The issue of how much in the way of increased exports we can generate is an issue which clearly is a forecasting question. One of the problems that we have in this country is that the level of our exports is relatively low, especially relative to our imports, and that we therefore have a considerable way to go on the upside. In other words, we are not taking that much of a share of other countries imports and that is something which at this stage strikes me as a real potential restraint.

The markets in countries to whom we export are likely to be moderately better. The world economy is moving up moderately. It's sluggish but still persists in moving ahead and we think that is enough. We hope that there will be a significant turn in the ratio of imports to domestic consumption. And there is another major

factor which I think, would contribute to the improvement in our overall trade balance.

I would expand the issue you raised with respect to the question of will foreigners continue to hold dollars. I would expand it not only in terms of will they hold the increased claims from U.S. citizens, which is the financing number you're looking at, but also would they be willing to continue to hold their huge block of dollar-denominated securities in both the Euro and Asian currency markets, because in a sense it's one large block of funds.

What we have seen in the past is that the willingness on the part of foreigners to hold dollars is very closely related to their sense of soundness of our economic policies. And as best I can judge we have the capacity to absorb—or rather to, in a sense, have foreigners absorb—still fairly substantial blocks of dollars provided their presumption is that this is a good place to invest directly and indirectly.

I don't perceive there to be a significant problem out there provided we have, as I say, a stable economic environment. The difficulty arises should there be a perception that we are going in the wrong direction. And should that happen, then I think there will be an endeavor to shift out of dollars. That could cause the types of problems which you suggest, Senator, which is all the more reason why I think it is so important that we address the budget deficit question and I think we are making progress with it. We should not forget that with all the struggles that have occurred, progress has been made, but a lot more is required to resolve the type of question which I think you are raising.

Senator RIEGLE. I hope to follow up later, Mr. Chairman.

The CHAIRMAN. Thank you. And congratulations on the superb charts.

Senator RIEGLE. Thank you.

The CHAIRMAN. Senator Shelby.

Senator SHELBY. Thank you, Mr. Chairman. I hope Senator Riegle will pass that chart around because it is graphic and we will all use it at some time.

The CHAIRMAN. It's very good.

Senator SHELBY. Chairman Greenspan, I want to follow up on some of the areas that both Senator Bond and Senator Riegle were getting into.

I think it's important, (1) as you point out, to do something about our deficits that we are creating here in the Congress each year. That's No. 1. But if we're going to have those deficits, which is not desirable—if we're going to have those deficits, we should borrow that money from our own people that's generated from savings in this country rather than the Germans and the Japanese and other blocks in the world because, as his chart points out, we are a big debtor nation now and I worry about the problem down the road of making policy; that sooner or later people in other countries will have a hold of some kind in this country and will make some type of policy. I'm not talking about monetary policy. I'm talking about political policy and economic policy. Maybe they're already doing this a little bit.

Does that bother you, the fact that we are in hock, so to speak, a country with a gross national product like we have and one of the most dismal savings rates in the world?

Mr. GREENSPAN. Well, it certainly does, Senator, and I think the concern that I would have is what tends to occur in an economy with fairly large external liabilities when we run into some difficulties, which we periodically do, as all economies do. It is certainly the case that the behavior of the holders of our dollar denominated assets will have a significant impact on what we do here and how we evolve our own policies and what happens to us.

Senator SHELBY. Mr. Chairman, does that put us at risk some when our debt is external?

Mr. GREENSPAN. Yes, it does. However, let me just comment that it's our aggregate debt—the aggregate holdings of dollar-denominated securities, whether or not they are U.S. Treasury securities and whether or not we finance our Federal deficit wholly internally or partly externally. The crucial issue is to what extent do we have large external dollar liabilities?

We needn't go back very far in history to see the types of problems we can get. Remember Britain had a very serious problem at the end of World War II with very large external sterling liabilities which it gradually unwound. But during the process it was very obvious that those international obligations had a very significant effect on domestic economics and politics of Britain.

Senator SHELBY. Mr. Chairman, do you think it's time we took some legislative initiatives to encourage people in this country to save more money? Have you looked at that?

Mr. GREENSPAN. Senator, I've been looking at that for many years and I must say to you that I am somewhat discouraged. We have had innumerable legislative initiatives. We have had many changes in our tax code, the base for which was to try to increase savings in this country.

While there is some dispute on the statistics, the way I read the numbers suggests to me that we've had very little progress, that while some IRA's and other types of tax saving gimmicks have exhibited very large increases, as best we can judge, they were merely taken from some other pot of savings and the aggregate did not increase substantially.

Senator SHELBY. The aggregate didn't change.

Mr. GREENSPAN. I think it's terribly important that we try to find ways of doing this, but I must say to you, Senator, that it's something which has been rather discouraging to economists who over the years have been trying to find ways in which to do this.

What we do know, however, is that in order to increase savings we've got to reduce consumption and that is difficult to do.

Senator SHELBY. My time is up.

The CHAIRMAN. Senator Sasser.

Senator SASSER. Thank you, Mr. Chairman.

Dr. Greenspan, we are living in a time of enormous Federal budget deficits. We are all aware of that. And there is apprehension I think on the part of economists across the board that the economy could be moving into a slowdown if not this year certainly next year. Indeed, that the economy could fall off into a recession that could be fairly severe.

Now I think the great legacy of this administration is going to be that it's deprived the Congress and the American people of the tool we've used to deal with recessions and depressions since 1932, and that is the tool of economic stimulus. In other words, if we fall off into a recession in January or February of next year, we're simply not going to have the ability with these enormous deficits to engage in the economic stimulus that we have engaged in at other times when we've gotten into a recession situation.

Given that scenario, it appears to me that the Federal Reserve is going to be our last resort and that last resort is going to be in the form I suppose of increasing money supply and lowering interest rates.

FED'S ROLE AS TO RECESSIONARY ECONOMY

What do you view as the Fed's role here in an environment in which the Congress and executive branch are deprived of our economic stimulus tool when we get into a recessionary economy? What do you view the role of the Fed being in that situation and do you agree with my assessment that we are deprived of that tool?

Mr. GREENSPAN. Well, Senator, I think this may come as somewhat of a surprise answer, but there's something different about the current environment and I would be inclined to say at this moment that stimulus coming from the budget side over the next several years could very well be in the context, of reducing the deficit rather than expanding it.

The reason I say that is that however one reads the numbers, the real rate of interest is higher in this country than it should be and I would contend that the budget deficit is the primary cause of that problem.

If we could reduce the real rate of interest—which the Federal Reserve has very little capability of doing but can be done from the fiscal side—I think we open up a whole layer of potential effective demand in this country. So what I would suggest here is not that we try to think in terms of reducing the deficit as a fine-tuning operation—I don't seriously believe you can do it in that context—but I do believe that if we get the budget deficit down to a point where real interest rates fall, then actions by the Federal Reserve can become quite effective in endeavoring to forestall economic declines.

If we are forced to try to act in a market where real interest rates are high because deficits are extraordinary, I think the ability of monetary policy to function in its historic role will be curtailed. And as a consequence of that, I urge the Congress to address this question largely because the deficit itself limits what monetary policy can do when it is required to do something important in restraining declines in economic activity.

I don't know whether this responds to your question effectively, Senator.

Senator SASSER. Well, I think it is a good response, Dr. Greenspan, but I'm not quite sure that I fully understand it. I'd like to go a little further.

Did I understand you to say on the front end that in seeking to reduce interest rates or to bring real interest rates down that we

might want to engage in stimulus spending; that is, move more in the Keynesian direction or the supply side direction?

Mr. GREENSPAN. I'm sorry. I thought I said reduce the deficit. In other words, let me explain what I think is involved here.

At the moment, the budget deficit as best I can judge is causing an increase in the real rate of interest which is preventing capital investment from being at levels which I think it would otherwise be and probably is acting as a depressant in housing as well—two very major areas of our economy. In other words, overall effective demand in this economy is significantly lower than it could be at lower real interest rates.

So what I'm saying, Senator, is that if we can find a way over the next several years to bring the budget deficit down in a permanent way, I think that that will, by reducing real interest rates, create an environment of potentially greater effective demand. If we do get a recession in that period—in two years or so or whatever then monetary policy could be particularly effective in fending it off.

Senator SASSER. I agree with that. Dr. Greenspan, but the thrust of my original question is how do you get from here to there. In other words, you're talking about reducing the deficit down to the point that real interest rates will follow it down, and I'm not prepared to disagree with you on that point; that if we did significantly reduce the deficit as a percentage of GNP, if we started financing this deficit hopefully more internally and less externally, we would see real rates come down.

But the question is, if and when we fall off into a recession, the deficit historically—and correct me if I'm wrong—almost always comes close to doubling, how can we then react to the recession by trying to come up with additional stimulation to the economy at the Federal level?

Now if we fall off into a recession and the deficit get even worse, we will be deprived of a stimulus tool because of the very large deficits we have now. In fact, if we start playing the stimulus game it appears to me we are going to be driving interest rates further up because of the deficit.

Mr. GREENSPAN. I agree with that. I was agreeing with what you're saying. What will be the Fed's role? I was just going to the next step. I don't disagree that there's very severe limitations, and I think it would be really counterproductive at almost any point to try to consciously expand the deficit as a countercyclical policy.

Senator SASSER. My time has expired. I'd like to pursue this with you further.

The CHAIRMAN. I want to pursue the deficit issue too. Mr. Chairman, your analysis is revealing and exciting if it is correct. Few people in Congress believe that if you raise taxes and cut spending you stimulate the economy through a drop in real interest rates. If that were true, that would be marvelous. To sell that to the Congress and the country, would be a great achievement. Maybe we can do it, but I don't think many people believe that now. It turns Maynard Keynes on his head, doesn't it?

Mr. GREENSPAN. No, I don't think it does.

The CHAIRMAN. Ignoring the real interest rate, Keynes view was that in recessions and depressions you have to do your best to stimulate the economy by running a deficit deliberately.

Mr. GREENSPAN. Well, Mr. Chairman, I don't think that this is particularly a bizarre point of view. I think there are a large number of economists who hold this view.

The CHAIRMAN. I didn't say it would be bizarre. It's exciting. It's great.

Mr. GREENSPAN. Let me put it this way. It is certainly the case that the evolution from Maynard Keynes' original notions in the mid-1930's as it evolved in the post World War II period did have much greater emphasis on expectations, especially inflationary expectations, and they become critical factors in the elements of how the system works. I don't think the issue of real rates as they come into the system were fully understood, largely because we never had rates anywhere near as high as we have had in the last decade or so.

The CHAIRMAN. This analysis has great appeal to me. I hope we can implement it.

Turning to the Glass-Steagall reform bill for a moment, I understand that the Securities and Exchange Commission and the banking agencies recently agreed on a compromise proposal regarding which securities activities may be conducted directly in a bank and which activities should be conducted in an SEC registered subsidiary or affiliate.

Does the Federal Reserve Board fully support that proposal?

Mr. GREENSPAN. I have been over it and I personally support it. We have not yet formally put it by the Board, but I have no reason to believe that, having spoken with them individually, that there is any dissent on that agreement.

The CHAIRMAN. That's very, very reassuring. It looks as if we have on board the banking agencies, the SEC, as well as the administration, and that's extraordinarily helpful.

LOWER VALUE OF THE DOLLAR

We have been discussing what effect of the drop in the dollar will have on our economy. I'm very concerned with what effect this may have on the European economy, given great interdependence of economies generally today. You have a situation now where I'm told that the rate of unemployment in Western Europe is 11 percent. It's as high as 20 percent in Spain, 19 percent in Ireland, 9.5 percent in the strongest economy in Europe—the German economy. If we proceed with a policy which is very attractive to us of letting the dollar go down so that we can export more, aren't we running into a situation where we're going to be adversely affected by a recession that could begin in Europe?

Mr. GREENSPAN. Well, first of all, I am not an advocate myself of driving down the dollar to export more. I think it's a futile activity. In the end it doesn't work because you drive up internal U.S. costs and we will end up being noncompetitive because of rising internal costs.

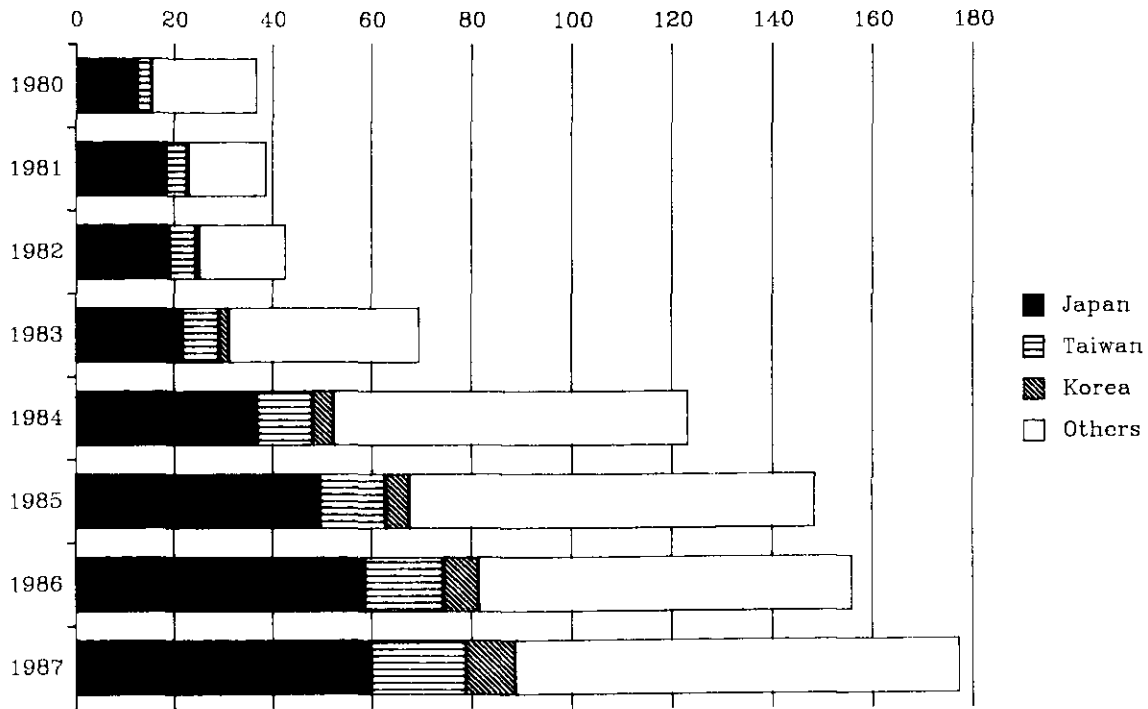
Japan clearly has had a remarkable capability of adjusting and has shown very little evidence of any internal weakness as a conse-

quence of the strength of the yen vis-a-vis other currencies, especially the dollar.

The CHAIRMAN. My time is up. Senator Riegle.

Senator RIEGLE. To follow along that line, if you look at the bilateral deficit with Japan for 1987 versus 1986, we've had basically no improvement, despite the big shift in the value of the dollar versus the yen and the notion that economists say that this will give us the improvement, J curve effects and other things where suddenly we will see a balance coming about. It didn't happen and it's not going to happen.

**U.S. TRADE WITH JAPAN, TAIWAN, AND KOREA ACCOUNTED FOR NEARLY
FIFTY PERCENT OF U.S. TRADE DEFICIT IN 1987**
(Dollars in Billions)



Office of Senator Donald W. Riegle, Jr.

Source: Department of Commerce

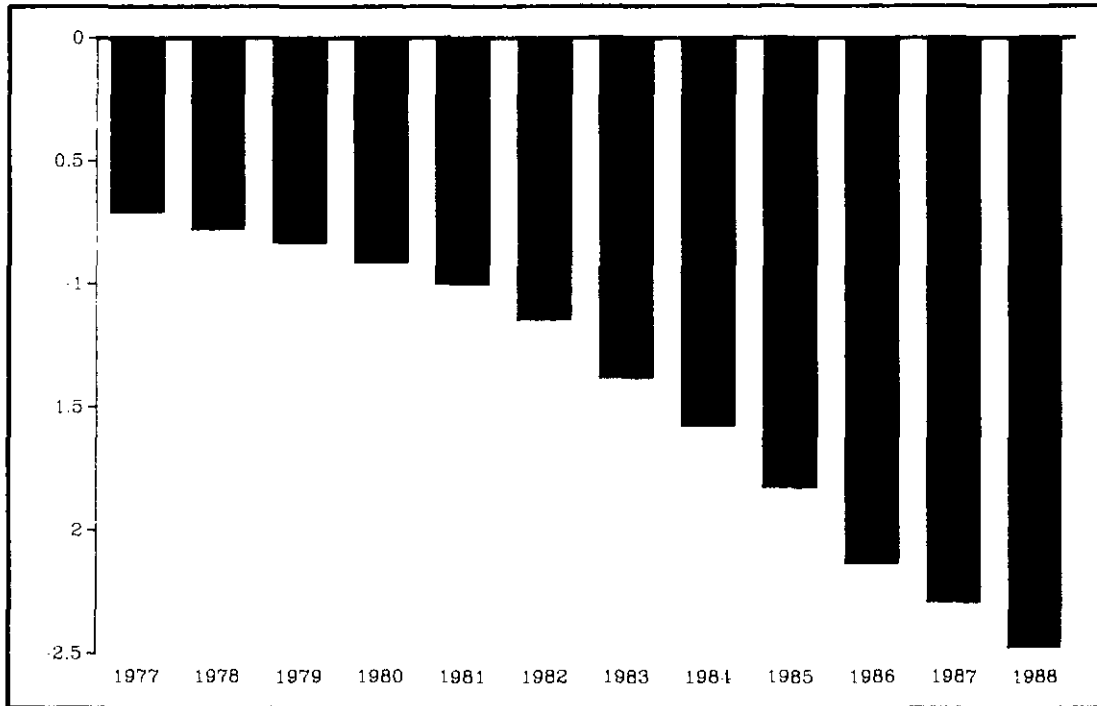
The thing that bothers me about the testimony today—and I'm a great admirer of yours, as you know—is that it is very casual, very relaxed, very business as usual, and I don't detect any sense of urgency, despite the trend lines, despite a lot of things that have been said here today. When you talk about pumping out much higher dollar amounts of U.S. exports and being able to sell them overseas, you've got to sell them somewhere. Somebody has to take those goods. Central and South America can't take them because they don't have any credit anymore, so they can't buy what they would like to and therefore we can't sell it. With the unemployment rates in Western Europe that the chairman talks about, they're not about to put more of their people out of work to take a huge influx of American production. And out in the Pacific rim, the Japanese are the masters on the globe at practicing that kind of mercantile trade and they're not going to let the deficit come down. They're taking \$5 billion a month out of this economy. That's what that \$60 billion trade deficit does.

I want to show you one other chart that we just made overnight so that we could have it here today for you to see. I was showing you the trade deficit before. This is again all official Government data. But this looks, Mr. Chairman, as well, that the buildup in our Federal national debt just in the last few years—look at 1981, for example. We were roughly at \$1 trillion in national debt. By the end of this year, we're going to be at \$2.5 trillion. Now these are big numbers. A trillion is a thousand billion. So we've left from millions to billions to trillions.

But if you take that debt buildup and riding that debt accumulation line—and frankly this year's deficit which you didn't respond to is worse than last year's deficit through the first 3 months—but if you take that debt trend line and you imagine that one with this one [indicating] because these two are really the foundation on which the economy is performing—and so when you talk in a sense as if we can just sort of work our way through this, I have really not heard anything about how we deal with the magnitude of those trend line shifts.

TOTAL FEDERAL DEBT

Dollars in Trillions



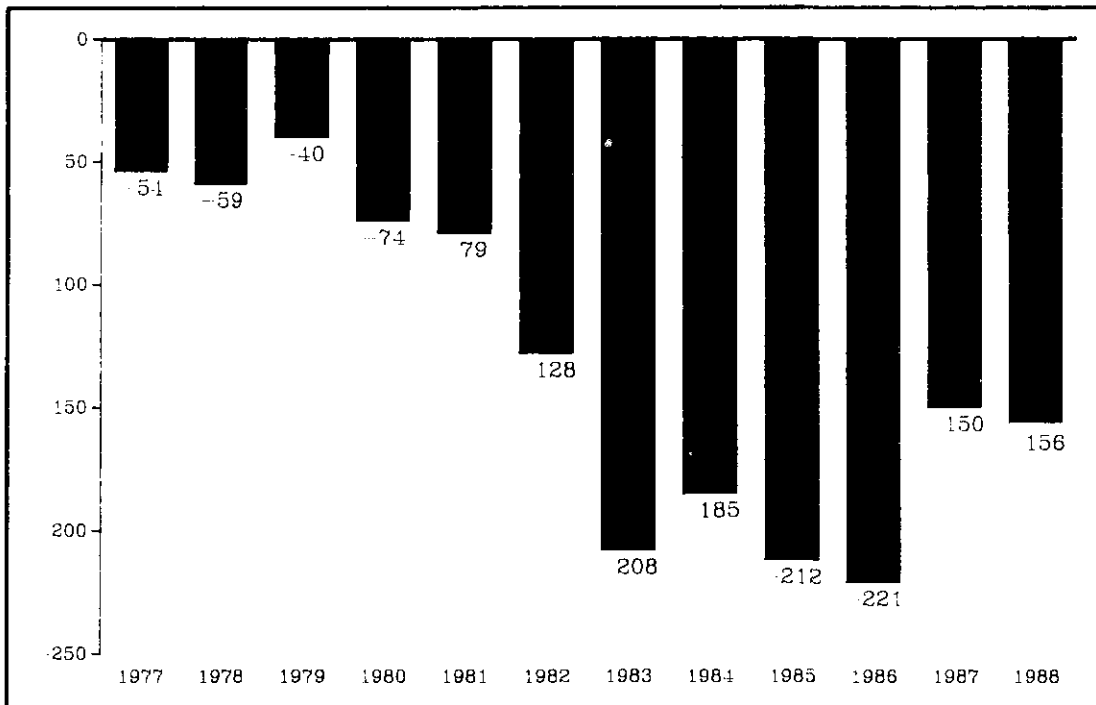
Office of Senator Donald W. Riegle, Jr.

Source: Economic Report of the President

To come back just to the international part of it, the notion of going from this position internationally in 1982 as a creditor nation [indicating] through the end of the fourth quarter—and this data just came out and this data is our latest information—to go from here to here in roughly a 5-year period of time is a breathtaking change in national circumstance. And I think anything that suggests that we can keep riding this curve or somehow this curve is changing magically—where is it changing? I mean, where is the data that shows that it's changing either on this debt accumulation chart or on the Federal budget deficit accumulation chart?

FEDERAL BUDGET DEFICIT

Dollars in Billions



Office of Senator Donald W. Riegle, Jr.

Source: Economic Report of the President

I don't see it and what I see instead is the situation—and there's a piece in this morning's Washington Post—I don't know if you know this man, John Paulus, who is the managing director and chief economist at Morgan Stanley—but he addresses this issue. He says we're in for a very major shock coming here in terms of a scaling down—he describes it—that American citizens are going to suffer an enormous loss of wealth because of the decline of the dollar that accompanies the effective downgrading of American means that prices of imported goods are going to go up and we're going to have a hard time selling abroad. In any event, I'll put that in the record. I don't know if you've had a chance to see it or not.

John D. Paulus

From the
Washington Post—Feb. 24, 1988

America the Irresponsible

Recently, there has been much loose talk about America's borrowing abroad being a reflection of the United States' attractiveness as an investment for foreigners. Nothing could be further from the truth, given the U.S. dollar's fall of more than 10 percent against the leading currencies during the past three months and its decline of a far larger amount in the past two years. This depreciation in the U.S. currency, especially when viewed against the background of sharply diminished capital inflows from private investors, coupled with increasing inflows from foreign central banks attempting to prop up the sagging dollar, implies that the United States is seen as a risky nation in which to place funds.

The sad fact is that over the past 15 years America, in proving to be an unreliable master of the global financial system, has squandered a great resource—namely, its franchise as the premier financial power in the world, the best name in the market, so to speak. However, this nation's financial hegemony in promoting a strong dollar had enabled America to purchase foreign goods cheaply and to attract capital from abroad at bargain rates.

We've achieved the dubious distinction of downgrading our name and, therefore, of superseding our financial might, by pursuing inflationary monetary policies in the 1970s and by implementing in the 1980s a stimulative fiscal policy, while other industrial powers tightened their fiscal policies through tax increases and reductions in government spending. Indeed, the stimulative U.S. fiscal policy has been so far out of the mainstream since 1982 that it has produced an expansion of domestic spending which has been 60 percent greater than that of other industrial nations over the past six years. As a consequence of these erratic and misguided policies for the past 15 years, the dollar has fallen more than 50 percent against the Japanese yen and more

"America now must borrow roughly \$150 billion per year from foreigners to finance its binge in household spending."

than 30 percent against most other major currencies during this period.

The latest example of U.S. irresponsibility is America's severe overconsumption problem, stemming from the disparity in fiscal policies in the 1980s. As a result of overconsumption, America now must borrow roughly \$150 billion per year from foreigners to finance its binge in household spending which, according to my calculations, is running about \$150 billion above its long-term trend. In other words, we as a nation are borrowing from foreigners to maintain a high level of consumption since, as it turns out, the share of gross national product devoted to household spending since 1986 has been at, or close to, a post-World War II record high.

Incidentally, there is no truth to the assertion advanced by proponents of the view that foreign borrowing reflects good things and that such capital inflows have been used to expand the U.S. commitment to capital spending. On the contrary, the share of GNP devoted to business fixed investment, at 11.8 percent in 1987, is practically the same as it was in 1980. Is there any wonder that foreign central banks have had to play an increasingly dominant role in financing the United States, supplying an estimated 75 percent of foreign capital needed to stem the shortfall in foreign trade in 1987, as private investors around the world turn their noses at us?

The loss of America's franchise as the world's financial leader has three major implications. First, the United States must surren-

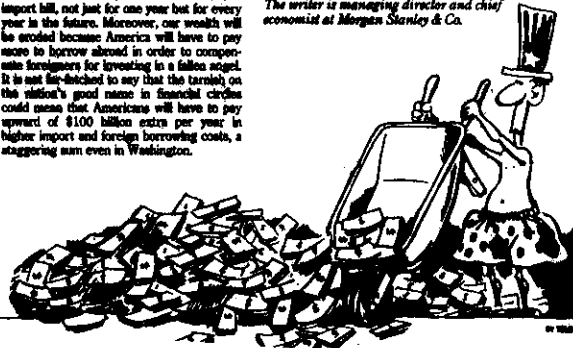
der a measure of policy autonomy. Because of the succession of irresponsible economic policies over the past 15 years, financial markets have taken a harsher view of certain American economic policies, which they regard as self-centered. As a result, our ability to undertake an independent course without punitive costs has diminished.

Second, American citizens will suffer an enormous loss of wealth. The decline in the dollar that accompanies the effective downgrading of America means that prices of imported goods, which now account for a little more than 10 percent of domestic spending, will have to rise. In fact, from current levels every 10 percent drop in the dollar will add about \$50 billion to America's import bill, not just for one year but for every year in the future. Moreover, our wealth will be eroded because America will have to pay more to borrow abroad in order to compensate foreigners for investing in a fallen angel. It is not far-fetched to say that the tarnish on the nation's good name in financial circles could mean that Americans will have to pay upward of \$100 billion extra per year in higher import and foreign borrowing costs, a staggering sum even in Washington.

Third, there is a risk that the American government will be forced by the electorate to adopt economic policies favoring even more consumption in a vain attempt to restore the lost wealth and to boost the lagging standard of living. Such efforts, of course, would fail because they would discourage the primary source of wealth—investment in real capital. In the process, however, these efforts could cause further havoc in the struggle to eliminate the trade deficit.

The world will survive without the United States' serving alone as the linchpin of the global financial system, a role that most likely will have to be shared by a reluctant Japan, a hesitant Germany and a chastened United States. Moreover, it is possible that global economic growth could actually accelerate during the next decade if the movement toward reduced government involvement in economic affairs continues and if the revolution in high technology comes to fruition. Nevertheless, it will be a less hospitable place for America.

The writer is managing director and chief economist at Morgan Stanley & Co.



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Senator RIEGLE. But you really haven't said much today that deals with those trend lines. So the only thing I'm left to conclude is you're really not very concerned about them, at least not to the point of saying that there has to be some heightened sense of urgency to do some set of policy adjustments and steps to do something about them because right now we're on automatic pilot. The administration is on its way out the door. They have no intention to change the policy mix. The fix is in on the budget. All those stories have been written to sort of take it on through the next year.

And these are the curves we're riding and I think you ought to be speaking out about it, quite frankly.

Mr. GREENSPAN. Well, let me come to grips with a few of the problems. First of all, as I said before, I'm very much concerned about the issue of the Federal budget deficit.

I would just want to point out there is a technical problem on the 3 month over 3 month Federal deficit comparison. My recollection is that a Social Security payment that's usually paid in the beginning of January was paid in December, so it showed up in the first 3 months of the fiscal year and when we see the 4 months through January we don't see that big jump.

Nonetheless, I do think it is correct to presume that there will be some modest increase under existing forecasts of the Federal deficit for fiscal 1988 over fiscal 1987 and I think that is unacceptable myself.

On the issue of the debt question that you're raising, Senator, I think we have to get the current account deficit down because it's basically the accumulation of the current account deficit which is engendering that net debtor position that you're showing on your chart.

There are very few ways in which that can be done. Fundamentally, we have to reduce our demand for imports and that almost invariably means domestic consumption has got to slow and, indeed, it is slowing. We have made progress in that respect.

Second, exports have to rise and, indeed, they have been rising very significantly. I realize that it is difficult to see how in the world we can get 15 percent increases in physical volume for exports or even any double digit number for a while and have it absorbed in the world economy. But it is true that the aggregate ratio of exports in the world to GNP is still rising. In other words, the market for goods over national boundaries is moving faster than domestic increases in demand.

As a consequence of that, when we put a rising forecast in any of our models, we are required to ask where is it going and from whom is it being taken, and we are not at a point where the capacity of American exporters to ship abroad on an increasing trend is as yet running into any trouble of the type that you're mentioning.

So all I can say, Senator, is that it is absolutely essential that we continue on the path of trying to make our external adjustments as quickly as possible to forestall the types of problems that you raise.

If I seem to you to be unconcerned, it's only because we have looked at it in great detail. We know what the dangers are. We know what the nature of the problem is. I think it is an issue of concern, but I think it's far more important for us to focus on how we solve these problems. And I think at the moment we are on the

road to solving them. I would like to see it done much more quickly. I sincerely trust that we don't try to do it through some quick-fix type of program which is very easy for the Congress to react to in frustration. I think that could be very counterproductive and in fact not create the solution to the problem. I have a great deal of sympathy with your concern because I am concerned as well.

Senator RIEGLE. But we haven't suffered, I might say, Mr. Chairman, from any quick fixes, as these charts show. I think we've suffered from sort of a no-fix problem and I have heard an awful lot of esteemed economists—and you are certainly among the highest in that rank—keep saying it's all working out, the J curve is taking effect and this thing is going to level itself out and so forth.

I think you have an obligation to bring some data in here that shows that and if you can't demonstrate it, I think we're at a point where we need some far more rapid action. And that means we need a far blunter assessment of where we are and adjustments in policy rather than just stay on automatic pilot for another 12 to 18 months here and somehow hope that everything is going to correct itself.

The CHAIRMAN. Senator Sasser.

Senator SASSER. Thank you, Mr. Chairman.

HOUSING STARTS

Dr. Greenspan, housing starts for January were at an annual level of 1.4 million units, which, as I'm sure you know, is the lowest level in 5 years.

This follows a very low level for December as well, and additionally, building permits for January declined by 6.9 percent and building permits are considered to be the most reliable indicator of future housing starts.

Now my question is, what are your expectations for housing starts in the year ahead? And I ask that question in this context. The housing industry has traditionally been on the leading edge of the business cycle either up or down and I'd like to know whether you think it's leading us up or leading us down.

Mr. GREENSPAN. Well, Senator, I think the December and January figures were a bit of an aberration. We always have trouble with those months—and February as well—because the seasonal adjustment factors which we use are very low, largely because of the usual poor weather in the north which makes construction difficult. And while it's very difficult to prove, the implication is that the numbers in December and especially in January were statistically low, meaning that that's not the way the market really was.

Moreover, there is some evidence from homebuilders during the month of February of some quickening in the pace of sales of existing homes and some renewed interest in home buying as a result of the decline in mortgage interest rates. To be sure, we don't have the data yet and the month is scarcely over, but there seems to be a somewhat better tone to the market and we would expect that starts will be climbing in the spring and into the summer months.

Senator SASSER. So you don't see that as an ominous sign, that these housing starts are at the lowest level in 5 years?

Mr. GREENSPAN. No. I must say I was surprised at both the December and January figures. I did not expect them to go that low. But having evaluated the data, I'm not particularly concerned that it was a trend that should worry us.

Senator SASSER. Dr. Greenspan, I serve on the Senate Budget Committee and am aware of this conflict between the Congressional Budget Office and OMB as to basic economic assumptions. Traditionally—at least in recent years—the OMB assumptions have been overly rosy—when compared with the average of economic predictions. I have more confidence in CBO's numbers, but it's been suggested that the Federal Reserve ought to be the final arbiter between CBO and OMB as to what should be the genuine economic assumptions to be used in formulating the budget.

What say you to that, Dr. Greenspan?

Mr. GREENSPAN. We thank you for your confidence. However, we would have a technical problem which rests on the difficulty that we would have in forecasting interest rates, because there is no useful budget forecast—whether by CBO or OMB—which does not embody in it their view of where they think interest rates are going. Largely because they do not have an influence on where interest rates are going, that is not a particular problem. But because the Federal Reserve by its nature is involved and has considerable influence on interest rates, it is very difficult for us to make forecasts without creating market instabilities. So that if we were out there to arbitrate between CBO and OMB, we would have to make judgments about their interest rate forecasts.

Senator SASSER. But the beauty of that is you could make your assumptions come true.

Mr. GREENSPAN. No, I'm afraid it wouldn't because the irony of this exercise is that, if we were to forecast interest rates, the chances are the markets would create an environment which would probably make our forecast wrong. It's a very difficult situation to be in, but it does preclude our capability of adjudicating between OMB and CBO in an effective way.

Senator SASSER. Well, I see my time has expired again. Thank you.

The CHAIRMAN. Mr. Chairman, many people feel that anybody who runs for President these days is crazy because in the beginning of 1989 we're bound to have terrible economic problems and probably a very deep recession and maybe the first depression since the 1930's. If that happens, you could well be right in the middle of it. Some people argue that there's not much Congress or the President can do once we move into a very deep recession or depression. What can the Federal Reserve do? They say we should have learned lessons from what the Federal Reserve did wrong in the early 1930's when it decreased the money supply and followed very conservative policies. Is there much that the Federal Reserve Board could do in the next crisis or would you be just pushing on a string, as former Chairman Martin used to say?

Mr. GREENSPAN. The problem that I have in answering the question, Mr. Chairman, is that there are so many different types of severe economic contractions, all of which have differing characteristics with respect to inflation, with respect to financial stress, with respect to bankruptcies and the like, that you can't really general-

ize in advance on what type of policy the Fed would pursue under those adverse conditions.

My impression is that, should that hypothetical event ever occur, I think it would be terribly important for us to be very clear on trying to understand precisely why it occurred and what the particular internal structure of the economy was doing because unless we addressed—as far as our policies were concerned—the specific form of problem that confronted us at that time, we probably could very readily provide the wrong remedy, as indeed was done, in my judgment, in the late 1920's and the early 1930's.

So without actually being there and seeing in detail what that structure looks like, I don't think I can effectively answer that question.

The CHAIRMAN. Do you have confidence that the Federal Reserve could substantially ameliorate and improve the situation if we went into a recession?

MONEY SUPPLY

Mr. GREENSPAN. I would certainly hope so.

The CHAIRMAN. To get back to the issue that I raised in my opening statement, last year the Fed unilaterally dropped the target range for M1. Now you come before the committee and widen the range for M2 and M3 and don't have any target range for M1.

This Senator very much disapproves of the range that we have. When Chairman Burns came before the committee, I argued with him at great length and pleaded for a single figure not a range. You not only give us a range but you widen the range. The range is now so wide that if you follow the low money growth policy and come in with a 4-percent increase, given the rate of inflation, it's quite conservative; and if you go to the 8 percent, it's very stimulative. So the range you give does not tell us anything about what your objective really is.

Do you agree?

Mr. GREENSPAN. Well, Mr. Chairman, let's take a step back to what these ranges are for and why we want to adhere to them.

Our basic goal in monetary policy, as I see it, is to maximize long-term sustainable economic growth and employment in this economy. And as a necessary condition of that, we perceive the need to maintain a non-inflationary environment.

What history has told us is that money and prices in the very long run are tied together. They may not be in the short run, but over the very long run they are.

What we have observed in history is that if we can maintain some relatively stable set of relationships between money and income we can maintain a stable economy and stable growth and achieve long-term monetary policy objectives.

It is important, however, to recognize that the objective is long-term sustainable economic growth and not the proxy, which is the monetary aggregate which we are endeavoring to use as a means—as an instrument to obtain our goal of much broader long-term economic growth.

In the 1980's we began to see that the tie between money as we measured it—the specific proxies, the M1's, the M2's, the M3's—

and real economic growth began to loosen. What we felt necessary to do was to loosen the tie to money because we might follow the proxy, the instrument to achieve our goal, and succeed, but fail in our goal.

The best example occurred in recent years. In recent years, economic growth has been relatively stable. It has not been as high as I think we would like to have seen it obviously, but not bad. The money supply, however, has fluctuated all over the place. Had we endeavored in 1986 and 1987 and even in 1985, for example, to stabilize money, we would have probably temporarily distabilized our economy.

I think that this condition is temporary. I think it's a function of the whole period of changing markets, deregulation, the tremendous extraordinary changes in telecommunications, and the whole structure of the financial system. But I think we're adjusting.

Since I firmly believe that money matters, we will at some point find that the monetary aggregates are again tracking very closely with income. At that point it would be wholly appropriate and I think mandatory for us to narrow the target ranges very considerably. We would argue that that is inappropriate at present because we think there are special factors such that strict adherence to money—the instrument of policy—would create difficulties in attaining our goal, which is stable, long-term economic growth.

The CHAIRMAN. Then I take it you would object strongly if we were to change the law and require you to report a range of no more than 3 percent. In other words, instead of 4 to 8, it would be narrower—5 to 8 or 4 to 7, for example. You would prefer to wait until you get the kind of resolution you're talking about, is that right?

Mr. GREENSPAN. I would certainly think so, Mr. Chairman. I think that it would not be appropriate for the Congress to do that.

The CHAIRMAN. Since you've discarded M1, suppose we were to ask you then to give us a target rate for the monetary base?

Mr. GREENSPAN. Well, strangely enough, we have been discussing the issue of the monetary base as a target amongst ourselves.

The problem is that it has many of the characteristics of M1 and the reason it does is that the monetary base very crudely reflects currency in circulation plus commercial bank reserves. And since M1 essentially reflects currency in circulation and demand deposits and other transaction deposits, the only difference between the monetary base and M1 is reserve requirements on the transaction balances which are roughly 12 percent and the fact that there are excess reserves in our total reserve base.

So what I'm saying is that the actual arithmetic shows that the monetary base, especially in the current environment, and M1 are very closely related with respect to their targeting characteristics. And my impression is that when M1 comes back into usable targeting range, so will the monetary base, but I doubt that the monetary base itself will be effectively usable until M1 is also usable.

The CHAIRMAN. I want to follow up on that but my time is up. Senator Chafee.

Senator CHAFEE. I don't have any questions. Like everybody else, I've got these terrible conflicts, Mr. Chairman, so I am not able to stay. I apologize for just dropping by but I wanted to look at Mr. Greenspan's statement. Thank you very much for coming up, Mr. Greenspan.

[The complete prepared statement of Senator Chafee follows:]

SPEECH BY
SENATOR JOHN H. CHAFFEE
TO
SENATE BANKING COMMITTEE
ON FEDERAL RESERVE MONETARY POLICY REPORT
(FEBRUARY 24, 1988)

MR. CHAIRMAN. I AM PLEASED TO WELCOME CHAIRMAN GREENSPAN BEFORE THE COMMITTEE THIS MORNING.

THE ROLE OF THE FEDERAL RESERVE HAS BECOME INCREASINGLY IMPORTANT IN THE LAST DECADE AND WILL BE CRUCIAL IN THE YEARS TO COME. THIS IS TRUE FOR TWO REASONS.

FIRST, THE SCALE AND SCOPE OF MONETARY POLICY HAVE BROADENED GREATLY, DUE TO THE BURGEONING INTERNATIONAL SECTOR, ESPECIALLY INTERNATIONAL CAPITAL FLOWS AND TRADE. NO LONGER IS AMERICA A CLOISTERED NATION; SPLENDID ISOLATION IS TRULY ~~WAS~~ OF THE PAST. THE FEDERAL RESERVE CAN NO LONGER MERELY CONCENTRATE ON HELPING TO CREATE A LOW INFLATIONARY PATH TO REAL ECONOMIC GROWTH. IT NOW MUST ALSO WORRY ABOUT THE VALUE OF THE U.S. DOLLAR, AS A FACILITATOR OF TRADE ADJUSTMENT AND A STORE OF VALUE TO ATTRACT FOREIGN CAPITAL.

SECOND, THE FEDERAL RESERVE HAS RECENTLY HAD TO SHOULDER A PROBABLY DISPROPORTIONATE SHARE OF THE BURDEN IN BALANCING THE INTERNAL AND EXTERNAL SECTORS. THIS HAS OCCURRED JUST WHEN ITS ROOM FOR MANEUVER HAS BECOME MORE CIRCUMSCRIBED. ALTHOUGH CONGRESSIONAL EFFORTS TO REDRESS THE FEDERAL BUDGET DEFICIT HAVE BEEN POSITIVE,

PROGRESS MUST CONTINUE. FOR A REDUCED DEFICIT WILL ALLOW FOR INCREASED DOMESTIC SAVINGS AND INVESTMENT AND LESS DEPENDENCE ON FOREIGN CAPITAL.

YOUR DESCRIPTION, CHAIRMAN GREENSPAN, OF AMERICA'S ECONOMIC PERFORMANCE IN 1987 COULD PERHAPS BE LABELED: "MODIFIED RAPTIRE"; BUT YOUR CONCERN FOR 1988 IS WELL WARRANTED. ALTHOUGH IT MUST BE A RELIEF NOT TO HAVE M1 THE MOST EAGERLY AWAITED GOVERNMENT FIGURE, YOUR VIGILANCE TO AVOID THE REAWAKENING OF INFLATIONARY EXPECTATIONS IS NECESSARY. YOUR MONETARY AGGREGATE TARGETS REPRESENT YOUR BEST ESTIMATE TODAY OF HOW TO ACHIEVE THE TWIN GOALS OF PRICE STABILITY AND ECONOMIC GROWTH. YOUR ABILITY TO STAY THAT COURSE, COMBINED WITH CONGRESSIONAL ACTION ON THE BUDGET DEFICIT, PROMISES BENEFITS FOR THIS YEAR AND BEYOND. THESE ACTIONS CAN ONLY HELP AMERICA ACHIEVE GREATER INTERNATIONAL COMPETITIVENESS.

I WISH YOU WELL IN THESE ENDEAVORS.

The CHAIRMAN. Senator Riegle.

Senator RIEGLE. Mr. Chairman, I just want to touch on something that you developed earlier that we kind of went by in a hurry but I think ought to be touched on just for a moment and then I want to go into a different area myself.

FISCAL STIMULUS VERSUS MONETARY STIMULUS

When you engaged in that colloquy on the question of fiscal stimulus versus monetary stimulus and real interest rates and so forth, in effect, what I understood you to say was your interpretation of what Dr. Greenspan is saying is that if you could somehow get consumption down, maybe have higher taxes that led to lower real interest rates, that you could actually get an expansion of the economy and that you might in fact be able to make supply side economics work with lower interest rates and, in a sense, monetary stimulus rather than this reliance we've seen over such a long period of time on just fiscal stimulus.

If in fact anybody wants to advance that theory, I think that becomes a very interesting concept to look at, and that is that if you're stuck with very high real interest rates that may be the thing that's limiting your growth at this point, a real spurt in growth, more than anything else.

I heard Dr. Greenspan in effect say some of that today and I would be very interested myself in finding a way through this set of problems to lower real interest rates. I think that really is the key to the kind of surge that we have to make, not just by itself because we've got to jack up savings rates and we've got to get the investment going into things that improve productivity and capital formation—but lower real interest rates, it seems to me, would give us the biggest single economic surge that we could get out of the sort of monetary-fiscal policy mix, and that has not been discussed, has not been focused, but I think your observation hit on that today and I think it does open up a different way to look at this problem.

I want to raise one other thing with you related to that and test it a little bit. What would happen right now, Dr. Greenspan, if the Fed acted to try to bring interest rates down? Let's say the Fed were to meet and decide that it should try under the current situation to bring interest rates down, say, a full percentage point by means of using all of the internal mechanisms that the Fed has available to it with money supply and so forth?

I assume that you would feel that you can't just arbitrarily push interest rates down, say, a full percentage point because you decide you want to do it or a percentage point and a half, but I'd like you to address that.

If real interest rates are high, what really limits the Fed right now from embarking on a strategy that would force those interest rates down more abruptly, and if you tried to do that, what would be the problems that we might encounter?

Mr. GREENSPAN. Well, let me first emphasize we're discussing a hypothetical case.

Senator RIEGLE. I understand.

Mr. GREENSPAN. You have problems if monetary policy endeavors to move in a manner which the markets are working against—and this would be true whether or not you try to lower rates or raise them. Take the case in which, let's say, we forced the funds rate down by 1 or 2 percentage points, which we could do. What would happen if the market were not prepared for that and in fact felt that was an inappropriate rate? Money supply would rise very sharply, inflation expectations would jump immediately, long-term interest rates—rather than following the short-term Federal funds rates down—would go up, and we would find ourselves in a situation in which inflation would likely be taking hold and we would get a tremendously disruptive economy.

This similar exercise would be occurring on the opposite side if interest rates were raised 1 or 2 percentage points against trends that were developing in the markets.

This is the reason why we say it is so important to coordinate policies and in effect to set interrelationships to get the type of result we desire.

Senator RIEGLE. May I pursue this just for 1 minute?

The CHAIRMAN. Yes.

Senator RIEGLE. A lot of people go back and they look at the market break on October 19 and 20, and they point to a lot of things that seem to have built up to create the change in psychology and the very sharp plunge in the market, the greatest crash in percentage terms that we'd ever had before. I find very persuasive the argument that says that the interest rate spike on long interest rates that occurred as the market was approaching on October 19, that that sudden rise in long-term rates and the very high price-earnings ratios that we had in the stock market and the widening out of the gap between the interest rate spread versus in a sense the multiples that the market was supplying created a tremendous amount of stress. If that were right, that would in a sense support the kind of an argument that you're making and that is that if interest rates suddenly shoot up because of inflationary expectations or because there's the perception that the Fed is flooding money in to the system unwisely and interest rates go up, you can start to see a lot of shuddering and shaking in the capital structure. I think we've just seen an example of it. We might see it again.

The reason I pose the question—and it relates to what the chairman has been saying and others of us have been saying today—and that is, I get the sense that the Fed doesn't have an awful lot of maneuvering room right now and, despite your adeptness in terms of managing our way through the market crash and assuming that job as you have over the last several months, that the operating range of the Fed to go very far one way or the other isn't very great and the Fed is quite hemmed in and the Fed is really quite hemmed in because of these charts that I was describing earlier. We've had a buildup of circumstance over a long period of time that I think is taking your maneuvering room down to a dangerously small margin, in my view. Those are my words. I don't try to put those words into your mouth. But I am very uncomfortable that the maneuvering room on monetary policy has been reduced to such a small level and it worries me because it goes back to the earlier discussion—we've played the fiscal policy strategy—I think

the Government has gone wild in that area, and now we're to the point where we've got to balance that back the other way, move in the direction of finding how we push real interest rates down so we can get an authentic surge into our basic economy, but it seems to me we're very much out of position. You and I may have a difference of opinion there because I have not heard a very persuasive case made today that says that all we really have to do is just enjoy this nice smooth transition that we're in the process of making. I don't see that happening and I think we need an active set of policy adjustments and that we need somebody like yourself speaking to that problem if that's so, and that if we talk ourselves into the notion that we can go on automatic pilot for the next 12 to 18 months because we've got an administration leaving after 8 years and a new administration coming in in the early part of 1989, that that would be a very serious miscalculation, although I think that's what's happening.

I think that the view is now let's not rock the boat. Let's just ride it on through and hope for the best, although privately in the cloakroom, as the chairman will say, everybody says whoever the next President is going to be, he's going to have a very tough job at that time because a lot of these problems are just being postponed.

I don't know if we can find a way to make some policy adjustments during this year but we should try and I want to try and I will work with you and anybody else that's willing to work to try to find a different mix to give us more maneuvering room and get us out of this I think box canyon that we've gotten into.

Thank you, Mr. Chairman.

ECONOMIC REPORT BY PRESIDENT CRITICIZES THE FED

The CHAIRMAN. Mr. Chairman, the economic report the President published a couple of weeks ago holds the Fed policy in the months before the stock market crash partly responsible for the market's precipitous decline.

Do you agree or disagree?

Mr. GREENSPAN. I disagree, Mr. Chairman.

The CHAIRMAN. Why?

Mr. GREENSPAN. I think that what we were looking at at the time—and I would say I subscribe to Senator Riegle's view about the effective interest rates at that time—we were confronted then by a worldwide rise in interest rates, which struck me as essentially reflecting a flight from currencies generally. It was an extraordinary period.

What essentially was driving the yield-spread differentials was the 30-year Treasury bond yield, which I must say we had great difficulty understanding on a day-by-day basis at that time. I made a very extensive analysis and had many discussions with my colleagues at various central banks around the world and a number of economist friends of mine, and I must say to you I never really fully understood—at least to my satisfaction—precisely what the driving forces for that worldwide rise in interest rates were.

In my judgment, the Fed could have done very little to prevent that from happening at that time.

The CHAIRMAN. Certainly on any kind of a basis, any kind of experience, the market was selling at 23 times earnings—this is extraordinarily high, regardless of the level of interest rates or the pattern of interest rates.

Mr. GREENSPAN. Yes, I would agree with that, Mr. Chairman. What I'm saying is that even if that last surge in long-term rates did not occur, I think the market would have topped out and come down anyway because it had reached levels which in historic terms usually signaled some form of top.

So I find it difficult to perceive how actions by the Federal Reserve were a material factor in the market when, as best I can judge, there were so many other issues which would have driven the market down in any event. In other words, no matter what we did, in my judgment, the market probably would have come down at some point and probably in much the same way it did. And if one can say that, then it's very difficult to say that we had a material effect on it.

The CHAIRMAN. Let me ask one final question. You said that M1 and the monetary base are closely related. Furthermore, you say that M1 was unstable in the 1980's and should not be a target. You implied that the monetary base should not be a target.

Wasn't the instability in M1 related to the interest-sensitivity to deposits such as NOW accounts which are not included in the monetary base and to the fact that reserves and/or currency become very unstable in the 1980's?

Mr. GREENSPAN. Well, in effect, Mr. Chairman, the interest sensitivity that affects demand deposits affects total required reserves obviously, because to the extent that we have required reserves for demand deposits they are in the total reserve number and, therefore, in the total monetary base.

So while it is true that it is somewhat less sensitive than M1, it nonetheless captures most of the problem, largely because the volatility in transaction deposits as a consequence of interest sensitivity causes a virtually fixed relationship between required reserves for transaction deposits. What we find is that we mirror that instability in M1 in the required reserves part of the monetary base.

The CHAIRMAN. But you can control required reserves. You can control the monetary base.

Mr. GREENSPAN. Sure, we can. I'm saying that. Nonetheless, it would create the same degree of problem that would occur were we to try to control M1. I don't deny that if we were absolutely forced to that we could get M1 to stay within a specific narrow range. My concern, however, is that there are occasions when trying to do that would destabilize the economy.

The CHAIRMAN. That's exactly right. I think that perhaps there's a misunderstanding at least between you and me on what these target ranges mean. I don't think a target range means you have to meet it. I don't think that your success or failure depends upon whether you meet the range. I don't think that should ever be the case. You certainly should have flexibility. You have to have it.

What we want to know is, at the beginning of a period, what you feel should be the policy and then, of course, as conditions change, if you have to modify it then you can explain why.

So I would hope that you would consider that monetary base suggestion as a possibility. Thank you.

Senator RIEGLE. Could I ask just one more question, Mr. Chairman?

The CHAIRMAN. Certainly.

FOREIGN INVESTMENT

Senator RIEGLE. I don't know if you saw Malcolm Forbes' editorial in an issue a few weeks ago to the effect of him expressing a great concern about foreign investment in the United States, about these recycled dollars, money that used to be ours now belongs to somebody else, coming back in and picking off strategic assets of various kinds, as apart from coming in and building a manufacturing plant and so forth.

Mr. GREENSPAN. Was he saying strategic in a national security sense?

Senator RIEGLE. Well, that would have been part of it, the question of whether they were coming in and picking off a high technology company or an electronics company or somebody who's defense sensitive, but also financial services. The point he was making was broader than just that and it addressed real estate and other things.

Do you have any concern at all about this money coming back in in terms of this increasing foreign investment of that kind in the United States?

Mr. GREENSPAN. No, with the sole exception of national security secrets, which is a different category. What's happening is that we're shifting ownership from American to foreign. The corporation remains American, it remains under our laws. It is subject to the same taxes. It is subject to all the other considerations that an American-owned organization would have. So in that sense, I'm not concerned about the form of the ownership.

I think, strangely enough, there is a difference as far as these policies are concerned between whether the ownership is in real terms—that is owning real estate or a company—and owned in liquid-asset terms. The liquid-asset holding that is the external liability of financial claims raises a number of the issues that you raise with respect to our policies and our financial instability. But once those monies are committed to real assets, they are no longer that liquid and capable of being shifted around. And provided that the owners adhere to the laws of this land, these are creators of jobs and these are creators of prosperity.

Remember that the United States was a major investor in Western Europe after World War II and, in my judgment, those vast investments were a major factor engendering the extraordinary recovery in Europe. We created jobs. We created technology. We created standards of living there, and I don't think we should look askance at others investing here. I mean free trade, in my judgment, the movement of goods and services, enhances everybody's standard of living and the free movement of capital does the same for much the same reasons.

Senator RIEGLE. Well, Malcolm Forbes, who I would think probably describes himself as a raving capitalist and is a real believer—

Mr. GREENSPAN. He's a good friend of mine.

Senator RIEGLE. I know he is and when somebody like that, as opposed to a Felix Rohatyn or Robert Rice, speaks out because they are concerned about it, I think it's a significant piece of data and I've heard this from a lot of other people who would share Malcolm Forbes' general vantage point who are now concerned about this from the point of view where they see other implications to it; that if you've got mercantilist nations that are very predatory in their trading practices and you can document that, who are loaded with dollars and they come in and pick off choice assets, not just the people who design the black boxes for the Defense Department but other strategic industries—high technology, computer chip type industries and so forth—that gives them a degree of operational control in this country that's quite different than we have perhaps seen before and sometimes they can shut down certain things. If you're looking at a worldwide marketing scheme and a worldwide business scheme, the degree to which you do or don't produce part of that output in the United States is part of a much larger corporate multinational strategy and very often a nationalistic strategy—what's good for the people who are domiciled in another country.

I think this is now an issue that we need to look at very carefully. I think Malcolm Forbes is not just seeing shadows on the wall here. I think this issue is now one we'd better take a look at because of the charts I was describing earlier. We've put so much of our wealth, if you will, in other hands. We've gone from being a creditor to a debtor. We've exchanged equity capital for consumer goods and now the other person has taken title to the equity and they're lending it back to us in a debt form, and we're in an entirely different posture than we were before.

And I don't think it is the same old story that we've seen in the Marshall Plan days. I wish it were. But I would like to urge the Fed to take a look at that and see if the view that some major people in the private sector are beginning to express apprehension about this has something more to it that we'd better understand while we still have some chance to do something about it.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you very, very much, Chairman Greenspan, for a superlative performance. We're in your debt.

Mr. GREENSPAN. Thank you very much.

The CHAIRMAN. The committee stands adjourned.

[Whereupon, at 12:05 p.m., the hearing was adjourned.]

[Response to written questions of Senators Proxmire, Sasser, and Sanford follow:]

**Chairman Greenspan's Responses to Written Questions from
Chairman Proxmire in Connection with the Hearing Held on
February 24, 1988**

Question 1. In your written testimony, on page 6, you state:

"Indeed, indications of some softening in the economy as the year began, against a backdrop of a more stable dollar in foreign exchange markets, led us to take a further small easing step a few weeks ago."

Some will insinuate that the Fed's ease was acquiescence to pressure from the Reagan Administration rather than good policy. To clear the record would you please give us a precise description of the economic factors that were the most prominent influence in your decision to ease? What indications of softening in the economy did you see?

Answer: As you know, the decline in the stock market and buildup in business inventories last fall were key causes for some concern about weakness in the economy in the first part of 1988. In addition, monetary growth was weak in the latter part of 1987.

During January, the incoming news gave some indications that, indeed, we might be moving toward a marked slowdown in production growth. Among the indicators were a substantial jump in initial claims for unemployment compensation and weak figures for housing activity. Fears of possible recession were reflected in a good many private forecasts, and this kind of thinking obviously carried risks of a self-fulfilling prophecy if business decisionmakers became too gloomy.

Meanwhile, inflationary pressures seemed to be in check, with favorable near-term prospects for energy prices in particular. In addition, the dollar was exhibiting greater

stability on exchange markets; the weakness in the dollar in the latter part of 1987 had militated against a greater adjustment in System policy to compensate for the risks to the economy associated with financial fragility in the aftermath of the stock market break. Under the circumstances prevailing in early 1988, we felt it appropriate to move to reduce modestly further the pressures on the reserve positions of depository institutions.

Question 2. Many including myself are concerned by the growth of debt in our economy. Debt to GNP ratios for all classes of borrowers have risen to very dangerous levels. Doesn't this limit the ability of the Federal Reserve to contract credit without causing widespread default on credit obligations? In the 1980's the ex-post real interest rate has exceeded the real GNP growth rate on average. Doesn't this imply that the debt to GNP ratio must rise?

Answer: We do need to be concerned, in general, that the highly levered positions of many businesses and households might make them more vulnerable to adverse economic or financial developments. So, I share your concern about this pattern of developments over the course of the 1980s. There were some hopeful signs in the deceleration of debt growth last year, and I would hope to see that trend continue.

Your observations about the arithmetic of interest rates and GNP growth is correct up to a point, but it abstracts from all considerations other than interest payments on the debt. Consider, for example, the case of the federal government alone: If the interest rate were above the GNP growth rate and the current primary deficit (that is, the total deficit, less interest payments net of the taxes paid on that interest) were zero or positive, your formula would tell us correctly that the government debt to the GNP ratio would rise; however, if there were a sufficiently large primary surplus, the ratio could be stable or declining.

Question 3. There appear to be two schools of thought on exchange rate policy. The first group says let the dollar fall and fall a lot in a hurry. Then investors will clamor to buy dollars and U.S. interest rates will actually decline. This school claims that if we let the currency decline a great deal the expectation will be that it can only rise. They point to the experience of devaluations during the fixed exchange rate period when the rule of thumb was if you are going to do it don't undershoot.

The second school believes that a gradual managed decline of the dollar is necessary because in a floating exchange rate world expectations are unstable and a rapid fall in the dollar would create the expectation continue depreciation leading to high interest rates and an exchange rate collapse.

It appears to me that a key question in exchange rate management is how actions today affect expectations of exchange rate changes in the future. Do you agree? Which of these schools of thought has the story right? Why is the right one right and the wrong one wrong?

Answer: The comparison between a devaluation under a fixed exchange rate regime and a depreciation under a floating rate regime is not a simple one. In a fixed exchange rate regime, the monetary authorities of a country declare a discrete change in the currency's parity (and intervention limits). Under the Bretton Woods regime, where parity changes were very infrequent, it can fairly be stated that the rule of thumb was to make sure that the change was large enough to avoid a widespread expectation that a further change would be needed soon. Even so, parity changes by major industrial countries rarely were as large as 15 percent. Within the European Monetary System (EMS), where parity changes are more frequent, the changes have been smaller, generally 5 percent or less. And the

operative rule of EMS devaluations in the 1980s has been to "underdo it" so as to maintain an anti-inflation pressure on economic policy in the higher inflation countries. Under both Bretton Woods and the EMS, parity changes required the agreement or acquiescence of the other members of the regime. Under neither system could monetary and fiscal policy among the partners move drastically out of line so as to build up enormous external balances; macroeconomic policy was constrained by the agreement to maintain fixed exchange rates.

Under the floating rate regime enormous imbalances were allowed to build up in the 1980s since there was no prior agreement to focus economic policy mainly on the exchange rate. By 1985 an international consensus had been reached that the dollar's exchange value was too high, but there was no agreement on how much too high. Nor is there any consensus now on the dollar's long-run equilibrium value. The purpose of the February 1987 Louvre Accord and the reaffirmation in December 1987 was to give the U.S. and foreign economies time to adjust to the cumulative substantial depreciation of the dollar that had already occurred, while recognizing the uncertainties of where the dollar's long-run equilibrium value may lie.

The Federal Reserve's concern over a precipitous dollar decline has not been that the dollar would fall to zero under the influence of extrapolative expectations, but that a huge

decline over a very short period could disrupt financial markets generally and would certainly subject the economy to severe inflationary pressures in an environment in which still large budget deficits are making substantial net claims on our resources.

The economic function of the dollar's depreciation has been to induce expenditure switching from foreign to U.S. output so as to adjust an unsustainable current account deficit. But in the context of an economy near full employment, this means that domestic absorption has to be restrained by macroeconomic policy to make room for the increase in export demand if we are not to incur an acceleration of inflation.

In a context of slow reductions of the budget deficit to slow domestic spending, the faster the current account adjustment is, the greater the burden on monetary policy to curtail private domestic spending. Indeed, a precipitous fall in the dollar and a very rapid adjustment of our current account deficit would require a draconian monetary tightening to reduce private spending if we were to contain total demands on the economy's resources.

Question 4. Real interest rates have been unusually high in the U.S. in recent years. Are real interest rates in the U.S. higher than in those countries with which it competes internationally? What are the causes of high real interest rates in the U.S.? Do you foresee real interest rates declining in the near future? What changes in public policy would help to lower real rates of interest?

Answer: Real interest rates are defined as the difference between nominal interest rates and expected inflation. Because expected inflation cannot be measured directly, neither can real interest rates. If real rates are calculated assuming that expected inflation can be adequately represented by actual inflation over the immediate past, rates in the United States now are well within the range of values for major industrialized countries. These rates are considerably higher than in the late 1970s, when their very low level contributed to rising inflation. But they are lower than earlier in the 1980s, when restrictive monetary policy was needed to bring down inflation and fiscal policy was unusually expansionary.

Lowering real rates further probably would require that the United States generate additional savings internally to meet our investment needs, rather than depending on foreign capital inflows. The most direct and dependable approach to this would be to lower the federal budget deficit. Although some reduction in the budget deficit has been achieved, the deficit remains quite large considering the prolonged expansion of the economy.

Further reductions in the deficit, by increasing national savings, would provide downward pressures on real rates and encourage much-needed capital formation.

Question 5. In 1987 the Federal Reserve Board appeared to tighten monetary policy several times to arrest the decline in the exchange value of the dollar. The Fed's monetary base growth decelerated in February, May-June, and in August-September before the stock market collapse. In each of those time periods the dollar was skittish. Why not just let the dollar decline and pursue a steadier course with monetary growth? Wouldn't letting the dollar fall further cause a fall in our huge trade deficit by reducing U.S. imports, and promoting our exports?

Answer: In the spring and the late summer of 1987, it was widely perceived--by the Federal Reserve and the market--that inflationary expectations were increasing, partially in response to the dollar's weak performance. With the economy expanding at rates sufficient to produce rising rates of resource utilization, the FOMC sought some firming of pressures on reserve positions and the discount rate was raised in September.

It is critical that the risk of inflation be controlled and that resources be available in our economy to accommodate a shift in demand toward net exports. Otherwise, a further decline in the dollar's value would be counterproductive. It would not help significantly to reduce our external imbalance, but it would tend to weaken foreign growth and to exacerbate inflationary pressures in the United States.

Question 6. Privately many people are suggesting that the U.S. economy is going to be put into a severe recession by policymakers in 1989 just after the Presidential election. Some suggest that this is the only way to reduce the trade deficit. Does the Federal Reserve intend to contribute to putting the economy into a recession in 1989 by tightening money after the election? Are there not some very adverse consequences associated with a prolonged recession given the condition of Latin American debtors, farmers, banks, S&Ls and businesses with such high levels of debt? Does not that limit the extent of a recession that policymakers could tolerate before easing up to alleviate these maladies? Is not further exchange rate depreciation the alternative to reducing absorption by inducing a recession? Why not encourage continued growth and let the dollar fall rather than force the economy into recession?

Answer: The Federal Reserve does not view a recession as being necessary to reduce the trade deficit or as being desirable in any way. Indeed, the real trade deficit has been shrinking steadily since the third quarter of 1986, albeit from an extraordinary size, over a period when the U.S. economy has been expanding at a quite satisfactory pace. The turnaround in trade was one of the principal contributors to U.S. economic growth in 1987.

We are optimistic that the balance of trade will continue to improve in 1988 and beyond. The effects of the drop in the dollar's value that began in 1985 do not appear, as yet, to be fully reflected in the terms of trade or, consequently, in imports and exports, but these effects should continue to unfold in coming months.

The process of international adjustment is a challenging one. Achieving a better external balance without

increasing inflationary pressures will require a restrained pace of expansion of domestic demands. Such restraint could best be obtained by limiting federal spending and the budget deficit, which would increase our savings and put downward pressures on interest rates, helping to sustain capital formation. This would be entirely consistent with continued expansion in our economy.

Question 7. Over the last decade economists' estimates of the so-called non-accelerating inflation rate of unemployment (NAIRU) have varied considerably. Large changes in demographic factors and sectorial dislocation may have provided good reason for these varying estimates over time. In recent months the estimates have been declining. What is your estimate of NAIRU for today and for the near future? Do you believe that the current declines in the unemployment rate imply that inflation will accelerate? Could not the presence of foreign competition increase the discipline of wage demands in light of the possibility of losing business to competitors offshore? Have not real wages in the United States been falling in recent years? Is this the result of the influence of foreign competition?

Answer: It should be kept in mind that the concept of the NAIRU is open to question; it is typically identified with a particular formulation of wage determination (the "expectations-augmented Phillips curve"), which may not capture all significant aspects of behavior. Even within that general analytical framework, empirical estimates of the NAIRU vary considerably among researchers. It is fair to say that most analysts believe that the NAIRU has been declining in recent years.

It is my assessment that we probably have not yet reached the level of unemployment--of general labor market tightness--that will spell a significant increase in real wage inflation. One factor in this is, as you suggest, the awareness on the parts of labor and business that the competitive realities of the domestic and international marketplace will not permit cost increases to be passed through readily to prices. In effect, last year's decline in real wages is consistent with the painful fact that the reversal of the earlier runup in the

foreign exchange value of the dollar implies a deterioration in terms of trade, which must be inevitably reflected in our purchasing power.

Question 8. Governor Johnson, in a speech at the Cato Institute in February, suggested that the Federal Reserve is now watching three new indicators in setting monetary policy: 1) the term structure of interest rates; 2) the exchange value of the dollar; 3) the price of commodities.

Please discuss what variations in each of these individual indicators would imply about economic developments and how monetary policy would be used to respond to the signals sent by the indicators.

Answer: Exchange rates, commodity prices, and the spread between long- and short-term interest rates are just three of the many financial and nonfinancial indicators used by the Federal Reserve to assess where the economy is headed and the effects of monetary policy. They have been among the important types of information the Federal Reserve has been looking at for some time, but as confidence in the relationship of the money supply to the economy has eroded in recent years, many policymakers have been paying greater attention to other indicators--including the three cited. Interpreted together and with information provided by other variables, the three indicators help in the assessment of whether an adjustment of policy is needed to achieve ultimate objectives for employment and prices.

Changes in these variables can reflect shifts in supply/demand balances in our economy and market expectations about prices and activity--important information for monetary policy formulation. For example, a widening of the yield

spread, a fall in exchange rates, and rising commodity prices could signal the potential for a stronger economy and potentially a pickup in inflation. A narrowing in the yield spread, a stronger dollar, and weakness in commodity prices could indicate the potential for a slowing in economic activity and possibly disinflation or deflation. How policy might react to these signals would depend on whether the trends were confirmed by other information and whether they were considered unfavorable to the economy. For example, indication of greater strength expected in the economy would be viewed quite differently in a recession than if the economy were near full employment and inflation a more immediate threat.

The need for looking at a number of indicators together arises from the possibility that any one of them may be subject to a variety of influences that could result in inappropriate policy signals. Commodity prices, for example, can reflect developments in particular markets and represent only a small component of overall business costs; the exchange rate is influenced by developments overseas as well as in the United States; and the yield curve is influenced by expectations about Federal Reserve policy and shifting valuations of liquidity, as well as the outlook for the economy and prices. Even so, all three of these, when used with care, can convey to the policy-maker important information about market expectations and supply and demand conditions not only in the narrow markets in which they are determined but in the overall economy as well.

Question 9. In your testimony you suggested that the monetary base had been considered as a target for monetary policy in light of the decision to drop M1 targets in the report to Congress. You also suggested that it was not desirable to target the monetary base.

- (a) Please provide the Committee with a history of the velocity of the monetary base from 1960 to January of 1988. How does the variability of base velocity compare with the variability of the velocity of M1?
- (b) Please provide the Committee with data on the variability of the components of the monetary base from 1975 to the present. How does the variability of these components compare with the variability of components of M1 that are not included in the monetary base?
- (c) Why do you oppose establishing the monetary base as a target in lieu of the M1 target that was discarded last year?

Answer: (a) As you know, the monetary base consists of the monetary liabilities of the Federal Reserve and the Treasury. There are two publicly available measures of the monetary base, one constructed by the Board and the other by the Federal Reserve Bank of St. Louis, with differences between the two measures reflecting mainly alternative treatments of vault cash. The discussions below focus on the base measure constructed by the Board, after adjustments for changes in reserve requirements and seasonality. As measured by the Board, the base is the sum of total reserves (adjusted for changes in reserve requirements), the currency component of the money stock, and a small residual item equal to the surplus vault cash of depository institutions--that is, vault cash in excess of reserve requirements.

Table 1 presents quarterly velocity data for the monetary base and M1 for the period 1960:Q1 through 1987:Q4, both in levels and in growth rates. Since velocity is calculated as the ratio of GNP to money, velocity data are available only on a quarterly basis--the frequency at which GNP is measured.

Statistics summarizing the variability of base and M1 velocity (measured as the standard deviation of velocity growth rates) are shown in Table 2 for the period 1960:Q1 through 1987:Q4, and for subperiods of this interval. The table indicates that over the 1960s and 1970s the variability of base velocity and variability of M1 velocity were about the same, but that over the 1980s the variability of M1 velocity nearly doubled while that of base velocity rose by considerably less, leading to a substantial increase in the variability of M1 velocity relative to that of the base.

The greater variability of M1 velocity compared with base velocity over the 1980s reflects two factors: (1) that the currency component of M1 accounts for a much greater share of the base (roughly three-quarters) than of M1 (about one-quarter), and (2) that most of the increased variability in M1 velocity in the 1980s, relative to the 1960s and 1970s, can be traced to components of M1 other than currency. As shown in Table 3, the variability of the velocity of transaction deposits

in M1 (the sum of demand deposits and other checkable deposits), which account for about three-quarters of M1, increased sharply in the 1980s. In large part, this heightened volatility reflected greater fluctuations in interest rates as well as the nationwide authorization of NOW accounts and other financial deregulation that increased the sensitivity of this component to movements in interest rates and to shifts in the portfolio preferences of the public. In contrast, the variability of currency velocity was little changed in the 1980s compared to earlier periods. The increased variability in transactions deposits is reflected in greater variability of the reserve components of the base. But the greater share of currency and smaller share related to deposits in the base has tended to damp the increase in the variability of base velocity relative to that of M1.

(b) Table 4 summarizes the variability of base and M1 growth rates, and the variability of components of these aggregates, for the period 1975:Q1 through 1987:Q4 and for subperiods of this interval. The table indicates that quarterly growth rates of the base tend to be appreciably less variable than those of M1. This relationship reflects mainly the large share of the base accounted for by currency, which tends to grow more smoothly than transaction deposits.

(c) The Federal Reserve does not necessarily oppose establishing growth targets for the monetary base. This issue is currently being considered within the System. We are attempting to evaluate whether the establishment of such targets would enhance the Federal Reserve's ability to achieve its policy goals or our ability to convey our policy intentions to the public. This involves questions about the value of the base as a forerunner of economic developments and whether its movements add to the information already in the broad aggregates. In large part, the base is closely related to M1, with different weights on the various components. The heavy weight given to currency in the base significantly affects its characteristics as a policy target. For one, as noted above, its velocity is considerably less variable than that of M1. A second characteristic, however, arises from the policy of the Federal Reserve, since its founding, to accommodate the public's demand for currency. Targeting the base together with accommodating currency demand would imply that, if demands for currency were weak or strong, offsetting increases or decreases in reserves might be needed, leading to multiple expansion or contraction of deposits; this could have important effects on interest rates. In any event, regardless of whether it is deemed advisable at some future date to establish monetary base growth targets, it seems likely that monetary policy would need to remain flexible

and that movements in all the monetary aggregates would still need to be evaluated within the broader context of other information about developments in the economy and in financial markets.

Table 1
Selected Velocity Measures

Period	Monetary Base ¹		M1	
	Velocity	Growth Rate of Velocity (annualized percentage)	Velocity	Growth Rate of Velocity (annualized percentage)
1960:Q1	3.689	12.1	11.966	11.8
1960:Q2	3.685	-0.4	11.931	-1.2
1960:Q3	3.674	-1.2	11.964	1.1
1960:Q4	3.642	-3.5	11.834	-4.4
1961:Q1	3.655	1.5	11.940	3.6
1961:Q2	3.702	5.1	12.192	8.4
1961:Q3	3.754	5.7	12.354	5.3
1961:Q4	3.810	6.0	12.491	4.4
1962:Q1	3.875	6.8	12.711	7.0
1962:Q2	3.902	2.8	12.778	2.1
1962:Q3	3.954	5.4	12.867	2.8
1962:Q4	3.956	0.2	12.850	-0.5
1963:Q1	3.979	2.3	12.918	2.1
1963:Q2	3.996	1.8	12.960	1.3
1963:Q3	4.040	4.4	13.070	3.4
1963:Q4	4.060	2.0	13.114	1.3
1964:Q1	4.130	6.9	13.273	4.9
1964:Q2	4.157	2.7	13.297	0.7
1964:Q3	4.156	-0.1	13.301	0.1
1964:Q4	4.132	-2.3	13.222	-2.4
1965:Q1	4.238	10.3	13.535	9.5
1965:Q2	4.289	4.8	13.642	3.2
1965:Q3	4.336	4.3	13.767	3.7
1965:Q4	4.386	4.6	13.960	5.6
1966:Q1	4.446	5.5	14.187	6.5
1966:Q2	4.455	0.8	14.195	0.2
1966:Q3	4.546	8.2	14.300	3.0
1966:Q4	4.609	5.6	14.469	4.7
1967:Q1	4.615	0.5	14.418	-1.4
1967:Q2	4.587	-2.4	14.354	-1.8
1967:Q3	4.583	-0.4	14.433	2.2
1967:Q4	4.587	0.4	14.443	0.3

Table 1 (continued)

Selected Velocity Measures

<u>Period</u>	<u>Monetary Base¹</u>		<u>M1</u>	
	<u>Velocity</u>	<u>Growth Rate of Velocity (annualized percentage)</u>	<u>Velocity</u>	<u>Growth Rate of Velocity (annualized percentage)</u>
1968:Q1	4.666	6.9	14.672	6.3
1968:Q2	4.715	4.2	14.855	5.0
1968:Q3	4.712	-0.2	14.858	0.1
1968:Q4	4.683	-2.5	14.818	-1.1
1969:Q1	4.720	3.2	14.996	4.8
1969:Q2	4.754	2.9	15.073	2.0
1969:Q3	4.831	6.5	15.244	4.6
1969:Q4	4.832	0.1	15.114	-3.4
1970:Q1	4.831	-0.1	15.115	0.0
1970:Q2	4.869	3.1	15.108	-0.2
1970:Q3	4.895	2.2	15.144	1.0
1970:Q4	4.824	-5.8	14.928	-5.7
1971:Q1	4.945	10.1	15.276	9.3
1971:Q2	4.931	-1.2	15.258	-0.5
1971:Q3	4.935	0.3	15.219	-1.0
1971:Q4	4.947	1.0	15.252	0.9
1972:Q1	5.020	5.8	15.504	6.6
1972:Q2	5.071	4.1	15.614	2.8
1972:Q3	5.079	0.6	15.716	2.6
1972:Q4	5.117	3.0	15.817	2.6
1973:Q1	5.207	7.1	16.022	5.2
1973:Q2	5.270	4.8	16.122	2.5
1973:Q3	5.312	3.2	16.131	0.2
1973:Q4	5.414	7.7	16.292	4.0
1974:Q1	5.373	-3.0	16.102	-4.7
1974:Q2	5.448	5.6	16.068	-0.8
1974:Q3	5.510	4.5	16.078	0.2
1974:Q4	5.545	2.5	16.154	1.9
1975:Q1	5.540	-0.4	16.035	-2.9
1975:Q2	5.599	4.3	16.181	3.6
1975:Q3	5.719	8.6	16.546	9.0
1975:Q4	5.850	9.2	16.803	6.2

Table 1 (continued)

Selected Velocity Measures

<u>Period</u>	<u>Monetary Base¹</u>		<u>M1</u>	
	<u>Velocity</u>	<u>Growth Rate of Velocity (annualized percentage)</u>	<u>Velocity</u>	<u>Growth Rate of Velocity (annualized percentage)</u>
1976:Q1	5.953	7.1	17.040	5.6
1976:Q2	5.964	0.7	16.979	-1.4
1976:Q3	6.011	3.1	17.038	1.4
1976:Q4	6.058	3.2	17.174	3.2
1977:Q1	6.097	2.6	17.362	4.4
1977:Q2	6.211	7.5	17.658	6.8
1977:Q3	6.301	5.8	17.822	3.7
1977:Q4	6.261	-2.5	17.727	-2.1
1978:Q1	6.288	1.7	17.698	-0.7
1978:Q2	6.498	13.3	18.307	13.8
1978:Q3	6.537	2.4	18.390	1.8
1978:Q4	6.643	6.4	18.643	5.5
1979:Q1	6.711	4.1	18.754	2.4
1979:Q2	6.738	1.6	18.867	2.4
1979:Q3	6.702	-2.1	18.942	1.6
1979:Q4	6.748	2.7	18.811	-2.8
1980:Q1	6.886	8.2	19.000	4.0
1980:Q2	6.990	6.0	18.658	-7.2
1980:Q3	0.819	-9.8	18.739	1.7
1980:Q4	6.902	4.9	19.090	7.5
1981:Q1	7.179	16.0	19.752	13.9
1981:Q2	7.149	-1.6	19.689	-1.3
1981:Q3	7.224	4.2	19.963	5.6
1981:Q4	7.171	-2.9	19.876	-1.8
1982:Q1	7.039	-7.4	19.497	-7.6
1982:Q2	7.109	4.0	19.478	-0.4
1982:Q3	7.005	-5.9	19.254	-4.6
1982:Q4	6.808	-11.3	19.049	-4.3
1983:Q1	6.756	-3.1	18.917	-2.8
1983:Q2	6.770	0.9	19.012	2.0
1983:Q3	6.727	-2.5	19.063	1.1
1983:Q4	6.818	5.4	19.251	3.9

Table 1 (continued)
Selected Velocity Measures

Period	Monetary Base ¹		M1	
	Velocity	Growth Rate of Velocity (annualized percentage)	Velocity	Growth Rate of Velocity (annualized percentage)
1984:Q1	6.961	8.4	19.447	4.1
1984:Q2	7.000	2.3	19.503	1.2
1984:Q3	7.020	1.1	19.444	-1.2
1984:Q4	7.035	0.9	19.412	-0.7
1985:Q1	6.980	-3.1	19.368	-0.9
1985:Q2	6.898	-4.7	19.262	-2.2
1985:Q3	6.774	-7.2	19.132	-2.7
1985:Q4	6.694	-4.7	19.007	-2.6
1986:Q1	6.658	-2.1	18.971	-0.8
1986:Q2	6.465	-11.6	18.716	-5.4
1986:Q3	6.277	-11.6	18.488	-4.9
1986:Q4	6.049	-14.6	18.094	-8.5
1987:Q1	5.978	-4.7	17.974	-2.7
1987:Q2	5.971	-0.5	17.942	-0.7
1987:Q3	6.065	6.3	18.030	2.0
1987:Q4	6.112	3.1	18.001	-0.6

1. Board of Governors concept. This measure is seasonally adjusted and adjusted for regulatory changes in reserve requirements.

Table 2

Variability in Quarterly Growth Rates of Selected Velocity Measures (percent, annual rates)

Period	Standard Deviation of Growth Rates	
	Monetary Base Velocity	M1 Velocity
1960:Q1-1987:Q4	4.2	5.2
1960:Q1-1969:Q4	3.5	3.6
1970:Q1-1979:Q4	3.9	3.8
1980:Q1-1987:Q4	4.6	7.0

Table 3

Variability in Quarterly Growth Rates of Selected Velocity Measures
(percent, annual rates)

Period	Standard Deviation of Growth Rates					
	Monetary Base	Currency Component of M1	Total Reserves	Residual Item ¹	Memo: M1	Memo: Transaction Deposits in M1 ²
1960:Q1-1987:Q4	4.2	4.0	6.9	30.2	5.2	6.1
1960:Q1-1969:Q4	3.5	3.3	6.1	29.7	3.6	3.9
1970:Q1-1979:Q4	3.9	4.1	5.2	26.4	3.8	4.1
1980:Q1-1987:Q4	4.6	4.1	7.7	33.5	6.9	8.6

1. The residual item is surplus vault cash of depository institutions less that part of the vault cash holdings of thrift institutions that is already included in the currency component of M1. Although growth rates of the residual and its velocity are quite volatile, the absolute level of the residual is relatively small, about \$3 billion currently compared with about \$260 billion for the entire monetary base.
2. Sum of demand deposits and other checkable deposits.

Table 4

Variability in Quarterly Growth Rates of Selected Monetary and Reserves Aggregates
(percent, annual rates)

Interval	Standard Deviation of Growth Rates					
	Monetary Base	Currency Component of M1	Total Reserves	Residual Item	Memo: M1	Memo: Transaction ² Deposits in M1
1975:Q1-1987:Q4	1.7	1.5	6.3	27.6	4.7	6.3
1975:Q1-1979:Q4	1.4	0.9	3.9	15.7	2.5	3.3
1980:Q1-1987:Q4	1.9	1.6	6.5	31.9	5.5	7.5

1. The residual item is surplus vault cash of depository institutions less that part of the vault cash holdings of thrift institutions that is already included in the currency component of M1. Although growth rates of the residual and its velocity are quite volatile, the absolute level of the residual is relatively small, about \$3 billion currently compared with about \$260 billion for the entire monetary base.
2. Sum of demand deposits and other checkable deposits.

Question 10. A recent Federal Reserve press release (for the FOMC meeting of December 15-16, 1987, page 10) referred to "fiscal, monetary, and trade policies by the United States and its major trading partners" that are appropriate to the realignment of the U.S. economy called for by the "unsustainable size of the current trade deficit and the rapid growth in the nation's external indebtedness." GNP data show that real exports have grown recently more quickly than consumption.

What further changes in the U.S. economy do you believe necessary to deal with the problem of the trade deficit? What fiscal and monetary policies do you consider desirable to promote the realignment? What actions would we like the U.S. trading partners to take to further the necessary adjustments in the U.S. and the world economies?

Answer: We have a long way to go in restoring our external position to a sustainable posture. It will require continued effort to enhance the efficiency of our productive processes and the quality of our goods, and continued restraint on prices. Monetary and fiscal policies in the United States must be aimed at noninflationary growth of aggregate activity, which likely will entail a considerably slower increase of consumer spending than we saw earlier in the present economic expansion--so that resources will be available to support gains in net exports. Our trading partners, in contrast, must work to ensure adequate growth of domestic demand in their economies.

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Question 11. In the Wall Street Journal for Tuesday, February 23, Edouard Balladur, the finance minister of France, referred to the "anarchy of floating exchange rates" during the past 15 years. Several well-known analysts now recommend that the international financial system needs reform. Others disagree.

In the Fed's estimation, how urgent is reform of the international financial system?

Answer: Calls for reforming the international monetary system stem primarily from dissatisfaction with the wide swings in exchange rates that have occurred in recent years. However, the complexities of negotiating a new international monetary system would be immense. The issue of reforming the international monetary system has been studied repeatedly over the past 20 years in various international fora, and no political, conceptual, and operational consensus has emerged about the need and manner of restructuring the international monetary system.

In practice, modifications in selected aspects of the international monetary system are likely to evolve through pragmatic adjustments in current arrangements. In recent years, policymakers in the major economies have concluded that there is no substitute for sound, compatible, non-inflationary policies by all major countries on a sustained basis as the most promising way to achieve and maintain greater exchange rate stability. Ongoing efforts to strengthen the process of international policy coordination, as evidenced by the Louvre statement of February 1987 and the G-7 statement of last December, are directed at reinforcing this pragmatic approach to achieving greater exchange rate stability.

Question 12. Many financial firms, particularly those in Texas and other energy producing and agricultural states, are currently undergoing trauma. Their survival is threatened.

Do you consider that the resources of the FDIC and FSLIC funds are adequate to deal with the problems of these institutions? What do you believe is the correct public policy to deal with this situation?

Answer: Many thrift institutions and commercial banks have run into serious difficulty over the current decade, resulting in substantial losses to the federal deposit insurance funds. The problems of the thrifts have been particularly acute relative to the resources of the Federal Savings and Loan Insurance Corporation (FSLIC).

The large number of troubled thrift institutions, principally in Texas and California, has put a particularly severe strain on the resources of the FSLIC. Given the added resources to be obtained from the recent recapitalization of the insurance fund and the continued inflow of insurance premiums from insured institutions, the FSLIC now appears to have sufficient funds to permit it to begin to address many of the more serious problems in the industry. The FSLIC will undoubtedly require a further injection of capital to complete the process of resolving the problems in the thrift industry.

As for the Federal Deposit Insurance Corporation (FDIC), it, too, has incurred substantial costs in resolving the

problems of troubled commercial banks--most recently, in particular, in the State of Texas. In the case of the FDIC, however, it managed to build up its insurance fund over the early part of the decade and thus, given the current level of the fund and prospects for a continued inflow of insurance premiums from commercial banks, it appears that it remains strong and will have sufficient resources to resolve existing and new problems that may arise in the industry. FDIC Chairman William Seidman has stated recently that the insurance fund remains healthy and is more than adequate to address the problems he foresees this year.

The FDIC and the FSLIC were established by the Congress for the express purpose of dealing with insolvent commercial banks and thrifts. As a matter of public policy, it would seem appropriate to continue to address problems in the thrift and commercial banking industry through the auspices of their offices.

Chairman Greenspan's Responses to Written Questions from
Senator Sasser in Connection with the Hearing Held on
February 24, 1988

Question 1. We have seen an extraordinary decline in the value of the dollar over the past year. In previous times, such declines in our currency value have been accompanied by rises in prices, in inflation generally. Imported goods become more expensive and at the same time it gives a window to domestic producers to increase prices also.

Why haven't we seen dramatic increases in import prices and resulting inflation? Are foreign suppliers being cautious about increasing prices--trying to preserve their market shares?

Answer: There are basically two phenomena working to limit the rise in import prices following the sharp declines in the dollar. First, production costs for foreign exporters have tended to decline, in terms of their own currencies, as prices of imported raw materials and intermediate goods have declined and as domestic prices and wages have been quite stable. Second, as you suggest, foreign exporters have been reluctant to allow their prices in the United States to rise by the full amount of the dollar's decline. In an attempt to preserve their market position as much as possible, they have preferred to see an erosion of their profit margins, which had been built up substantially over the period of the dollar's rise from 1980 to 1985.

Question 2. As you know, the central bankers of the major western countries have developed a plan to raise the capital of banks dealing in international markets. By 1992, banks would have to have minimum capital of 8 percent of assets, of which 4 percent would have to be common equity and disclosed reserves. This is obviously a very good idea--capital is the best cushion against loss and the best protector of the safety and soundness of the banking system that there is.

Well 1992 is only five years away and there are a great many of our banks that are pretty far away from meeting this standard. Will they make it?

The recent GAO study on the repeal of the Glass-Steagall Act says that bank holding companies that are undercapitalized have incentives to take risks that could threaten the insured bank. "Our work has shown that solvent thrifts with capital below 3% of assets tend to undertake more risky activities than do their well-capitalized peers." Indeed, the GAO is worried that the shakiest banks might be the first to take advantage of the repeal of Glass-Steagall.

Do you agree that capital is the best firewall? I understand that under the Chairman's bill, S. 1886, a bank holding company has to have excess capital to have a securities affiliate. Wouldn't it make sense to set the capital level even higher if banks get into the securities business, would it make sense to speed up the implementation of this international capital agreement? If we tied securities powers to bank capital it would be an incentive for banks to get their capital up, don't you think?

Answer: Most regional and community institutions already meet or exceed the proposed capital standards by a comfortable margin--both the interim ratios specified for 1990 and the somewhat higher ratios targeted for 1992 and beyond--and so do more than half of the large multinationals. Some of the organizations that will have to increase their capital ratios to meet the standards may find that difficult to do but we believe that, by concerted effort, most, if not all, will be able to accomplish that end over the specified phase-in period.

With regard to undercapitalized banks being the first to take advantage of the repeal of Glass-Steagall, that is not a reasonable concern. S. 1886 specifies that bank holding companies will be permitted to engage in securities activities, not previously authorized for banks, in a newly established nonbank subsidiary only after obtaining the approval of the Federal Reserve Board. And, the Act prohibits the Board from granting such approval to banking organizations that do not have sufficient resources to adequately capitalize the securities affiliate and, at the same time, meet the capital standards set down for banking organizations. The bill also provides that a member or nonmember bank, whether it is owned by a bank holding company or independently operated, may not be affiliated with a company that engages in securities underwriting activities except as provided under the new securities affiliate provisions of S. 1886 or to the extent permitted by statute for national banks.

As for the appropriate capitalization of banking organizations that wish to own a securities affiliate, it is important to keep in mind, in addressing that question, key provisions of S. 1886. Certain provisions, referred to above, require that a banking organization wishing to own a securities affiliate must be able to capitalize it in accordance with

standards set down for securities firms and also meet the capital standards for banking organizations, without counting the capital invested in the affiliate. Other provisions (that establish a so-called firewall) prohibit insured depositories in a holding company from lending to or investing in the securities affiliate and place other restrictions on transactions and arrangements between the securities affiliate and other elements of the holding company. The purpose of all these provisions is to protect insured depositories of holding companies from losses occurring at their securities affiliate and to gain assurance that a bank holding company will be able to serve as a source of strength for its banks and other insured depositories.

Because of the requirements for separate accounting for capital in the securities affiliate and the firewall specified in S. 1886, it appears appropriate that capital standards for banking organizations be set, as contemplated by S. 1886, without regard to whether an organization has a securities affiliate. Moreover, there would appear to be no reason to alter the timetable for implementing the risk-based capital standards for banking organizations simply because they are given the authority to establish securities affiliates. In this regard, S. 1886 provides that a bank holding company may not engage in underwriting certain corporate securities unless all of its subsidiary banks are in compliance with any applicable risk-based capital standards.

Question 3. Would you please address the recent Louvre Accord on exchange rates. How do you think it is working? Does this indicate that there is a much greater level of international macroeconomic cooperation taking place today than there was in the past. Does this give you hope that we will begin to make greater progress on the trade and budget deficits?

Answer: Following the Louvre Accord of February 1987 and again following the G-7 statement this past December, the exchange value of the dollar experienced a period of relative stability. Such stability is welcome. It reflected mutually supportive economic policy actions in the United States and in other major countries, especially last spring, and more recently the recognition of progress toward reducing the U.S. trade and budget deficits.

The increased degree of international cooperation in recent years and the role that has played in achieving exchange rate objectives are noteworthy. However, the ongoing process of cooperation should not obscure the underlying need for individual countries to pursue appropriate policies. In the case of the United States, a key element is that we make further progress in reducing our federal budget deficit.

Question 4. Commentators on the current fiscal deficit point out that a sizable portion of those deficits were incurred to finance corporate cash flow in the form of investment incentives provided in the 1981 tax bill (primarily accelerated depreciation). They also point out that subsequently investment in new plants and equipment declined while mergers, acquisitions, leveraged buyouts and buybacks skyrocketed. These investment incentives were cut back in the 1986 bill but we'll be paying for them for years to come.

Some people argue that these transactions that we are financing with the deficit benefit very few people. Moreover, the deficit itself, or rather the debt, is owned by very few people. According to the Treasury, 71% of the debt is held by 2% of U.S. households. And U.S. taxpayers are paying the owners of the debt billions of dollars annually in interest.

Is there any way to increase the number of people that participate in this process--make ownership more widespread. I happen to think that our capital raising process would be stronger if more participated. What about ESOPS?

Answer: Broad ownership of business clearly is a concept that is consonant with our economic system; it can, as you suggest, contribute to a strong capital raising process and sounder financing for our firms. I think we must be careful about utilizing tax gimmicks to encourage particular forms of investment, for they can easily cost a good deal of revenue for modest net effects. Perhaps the most important focus for policy would be to do more to remove the incentives firms now have to rely heavily on debt as opposed to equity finance.

Question 5. Last Friday, Senators Proxmire, Sanford and I wrote to you and expressed our concern about a trend that could be developing--hostile takeovers of banks. I think the major question in this is how it would affect the capital positions of banks that are not in the best of shape anyway. In the corporate sector we have seen in the last few years an enormous number of highly leveraged hostile takeovers. If these takeovers spread to banking where many institutions are already highly leveraged against inadequate capital, it could compound existing problems.

When the Federal Reserve reviews an application from a bank holding company to acquire another bank or bank holding company, capital adequacy is probably your number one concern. Correct?

Do you think that the combined effect of a trend of hostile bank takeovers, and repeal of Glass-Steagall, could lead to fewer and larger financial services organizations? (I recognize that there are some merger limits in the Proxmire bill.)

What about the combined effect of a trend toward hostile bank takeovers and the dropping of the states' restrictions against interstate banking? What effect will that have on community-oriented banks?

Answer: The Board has indicated that it will apply the same financial standards in evaluating applications contested by management as it applies to negotiated mergers and acquisitions. The Board's basic policy is that banking organizations contemplating expansion proposals maintain strong capital positions and that there should be no significant diminution of financial strength below these levels to effect major expansion proposals. Thus, as a condition of approval, the Board may require the newly combined organization to increase its capitalization above pre-acquisition levels within a reasonable period.

Contested acquisitions and other negotiated mergers, in part fostered by the lifting of restrictions on interstate banking, will no doubt lead to fewer and larger financial organizations. Indeed, there is already a well-established trend in this direction.

To date, however, there does not seem to be an undue level of concentration in major banking markets. In fact, the number of competitors in the banking industry is still large relative to the number of competitors in most other industries. Moreover, the very changes that have accelerated the trend toward bank mergers and acquisitions also appear to have increased the level of intra-industry competition. For example, the removal of legislative barriers to intrastate and interstate banking which paved the way for consolidation also induced highly competitive organizations to expand into markets by opening new branches, establishing ATM networks, and acquiring and revitalizing marginally competitive institutions. In many cases, the new entrants brought added capacity, better service, and more attractive pricing in an effort to gain market share. As a result, competition intensified and the consumer benefited.

The provision of financial services by nonbank firms also mitigates the need for concern about impact of consolidation within the banking industry on competition. Over the past decade, the industry's competitive position has been challenged

on many fronts. Thrift institutions have been competing more aggressively with banks, and competition from foreign banking institutions, credit unions, money market mutual funds, and other nonbank firms has intensified.

In short, consolidation has reduced the number of competing commercial banking organizations and increased the concentration of commercial banking assets at larger organizations. But it is far from clear that these changes have resulted in any lessening of competition; in fact, the intensity of competition appears to have increased.

Finally, it is important to note that many community-oriented organizations have been able to meet this competitive challenge and maintain their market positions as well as reasonably acceptable profit margins. Given their performance to date, there would appear to be no reason why community banking organizations cannot continue to survive and, indeed, thrive in the years ahead.

Question 6. On pp. 6-7 you outline generally the steps the Fed took following October 19. I think the role of the Fed and its effect is a little understated. You say "the System temporarily altered its focus somewhat." It's been the impression of at least some of us that the intervention was more dramatic. You say "we encouraged some decline in short-term interest rates . . ." Well, the federal funds rate dropped from 7-1/2 percent to 6 percent in a day or two.

I was wondering if you could review the situation again with the Committee from a monetary policy standpoint. How much liquidity was supplied to the system by the Fed following October 19? How did the Fed's response compare to normal operating procedure--how much more money was supplied? Over how long a period did the intervention last? What have been the effects in the rest of the economy? On the dollar? On inflation?

Answer: The Federal Reserve provided liquidity temporarily following the stock market collapse to meet extra demands for reserves arising from two sources. One was an enhanced demand for excess reserves by depository institutions; the other was an increased demand for required reserves to back higher levels of demand deposits and NOW accounts. In addition, the Federal Reserve undertook a measured easing of overall reserve pressures as the balance of risks in the economy shifted in the aftermath of the crash. This easing was not as great as might have been inferred from the levels of federal funds trading on particular days, which might be subject to a variety of influences. On a statement week average basis, the federal funds rate fell from 7.6 percent during the week of October 14 to 7.0 percent in the October 28 week and to 6.4 percent during the following week.

Reserve needs were met through open market operations in the form of daily repurchase transactions in the market from October 20 through November 2. These operations were undertaken more frequently than usual, in order to quell market fears. The maturity of the repurchase agreements (RPs) ranged from overnight to four days, and on several days the Federal Reserve entered the market earlier than normal to reassure markets of our intentions. The unusual demands for liquidity reversed in November as the market atmosphere calmed somewhat, and the Federal Reserve open market operations accommodated the reduced demand for reserves. Trading in the federal funds market settled down in the 6-3/4 percent area in the latter part of the year.

There are several measures that can be used to gauge the extent of the Federal Reserve's reserve provision after the stock market decline of October 19 and its subsequent reversal. One is nonborrowed reserves--these are the reserves that are available to depository institutions without going into the discount window and are the most direct reflection of our open market operations. These reserves rose by \$800 million to \$58.3 billion in the two-week reserve maintenance ending November 4, the first period following the crash. They fell by around \$600 million to \$57.4 billion over the subsequent two maintenance periods in the latter part of the year.

Another view of our operations can be had from looking at "net free reserves", which is the excess of reserves we supply in nonborrowed form over that depository institutions need to back deposits. In the November 4 statement period, these rose to \$1,275 million from \$440 million the previous two weeks, also indicating a more generous stance of reserve provision. Net free reserves dropped off to average \$630 million in the next two maintenance periods.

The response of the Federal Reserve seems to have helped prevent the shock from the stock market crash from spreading throughout the financial system. Extreme fears and the accompanying demands for liquidity quickly abated. Concerns about a recession have now eased, and economic growth has continued.

The decline in short-term interest rates after October 19 did place limited downward pressure on the value of the dollar, by making short-term investments in the U.S. slightly less attractive. However, the decline in the dollar was halted early this year, and in any case it did not seem to adversely affect inflationary expectations, given concerns about the economy. In fact, inflationary expectations appeared to diminish following the stock market collapse owing to the possibility of a period of economic weakness or even recession caused by the drop in wealth and confidence. As the economic

expansion has been seen to be continuing at a good pace, these expectations are no longer declining, but the moderate easing by the Federal Reserve since October 21 is not expected to add to inflation pressures in our economy.

Chairman Greenspan's Responses to Written Questions from
Senator Sanford in Connection with the Hearing Held on
February 24, 1988

Question 1. The U.S. Treasury is supporting a case-by-case, market-driven, menu-approach to the international-debt crisis as part of the Baker Plan. An important feature of the Plan is economic restructuring by the debtor countries involved, with the privatization of government enterprises a high priority.

One means of privatizing while at the same time reducing the debt is through debt-to-equity swaps. A Presidential Task Force on Project Economic Justice recommends that LDC debt be restructured to encourage swaps which include employees through part-ownership of the privatized companies through stock ownership plans (ESOPs). As a regulator of the banking system, do you see any means by which we can encourage ESOPs in debt-to-equity swaps?

Answer: ESOPs are useful vehicles to encourage employee participation in the success of their employer company. It would appear that ESOPs would be readily accepted only where there is broad public acceptance of the concept of private ownership of stock. The menu of options developed by the Administration includes encouraging lesser developed countries to adopt policies that will promote development of market-oriented practices in those countries. As these policies are implemented, there may be greater acceptance of private ownership of corporate stock and a concomitant growth in the establishment of ESOPs.

With respect to establishment of ESOPs by foreign companies in which banking organizations invest through debt-for-equity swaps, the Board does not direct or dictate the business practices of these companies. It is the Board's policy that, consistent with any measures necessary to protect the

banking organization's safety and soundness, the foreign companies in which a banking organization invests should be able to compete with other companies on an equal basis. Such companies should not be required to offer benefits that may disadvantage them vis-a-vis their competitors. If it becomes useful to provide for employee participation in management or ownership in order to attract and retain employees, companies owned by U.S. banking organizations would no doubt establish ESOPs and would not be restricted from doing so.

Question 2. As you well know, a great deal of attention is being paid to the growing level of foreign investment in the U.S. along with our growing foreign indebtedness. Some believe that foreign investment is beneficial in that it provides much needed capital for economic restructuring and industrial revitalization. Others believe that it surrenders control over our industrial base and drains our financial resources. What is your view of the role of foreign investment? Is there a maximum desirable level? If so, have we reached it?

Given our propensity to deficit spend, coupled with the attractiveness of the U.S. to foreign capital for both economic and political stability reasons, is it indeed possible to reduce our deficit and our dependence on foreign capital? In other words, if we were to eliminate our budget deficits, wouldn't that make the U.S. an even more attractive site for foreign investment?

Answer: When a nation runs a trade and current account deficit as we are, there must be a capital inflow of some sort to "finance" it. As you note, this inflow has taken the form not only of net borrowing from abroad, but also of equity investments by foreigners in U.S. business. At this juncture, I think we should take a generally positive view of such investment; we are far from the point of foreign domination of American industry, and in many instances the foreign participation offers the potential for the transfer of valuable technological and organizational expertise that will aid our economy.

You are correct in suggesting that success in eliminating our budget deficits would bolster the confidence of foreigners in our ability to manage our economic affairs, and this might--all other things equal--encourage investment in the United States. But other variables would change as well, and I

think the evidence suggests that, in the end, the restoration of better fiscal balance would be compatible--indeed, would foster--greater external balance.

Question 3. Many economists believe there is a strong possibility of a recession beginning in 1989. If the LDC debt problem continues to be addressed as "business-as-usual", what will be the impact of a U.S. recession on debtor nations? What are the implications to U.S. banks holding large third world debt portfolios and the U.S. banking system?

Another troublesome aspect of the third world debt problem has been capital flight, much of it winding up in the U.S. What can we do to encourage the return of capital for productive investment in the debtor nations from which it originated?

Answer: The Federal Reserve does not now foresee a recession in the United States in 1988 or 1989, though we would be foolish to pretend we have perfect insight into events two year from now. However, in the event of a U.S. recession, or more importantly for debtor countries, a recession in industrial countries generally, the heavily indebted countries would be affected in several ways. On the one hand, a recession in industrial countries is likely to result in reduced demand for exports from developing countries and in a decline in commodity prices. This would adversely affect the balance of payments and growth prospects of developing countries. However, in a recessionary environment, world interest rates would likely fall and, as a result, interest payments on the external debt of developing countries would fall. This would strengthen the balance of payments of developing countries with large amounts of floating rate debt. On balance, the net result would depend on the individual borrowing country's circumstances.

The U.S. banking system would be adversely affected by a recessionary environment because the quality of its loan portfolio--including domestic and international loans--would tend to deteriorate. However, given the strengthened capital position of the U.S. banking system in recent years, it is now in a better position to withstand shocks that are either domestic or foreign in origin.

Better policies in developing countries are the key to encouraging the return of flight capital. In particular, appropriate exchange rate and interest rate policies, by providing a stable investment climate, will help encourage residents of developing countries to repatriate capital that they have placed abroad.

FEDERAL RESERVE'S FIRST MONETARY POLICY REPORT FOR 1988

THURSDAY, FEBRUARY 25, 1988

U.S. SENATE,
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS,
Washington, DC.

The committee met at 10 a.m., in room SD-538, Dirksen Senate Office Building, Senator William Proxmire (chairman of the committee) presiding.

Present: Senators Proxmire, Dixon, Garn, Heinz, and Hecht.

OPENING STATEMENT OF CHAIRMAN PROXMIRE

The CHAIRMAN. The committee will come to order.

I want to thank you for your excellent statement. We look forward to your views of the Fed's policies. They are most helpful to us as we conduct our oversight responsibilities.

International considerations have been of vital importance to this country's monetary policy in recent months. There are currently great divisions of opinion concerning the appropriate level of the foreign exchange value of the dollar. With large trade surpluses in Japan, West Germany, and Taiwan and an enormous current account deficit in this country it is hard to resist the temptation to let the dollar fall to address the problem.

On the other hand, many believe that the dollar has fallen enough already, or at least it has fallen as much as it can in a short period of time without causing a recession in the countries whose currencies rise against the dollar. Many of those countries are already suffering from very high levels of unemployment and further exchange rate pressure could put them into a recession that feeds back on this country as well.

A related problem is the impact on the domestic economy when monetary policy is used to defend the dollar. Some, including the Council of Economic Advisers, have suggested that monetary policy was too tight in 1987 because of efforts to defend the dollar and that tight monetary policy significantly contributed to the stock market crash in October.

A third concern derives from the large accumulations of debt owed to foreigners as a result of our persistent large current account deficits. Owing large amounts of debt to foreigners, who are quite sensitive to exchange rate fluctuations, appears to significantly alter the tradeoffs that our central bank faces when setting monetary policy. A look at the data for 1987 suggests that the Fed slowed the growth of the monetary base whenever downward pres-

sure on the dollar developed. Perhaps there is more truth than I would like to admit in economist Albert Bressand's witty remark that "the United States now has two central banks, the Federal Reserve and the Japanese life insurance companies." Our ability to devote monetary policy to purely domestic economic consideration is compromised by the importance of foreign creditors.

Finally, the effect of our monetary policy on the Latin American debtor nations is a source of concern. A rise in interest rates increases the cost of debt service, slows our economy and reduces our ability to import from those debtor nations. When we need to tighten monetary policy to arrest inflationary pressures the ability of debtor nations to pay debt service to our banks is reduced. That in turn may have significant domestic repercussions.

These international challenges posed for our monetary authorities are here to stay. I look forward to hearing our witnesses' views in this vital area of national interest.

Before we start, I have statements for the record from Senators Dixon and D'Amato.

FEBRUARY 25, 1988

STATEMENT OF SENATOR ALAN DIXON

SENATE BANKING COMMITTEE OVERSIGHT HEARING
ON
THE CONDUCT OF MONETARY POLICY

MR. CHAIRMAN, I AM PLEASED TO BE HERE THIS MORNING AS THE BANKING COMMITTEE CONTINUES ITS SEMI-ANNUAL MONETARY POLICY OVERSIGHT HEARINGS AS MANDATED BY THE HUMPHREY-HAWKINS ACT. WE HAVE A DISTINGUISHED GROUP OF WITNESSES BEFORE THE COMMITTEE TODAY, AND I LOOK FORWARD TO THEIR TESTIMONY.

AT THE OUTSET, I WANT TO SAY THAT I WAS DEEPLY CONCERNED BY CHAIRMAN GREENSPAN'S TESTIMONY YESTERDAY ON THE EXTENT OF THE POLITICAL PRESSURE THE FEDERAL RESERVE IS GETTING FROM THE ADMINISTRATION ON ITS CONDUCT OF MONETARY POLICY. I THINK IT IS VITALLY IMPORTANT TO HAVE A SOUND, COORDINATED MONETARY AND FISCAL POLICY. THIS ADMINISTRATION, HOWEVER, HAS GIVEN US BIGGER FEDERAL DEFICITS THAN ALL OF ITS PREDECESSORS COMBINED, AND THAT

FACT CLEARLY HAS TO ADD TO THE DIFFICULTIES THE FED FACES IN TRYING TO ACHIEVE THE KIND OF MONETARY POLICY THAT MAINTAINS THE CONDITIONS FOR SOUND ECONOMIC GROWTH WHILE NOT REKINDLING THE INFLATIONARY FIRES THAT WERE DAMPENED AT SUCH GREAT COST.

IF THE CRITICISM OF THE FED IS AN ATTEMPT BY SOME IN THE ADMINISTRATION TO DIVERT ATTENTION FROM THEIR OWN STEWARDSHIP OF THE FEDERAL BUDGET, I CAN TELL THEM NOW THAT IT WILL NOT WORK. THEY WOULD BE MUCH BETTER ADVISED TO BEND THEIR EFFORTS TO SEE THAT THE EXECUTIVE BRANCH IS DOING EVERYTHING IT CAN TO REDUCE THE TERRIBLE TWIN TRADE AND BUDGET DEFICITS THAT SO JEOPARDIZE OUR ECONOMIC FUTURE.

STATEMENT OF SENATOR ALFONSE M. D'AMATO

FEBRUARY 25, 1988

EACH OF THE EXPERT WITNESSES BEFORE THE COMMITTEE THIS MORNING ARTICULATES THE DILEMMAS FACING BOTH THE FED, THE TREASURY AND THE CONGRESS REGARDING THE HEALTH OF THE U.S. ECONOMY. AT A TIME WHEN WE ARE EXPERIENCING THE AFTER SHOCKS OF A HUGE MARKET CORRECTION, A VOLATILITY IN THE VALUE OF THE DOLLAR, A TRADE BILL WHICH CAN HAVE MANY DETRIMENTAL EFFECTS ON THE U.S. AND WORLD ECONOMY. I BELIEVE THAT THE CONGRESS SHOULD PUT ASIDE PARTISAN DIFFERENCES AND WE SHOULD WORK WITH OUR ALLIES TO PROMOTE U.S. ECONOMIC GROWTH, WHICH TO A LARGE PART IS DEPENDENT UPON GLOBAL ECONOMIC GROWTH.

TODAY'S WITNESSES RECITE THE LITANY OF DILEMMAS FACING THE NATION. ALTHOUGH THESE DILEMMAS HAVE CREATED A CLIMATE OF EXCEPTIONAL UNCERTAINTY, I BELIEVE THAT THE AMERICAN PEOPLE, AND PERHAPS THE REST OF THE WORLD IS LOOKING TO THE CONGRESS OF THE UNITED STATES FOR SOLUTIONS. THE SOLUTIONS TO THE ECONOMIC PROBLEMS CONFRONTING THE U.S. AND GLOBAL ECONOMIES ARE NOT EASILY IMPLEMENTED, NOR ARE THEY SHORT TERM IN NATURE. UNDERSTANDING THIS WE SHOULD BEGIN TO LOOK AT SOME LONG-TERM PROPOSALS SO THAT WE WON'T BE CONFRONTED WITH SIMILAR ECONOMIC DILEMMAS 10 YEARS FROM NOW. EACH OF OUR WITNESSES HAS PROVIDED SOME GUIDANCE WITH REGARD TO BOTH LONG-RUN AND SHORT-TERM SOLUTIONS. IN THE SHORT-TERM, THE FED IS IN A BETTER POSITION TO DEAL WITH ECONOMIC GROWTH THROUGH ITS CONDUCT OF MONETARY POLICY. HOWEVER, THE LONG-TERM SOLUTIONS CAN ONLY BE DEvised AND IMPLEMENTED BY THE CONGRESS - THIS IS A RESPONSIBILITY WHICH WE CANNOT LIGHTLY TAKE.

The CHAIRMAN. I'm going to ask each of you gentlemen if you would to confine your oral remarks to 10 minutes or less. We have had a chance to see your statements in advance so, we will proceed alphabetically. That's about as democratic—I like that word—an approach as we can have. So we will start with Dr. Barbera, who is the chief economist Shearson Lehman Hutton in New York. My eldest son works as a broker for Shearson Lehman. I'm very proud of the way he's done and the way the organization has done. So go right ahead.

**STATEMENT OF ROBERT J. BARBERA, CHIEF ECONOMIST,
SHEARSON LEHMAN HUTTON, NEW YORK, NY**

Mr. BARBERA. Thank you, Mr. Chairman. As you said, I am Robert J. Barbera and I am the chief economist of Shearson Lehman Hutton. I would like to add that I did sit over there as a legislative assistant for economics for Paul Tsongas for several years while you were chairman. It is very interesting to sit on this side of the dais.

I would like to frame my testimony in terms of answering four questions.

First, were Fed officials compelled to tighten in the spring and fall of 1987?

Can the Fed be held largely accountable for the October stock market crash?

Was the Fed's dramatic swing toward ease immediately after the October crash appropriate?

Is current Fed policy, with a slight tilt toward ease, in keeping with the Fed's disinflation bent or is the November election preventing the U.S. central bank from returning to its precrash bias toward tightening?

TIGHTENING OF INTEREST RATES

To briefly summarize my answers to these questions, I believe that consistently faster than expected U.S. economic growth in 1987, alongside bouts of rising commodity prices, dollar weakness and the flight of foreign capital from the United States, impelled the Fed to raise short-term interest rates and validate the tightening of interest rates that market forces generated during these periods. Had U.S. spending been reined in by budget cuts in 1987, Fed action may have been less severe, but fiscal policy moves to tighten have been most modest, leaving the job of slowing U.S. spending largely to the Fed.

The second leg up for short rates in November on the heels of decidedly disappointing U.S. trade data announcements made in the summer and was to an important degree an attempt by the Fed to counteract dollar weakness. The October crash reflected not just the new higher rate structure, but, importantly, the announcement of an extraordinarily disappointing trade number in mid-October. I think the Fed then really is much less accountable for that crash than was the continued deterioration on the trade side.

Once stocks crashed in the United States and quickly moving abroad, the Fed had no options. The safety and soundness of the U.S. financial system was ensured by the prompt and dramatic pro-

vision of liquidity by the U.S. central bank. That infusion of liquidity and the consequent sharp fall in the Fed funds was essential.

Currently however, with risks to the financial system diminished, the Fed appears to be tilting toward an easier policy again. Some see this as a case of election engineering. I see it as a response to a world different in two important ways from 1987. First, significant leading indicators of the U.S. economy have begun to falter. Second, the world and the Fed have been blessed by two decidedly better than expected trade announcements, which generated a U.S. dollar bounce. Were the Fed to continue to tighten in the face of weakening leading indicators, recession would be the clear risk. And given growing evidence that the U.S. advance right now is export-driven and therefore likely consistent with an end to the one-way—down—dollar market, recession seems absolutely inappropriate, election in November or not.

The two tightening moves in 1987 were, in part, explicable simply based upon real economy variables: faster price increases for commodities; sharp gains for U.S. industrial activity; and rapid growth in employment.

This committee, however, should also understand that bouts of dollar weakness which we saw in 1987 unquestionably also helped force the Fed to be firm.

Why? Because U.S. financial markets—the markets that finance U.S. economic activity—now depend upon foreign capital.

To keep that capital inflow voluntary and therefore preserve well functioning capital markets, foreigners need evidence that these inflows are temporary, or at least receding. Fed tightening, by slowing U.S. spending, promises slower import flows, better trade numbers, and, therefore, less foreign capital need in the future.

The last page of my printed testimony includes some sober arithmetic. If you grant me excellent trade improvement—that is trade improvement well above what econometric models would look for—a \$125 billion trade deficit this year falling to \$30 billion in 1992, and the accumulated net capital need from abroad totals to \$500 billion, ownership of $\frac{1}{2}$ trillion of U.S. assets will be handed over to foreigners.

I think that's a staggering figure, but if trade were to fail to improve rapidly—that is, if we had more conventional development on trade numbers—the number could approach \$1 trillion by 1992.

I think therein lies the world financial markets' morbid fascination with U.S. trade numbers. Better than expected trade numbers allow investors around the globe to scale down their fears about future U.S. capital needs from abroad.

Conversely, when those numbers disappoint they are immediately translated to a worldwide announcement that U.S. addiction to foreign capital is worsening, and hence our extraordinary focus with the trade numbers and the Fed's focus with those numbers.

As I see it, it was just such disappointment in the form of a much worse than expected nominal trade deficit on October 14, 1987 that burst the bubble of investors looking for receding U.S. capital needs and catalyzed the October crash.

Foreign investors, all agreed, would not countenance another leg up for U.S. capital inflow needs and the investors leaped to the

conclusion that a U.S. recession was the only way to curb the U.S. appetite for spending, foreign financed.

U.S. stocks collapsed, foreign stocks followed. The Fed's second tightening, then, played only a small role in the stock market fall. Foreign anxiety about our trade deficit was central.

Again, once stocks crashed, safety and soundness forced the Fed to leave its focus on world imbalances and confront the financial system crisis. Safety and soundness of the U.S. banking system demanded the Fed ease and it was forthcoming.

Now for the present, clearly our capital needs from abroad remain with us, but the last two trade numbers were well below expectations and they have given the dollar some bounce. Moreover, we appear to be in the midst of a much needed stall for U.S. consumer spending. And taken alongside the extreme inventory overhang that U.S. retail stores are burdened with, I think it is likely that U.S. trade numbers, for some months, will show good improvement.

That, as I see it, gives the Fed some breathing room. They are not consigned to lean against U.S. spending at present, as it is already sagging; and it promises to deliver dividends in the form of better trade numbers.

At the same time some U.S. leading indicators are flashing warning signs. As is typical when Fed policy moves toward restriction, as it did in 1987, financial indicators showed the first signs of rising rates. Real money growth traditionally stalls and stock prices tumble. They certainly both did in 1987. Weakness in these leading indicators in the financial system is then typically followed by weakness in leading indicators tied more directly to the economy. We are now seeing that. Initial unemployment claims, though moderating from their sharp rise in January, are well above the October levels; industrial commodity prices are well off their highs; and building permits have fallen sharply for two consecutive months.

The Federal Reserve Board, therefore, now confronts an economy that is not unambiguously robust. Some caution flags are waving and, again, trade improvement has lifted the dollar. Accordingly, monetary policy needs to be sufficiently accommodative to prevent the ongoing consumer pullback from devolving into recession. In that light, the modest tilt toward ease in place at present appears appropriate irrespective of political considerations. It is instructive to note that, I think, that reflecting upon the weakening U.S. leading indicators, the two better than expected trade numbers, we did have a substantial decline in long-term interest rates from 9 percent to 8.3 percent before any move to ease by the Fed occurred.

At the same time, I must point out that the Fed cannot be so stimulative as to generate a strong rebound in U.S. consumer spending. In effect, the U.S. consumer is balanced atop a knife's edge, and the U.S. Fed must work to keep the consumer in place.

Thank you.

[The complete prepared statement of Robert J. Barbera follows:]

Testimony Before The Senate Banking Committee, February 25, 1988

Good morning, Mr. Chairman and members of the committee. My name is Robert J. Barbera and I am the chief economist of Shearson Lehman Hutton. I would like to thank you for the opportunity to testify at these hearings. In order to frame my testimony, I have chosen to answer four questions:

Were Fed officials compelled to tighten in the spring and fall of 1987?

Can the Fed be held largely accountable for the October stock market crash?

Was the Fed's dramatic swing toward ease immediately after the October crash appropriate?

Is current Fed policy, with a slight tilt toward ease, in keeping with the Fed's disinflation bent or is the November election preventing the U.S. central bank from returning to its precrash bias toward tightening?

To briefly summarize my answers to these questions:

I believe that consistently faster than expected U.S. economic growth in 1987, alongside bouts of rising commodity prices, dollar weakness and the flight of foreign capital from the U.S., impelled the Fed to raise short-term interest rates and validate the tightening of interest rates that market forces generated during these periods. Had U.S. spending been reined in by budget cuts in 1987, Fed action may have been less severe, but fiscal policy moves to tighten have been most modest, leaving the job of slowing U.S. spending largely to the Fed.

The second leg up for short rates, which developed in September, followed on the heels of decidedly disappointing U.S. trade data announcements made in the summer and was to an important degree an attempt by the Fed to counteract dollar weakness. The October crash reflected not just the new higher rate structure, but, importantly, the announcement of another wildly disappointing monthly U.S. trade performance. Investor opinion in mid-October swung radically toward the notion that U.S. trade would not improve without deep U.S. recession. Fed tightening therefore played a role in the stock market's fall, but it was a secondary one.

Once stocks crashed, beginning in the U.S. and quickly moving abroad, the Fed had no options. The safety and soundness of the U.S. financial system was ensured by the prompt and dramatic provision of liquidity by the U.S. central bank. Thus that infusion of liquidity and the consequent sharp fall in U.S. Fed funds was essential.

Currently, however, with risks to the financial system diminished, the Fed appears to be tilting toward an easier policy again. Some see this as a case of election engineering. I see it as a response to a world different in two important ways from 1987. First, significant leading indicators of the U.S. economy have begun to falter. Second, the world and the Fed have been blessed by two decidedly better than expected trade announcements, which generated a U.S. dollar bounce. Were the Fed to continue to tighten in the face of weakening leading indicators, recession would be the clear risk. Given growing evidence that the U.S. advance is export-driven, and therefore likely consistent with an end to the one-way--down--dollar market, recession seems absolutely inappropriate, election in November or not.

In the spring and fall of 1987, the Fed tightened. In both periods the economic backdrop was one of:

- rapidly rising prices for industrial commodities;
- strong growth for U.S. employment and industrial output;
- excellent gains for U.S. exporters;
- still hefty gains for U.S. import volumes, with rising prices;
- disappointing nominal trade deficits;
- bouts of dollar weakness;
- periods of foreign selling of U.S. assets;
- large foreign central bank intervention to absorb unwanted dollars.

Clearly, then, better economic performance and rising commodity prices, in and of themselves, gave some justification for a tighter Fed. The change in the pace of U.S. economic growth was important to Fed policy. But the changing financial situation of the U.S. in the world was equally significant. The U.S. had become highly dependent on foreign capital by 1987, and once U.S. interest rates ended their incredible decline, foreign investors began to balk at supplying that capital.

During 1987, the U.S. broke its two-year pattern of weak industrial production and sharp declines in industrial commodity prices, which had permitted sharp declines in U.S. long-term interest rates alongside a falling dollar.

Thus, in early 1987, foreign investors faced, for the first time in two years, the prospects of an end to the explosive gains in U.S. bond prices. Stronger GNP growth was raising inflation concerns and capping the bond rally. And overseas investors still faced likely hefty declines in the dollar. The prospects for large decreases in the local currency-denominated returns of U.S. assets caused a run from U.S. assets.

The Fed, then, faced the task of both moderating the U.S. output advance and tempering foreign investors' flight from U.S. assets. By tightening in 1987, the Fed was, I believe, attempting to do its part to help trade and the dollar and thereby restore foreign investor inflows.

How can tighter Fed policy help improve the U.S. trade deficit? Simple. Higher rates slow U.S. spending, and when spending slows, spending on imports shares in the slowdown.

The Fed's second move to tighten was followed soon thereafter by the crash of 1987. Again, however, rather than holding the Fed accountable for the sharp stock market swoon, I would point the finger at the second wave of disappointing U.S. trade reports that confronted world financial markets. That second round of reports was the fundamental driver in the stock market slide.

Throughout the late spring and early summer, U.S. companies across a wide array of sectors were reporting extraordinary gains in the sales of exports. In stark contrast, U.S. retailers were reporting significant sales weaknesses--a precursor, one would imagine, to a fall off in imports. Many equity investors, seeing this as bottom-up evidence of a much improved U.S. trade picture, discounted several very disappointing trade reports. The wildly disappointing trade statistics on October 14 caused investors to capitulate to the view that trade was not turning and recession was likely the only way to right U.S. trade sector woes.

Perhaps the easiest assessment of appropriate Fed policy can be tied to the immediate aftermath of the U.S. and worldwide stock market crash. Once that slide occurred, financial market frailty could easily have spilled into the economy, and the U.S. and the world ran the risk of sharp economic contraction. Dramatic Fed ease was appropriate and it was forthcoming.

Currently the Fed, as we see it, must ponder the following economic backdrop: U.S. exporters are enjoying explosive demand for their products. Consumer spending, however, in part reflecting last year's move to a more restrictive Fed policy, remains stagnant. These data suggest, in turn, that U.S. output advance will indeed slow in the quarters before us. Importantly, however, slack demand for consumer products promises both slower U.S. economic advance and a falloff in U.S. import inflows. Better than expected trade numbers and slower but still positive economic advance should be the rule in the months ahead. A string of better than expected trade statistics should also catalyze a healthy dollar bounce. More voluntary capital inflows can be expected in the coming months.

Again, the multiquarter poor performance for U.S. consumers has begun to temper demand for goods, both here and abroad, which should help improve U.S. trade statistics. With the U.S. export sector still minute in comparison to the U.S. consumer sector, however, consumer quiescence cannot be permitted to deteriorate into consumer contraction.

U.S. leading indicators are in fact flashing such warning signs. As is typical when Fed policy moves toward restriction, leading financial indicators showed the first signs of the effects of rising rates. In 1987, real money growth stalled, and of course stock prices tumbled. Weakness in these early leading indicators is now being met by declines for leading indicators tied more directly to economic performance. Initial unemployment claims, though moderating from their sharp rise in January, are well above the October levels; industrial commodity prices are well off their highs; and building permits have fallen sharply for two consecutive months.

The U.S. Federal Reserve Board, therefore, confronts an economy that is not unambiguously robust. Some caution flags are waving. And again, trade improvement has lifted the dollar. Accordingly, a monetary policy needs to be sufficiently accommodative to prevent the ongoing consumer pullback from devolving into recession. In that light, the modest tilt toward ease in place at present appears appropriate irrespective of political considerations. It is instructive to note that, reflecting upon weakening U.S. leading indicators and the dollar's bounce, U.S. long rates fell 3/4 of a percentage point from 9.1% to around 8.3% before any Fed easing took place. The Fed, then, has followed the markets toward an easier policy.

At the same time, I must point out that the Fed cannot be so stimulative as to generate a strong rebound in U.S. consumer spending. In effect, the U.S. consumer is balanced atop a knife's edge, and the U.S. Fed must work to keep the consumer in place.

To be sure, the task the Fed faces at present is daunting. The U.S. central bank is at once attempting both to help prevent a worldwide economic downturn and to assist in effecting a turn in U.S. trade. Again, this amounts to a policy of engineering stagnant but not sliding U.S. spending. Growth in the U.S. economy depends in turn on healthy export gains, and trade sector improvement will reflect both export advances and import declines. Export strength, however, hinges in part upon foreign central bank stimulus and consequent spending patterns abroad. Other nations must ensure sufficient demand growth abroad to absorb the slackening in demand for their products that an extended period of stagnant U.S. spending assures. In that sense, we remain hostage to foreign savers. That's a handcuff it will be difficult to slip through in the coming years.

In both the spring and fall of 1987, U.S. dollar decline, coincident increases for U.S. long rates and steepening for U.S. yield curve compelled the Fed to tighten.

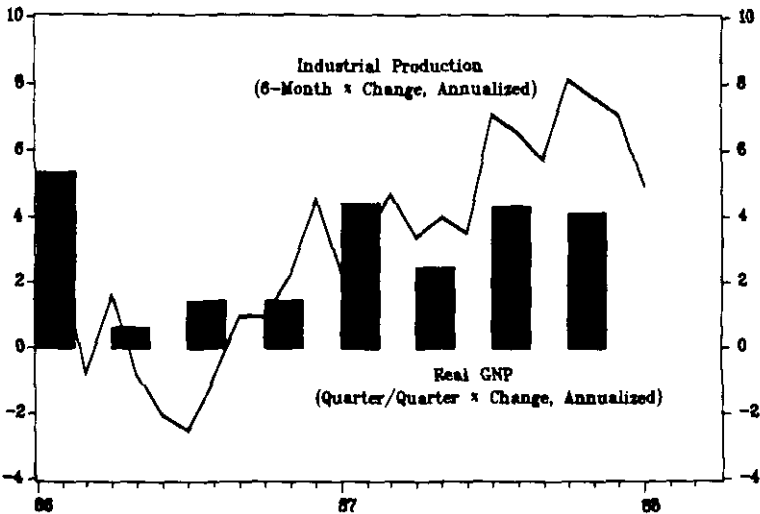
	<u>Late Jan.</u>	<u>Mid-May</u>	<u>Early-Aug.</u>	<u>Mid-Oct.</u>
U.S. dollar*		-3.8%		-4.7%
Rise for U.S.**				
Long rates	7.4%	to 9.0%	9.0%	to 10.1%
Steepening Yield***				
Curve	140	220	215	276

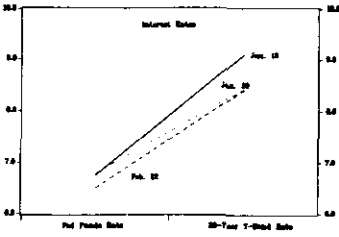
* Federal Reserve Board trade weighted dollar index, percent change.

** 30 year U.S. Treasury bond yield.

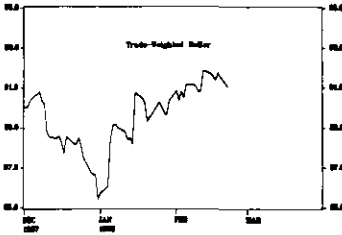
*** 30 year U.S. Treasury bond yield less interest rate on Fed Funds (in basis points).

**THE FED'S TIGHTENING IN 1987 OCCURRED
WHILE THE ECONOMY WAS EXPERIENCING
QUITE ACCEPTABLE OVERALL GROWTH.**

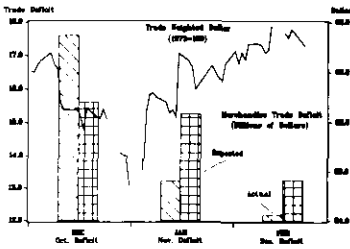




DURING THE FIRST FEW WEEKS OF 1965, LONG RATES DECLINED WITH STEADY FED POLICY. RECENT FED EASING FOLLOWED THE JANUARY BOND MARKET RALLY.



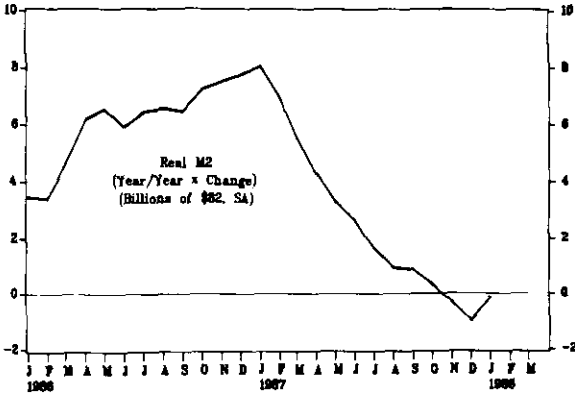
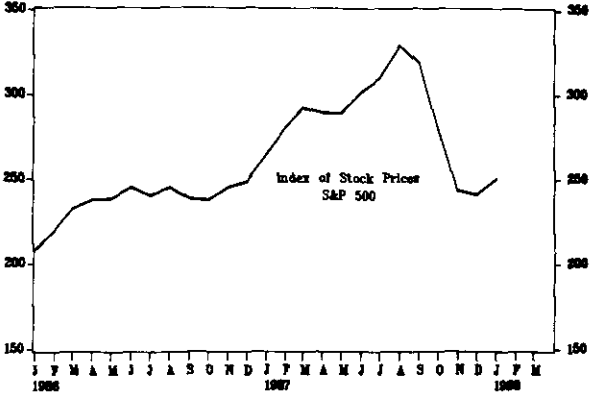
LIKEWISE, THE FEDERAL RESERVE BOARD'S SLIGHTLY EASIER STANCE HAS BEEN TAKEN WITH THE DOLLAR OFF ITS LOWS.



BOTH LONG-TERM INTEREST RATE DECLINES AND THE DOLLAR'S RECENT BOUNCE DIRECTLY REFLECT TWO MONTHS OF BETTER-THAN-EXPECTED MERCHANDISE TRADE DEFICITS.

CURRENT FED POLICY, WITH A SLIGHT TILT TO EASE,
 ALSO REFLECTS, NO DOUBT, THE DECLINE FOR U.S.
 LEADING INDICATORS.

Financial Indicators Fell First.



ANOTHER MONTHLY FALL IN THE U.S. INDEX OF LEADING INDICATORS?

These Economy Related Leading Indicators Pulled the Index Down in January.

	Oct.	Nov.	Dec.	Jan.	Forecast Contribution
Initial Unemployment Claims	284	293	312	351	-.42
Building Permits	116.7	117.1	108.5	100.0	-.31
Vendor Performance	70	66	71	68	-.14
Sensitive Material Prices	1.67	1.38	0.84	0.35	-.24

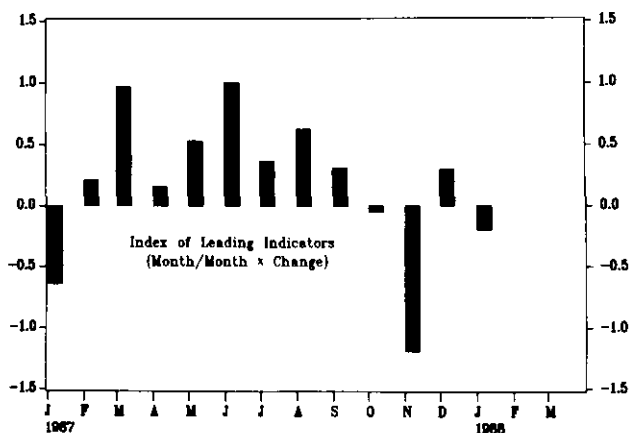
Financial Leading Indicators, However, Bounced Back and Will Lift the Index.

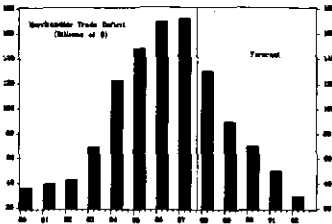
M-2 (82\$)	2427.4	2419.1	2420.1	2443.8	0.43
S&P 500	280.2	243.4	241.0	250.4	0.33

The Swing Factor for the Monthly Move is Factory Orders.
Should They Fall, As We Expect, The Index Will Decline in January.

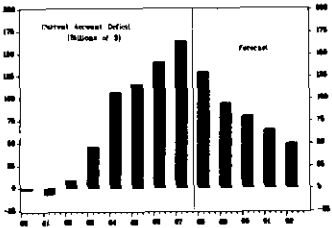
Consumer Goods Orders	85.8	85.9	87.8	87.0	-.14
Capital Goods Orders	39.1	37.5	42.0	42.4	0.04
Index of Leading Indicators	193.3	191.0	190.7*	190.2	
Percent Change)	-0.1	-1.2	-0.2	-0.2	

*The initial 0.2% decline of the December Index of Leading Indicators will likely be revised up to 0.3% with the next release.

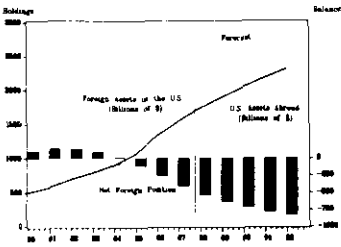




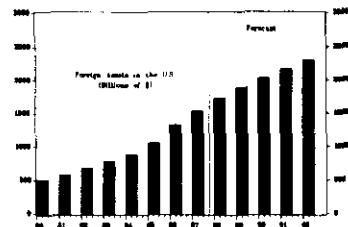
THE EXPLOSION OF THE U.S. MERCHANDISE TRADE DEFICIT IN THE EARLY 1980s WILL REcede IN THE LATE 1980s AND EARLY 1990s. MOREOVER, EVEN WITH AN OPTIMISTIC VIEW ABOUT TRADE IMPROVEMENT



THE U.S. CURRENT ACCOUNT DEFICIT WILL FALL MORE SLOWLY AS INTEREST AND DIVIDEND PAYMENTS ON FOREIGN-HELD ASSETS MOUNT AND .



AS A CONSEQUENCE, NET FOREIGN INVESTMENT-- THE EXCESS OF THE VALUE OF FOREIGN-OWNED U.S. ASSETS COMPARED TO THE VALUE OF U.S.-OWNED FOREIGN ASSETS--WILL LIKELY EXCEED \$750 BILLION IN 1992. THIS IN TURN IMPLIES AN ADDITIONAL \$500 BILLION IN NET FOREIGN PURCHASES OF U.S. ASSETS OVER THE 1988-1992 PERIOD.



IMPORTANTLY, FOREIGN PURCHASES OF U.S. ASSETS WILL EXCEED "NET FOREIGN PURCHASES" BY A WIDE MARGIN. NET FOREIGN INVESTMENT FOCUSES ON THE NEED FOR FOREIGN ASSET OWNERSHIP ABOVE THE LEVEL OF U.S. ASSET PURCHASES ABROAD. FROM 1988-1992, WE ENVISION FOREIGN PURCHASES OF AN ADDITIONAL \$800 BILLION IN U.S. ASSETS.

The CHAIRMAN. Thank you, Dr. Barbera.

Dr. Cooper is professor of economics at Harvard University and he's served with distinction as Assistant Secretary for Economic Policy in the State Department. Go right ahead, Dr. Cooper.

**STATEMENT OF RICHARD N. COOPER, PROFESSOR OF
ECONOMICS, HARVARD UNIVERSITY**

Mr. COOPER. Mr. Chairman, I appreciate very much the opportunity to testify in these important hearings. I have provided a statement and, with your permission, I'd just like to emphasize several points and in the process address some of the questions that you've posed.

OPPOSES FURTHER WEAKENING OF DOLLAR

First, I do not share what I take to be the strong consensus among American economists that the dollar must weaken further, that the Fed or other central banks should do nothing to stop it, and if anything, they should push the dollar further down.

For reasons given in my statement, I believe that a further sharp drop in the dollar may perversely enlarge rather than narrow the U.S. trade deficit over the next 12 to 18 months by creating a recession in Europe and even possibly in Japan, both of which areas are economically fragile at the present time and are feeling the impact of a decline in real exports.

Recession abroad would affect the United States adversely because our near-term economic growth depends heavily on an improvement in net exports and on the investment which will be in large part associated with that improvement in net exports.

Now I don't want my position to be interpreted as favoring a tightening of U.S. monetary policy in order to keep the dollar from dropping. I do not. And in fact I support the course of policy that the Fed has recently been on. But the U.S. should not try to dissuade other countries from intervening in exchange markets to prevent sharp appreciations of their currencies against the dollar which intervention incidentally involves monetary expansion in other major countries which I believe is desirable in its own right.

DEBT OF THIRD WORLD COUNTRIES

Second, I believe that the heavy debt of many Latin American and African countries is a continuing problem, both for the debtors and for the creditors. While it is not perhaps a threat to the world financial system, it continues to nag at the world economy acting as a costly drag on economic growth. There is no easy way out, but certainly if the world economy goes into recession or if short-term interest rates rise markedly, we will see even more debtors declining to service their debts. Politically, most of them will not have the option of squeezing their economies further in order to pay interest on debts that were incurred 5 to 15 years ago.

Third, I do not believe that the rapid growth of net U.S. foreign indebtedness per se will affect the ability of the Federal Reserve to set U.S. monetary policy.

I do believe, however, that the increasing integration of world financial markets, the increased gross indebtedness of the United

States to foreigners, and the increased ease with which Americans can invest overseas in many forms, will result in a gradual reorientation of U.S. monetary policy to the external environment and with greater attention being paid to "confidence" in the world financial community.

The world financial community includes U.S. American participants. I do not believe that foreigners are more fickle in their holdings of dollars than Americans are.

These developments will occur via exchange rate as well as interest rate impact on the U.S. economy. Indeed, I see a growing tension between the relative importance of the U.S. dollar in the world economy, which I suspect will continue, and the relative—and I emphasize relative—decline of U.S. output as a share of gross world product; not because the U.S. economy is doing badly but because over the next 10 to 20 years other economies will grow more rapidly.

For this reason, as well as because it will be desirable to reduce the influence of turbulence arising in financial markets on real business decisions, I put forward at the end of my statement what many will consider a quixotic suggestion that we should begin now to think about steps necessary to create and manage a single currency for the industrialized democracies.

The management arrangements could be modeled on our own Federal Reserve System, but those who would sit on the equivalent of the Transatlantic Open Market Committee would involve Western Europe, Canada, as well as the United States, and Japan.

That sounds very radical at the present time, but in fact it represents a clean solution to a number of problems which we already face and which are likely to get more acute as the years go by. I believe that a single currency for the industrialized democracies is now technically feasible, by which I mean the markets exist that could support it in a reasonably smooth way, but of course it would require a major change in our political thinking, but it's not too early to start.

Thank you, Mr. Chairman.

[The complete prepared statement of Richard N. Cooper follows:]

Testimony before the Senate Committee on Banking,
Housing and Urban Affairs

February 24, 1988

Richard N. Cooper
Harvard University

The Current Dilemmas for Policy

Policy makers around the world face critical dilemmas in their choice of action in the immediate future. But in focusing on immediate issues, they should not neglect the medium and longer-run issues. Let us consider first the most urgent policy dilemmas.

At least seven policy dilemmas hang over the world economy at the present time. The first dilemma confronts the Federal Reserve System in the United States: Should it tighten monetary conditions in order to prevent the dollar from depreciating and thus to inhibit inflation in the United States, recognizing that by doing so it runs the risk of creating a recession in the U.S. economy, a risk that has been heightened in the closing months of 1987? This was the dilemma that confronted Paul Volcker. Most American economists have voiced a clear resolution in favor of allowing the dollar to depreciate further, and thereby, it seems, reducing the risk of recession in the United States. The Federal Reserve resolved the dilemma in late October in favor of easier monetary conditions. That decision may be only a temporary one as the dollar drops. In any case, the assumption by most U.S. economists that this course of action would avoid recession in the United States is at least open to doubt, as will become clear below.

Those responsible for reducing the budget in the United States - the President, his aides, and the leaders of both parties in both houses of Congress - confront a different kind of dilemma. Financial markets and their journalistic spokesmen have made clear that they need and expect a substantial real reduction in the U.S. budget deficit. But too sharp and too rapid a reduction in the budget deficit would certainly produce a recession in the United States, a fact of which Congressmen and the President are fully

conscious in this presidential election year. This dilemma could be resolved by making commitments now to reduce budget deficits in the future, with the immediate reductions affecting only \$25-30 billion. The only ways to make these forward commitments in the American system is either through tax legislation, which phases in tax increases over a series of years, or by adjusting the formulae that affect social entitlements, such that these entitlements are reduced in the future. Both of these courses of action have been put off limits by President Reagan, thus ruling out the one clear way to resolve the dilemma.

A third dilemma for the United States concerns the exchange rate of the dollar. The continuing huge trade deficit suggests the need for further depreciation of the dollar, even after allowance is made for the fact that trade flows in late 1987 reflected largely exchange rates in 1985 and early 1986, and that much correction is already built in to current values of the dollar. Yet further depreciation will increase inflation as measured by the Consumer Price Index, which includes imported goods. Paradoxically it will also postpone visible improvement in the trade balance, because a further increase in the dollar price of imports will temporarily outweigh the stimulus to exports and discouragement to imports brought by dollar depreciation. Furthermore, a sharp and rapid dollar depreciation may discourage investment in Europe and even Japan, creating business downturns there. That in turn would affect U.S. exports negatively, such that the short-run affect of dollar depreciation might be, via recession abroad, to worsen rather than improve the U.S. trade balance. It is noteworthy, in this connection, that U.S. forecasts for economic growth during 1988 place heavy weight on an improvement in net exports (in one forecast of 2.5 percent growth, nearly 60 percent is attributable to an increase in net exports). If, because of economic weakness in Europe, Japan, and elsewhere, this U.S. export growth does not materialize, the United States will also experience a weak economy in the coming year.

Persistence of the U.S. trade deficit will make restrictive trade legislation tempting. The Omnibus Trade Bill was postponed in late 1987 by the budget debate and by its sheer complexity with over 200 conferees participating. The stock market crash has increased sensitivity to the vulnerability of the economy and has recalled the sequence of 1929-1930, when the crash of 1929 was followed in June 1930 by the passage of the Smoot-Hawley Tariff Bill, a prelude to and major contributing cause of the Great Depression.

Debt-ridden developing countries would be further devastated by protectionist action, and could not contribute to world growth. Some Congressmen will be tempted to threaten to withhold votes for the U.S.-Canada Free Trade Agreement unless the President accepts import-restricting provisions in the Omnibus Trade Bill that he now threatens to veto. It would be foolish, however, for Americans to enact protectionist legislation now, just when U.S. exports are doing well, and a major turnaround in the U.S. trade balance is in process. Such action would set the stage for emulation by others, some of whom are going to experience considerable trauma as their trade balance deteriorates in the next five years.

Japan, the Federal Republic of Germany, and other countries could prevent depreciation of the dollar by intervening heavily in exchange markets by the purchase of dollars. But to do so on any scale would increase the domestic

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money supplies in those countries. While there is no immediate danger of inflation in Germany or Japan, some fear that such an expansion would store an inflationary trouble for the future.

These countries could engage in fiscal stimulus in order to offset the decline in exports that would arise as a result of further depreciation of the dollar. But they can do so only at the expense of increasing outstanding public debt, which to domestic residents of both countries is already unacceptably high. (In fact, West Germany has at 41 percent the lowest ratio of public debt to GNP of any major country in Europe apart from France. The ratio in the United States is 50 percent, and in Japan it has reached 69 percent.) Japan wants to avoid increasing debt by offsetting any stimulative action through increasing new taxes, notably a tax on consumer spending, which unhelpfully may actually further increase household savings in Japan. Germany proposes to offset cuts in income taxes by cutting subsidies, a move that is surely meritorious in the medium to long run, but which would reduce or eliminate the demand stimulus arising from the proposed tax reductions.

The governments of developing countries with heavy external debt confront their own set of dilemmas. Servicing the outstanding debt represents a claim of the past and inhibits economic growth in the immediate future. Many are tempted to delay payment and are even urged to repudiate the debt. Avoidance of servicing the debt would permit higher imports which in turn would permit greater utilization of industrial capacity and greater employment, hence greater growth, in these countries. However, to decline servicing debt would threaten the ability of these countries to continue receiving trade credits, which is practice any necessary to carry on trade under current arrangements. It would moreover threaten the credit worthiness of these countries, so that their access to world capital markets would be impaired for many years. Furthermore, it cannot have escaped the leaders of these countries that if external debt can be casually disregarded, many of their citizens could take a similar view toward internal debt, and the entire process of lending and borrowing on which modern economies depend so heavily might become so difficult that the economies would not grow after all. In the meantime the developing countries languish, while their overseas creditors remain unhappy. A solution to this problem is more vigorous world economic growth, to which expansion by developing countries could contribute if additional financing were available, and lower world interest rates.

Finally, Saudi Arabia and its neighbors face a dilemma with respect to oil production and pricing policy. Unless an exceptionally harsh winter exhausts seasonal stocks, the oil market will continue soft and prices will decline, reducing revenues for all oil-exporting nations. Saudi Arabia could prevent that from happening by cutting back sharply on its production. To do so, however, would deny credibility to Saudi Arabia's claim that it will not be the swing producer within OPEC, and would weaken OPEC discipline even further.

The difficulty with genuine dilemmas is that there are strong advantages and disadvantages for alternative courses of action, and that makes prediction of outcomes very difficult. Thus, we live in a period of exceptional uncertainty - not merely the usual uncertainty associated with technical change, variations in weather, or political uprisals in developing countries, but uncertainties about the basic course of macroeconomic policies, especially

in the United States and Europe. This uncertainty in turn is reflected in uncertainties with respect to future developments in total demand, exchange rates, and interest rates.

One approach to some but not all of the dilemmas posed above would be concerted action by the major countries. Concretely, it would be desirable to have a substantial immediate budgetary contraction in the United States. But to offset the resulting contractionary impulse to world demand it should be accompanied by a simultaneous fiscal expansion in Japan, Germany, and several smaller countries. With this simultaneous expansion the United States could take more real action up front, without risking either a U.S. or a world recession. Enhanced U.S. exports could substitute for lower government and private domestic demand, and the reverse would be true in Japan and Germany: domestic government and private demand would compensate for lower exports. Such a package could and should be accompanied by a general easing of world short-term interest rates, which in turn would help debt-ridden developing countries.

All of this smacks somewhat of fine tuning, something we have learned is difficult to achieve. Moreover, the chief executives in both the United States and West Germany seem unwilling to show the necessary flexibility to make such a concerted action package possible. The alternative will be more exchange rate turbulence, and more depreciation of the dollar, which may then induce the required action in all three countries, but without explicit coordination and with serious risk of mistiming, such that an avoidable recession is in fact generated.

The Problem of Medium-term Adjustment

Even if economic policy is so skillfully managed as to avoid the hard landing of a world recession, it will be difficult during the next five years to eliminate the U.S. trade deficit, an objective that is universally desired, at least rhetorically. Numbers are tedious, but they are essential for understanding the magnitude and therefore the nature of the problem. At present, the United States runs a merchandise trade deficit of roughly \$150 billion, with services and remittances approximately in balance. During the past five years the United States has accumulated over \$570 billion in net obligations to foreigners, and it is likely to accumulate nearly that much again during the period 1988-1992. Thus, there will be increased debt servicing requirements of at least an additional \$50 billion a year. Elimination of the current account deficit requires an improvement of about \$200 billion a year in U.S. net exports.

Agriculture is likely to provide little of the necessary improvement. World agricultural production is currently in excess supply. Europe, formerly a major importer of farm products, has now become the second largest exporter after the United States. Japan heavily protects rice and other agricultural products. Coercive action has painfully started in Europe, but it moves at glacial speed and it is not likely to have material effect in the next five years or so. Indeed, we will do well to prevent further growth of agricultural surpluses. The burden of adjustment will thus fall on net exports of manufactured goods.

Who will be on the other side of this large swing of \$200 billion in world trade in manufactured goods? Developing countries would like to increase their imports, but to do so they need to export more or to borrow more. While the current debt situation may ease somewhat, net capital inflows to developing countries are not likely to increase greatly over the next several years because no major initiative to improve the situation is being discussed. That leaves Europe and Japan to do most of the adjusting, plus a few other countries such as Taiwan and Korea.

Even within Europe, many countries now run current account deficits. The large surpluses are concentrated in the Federal Republic of Germany, the Netherlands, and Switzerland. But those countries that could be on the other side of a major U.S. correction, especially Japan and West Germany, have kept their economies over the past decade or longer to export-led growth. The same is true of Taiwan and Korea. Will they be able to adjust, psychologically as well as economically, to a prolonged period of relative export stagnation? Will they be able to rely instead on domestic demand to fuel economic growth? Japan seems to have started the process of adjustment, and the Japanese discuss publicly the major structural changes that may have to take place in their economy, although much disagreement exists on their detailed direction. Discussion of the need for structural change along these lines is much less evident in Europe.

The problem can be put in another way. At current levels of income, demographic structure, interest rates, and so on, Japan and West Germany generate private savings far in excess of the willingness of domestic investors to borrow and invest in plant and equipment. The governments absorb some of these savings through their budget deficits. But large amounts of savings are invested abroad, especially in the United States. Developing countries would be happy to absorb the excess savings, to finance investment to improve future standards of living. Since the debt crisis of 1982 net lending to capital importing developing countries has stagnated, falling from \$103 billion in 1981 to an estimated \$14 billion in 1987, and the main brunt of this decline has fallen on investment. Private investors are leary about investing in most developing countries. While matters may improve somewhat over the next several years, barring world recession, there is no clear prospect in the medium run that the borrowing capacity of developing countries will improve by more than \$10-20 billion per year. So if the United States corrects its imbalance between savings and investment, where will the excess world savings go? Without careful management to direct them into public or private consumption (which in turn will lead to some pickup in private investment), they will be dissipated through world recession. A decline in income will eliminate the excess savings. To avoid this, the governments of Japan and Europe must absorb more of the excess savings through increases in expenditure or reductions in taxes that encourage private spending, that is, in higher budget deficits. This recommendation does not fit comfortably with conventional prudence in national fiscal management. But we learned long ago that if everyone - households and businesses as well as governments - is fiscally prudent, modern economies will not prosper. Spending is required to generate income and output.

An obvious solution in the near term would be substantial increases in aid to developing countries. But a certain disappointment with foreign aid is felt in most donor countries due to demonstrable mismanagement of funds in

some cases, to investments that turned out poorly, and, it must be said, to investments that turned out successfully but produced goods that compete with products from industrialized countries. There is some merit to these complaints. But industrialized countries do not hold their own investments to the same high standard: for example, commercial office space in U.S. cities was substantially overbuilt with the help of strong tax incentives during the early 1980s; and Europe has made numerous public investments, such as in steel and civil aircraft, that do not meet normal standards of returns on investment. Furthermore, over the decades 1950-1980 developing countries grew at extraordinary rates, and it is hard to believe that inflows of capital from the rest of the world, including foreign aid, were not essential to this outstanding performance. In view of the reluctance of private investors, reduced capital flows to developing countries must come from public sources, or from private sources with public guarantees. The former would increase budget deficits and conflict with conventional canons of fiscal prudence. While guarantees do not create this problem, they do create potential exposure to future defaults. But some combination of public loans and guarantees to developing countries may represent socially the most useful way to correct the current major imbalances in the world economy. The Japanese government has committed itself in principle to invest \$30 billion in developing countries over the next three years, but it has not yet found the modalities. The safer alternative, if world recession is to be avoided, will be continued lending to the United States. That is not desirable from the American perspective unless substantial new and productive opportunities for investment are found.

It is worth noting that northern Europe and Japan are entering a period of slow growth in the labor force and an aging population. The United States is also experiencing a decline in the natural growth of the labor force for the next seven or eight years. But immigration will augment growth in the American labor force, to an extent that will not occur in northern Europe and Japan. The United States can use investment productively for equipping and housing a growing labor force, whereas in northern Europe rich investment opportunities will be limited to those created by technological change, and even those will be discouraged by strong currencies. It is therefore likely that some capital will continue to flow from Europe and Japan to the United States. For this reason, it may be a mistake to think of having to eliminate entirely the U.S. current account deficit within the next five years. To the extent that the United States runs a deficit in the mid-1990s, the problem of adjusting the world structure of trade will be eased.

A Long-term Proposal

What will happen in the longer run, beyond the next decade? Our experience with flexible exchange rates will be fifteen years old in March 1988. It has not been a wholly satisfactory experience, although it was probably superior to alternative arrangements during this turbulent period. We still do not know that precisely determines exchange rates, although we have ideas about some of the factors. Nor do we know fully the effects that moving exchange rates have on trade flows, foreign investment, and total domestic investment in national economies.

There is at least a suspicion on recent experience that, first, the response lags of trade to changes in exchange rates are very long, leading to

the possibility of continual overshooting of exchange rates, with overvaluation followed by undervaluation, and vice versa. This possibility of overshooting, perhaps for prolonged periods, introduces a disturbing source of uncertainty into investment plans. It may well discourage total investment in manufacturing and unprotected agriculture. It also encourages diversification of production by firms across currency areas, even if such diversification is not economic in terms of return to capital. Real exchange rate movements introduce what from the viewpoint of the businessman or farmer is a wholly arbitrary source of uncertainty into his production and investment calculations.

We should therefore begin to think actively about altering exchange rate arrangements so as to reduce or even eliminate this particular source of uncertainty. Several schemes have been proposed to this end, with a view to having immediate appeal to policy makers. But the most compelling way to eliminate exchange rate uncertainty is to eliminate exchange rates. For the longer term, should we not begin to think about a single currency for the industrialized democracies? One currency, of course, would require one monetary policy, which in turn would require a supranational monetary authority. It could be modeled on the Federal Reserve System, with national governments represented on the equivalent of the open market committee.

There is another consideration that pushes in the same direction. The combination of reduced relative U.S. economic importance with growing use of the dollar as an international reserve will sooner or later put serious strains on U.S. monetary policy. In a certain sense, it implies more external "discipline" on the United States. But this discipline will not necessarily conduce toward greater economic or monetary stability, so as to provide a firm anchor for the system. Rather, the Federal Reserve will find itself more frequently having to respond to international financial pressures, whether they are rational in the larger scheme of things or not, and these may sometimes cause less rather than more stability in monetary affairs. Yet the proper role of a monetary system, national or international, is to provide a stable expectational environment for the wealth-producing sectors of the economy, and for the public generally.

A move toward a common currency for the industrialized democracies seems much more radical and much more ambitious than the detailed coordination of macroeconomic policies among nations, and indeed it involves a major leap in our thinking. National sovereignty will seem to be the major obstacle; but economic interdependence is rapidly eroding the ability of nations to determine their own destiny in any case, and this move would at least restore collective control. Moreover, if it could be accomplished, it would greatly simplify the problem of coordinating economic policy among nations. Monetary policy could be argued out in the Board, and fiscal policy could proceed independently, "coordinated" through the pressure of the marketplace. It represents a worthy addition for the future evolution of the industrialized democracies.

The CHAIRMAN. Thank you, Dr. Cooper. That's a very interesting suggestion.

Dr. Sachs, professor of economics, at Harvard University. This is Harvard day. As a Yale man, I don't know whether that's a good idea or not. You were a consultant, as I understand, with respect to Bolivia and you suggested some innovative approaches to their problems. We're delighted to have you. Go right ahead, sir.

**STATEMENT OF JEFFREY SACHS, PROFESSOR OF ECONOMICS,
HARVARD UNIVERSITY**

Mr. SACHS. Thank you very much, Mr. Chairman, for the opportunity to testify. I hope that despite my scholarly connection you will find some interest in the testimony.

I must say I'm quite relieved, after hearing my colleague's testimony, I agree with most of it so we won't have to have arguments on the airplane back home, although I would have some pause about the final suggestions of one world currency which maybe we can speculate on later on.

FLEXIBILITY IN MONETARY POLICY

I think that both speakers already this morning have explained why this is a period of unusual complexity in monetary policy. There are a number of cross-cutting aims of monetary policy which are extremely difficult to satisfy right now. I, like the first two speakers, support the current settings of monetary policy by the Fed, but would stress and do stress throughout my testimony that there is a considerable need for continued flexibility in monetary policy. This would be a terrible time, in my view, to enter into any kind of international arrangements to peg exchange rates or to rebase the currency on the basis of a commodity standard or other such innovations, particularly because given the kinds of real economic transitions that we're aiming for in the next few years we don't really have the capacity to say very clearly what the appropriate exchange rate will be. We just don't know enough to know what kinds of responses will occur in export and import demand and other variables which will determine the appropriate level of the exchange rate.

We are in a fundamental transition I hope from domestic-led growth to export-led growth in this country, and that involves a number of tradeoffs and risks. Exports are rising right now and on the one side there is a risk that if domestic demand does not slow sufficiently the rise in exports coming from the decline of the dollar will lead to overheating of the economy.

On the other hand, there are very legitimate concerns that the rise of exports will not be sufficient to match what is now projected to be a slowdown of domestic aggregate demand.

So there is an unusually wide range of forecasts right now ranging from overheating to recession this year, which comes from the fact that we are undergoing a rather major structural change in this economy whose outcome is very hard to see on a quantitative basis, though relatively straight-forward to understand on a qualitative basis.

POLITICAL BUSINESS CYCLE AND THE ECONOMY

One issue that you raised in the invitation was the question about how the political business cycle might interject itself with this delicate decision about the risk of overheating versus the risk of contraction, and I think it's a very interesting question. I do spend a couple of pages in my testimony describing that and if you could look at one of the tables in the testimony after page 3, I think that the history gives an interesting lesson actually about the political business cycle that's worth pondering.

In recent research that I've been doing and others have also found the same thing, there does not seem to be any overwhelming case of a political business cycle in the sense of election year changes in monetary policy for the purpose of affecting the election.

If you look in this table, for instance, you notice that the average growth rates in the fourth year of Presidential terms is approximately the overall average growth rate of the economy and when one scrutinizes fairly closely the monetary policies of the various administrations in the fourth year of office or of the Fed during the fourth year of office of the various administrations you don't really see too much manipulation of monetary policy for political ends except during the term of that most political of our Presidents, President Nixon, in 1972, where we have the single case of fairly clear evidence of excessive monetary growth for the sake of the 1972 election.

But more generally in our history that has not been a pattern which has played an important role.

However, there is a very strong political business cycle of a different sort which I wanted to draw your attention to, and that is that the Fed does respond to politics but not in the fourth year of Presidential terms but in the beginning of Presidential terms. And there is clearly a partisan business cycle in our country with Republican administrations almost invariably leading off with recessions. Indeed, every Republican Presidential term, save the most recent one, started out with a recession that began in the first or the 2d year of office.

No Democratic term has ever started out with a recession. And when one traces the monetary policy, you do indeed find the Democratic terms start out with quite expansionary monetary policy from the Fed and Republican terms start out with quite contractionary monetary policies from the Fed, in my view indicating the relative priorities given to growth versus anti-inflation policies of the different political parties, and indicating that the Fed is certainly not a purely autonomous institution that is not subject to political change. Indeed, it does move quite strongly with the political winds, but in the beginning of presidential terms, not at the end of presidential terms.

So aside from particular historical anomalies, it has not been a general pattern—the concern that you raised.

Now let me say a few words about the present situation, the difficulties of managing a transition from domestic-demand led growth to export-led growth.

One point I think should be understood at the beginning. A big part of that transition, of course, involves a continuing reduction of the Federal budget deficit as a share of GNP, but strikingly, all the evidence suggests that even if we were to get the budget down to that magic number that we're aiming for of zero in 1993, that in and of itself would not even be sufficient to restore trade balance in this country, if we don't, in addition, have a rise in private savings in this country because the private savings, private investment balance in this country is sufficiently adverse, private savings are sufficiently low that we would be relying on foreign capital inflows even if there weren't a Federal budget deficit right now.

Our true long-term policy crisis in this country involves the private savings rate just every bit as much as it does the public savings rate.

Now in the short term, however, we do have the pressing public policy concern of reducing the budget deficit and managing monetary policy during the transition.

The major problems for monetary policy, of course, are that there are great uncertainties in this transition. First, we don't really know what the strength of private demand will be, particularly after the collapse of the stock market last year. Export demand equations which predict how the exports should respond to movements of the exchange rate are also not performing very well now. So there are great uncertainties about the continuing strength of export demand.

And finally, the inflationary risks of continuing using monetary policy are present, but once again, the traditional equations that we rely on are not performing very well. Inflation has not responded as significantly as one would have expected to the falling dollar.

So the guideposts for moving between these difficult positions of overheating and recession remain a matter of very good luck and considerable risk because most of the traditional quantitative guidelines that would be used simply are not up to the task at hand.

I think the main implication for policy, therefore, is that monetary policy has to remain flexible and we should continue to avoid any adherence to firm rules either on the exchange rate or to monetary aggregates right now. If it does turn out that private demand falls more than is currently being forecasted, we do want to have the option of easing monetary policy and causing the dollar to go down further and we want to be able to do that without tremendous concern of international agreements pegging the dollar.

So I think that the main policy implication right now is that the Fed is probably on the right policy course and that it should remain flexible to stay on that course if either the economy starts to overheat to be able to tighten, or if the economy actually starts to fall into recession to be able to ease monetary policy significantly in order to keep the economy growing, one implication of which would be a more sharp fall to the dollar than has already occurred. But that seems to me to be a risk that would be appropriate in the circumstances of a sharp slowdown in the economy and one that we want to have available to us later on.

A word on the developing country debt. There is a real sense in which our monetary policy is hostage to the debt crisis right now

because a sharp rise of interest rates would do considerable damage to the prospects of the debtor countries. But as I stress in the testimony, this is an unfortunate situation because our overall debt management policy is so poor right now and so unrealistic that to hold monetary policy hostage to a very poor debt management policy is itself adding a disaster on top of a disaster. It's time to move toward a more realistic reduction of the debt burden for these countries and if we did so, then the extent to which our monetary policy had to reflect the concerns of the debtor countries would be substantially reduced.

So the element of constraint on monetary policy vis-a-vis the Latin countries follows very closely from the fact that we are already living in a very unreal debt management situation where countries are being called upon to service debts that are far beyond their steady state capacity to service. I'll stop there.

[The complete prepared statement of Jeffrey Sachs follows:]

Testimony to the Senate Banking Committee

Professor Jeffrey Sachs
Harvard University

February 25, 1988

Mr. Chairman, thank you very much for this opportunity to testify on the current management of U.S. monetary policy, as part of this Committee's semi-annual review of the Humphrey-Hawkins testimony of Chairman Greenspan. It is widely appreciated that the uncertainties now surrounding monetary policy are more profound than usual, in view of the large external deficits of the U.S. economy and the financial market instabilities in the past half year. Under the best of circumstances, the U.S. economy is in the process of a delicate transition from consumption-led growth in recent years to export-led growth in the future. The monetary authorities therefore have the central task of managing monetary policy (and exchange rate policy) so that export growth is fast enough to compensate for a decline in domestic demand, but not so fast as to result in an overheated economy and renewed inflation.

The dilemmas facing the Federal Reserve Board are perhaps most simply illustrated by the fact that pundits and forecasters can't decide whether the economy is at risk of overheating, with renewed inflation, or is instead on the brink of recession. One

complicating element is the fact that the recent declines of the dollar might provoke a rise in inflation via higher import prices even if the overall economy is relatively slack.

Because of the central importance of balancing a slowdown of domestic demand with an acceleration of exports, the most important questions now confronting monetary policy involve the appropriate management of the exchange rate. If monetary policy is eased, the dollar will depreciate further, and export demand will be further stimulated. The risks of recession will thereby be reduced, but at the possible costs of higher inflation (directly through higher import prices, and indirectly, through tighter labor market conditions). If monetary policy is instead tied to a target for the exchange rate (either by unilateral Fed policy, or in an agreement with our trading partners), the risks of renewed inflation may be reduced, but at the cost of a possible slowdown in export growth, and a slowdown in the economy overall.

The Effects of the Election Cycle on Monetary Policy

Before analysing the more technical aspects of the choices facing the Fed, it is worthwhile to turn to one of the particular concerns of the Committee: whether the choices made by the Fed this year are likely to be influenced in an important way by the elections. The historical record is, I believe, both interesting and a bit surprising on this score.

It is widely believed that the Federal Reserve Board tends to choose policy actions in an election year in order to improve the

electoral prospects of the Administration in power (either the reelection of the President, or the election of the President's party). There are usually two links to the argument: that White House pressure can have an important effect on monetary policy, and that those pressures are clear and overwhelming during election years. The empirical evidence does support one link of this argument: the ability of the White House to influence the Federal Reserve Board actions, despite the supposed institutional independence of the Fed from outside pressures (see the recent paper by Havrilesky, 1988, for a review of the evidence).

On the other hand, the historical record does not suggest any flagrant manipulation of Fed policies during election years for the sake of the incumbent Administration. Indeed, the "political business cycle theory", which predicts such manipulation, was born in the wake of the 1972 election, an election which now seems to be the only fairly clear case of monetary manipulation for electoral purposes.

As shown in the attached table (taken from a study that I have recently published with Professor Alberto Alesina, of Carnegie-Mellon University, 1988) there is no discernible pattern of especially rapid GNP growth during election years (the fourth year of each Administration), as a naive theory of the political business cycle would suggest. There is, however, a remarkable effect of political parties on the economy in the two years following a Presidential election. To the extent that political

Rate of Growth of GNP
(Constant Prices)

Democratic Administrations

	Year			
	First	Second	Third	Fourth
Truman	0.5	8.7	8.3	3.7
Kennedy	2.6	5.8	4.0	5.3
Johnson	6.0	6.0	2.7	4.6*
Carter	5.5	5.0	2.8	-0.3
Average	3.7	6.4	4.5	3.3
Average First/Second Halves	5.0		3.9	

Republican Administrations

	Year			
	First	Second	Third	Fourth
Eisenhower I	3.8	-1.2	6.7	2.1
Eisenhower II	1.8	-0.4	6.0	2.2
Nixon I	2.8	-0.2	3.4*	5.7
Nixon II	5.8	-0.6	-1.2	5.4
Reagan	2.5	-2.1	3.7	6.8
Average	3.3	-0.9	3.7	4.4
Average First/Second Halves	1.2		4.0	

* Oil shocks

Source: Alesina and Sachs, 1988

variables are important in the economy, they seem to operate at the beginning of Presidential terms, not at the end.

Almost invariably, Democratic Administrations begin with booms (especially in the second year of office), while Republican Administrations almost invariably begin with recessions. These differences average out by the third and fourth years of office. It is remarkable to contemplate that every Republican Administration except the second Reagan term began with a recession during the first two years of office, while no Democratic administration ever began with a recession. In the view of Alesina and myself, the differences between the Democratic and Republican Presidencies reflect the differing weights that the two parties put on the objectives of economic growth versus inflation control. Democratic Administrations have tended to favor growth (and employment) at the risk of higher inflation, and the Republican Administrations have tended to favor inflation-fighting even at the risk of a slowdown in growth, or even a recession.

It seems, moreover, that the differences in economic performance between Administrations of the two parties can be traced to differences in economic policies, particularly monetary policies. Thus, the Fed does seem to be susceptible to important partisan influence, but in ways that are more subtle than simply pumping up the economy on election eve.

Managing the Transition to Export-Led Growth

The fundamental macroeconomic policy goal that will face the country in the next few years, no matter which party is in office, is the reduction of the external deficit, and the concomitant reduction in the U.S. dependence on foreign capital inflows. In order to achieve a shift in the external deficit, it is required that total domestic spending in the U.S. should decline relative to GNP, in order to free up the resources that must be devoted to an increase in exports. Since the economy is already operating near full employment, the only way to increase exports significantly is reduce domestic demands for domestic goods, and thereby to free up workers and other resources to devote to export promotion.

The most reliable way to reduce domestic spending relative to GNP is to reduce the government budget deficit, either by expenditure reductions or by tax increases, or most likely, by a combination of the two. It should be noted, however, that even if the budget deficit is virtually eliminated, it is likely that an U.S. external deficit will remain, unless private-sector savings also increase markedly.

Put another way, the U.S. external deficit is equal to the excess of domestic investments over national savings. If government dissavings is reduced, thereby raising overall national savings, the excess of investment over national savings will tend to fall, and the external deficit will be reduced. However, even if government dissavings are virtually eliminated, there is still likely to be an excessive of private sector investment over

private sector savings. This is because our domestic savings is now extremely low, both by historical and international standards. Thus, a full balancing of the external accounts will likely require a rise in private savings (or, less attractively, a fall in investment) in addition to the elimination of government dissavings.

The great trick for monetary policy these days is to get exports growing fast enough to make up for the demand shortfall that might arise from the reduction in the government deficit, as well as any accompanying increase in private savings that might be achieved. The precision with which monetary policy can be deployed in this task is limited by several factors:

- (1) it is extremely difficult to predict accurately now the state of private demand and private savings, especially following the events of Black Monday;
- (2) it is difficult to predict the linkages of easier monetary policy to faster export growth, since both the linkage of money to the exchange rate, and of the exchange rate to exports, are difficult to gauge with precision. Statistical relationships of exports to exchange rate changes, based on past history, have not fared well in the past year;
- (3) it is very hard today to gauge the inflationary risks that arise from a further decline in the dollar. Those risks are of two sorts: a general overheating as well as the effect of a weaker exchange rate on higher import prices. The historical linkages between exchange rate changes and import prices have tended to break down in the past year.

Thus, to appreciate the Fed's current quandry, note that the historical bases for designing exchange rate policies have been unreliable guides in the past year. Until very recently, export growth was less buoyant than would have been predicted in light of

the fall of the dollar since 1985. Also, import prices were much lower than would have been predicted according to historical relationships, so that the effects of the weak dollar on domestic inflation had been much less than feared.

What remains to be seen, however, is whether these breaks with historical experience are simply temporary aberrations in the data (i.e. time lags in exports and import prices that are difficult to explain), or whether there are more fundamental structural shifts underway in the U.S. economy. Some have argued, for example, that the dollar has to go much lower than it is today because the U.S. has lost fundamental competitiveness with the Asian economies, so that the previous basis for judging the appropriate level of the U.S. exchange rate no longer apply.

As a general strategy in such uncertain periods, I would urge that we stick with the historical experience as long as possible (i.e. that we continue to rely on the earlier statistical relationships) as our guide to policy, rather than believing that we are always living with a new "special case", requiring new "special attention". The normal disciplines on policymaking tend to fall apart if policymakers are prone to abandon earlier guideposts every time that six months to one year of data come a cropper. Moreover, it is almost surely the case that we are better at estimating the long-run effects of policies than their short-run effects. Technical economists are almost bound to get wrong the dynamic responses of exports and imports to the exchange

rate, even if they can more reliably estimate the long-run effects of such policy changes.

In this view, we should expect two things from the fall of the dollar that has already taken place. First, export growth should remain strong for a while even if there is no further significant depreciation of the dollar. This is because there is evidently some remaining lagged response of export growth to the exchange rate depreciations to date. Second, import prices should be expected to rise more rapidly in the coming year, since the response of import prices to the dollar depreciation has so far been notably less than would have been anticipated from historical relationships.

To conclude this testimony, I would like to offer my observations on the specific issues raised by Chairman in his invitation to me to testify today, specifically: (1) the costs and benefits of a policy of defending the dollar on foreign exchange markets; (2) the constraints on monetary policy resulting from the fragility of the debtor nations; and (3) the impact of increasing net indebtedness of the U.S. on the conduct of monetary policy.

On the Costs and Benefits of Defending the Dollar

This is a very poor time indeed for the U.S. to enter into international agreements to support any particular value of the dollar. The whole thrust of my testimony has been to suggest the profound uncertainties that now revolve around the appropriate

"equilibrium" value of the dollar. How strong will export growth be? How inflationary will dollar depreciation be? How much will U.S. domestic demand slow in the coming year, and so how fast must export growth be in order to compensate for the slowdown of domestic demand? How much progress will be made in the next eighteen months of budget deficit reduction? All of these questions bear directly on the appropriate value of the dollar. Since we won't know the answers to these questions except in the course of time, we should maintain the flexibility to respond to developments with changes in monetary stimulus, and changes in the value of the currency.

To take one case, suppose that domestic demand in 1988 turns out to be much more sluggish than currently forecasted. The appropriate response for the Fed will be to ease monetary policy, with a resulting further depreciation of the dollar. This is for the straightforward reason that more domestic resources will become available for export. Without a further depreciation, the unexpected demand slowdown would tend to result in a rise in unemployment. With depreciation, however, the incipient rise in unemployment can be absorbed into export expansion.

In the event that the dollar were to be tied to the DM and the Yen in an international arrangement, however, we would not have the unlimited discretion to ease monetary policy. Nor could we enjoy the stimulative benefits of a further fall in the dollar. We would likely enter into a rather acrimonious dispute with Germany and Japan over the appropriate common response of the

three countries to the growth slowdown. Germany and Japan would tend to fear the inflationary consequences of further easing of monetary policies, and put pressure on the U.S. to ride out the demand slowdown with somewhat reduced overall economic growth.

The Links of Monetary Policy and LDC Debt

I have very recently testified (February 4, 1988) at length to the House Banking Committee on the state of the debt crisis, and I would kindly refer this Committee to that testimony for a detailed discussion of my views. Here, it should suffice to make two somewhat contradictory remarks. On the one side, tighter monetary policy clearly exacerbates the crisis, by raising interest servicing costs of the debtor countries and by depressing the prices of commodity exports of the debtor countries. On the other side, however, the whole debt crisis is being so poorly managed by the U.S. Treasury that it makes little sense over the longer run to hold U.S. monetary policies hostage to the current debt management strategy.

The time has long since arrived to reduce the debt burden of the major debtor countries through some mechanism of debt conversions, in which the commercial banks admit substantial losses in return for having some or all of their LDC claims taken over (at a deep discount) by an international agency, such as the World Bank. The agency, in turn, would hold the claims on the debtor countries, and would reduce the debt servicing burden in line with the ability to pay. In the debt conversion, the LDC

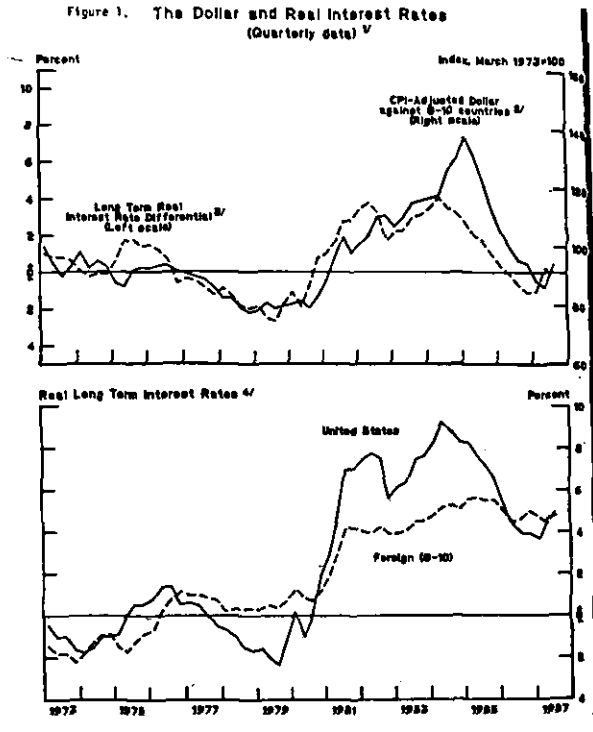
claims should usefully be converted from variable-interest-rate to fixed-interest-rate securities, so that the vagaries of U.S. monetary policy would not have the effect of wiping out the debtor countries.

The financial feasibility of such an approach can be demonstrated (see Sachs, 1987, for some details), as can the economic rationale for proceeding in that direction. With Latin America in its worst financial turmoil in decades (average inflation now exceeds 200 percent per year in the region!), it is time to face up to the shortcomings of the current ways of managing the crisis.

The Impact of Increased U.S. Net Indebtedness on Monetary Policy

In a world of high private capital mobility, as now exists, each country's monetary policies are inherently constrained by international factors, whether the country is a net debtor or a net creditor country. In either case, a reduction in domestic interest rates is bound to set in motion a (rapid) process of portfolio adjustment leading to a depreciation of the domestic currency. A drop in the real long-term interest rate of 1 percentage point tends to depreciate the real exchange rate by approximately 6 or 7 percent. The big swings of the dollar in recent years can indeed be well explained by shifts in the U.S. interest rate differential vis-a-vis our trading partners, as is shown in the attached figure, taken from Hooper and Marn, 1987.

Figure 1. The Dollar and Real Interest Rates
(Quarterly data) ¹



Source: Hooper and Mann (1987), Chart 13, p. 51c. The real exchange rate is a CPI adjusted exchange rate for the non-U.S. G10 countries plus Switzerland. Weighting is according to the share of the country in world trade during 1978-83. The long-term interest rate is a government long-term bond rate minus a 36-month, centered, inflation rate. The long-term interest rate index uses the same weights as the real exchange rate index.

For this reason, the monetary authorities must always grapple with the fact that "domestic" monetary policy changes will now inevitably have direct and nearly instantaneous repercussions on the exchange rate, the import price level, and export competitiveness. A move to managed exchange rates would not tend to change this fact: it would merely tend to limit the range of discretion now enjoyed by the monetary authorities. (Admittedly, if the U.S. were at the center of a managed system, our direct influence over foreign monetary policies could be enhanced. I do not view a U.S.-centered system as a realistic prospect, however).

The fact that the U.S. is a net debtor, and as importantly, a net borrower currently, also means that U.S. interest rates and monetary policy could also be subject to the swings in portfolio preferences of foreign investors — both private and official. If the Japanese investors suddenly decide on average that they require a risk premium of a few percentage points on U.S.-denominated assets, the result would certainly be a sharp rise in U.S. interest rates and a significant simultaneous fall of the dollar. Such a shift in the required risk premium is the central mechanism behind Stephen Marris' well-known forecasts of a "hard-landing" in the world economy in the next two to three years.

For what it is worth (and here history may be a rather unreliable guide), there is little evidence of a rising risk premium on U.S. assets in the past few years, despite the rapid buildup of U.S. denominated assets in the portfolios of Japanese wealthholders. The fears of a sudden withdrawal of credits from

the U.S. have remained just that . . . fears. Foreign private investors have continued to accumulate U.S. denominated claims at a rapid rate. Movements in U.S. interest rates have apparently been the result mostly of shifts in U.S. monetary and fiscal policies, and not of swings in foreign portfolio preferences.

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The CHAIRMAN. Thank you very much, Dr. Sachs.

Our last witness is Dr. Neal Soss, Chief Economist, First Boston Corporation in New York. We're delighted to have you. You're also, I understand, a former top assistant to Chairman Volcker of the Federal Reserve Board.

Mr. Soss. And from Princeton.

The CHAIRMAN. Well, nobody's perfect. [Laughter.]

Nice to have you. Go ahead.

**STATEMENT OF NEAL SOSS, CHIEF ECONOMIST, THE FIRST
BOSTON CORP., NEW YORK**

Mr. Soss. Thank you, Mr. Chairman. I appreciate the opportunity to be here as well.

[The complete prepared statement of Mr. Soss follows:]

Testimony by
Neal M. Soss
Chief Economist, The First Boston Corporation
before the
Committee on Banking, Housing & Urban Affairs
United States Senate
February 25, 1988

Mr. Chairman, I appreciate this opportunity to testify before the Senate Banking Committee as part of the Congressional oversight of the Federal Reserve's conduct of monetary policy.

Transferring Resources to Foreign Creditors

Two transitions—delicate and intertwined—challenge the American economy in the year ahead. The first is to slow output growth to a more sustainable pace after 1987's surge. The second is to base growth more heavily on foreign demand and relatively less on domestic demand. These transitions are fraught with risks, and financial markets have been resonating to those risks since the bond market collapse last spring.

GNP growth in 1987 pushed the U.S. economy toward its resource utilization limits too fast to permit continued low-inflation expansion. The question is what mechanism will moderate the pace of growth and relieve the potential inflationary pressures.

The devaluation policy of recent years renewed American industry's access to markets around the world. In real terms, manufactured exports are growing at double-digit rates while imports of manufactured items are stagnating. The world wants America's output because the dollar is cheap. And Americans are inclined to lay claim to the same output because of the jobs, wages, and profit opportunities created by the trade boom. The confrontation between an economy moving toward full resource utilization and rising demands, both foreign and domestic, is a recipe for inflationary excesses and mounting financial stringency. The prescription over time is for policies restrictive enough to moderate domestic demand (and so relieve the import side of the trade imbalance) but stimulative enough to perpetuate the resurgence of U.S. export competitiveness.

From the outset, the devaluation policy required that resources would someday have to be shifted away from domestic use and toward the foreign sector. Someday began to arrive in 1987, and will be with us for several years. What mechanisms can accomplish the resource transfer?

Fiscal Policy

Fiscal policy can play a constructive role in this process. A tighter budget—whether from higher taxes or lower expenditures—would act directly on domestic demand and allow foreigners to exercise the first claim on America's output that the cheap dollar has given them. The symptoms of the economy and the verdict of the markets suggest that still more fiscal restraint is in order. A cheap dollar and nearly full employment mean that for the first time in several years the U.S. economy needs a shrinking budget deficit to sustain the business expansion and stabilize financial conditions.

Inflation and Financial Stringency

As we learned in the 1970s, inflation itself is a resource transfer mechanism. Escalating prices ahead of wages (and interest rates) taxes away from the domestic economy some of the fruits of its labor. That margin is freed for export. In a broad sense, inflation was a central mechanism of the resource transfer to the oil-producing nations that occurred in the Seventies.

By contrast, inflation has remained under control so far in the 1980s despite a record-long peacetime business expansion, accompanied on average by quite high rates of money growth, and lately a sharply devalued currency. Financial market vigilantes have launched pre-emptive strikes at every inflection point in this business cycle when conditions threatened to overheat. While cost pressures are now trending up with *tighter labor market and capacity utilization conditions, the demand side of inflation has had a hard time gaining momentum because of the prompt and severe bouts of financial instability the economy periodically experiences. Regulating the pace of business through unfettered financial markets is dangerous and messy, however, since the markets have to make loud crashing noises to be heard by the real economy.*

Crashes and the Economy

The message to the economy in each instance has been to slow from an over-rapid pace. In particular, recession is not now required to deal with the problems of the economy or the financial system. Indeed, recession now would make the problems worse. But there is no clear calibration between the degree of setback suffered in financial markets and the cooling of demands on the economy that is induced. Moreover, repeated shocks have taxed the resilience of financial institutions and mechanisms.

Crashes heighten forecasting uncertainties. Domestic demand softened in the fourth quarter of last year, while production momentum continued. The result was a build-up of inventory. Will production now decelerate to bring inventories into better alignment with sales, or will sales pick up?

The most recent statistical readings point to a remarkable (implausible?) rebound in consumer sentiment and spending only 3-4 months after October's Black Monday. While each of us may express assessments of how sustainable these developments may be, the Federal Reserve requires a higher standard of proof, for its actions not only reflect its assessment but also have an important bearing on the outcome.

The Monetary Aggregates and Monetary Policy

Weekly readings on the monetary aggregates are not likely to dispel uncertainties. Do rising money balances reflect eagerness and wherewithal to go shopping? Or do they

reflect a heightened preference for liquidity rather than for the other goods and services the economy could produce?

Monetary aggregates are not goals in their own right. They are important insofar as they shed light on current and prospective developments affecting the true goals of economic performance—sustained growth at high levels of employment and reasonably stable prices. The link between money and economic activity is velocity (nominal GNP divided by the money supply). During the 1960s and 1970s M1 velocity displayed a fairly stable trend growth of about 3% per year. M1 was used for making transactions, and transactions are the stuff of GNP. Thus, for a given growth rate of M1 you could be fairly confident that nominal GNP would grow about 3 percentage points faster. The Fed made use of this relationship when it set growth targets for M1.

The historic pattern of velocity was a fundamental rationale of the Fed's monetarist experiment in October 1979. The Fed would provide reserves sufficient to support only a targeted amount of M1 growth, which in turn would support only so much nominal GNP growth. Over time, it was hoped, the economy would allocate more of that nominal GNP to the real component and less to the inflation component.

Then the link changed. The earlier stable relationship of money growth to GNP growth dissolved into an erratic trend decline in velocity. By late 1982 the Fed was giving less weight to M1 in its policy deliberations—actual M1 growth vastly overshoot its targets in 1982, '83, '85, and '86—and the Fed didn't set an M1 target for 1987

In part, the change in its velocity reflects regulatory initiatives that have altered the composition and character of M1. Today over one-third of the monetary assets included in M1 earn interest. In 1980 less than one-twentieth did, and the interest rate on even that small component was subject to strict limits. Since 1983 interest rate restrictions on checkable deposits held by individuals have been removed. Now the aggregate that we call M1 has both a transactions component and a large savings component.

The lifting of interest rate restrictions has also had an effect on the relationship of GNP and the broader monetary aggregates, M2 and M3. In general, both M2 and M3 velocity have become more volatile in recent years. This volatility makes M2 and M3 less reliable monetary policy targets.

The component of "money" that has been least affected by regulatory innovations is currency—folding money and coins. Yet, even currency has misbehaved; its pre-1980s trend increase in velocity has given way to erratic declines in the last few years, mimicking other forms of "money." It seems likely that the harsh early-'80s recession and the long disinflationary business expansion that followed have shifted the public's desire for and use of "money" in ways that go beyond the effects of regula-

tory innovations. Periodic outbreaks of financial instability may further shift the demand for money, both temporarily and over longer periods.

Money is probably still sending a message about economic performance, just as before. The difference is that in the "good old days" the monetarist message was decipherable by the 3% velocity trend. The code has changed in the last few years, and we haven't yet broken the new one. This fact does not make anyone's job any easier—not the Fed's in framing policy, not the Congress's in overseeing policy, not the market participants' in making business decisions in anticipation of economic and financial developments.

As the relationships have become less stable, the Fed has given less and less weight to all the monetary aggregates. Currently, the monetary aggregates rank last in the list of factors that the Fed considers before adjusting short-term policy. They fall behind strength of the business expansion, inflationary pressures, and developments in foreign exchange markets.

Velocity is not likely to be any more predictable in 1988 than in other recent years. The Fed will continue to set longer-range targets for money growth, but it is unlikely to react to growth that is above or below target unless business conditions and inflation pressures are confirming the signals.

Financial Fragility

Policy adjustments such as changes in the prevailing rate on federal funds tend to be smaller and less frequent when the Fed is focused on more judgmental indicators of economic performance. For the time being this is probably just as well.

Successive shocks in recent years have undermined confidence in the financial system, affecting the level and distribution of economic performance. The more comfortably an activity can be financed, the more of it will be undertaken—and vice versa. Credit quality problems have hindered financing for Latin America, the oil patch and other commodities industries, with contractionary implications for those sectors. For a time, this diverted credit to support booming securities markets and regional economies along America's coasts.

Now, however, financial tidal waves have undermined the ability and willingness of market-makers to perform their historic role. The stability of stock, bond and foreign exchange markets of late is still tenuous.

The nation's largest commercial banks have seen their credit ratings slip on average below the ratings of their largest corporate customers. Regulators of all major countries propose stricter bank capital adequacy that should induce tighter credit standards. More prudent lending is the financial synonym for more cautious spending.

Significant risk remains of a sudden and perhaps exaggerated shift in liquidity preferences that would require the Fed to exercise its responsibilities as lender of last resort. The Fed cannot pre-empt that risk by adopting a monetary posture that is chronically too easy. But a judgmentally-based Fed approach, by making for more stable money market conditions, will lessen the risk of a renewed outbreak of financial instability on a grand scale.

The Fed and the Election

The fact that 1988 is an election year should make no difference to the outlook for monetary policy.

The Federal Reserve System is designed to provide insulation from the biennial and quadrennial partisan pressures that are the lot of Congresses and Administrations. Fed Governorships last 14 years, and appointments are staggered to reduce the potential influence of one President or political party. The four-year term of the Chairman has not been formally synchronized with the President's. The leadership and governance of the twelve Federal Reserve District Banks, including rotating voting roles on the Federal Open Market Committee, add further insulation from political pressures that might at times draw their primary inspiration from electoral objectives.

While the Fed is constituted to encourage independence, the question still arises whether it has exercised that independence of policy judgment over the years.

It has often been observed that presidential elections tend not to coincide with economic recessions. There have been eight presidential elections since the emergence of a Federal Reserve unfettered by wartime and demobilization responsibilities at the end of the Korean War. Only once since then, in 1960, did the election occur during what is officially designated as a recession, while a somewhat broader standard would recognize November 1980 as a time of severe economic turbulence, even if not technically recession.

Thus, at least six (strictly speaking, seven) of the last eight elections occurred in months of business expansion. For perspective, however, recall that expansion is the normal condition of the economy; recession is the rarity. From 1956 through 1984, the economy grew about four-fifths of the time and suffered recession only about one month in five. Given the relative infrequency of presidential Novembers, their overlap with recession seems about what you'd expect from the "luck of the draw."

If policies have been put in place with the intent of influencing election year economic performance, they have shown no systematic tendency to work. Real GNP growth, for example, averaged 3¼% in the last eight election years, well within the measurement error of the economy's long-run 3% growth trend. Moreover, the record does not reveal a systematic tendency for the growth rate to accelerate in election

years or to decelerate thereafter. In 1968, 1972, and 1976 real GNP grew faster than it had the year before; in the other five election years growth slowed. Following the elections of 1956, 1968, 1972, and 1984 growth decelerated, but growth sped up in the years after the other four.

Attempts to exploit the voters' alleged myopia might aim to goose up GNP in the second half of election years as the fateful day draws near. Such attempts, if there were any, have a very poor record. In only two election years (1956 and 1980) did real GNP grow more rapidly in the second half than in the first—once the incumbent party returned to the Oval Office; the other time not. In six election years, real GNP decelerated in the second half—in half those cases the incumbents won; in half they lost.

The absence of a systematic tendency for the economy to perform differently in election years does not prove that the Fed (or other policy-makers) do not try to make it otherwise.

The monetary aggregates have been a prominent indicator of the Fed's posture only in the period encompassing the last four presidential election years. Their record is clouded. M1 growth accelerated by one and three-quarters percentage points in election year 1972 and about one point in 1976; M1 growth decelerated by one-half percentage point in 1980 and four and three-quarters points in 1984. These "facts" do not tell us about Fed motives—judgments about the best interest of the economy long-term or about the candidates short-term. More fundamental ambiguity lies in our inability to separate out of short-run changes in money stock the Fed's influence in supplying money and that of millions of households and businesses in demanding M1 balances.

The federal funds rate is not ambiguous. Except for quite short periods, fed funds trade at rates the Federal Reserve sets or condones. Fed funds behavior around elections suggests the Fed is more apt to avoid involvement at politically sensitive times than to be active.

There is no systematic tendency for the federal funds rate to go down or up in election years. Fed funds were higher in election season than a year earlier in five of the last eight presidential years and lower in three. (Of these, the incumbent party was ousted twice—1960 and 1976—and returned once—1984.) Recognition that it takes time for interest rates to influence the economy, and hence perhaps the election, leads to review of the fed funds pattern before election years. Here again there seems to be no suspicious pattern. The federal funds rate rose in five of the eight pre-election years and fell in three. (Of these, the incumbent party was ousted in 1968 and 1976 and returned in 1972.)

The magnitude of Fed policy changes in election periods presents a more revealing picture than their direction.

From 1955 to 1985, the fed funds rate changed on average about 160 basis points—sometimes up, sometimes down—from year to year. The average absolute change in the funds rate in both the eight pre-election and eight post-election years has been about 175 basis points—substantially like all other years. Except presidential years. In the last eight of those, the funds rate has changed on average only 94 basis points, less than two-thirds the norm.

This behavior is not puzzling. The Fed is constituted to set it apart from the government. But the central bank is also a part of the government. On both counts, its incentives are to keep out of the public eye when the limelight is properly focused on the candidates. On the basis of past patterns, the fact that 1988 is a presidential year means the Federal Reserve will do what it otherwise would, only less so and as unobtrusively as possible.

The Fed and Foreign Exchange

The foreign exchange value of the dollar is one policy matter on which the Fed's independence is deliberately circumscribed. The dollar is an instrument of foreign relations and foreign trade policies, and as such falls within the purview of the Executive. The Treasury Secretary has a particularly influential role in determining how much weight the Federal Reserve may give the dollar in monetary policy. This has been evident throughout the G-5 (G-7) process since mid-1985.

The United States is today a gargantuan debtor to the rest of the world. In the best of circumstances, even as the trade deficit shrinks in the next few years, foreigners will have to absorb several hundred billion more dollars. To induce foreigners to hold rising amounts of U.S. dollar claims—perhaps beyond the level of their demand for dollars—requires making American assets more attractive to them. That can happen by making the dollars cheaper or by making the assets (stocks, bonds, real estate and businesses) cheaper. The latter is a high-risk route that could end in premature domestic recession or deflation.

Defending the dollar means forcing up short-term interest rates—in the extreme, demonstrating a willingness to push rates high enough to provoke recession. A rising fed funds rate is no comfort to domestic financial markets, as we saw in the violently adverse reaction to the Federal Reserve's dollar-targeting posture last April. After seeing the sour outcome of defending the dollar from April to October, the relevant policymakers downplayed that policy in the wake of the Crash. It is unlikely that the Treasury Secretary will countenance a rerun in 1988. When the domestic economy and inflation require higher interest rates later in 1988, the Fed will tighten policy accordingly, but it is unlikely to raise interest rates for the express purpose of supporting the dollar's value against the judgment of the foreign exchange market.

Summary

In summary, Mr. Chairman, maintaining financial stability seems to me the first responsibility of the Federal Reserve this year. To accomplish this, it will need to gear its policy steps to:

- business conditions, which means not too fast as well as not too slow;
- inflation, to reduce the chances of financial markets' repeating their 1980s' pattern of overreacting to price pressures;
- the dollar, insofar as exchange rates influence domestic business conditions or prices;
- the monetary aggregates, to the degree that other indicators permit interpretation of the information hidden in the money supply;
- the election, not at all in terms of the substance of monetary policy.

Once again, Mr. Chairman, I want to express my appreciation to the Committee for the privilege of appearing before you today.

The CHAIRMAN. Thank you, Dr. Soss.

I'd like to start off with Dr. Sachs and Dr. Soss on one particular line. I'm concerned about the independence of the Federal Reserve Board and you seem to feel that, on the basis of the record, they can resist.

Well, it's an entirely different situation than it's ever been now. We have for the first time in 50 years, maybe the first time ever—I'm not sure about the Roosevelt administration—I haven't been able to get it clear—but this is the first time an administration has appointed every single member of the board unanimously, all six of them. Of course, there's a seventh being appointed at any time.

Also, this is an administration that has leaned very hard on the Board. I had a letter just yesterday from the Assistant Secretary of the Treasury which was, I thought, very specifically directed at the Open Market Committee. Right on the verge of their meeting, it was delivered to each member of the Open Market Committee, telling him what the Treasury thought they ought to do.

So I'm very much concerned about that. And I might say that Chairman Greenspan yesterday expressed some resentment of the recent efforts by the administration to influence monetary policy.

I understand that former Chairman Paul Volcker is said to have written in his thesis at Princeton that the Fed should be made a part of the Treasury to promote coordination of monetary and fiscal financial policies. I think he undoubtedly changed his view as he matured.

William Greider, in his recent book, "Secrets of the Temple," also suggests that the Fed should be made part of the Treasury to increase political accountability.

First, Dr. Sachs, as an old Fed man, what's your view?

FED IS A POLITICAL INSTITUTION

Mr. SACHS. Well, I actually did not mean to leave the impression that I think that the Fed can generally resist pressures. Indeed, I think what the evidence shows is that the Fed is a political institution which swings with the politics of administrations and there's a clear pattern of partisan shifts in the party that holds the White House leading to shifts in monetary policy.

Historically, however, the shifts in policy have come at the beginning of presidential terms. There isn't that much evidence that election years per se have been manipulated by the Fed. What there is evidence, however, for is the proposition I believe that if a Democrat—

The CHAIRMAN. Let me just interrupt to ask—I understand that some people argue that there's a lag between the action by the Fed and the Open Market Committee and the effect on the economy, a lag of perhaps a year or so.

Mr. SACHS. Right.

The CHAIRMAN. So if you say "in the election year" you don't see much of a shift, shouldn't we take a look at the year before the election?

Mr. SACHS. In the election year, neither do we see a shift in policy nor in effect, and in the year before we also don't see—apparently, we don't see enough of a shift in year 3 in order to lead

to different outcomes in year 4. In other words, the policy outcomes in year 4 are not significantly different from the outcomes in an average year in the economy.

The CHAIRMAN. Well, how important actually is the independence of the Federal Reserve Board?

Mr. SACHS. I think that there are conflicting interests at stake. A purely independent Fed I think would be—a totally independent Fed I think would be quite problematic because there should be some democratic constraint on the institution.

The CHAIRMAN. Why?

Mr. SACHS. Why?

The CHAIRMAN. With a democratic constraint on the institution it seems to me there would be an inflationary policy constantly. Everybody wants to have low interest rates. Everybody wants to avoid a recession. We inevitably have them but nobody ever wants them—not on his watch. It seems to me that if you're going to have a democratic effect—we have elections every 2 years—you're going to have a policy that will be less sound, less responsible, and it would seem to me there's a good argument for insulating the Fed from that democratic effect.

Mr. SACHS. I think that there is an argument on the other side that having it in the Treasury would be quite problematic, but I must say that there's responsibility on both sides.

The Bundesbank is probably the most independent central bank in the world and I'm not sure that that is really delivering good public policy for the German people right now. It does deliver stable prices and it's delivered significantly high unemployment rates for much of the last 15 years. And I think that there's a real problem there.

We have a balance where we have some political input and we also have institutional independence.

The CHAIRMAN. Right now it's a balance of living beyond our means. It's a balance which is failing to accommodate a fiscal policy which is grossly irresponsible.

Mr. SACHS. Right. Living beyond our means is the one clear thing that can't be put at the doorstep of the Fed. That's a problem of Congress and the administration and not a problem of monetary policy per se.

The CHAIRMAN. Well, it's a problem that monetary policy tries to compensate for.

Mr. SACHS. The problem of monetary policy is that given that quite problematic fiscal policy it's extremely hard to operate between the competing demands of accommodation and trying to restrain an overheating of the economy. And I think on the whole the Fed has done a good job of walking that narrow line. I think most of the testimony this morning illustrated just how difficult it is to do that and, given how many conflicting demands there are on monetary policy, how difficult it is to find a middle ground right now.

The CHAIRMAN. Dr. Soss.

Mr. SOSS. Well, I want to echo the sentiment about the role, if you will, of analysts or scientific kinds of approaches to assess patterns and to the degree that any particular instance or episode might tend to deviate from a pattern perhaps the sunlight that

you've directed to the issue of a more politically oriented Fed will help to sanitize the situation.

There is no question in my mind, however, that if financial markets came to believe that the Federal Reserve's behavior this year or any other year was motivated by the kind of partisan political concerns that—that the markets would not take that well.

FED AS PART OF THE TREASURY

The CHAIRMAN. Do you specifically think the Fed should be part of the Treasury?

Mr. SOSS. I don't think the Federal Reserve should be part of the Treasury, no. I think we're probably better off with the kind of balance that exists wherein the Federal Reserve is apart from the Government but also right here in Washington being a part of it as well. Paul Volcker's view on the question matured with age as well.

Mr. COOPER. May I comment on this question?

The CHAIRMAN. Dr. Cooper, I wish you would.

Mr. COOPER. I think that the formalities of the relationship are less important than the established conventions and expectations. Jeff Sachs has pointed out that from a formal point of view the most independent central bank is really the Bundesbank in Germany, and in two other European countries, Britain and Italy, from a formal point of view, the central bank is under control of the Treasury.

The CHAIRMAN. Let me interrupt. Isn't it true that West Germany has had an economic miracle? Isn't it true that that's the strongest economy in Europe?

Mr. COOPER. Absolutely.

The CHAIRMAN. Isn't it true on the basis of that independence that by and large over the years they've been able to avoid inflation? While it's true they have high unemployment now, it's lower than it is in other European countries and by and large it's been quite a success.

Mr. COOPER. Mr. Chairman, with deference, this would take us in another direction. I think the U.S. economy today is in much better shape than the German economy is— much better. It's true that we have a problem with our fiscal policy at the present time.

The CHAIRMAN. I'd be in better shape, too, if I took a credit card and lived on that credit card and ran up huge bills and lived way beyond my means. I'd be in great shape for a while.

Mr. COOPER. But in terms of its flexibility, its innovativeness, its capacity for change, its capacity to roll with the punches, we just have much less rigidity than the German economy does. That gets us well outside the role specifically of the central bank. I don't think the German central bank can be credited with the German miracle or faulted with the rigidities of the German economy. It's just one among many features. But I would not trade places with them for a moment in terms of the fundamental soundness of the economy.

I know that sounds a little odd because everyone attaches enormous importance to the trade position and the United States is now running a trade deficit and the Germans are running a large

trade surplus, but that is not the be all and end all of economic performance.

Anyway, the point I wanted to make was that in both Britain and Italy formally the central bank is under the control of the Treasury, in the sense that at the end of the day the government can order the central what to do. But in both countries the tradition has been established that the central bank will operate with a high degree of independence except perhaps in a real crunch, and people of sufficient stature have typically been appointed as governors of those institutions that if they were to make a row about an order given to them by the Minister of Finance that would create a large political stink in both countries. And I think that is much more important than the formal arrangements between the institutions.

Having said that, let me point out that there is a serious anomaly in the present U.S. arrangements and that is that the Federal Reserve is formally in charge of domestic monetary policy but the Treasury is formally in charge of exchange rate policy. That was an arrangement that worked perfectly well under the Bretton Woods system in which the U.S. was the passive player and we didn't intervene actively in exchange markets. That is an anomalous arrangement in a world of flexible exchange rates and it is one of the sources of the tensions that exist between the Treasury and the Fed today.

The CHAIRMAN. Senator Hecht.

Senator HECHT. No questions.

The CHAIRMAN. Senator Garn.

Senator GARN. Mr. Chairman, I have no questions at this time. Gentlemen, I apologize. I intended to be here earlier, but as you all know, we are having a very big markup next Tuesday on a major banking bill that Senator Proxmire and I have been working on for a long time and we had a Republican caucus going on to discuss the provisions of that bill and, as you know, caucuses sometimes last a long time. We were supposed to finish at 10 and just did.

I want you to know I'm sorry for not being here, but we were not malingering. We were doing important business on the Republican side and we appreciate your testimony.

The CHAIRMAN. Senator Heinz.

Senator HEINZ. Mr. Chairman, I will have to make Senator Garn's speech. I, too, was at the caucus. I apologize to our witnesses, but I thank them for their testimony. Perhaps I'll be able to submit some questions in writing.

The CHAIRMAN. Well, this is a very fine panel we have this morning.

IMPORT QUOTAS

I want to ask Dr. Barbera, the Wall Street Journal earlier this week reported shortages of semi-finished steel. The article blamed import quotas for contributing to the shortages and encouraging price-gouging by U.S. manufacturers.

Have you observed any capacity constraints operating in the manufacturing sector?

Mr. BARBERA. I think that certainly on the bottom end of the economy we've got such capacity—

The CHAIRMAN. I might say, if I could interrupt, Senator Heinz was elated by that news.

Senator HEINZ. I said I would be elated by it if it were true. [Laughter.]

Mr. BARBERA. There's ample evidence of booming demand for steel from the United States abroad, particularly in the Far East, that we are not meeting now because of capacity constraints.

I would point out, however, that there are those who are quick to jump at shortages of copper or steel and talk about running up against capacity for the entirety of the economy and then you could leap and say we're really dangerously close to a period where we should move toward recession but because of a Presidential election we're avoiding it.

I really think that's a gross mischaracterization of where we are. We have shortages at the bottom end of the economy, but once you move from steel and copper and get on to higher value-added products, in fact what we find is a great many nations producing products looking for consumers to purchase it. Big retail inventory excesses on the apparel, consumer electronic side, obviously we have a big chronic oversupply on the auto side. The Japanese are putting two million production capacity in the United States. They will be able to produce two million cars in the United States in 1989. It doesn't appear they are filling up the productive capacity they have in Japan with cement. So I would say that, except for the bottom end of the economy, we still have ample capacity and we're not dangerously close—

The CHAIRMAN. Well, I'm a little puzzled by that because they tell us that we're operating at a high level of capacity compared to our operations in the past—85 percent of capacity or something like that—

Mr. BARBERA. 82 percent.

The CHAIRMAN. They tell us that in paper and chemicals, for instance, we're operating at an even higher level, 95 percent of capacity. Do you think that production bottlenecks will be encountered in the near future?

Mr. BARBERA. I think on the bottom end of the economy, yes. I think, as I said, as you move up the value-added chain, no. I don't see it in cars. I don't see it in capital goods. I don't see it in farm machinery when I look at capacity on a worldwide basis and unemployment on a worldwide basis.

The CHAIRMAN. Again, what industries do you consider most vulnerable to capacity shortages?

Mr. BARBERA. As I said, the very basic industries where we've had sharp deflation. In other words, primary metal industries. As you said, paper and forest products, chemicals. We're at high levels of capacity because with the big decline of the dollar for a homogeneous commodity like that, we became wildly competitive very soon with the dollar decline and our exports have been very strong there. But once you move beyond that, I don't see those extraordinary capacities.

The CHAIRMAN. Dr. Cooper.

Mr. COOPER. Can I make a general observation? In today's world, we should address the question not of U.S. capacity or indeed capacity in any other single country, but worldwide capacity. There, I would say there is worldwide excess capacity, not deficient capacity, in almost every industry that you can think of.

The CHAIRMAN. But if you look at it that way, doesn't that mean that at least in the short run we will tend to have an even worse balance of trade?

Mr. COOPER. That's what I was going to say. If we run into bottlenecks and provided we do not have import controls, we simply import the goods, and the bottleneck is broken. The bottlenecks need not be a source of inflation or constraint to production up the line, but—and here's the important qualification—we want additional investment and the way you get additional investment is to have some degree of pressure on the market. If imports are coming in at higher prices, we get the supply of goods but we also get the stimulus to investment in this country. Indeed, we have seen a pickup in the last three quarters in manufacturing investment and that's what we're looking for. That's to be welcomed.

The real problem is the one you put your finger to, where a bottleneck develops in this country and we have effective import controls, so that we can't relieve the pressure by drawing on the excess capacity elsewhere.

The CHAIRMAN. Dr. Cooper, let me ask you about a statement by your colleague at Harvard, Robert Reich. He has an article in the most recent edition of *Foreign Affairs* in which he claims that our massive trade deficits of recent years have led us to become the world's largest debtor country.

MORTGAGING OUR FUTURE

He states in that article, "Without a surge in productivity, the present debt cannot be repaid unless we dramatically reduce our standard of living." And he further claims that so far our country has avoided being compelled to reduce the standard of living only by the steady sale to foreigners of shares in our companies and prime real estate. He claims we are, in essence, selling the house to pay the future rent.

Do you share Professor Reich's views that we are in effect now selling off our assets to finance our still massive trade deficits? If so, would you state that getting our budget deficits under control is the remedy for such concern?

Mr. COOPER. Well, let me say first that Harvard is a large and diverse institution and I don't take either credit or responsibility for everything that anyone associated with Harvard says.

The CHAIRMAN. In other words, you disagree with your colleague?

Mr. COOPER. Particularly with Bob Reich. Having said that, I guess I would say, stripped of the hyperbole in the quote that you read, I agree with the basic point, that we are now selling assets in order to finance an excess of consumption over output and we have been doing so since 1982. There is a risk that unless we do something about getting our overall macroeconomic situation into better

balance that we will sell our assets even more cheaply than we have been up to now.

The sale of assets we've made so far have not been such a bad deal for the United States actually, but it's getting worse because we're selling them more cheaply as the dollar goes down.

There's one red herring in the quote you read from Reich, and that is that we don't ever have to repay this debt. We may choose to repay it but we don't ever have to repay it as long as we're a productive economy. But I agree with the fundamental proposition that we are selling assets in order to finance an excess of spending over output and that is not desirable unless we were investing the difference at very high rates of return on investment.

The CHAIRMAN. I can't resist disagreeing a little bit with the argument that we will never have to repay it. You say that if we have a growing economy we will never have to repay a \$2.5 trillion debt. But, as it grows (and it's growing even by the rosy estimates of OMB), it's shortly going to be \$3 trillion and then \$4 trillion. Is there no limit? Won't we some day have to repay that?

Mr. COOPER. Let me counter by giving the example of Canada, which is a country which, with the exception of a few years mostly associated with World War I and World War II, has borrowed from the rest of the world in every year of its entire existence.

We don't talk about a Canadian external debt problem. We don't even think about it. The reason is that Canada has invested its borrowings profitably. It services its debt punctually and in fact the debt-to-GNP ratio, which is the key thing to look at, has gone down over the last 50 or 60 years, since the 1920's when it reached its peak. But the absolute amount of debt has gone up year after year.

The CHAIRMAN. That's not quite true in our country, though, is it?

Mr. COOPER. Well, we have gone through a period of being a net creditor, which Canada never did. After World War I we did build up assets in excess of our liabilities to the rest of the world, until 1982.

The CHAIRMAN. Our ratio of debt to GNP (and of business debt to GNP and of household debt to GNP and especially of household debt to savings and of business debt to earnings) has risen. In 1955 we had what I thought was a lovely ratio of \$2.85 in debt for every dollar of earnings. Today it's \$9. That's a terrific difference.

Mr. COOPER. I'm sorry. I was addressing your quote from Reich which had to do with external debt, not the internal debt. I was talking about the debt to the rest of the world.

The CHAIRMAN. Dr. Sachs.

Mr. SACHS. This is a good opportunity to disagree with both of my Harvard colleagues.

The CHAIRMAN. Great.

Mr. SACHS. I think first there's a semantical problem. If you say you don't have to repay the debt, it's true that you don't have to reduce the principal back down to zero, but you do have to repay the debt in the sense of servicing it. People will not lend you the money to service those accumulated debts forever and then the debt would grow at an explosive rate and eventually the lending will stop. Canada, for instance, does pay its debts in the sense of a trade balance surplus every year. It sends abroad more resources

than it imports and that's the way you pay the debt. You pay it in the annual debt servicing, which is a heavy burden.

Mr. COOPER. But he said "repay."

Mr. SACHS. OK. Well, that's the semantical point. You service your debts. You don't have to repay the principal, but it comes out to a real burden in any event.

I think where Reich goes wrong, however, is in the magnitudes. It's a quotation without any sense of quantitative—I think the quantitative importance of these things. Our accumulated foreign debt right now is somewhere on the order of perhaps \$400 billion, which is a very large amount, but we have a \$4 trillion economy. That makes a debt to GNP ratio of perhaps 10 percent and a real interest servicing bill each year if we were to stabilize at that ratio of something on the order between $\frac{1}{2}$ of 1 percent and 1 percent of GNP. To say that we can't afford that is a silly proposition. To say that it will be politically painful to turn from a trade balance deficit to a trade balance surplus is undoubtedly correct.

The CHAIRMAN. That's a very, very healthy and proper correction, but looking toward the future, if we continue this, it's a problem. Then, there's another problem involved here. When the debt to GNP ratio increases, doesn't it limit the ability of the Federal Reserve to contract credit, diminish credit, without causing widespread defaults on credit obligations, driving interest rates up?

Mr. BARBERA. I do think the markets have told us something in 1987 and that is that we've reached a point where we are no longer going to have the voluntary financing of that spending without clear evidence that that spending is slowing. I mean we did have two big bouts of dollar weakness in 1987 which was combined with big selling of bonds, as you said, by Japanese insurance companies. In both those instances, they were precipitated by disappointing evidence on trade which indicates a growing need rather than a declining need for U.S. foreign capital. I think we're already at the point where we are going to, one way or the other, see trade improve over the next 3 or 4 years and reduce our capital needs because foreigners simply aren't going to voluntarily provide that capital.

It seems to me that where you go to then is, if we're going to have economic growth over the next 3 years that stays within the disinflationary mode, let's say 2.5 percent on average the next 3 years, and if you talk about getting on a real balanced basis of something close to zero, you really don't have much in the way of room for growth on the consumer side.

I would posit that that suggests that goods spending—take services out—goods spending 1988 through 1990 is going to average something like zero or 1 percent in terms of growth compared to 5 percent from 1983 through 1986.

Now there's an easy way to do that. We talk about that at Shearson in terms of voluntary quiescence. We seem to be serendipitously right now in the midst of that, but if the consumer were to come back and spend strongly, I would argue, world financial markets would work to knock them down in America.

The CHAIRMAN. Dr. Soss.

Mr. Soss. I want to add two points on the financing of all of this. It is certainly the case that organizations as complex as a whole

economy rarely pay down the principal of debt, but there are two developments going on now that reflect how difficult it is to raise this new indebtedness.

The first is that not only is the private foreign capital inflow becoming more tenuous from time to time, but as you may have noticed in the Treasury's financings of late, increasingly what we're doing is financing this budget deficit by having foreign central banks and foreign finance ministries directly buying Treasury obligations through the so-called foreign add-ons, which I think we can characterize as a reflection of how inadequate private foreign demands are for those bonds.

So we are requiring a more routinized, regularized, dare I say it, IMF style financing of this budget deficit.

The second thing that's going on is that we are, ourselves, experiencing the debt for equity swaps that we have so often recommended for Latin America and other debtor countries.

The foreign financial inflow is not as much coming in the form of bonds or even for that matter hundred shares at a time in the stock market; it's coming in the form of 100 percent. Foreigners want control of productive assets rather than subjecting themselves to financial claims directly.

RECESSION WOULD EXACERBATE OUR PROBLEMS

The CHAIRMAN. Dr. Soss, your testimony suggests that the calibration between the degree of setbacks suffered in the financial system—the crash—and the cooling off of the real economy is missing. Furthermore, you say that a recession would just make the problems worse.

Is this lack of correspondence between the real and financial economies in the short run new? Didn't stocks crash in 1962 without precipitating a recession?

Mr. Soss. That is correct, Mr. Chairman. This calibration problem is not novel. It is to my mind a bit interesting to point out that we had, a relatively weak Christmas season at retail and if you attribute that to the crash, then I think you have to say that the crash is now behind us because January retail sales and February auto sales picture and all the rest suggests that the consumers have—

The CHAIRMAN. How about the Fed's vigorous lender-of-last-resort activity and their coming on hard and fast with more liquidity?

Mr. Soss. There are Hobson's choices that are faced from time to time and I think in that respect one can say that the Federal Reserve had no choice but to rescue the financial system on October 20 and that doing so as effectively as they did may be why consumer demand in fact is rebounding so promptly.

Mr. BARBERA. May I take a little bit of issue?

The CHAIRMAN. Please.

Mr. BARBERA. If we look at consumer demand, we are slaves to weekly and monthly numbers because both Dr. Soss and I forecast interest rate changes daily. If you look at the numbers that we've seen for January, you did have an upward revision for December

retail sales and a decent January number, so things were not quite as bad as they appeared.

However, take November, December, and January retail sales and compare them with May, June, and July—in other words, 6 months percent change annualized—and we're falling—

The CHAIRMAN. And correct it for seasonal factors?

Mr. BARBERA. Seasonal factors and inflation. We're falling at a 3 percent rate. So we are still below where we were in the middle of last year and I certainly wouldn't characterize consumer spending right now as robust.

We also, dare I say, poll the stores on a weekly basis and February looks fairly weak.

We did have a 35-percent decline in the stock markets around the globe. The precedent for that is 1929. I think it's absolutely unconscionable to consider that the Fed should have stuck to a tight monetary policy based on a fear about a little more inflation when you're faced with that kind of financial market fissure.

Obviously it was very difficult on the brokerage industry. Some brokerage companies are no longer there that were there in October. I worked for one. It was a difficult environment. I think the Fed had to ease money.

The CHAIRMAN. Dr. Soss, does the cumulative decline in the resilience of our financial system limit the ability of the Fed to arrest inflation in the real economy because the cost of credit stringency has grown?

Mr. SOSS. I think what it does is give you periodic crashes where the financial markets themselves insist on performing the function that monetary and fiscal policies from time to time are reluctant to perform.

The CHAIRMAN. Very interesting.

Mr. SOSS. People who were cheated out of their coupons in the 1970's have long memories. We have a financial system which from time to time gives you events like October 19 and requires the Fed to ease, and I certainly share the judgment that there was no alternative in that episode but to do so.

EXCHANGE RATES AND MONETARY POLICY

The CHAIRMAN. Dr. Cooper, let me ask you a somewhat lengthy question on exchange rates and monetary policy.

There appears to be two schools on exchange rate policy. The first group says let the dollar fall and fall a lot in a hurry. That school claims that if the currency declines a great deal the expectation will be that it can then only rise. During the fixed exchange rate period, the rule of thumb was that if you were going to do it, don't undershoot.

The second school believes that a gradual, managed decline of the dollar is necessary because, in a floating exchange rate world, an unstable and rapid fall in the dollar would create the expectation of continued depreciation leading to high interest rates and exchange rate collapse.

It appears to me that a key question in exchange rate management is how actions today affect expectations of exchange rate changes in the future. Is that right?

Mr. COOPER. Mr. Chairman, I belong to both of those schools of thought, depending on the circumstances. In 1985, I was very much of the first school. I argued that the proper task was to get the dollar down and get it down very quickly and for that reason I welcomed the Plaza Accord. I had already urged that course well before September 1985.

Starting from where we start now, however, I worry very much about a sharp drop in the dollar for the reasons that I gave. I think in the short run, by which I mean 6 to 24 months, a further sharp drop of the dollar on the world economy and hence on us, the United States, would be negative, not positive, because of the heavy dependence of many other economies, especially Germany, on exports. That dependence will have to change, but it will not change quickly, and it's not in our interest to shock Europeans into recession. So, my judgment at the current time is to try to avoid a further drop in the dollar.

Mr. COOPER. Now the market may have a different view and then somebody would have to decide my guess it would be the foreigners in the first instance—how they want to play that.

My view at the present time is conditioned by two other judgments that are worth making explicit. One is that I am not as certain as many of my academic colleagues that the dollar actually needs to go down further. It may be so. I'm not saying it's not the case, but I'm not certain in my own mind that it does.

Therefore, at the present time, I would not want to see a deliberate depreciation of the dollar. That judgment, in turn, is conditioned by a view which again differs from many American academics that have spoken out on this question, that I do not think it is either necessary or possible—I actually do think it's desirable but I don't think it's necessary or possible to achieve a balanced U.S. current account by the early 1990's. I look at the adjustments that the world economy would have to make in order for us to achieve a \$200 billion swing in net exports of manufactures and I cannot see that taking place politically or psychologically.

For that reason, the improvement in the U.S. trade position that I target is rather less than that that other people are either implicitly or explicitly targeting. Some of my colleagues want a current account surplus by the early 1990's, to start to repay the debt, I don't think it's in the cards and trying to force it would not serve either the United States or the rest of the world well.

I do believe that the U.S. should work to get the budget deficit down at a regular steady pace, but I don't think—and in this respect I agree with Dr. Sachs—I don't think that by itself that will generate a current account balance in the United States, much less a surplus, in this timeframe.

So for all of those reasons, I am not enthusiastic at the present time either about a sharp drop in the dollar or a further gradual drop in the dollar, although that's not to deny that one or the other might not take place as a result of market forces.

The CHAIRMAN. Dr. Barbera, the Federal Reserve has been widely praised for its action—in fact, I think it's more widely praised for this than anything that's happened since Dr. Greenspan has been Chairman of the Fed—for its action in the aftermath of the stock collapse on October 19. They came right in like gangbus-

ters on Terrible Tuesday with a tremendous amount of liquidity—prompt and dramatic action, as you say.

Now while they did act skillfully and decisively and they really had no choice but to act, we now have kind of a moral hazard problem where the financial sector will take even greater risks knowing that the Fed will come to the rescue when danger comes and liquidity is near at hand.

Mr. BARBERA. I don't think so. I think that what you had was the Fed coming in providing liquidity obviously during a period where many of the marketplaces really were, if functioning at all, functioning very poorly. We did have during that period some combination of events that exacerbated the stock market swoon with the combination of program trading and portfolio insurance. My firm, for one, has stepped back from program trading.

I don't think that simply because the Fed prevented that fissure and the extraordinary losses of the world's financial system and in the industry—they prevented that fissure from becoming a world-wide recession, that that certainly doesn't make it easy once again to increase speculation.

INFLATION AND LOWER UNEMPLOYMENT

The CHAIRMAN. Dr. Sachs, one of the problems that always concerns us very deeply is the tradeoff between unemployment and inflation and the fact that as unemployment diminishes inflation is likely to come on. We now have a situation where unemployment is lower than it's been in 7 or 8 years. It's down to about 5.8 or 5.7 percent, depending on how you measure it. It's down at a low level.

I understand that economists estimate a so-called nonaccelerating inflation rate of unemployment. Some say it kicks in when unemployment gets below 6.2 percent. Then inflation comes on. Others say it's lower. Others say it changes. The estimate varies considerably. Large changes in demographic factors and sectoral dislocation may provide a good reason for these varying estimates over time.

In recent months the estimates have been declining because the unemployment rate has been declining and inflation hasn't risen very sharply.

What's your estimate of the so-called nonaccelerating inflation rate of unemployment today and for the near future?

Mr. SACHS. Well, like many things, we don't really know, but I think that there has been relatively good success statistically with using demographically weighted unemployment rates over the past years adjusting for the composition of the labor force to include new entrants, for instance.

The CHAIRMAN. Let me just interrupt. One of the problems here that you see is that up in the area where you are, up in Massachusetts, there's a very low level of unemployment. In Texas there's a very high level of unemployment. Louisiana there's a high level of unemployment. It would seem to me that those regional factors would make a great difference. You should have a difference in the level of inflation in New England where unemployment is very low than in the South where it's higher.

Mr. SACHS. And we do. Of course, if you look at housing prices in Boston compared to Texas you can see what happens with non-tradable goods in the economy. Prices have skyrocketed in Boston and have collapsed in the Southwest. So indeed for those goods that can't be transported easily across State boundaries you see exactly the kind of phenomena you're talking about.

Overall, there is probably a small effect on the aggregate NAIUR that comes from regional mismatch and in fact some economists have tried to estimate that and I can provide for the record some of the estimates on that.

I would say that there's a mainstream view among people that are in this business now that the NAIUR may have come down from somewhere around 6 percent to something like 5.5 percent, but that we're very close to the range at which a significant downward push on unemployment would start causing wages to rise rapidly. Indeed, the slowdown in nominal wage growth which had been occurring every year since 1981 stopped slowing down last year and we had a slight uptake in hourly compensation in 1987 relative to 1986. So we are seeing a firming of the labor markets and I think we're around the range at which we have to be careful and we shouldn't expect another freebie of 1 percent of unemployment that can be reduced without having significant inflationary consequences down the road.

The CHAIRMAN. But we also have in 1988, 40 percent of organized labor contracts expiring, I understand, covering 40 percent of the workers. So it could be a year for big increases, especially in view of the fact that in many industries the real wage has not increased.

Mr. SACHS. That's right. Real wages on average have declined during the Reagan term from 1981 and that's partly because there was an enormous overhang of real wages. They were too high by the time the administration came to office, given all the adverse productivity.

The CHAIRMAN. How about the presence of foreign competition? Could that increase the discipline of wage demands in light of the possibility of losing business to competitors overseas?

Mr. SACHS. I think that the main way that that works through the system is not directly so much as affecting the overall state of the labor market. I don't think that there's been a significant structural shift in our economy which has made the wage equation all the sudden react for a given unemployment rate differently from what it would because of the presence of foreign competition.

I think the evidence is that there's a fairly stable relationship of wage inflation to lack of price change and to the demographically adjusted unemployment rate and that's a fairly good relationship that doesn't give us a lot of surprises year after year, and that suggests that we are in a range now where we have to be careful.

POSSIBLE RECESSION IN 1989

The CHAIRMAN. Dr. Soss, privately many people are suggesting that the U.S. economy is going to be put into a severe recession by policy makers in 1989 just after the presidential election. I think that's baloney. I've never known a policy maker who had any notion of getting into a recession. By a policy maker, I mean an

elected official. Obviously, the elections come frequently and so that's not likely to happen, but some suggest that this is the only way to reduce the trade deficit. Do you agree with that?

Mr. Soss. I've had over 10 years experience in public service, Senator, not quite as long as your own and not nearly as distinguished, but I would share very strongly your sentiment that I've never known a policy maker deliberately to choose a recession if he had to face the voters.

On the question of do we have to have recession in order to deal with the trade problem, I think to get back to Dr. Cooper's observation that you have to be careful what you wish for. There is a limit to how fast the world economy can tolerate a shrinkage in the U.S. trade deficit because of course the counterpart to that is the shrinkage in everybody else's trade surpluses. And I don't think that we require literally a balance all that quickly and I don't think that we require literally a recession to improve conditions. Running the economy, so you don't ever need a recession, should be the real good.

The CHAIRMAN. And there's some very adverse consequences associated with a long recession given the condition of Latin American debtors, farmers, banks, S&L's, and businesses with such high levels of debt. Doesn't that limit the extent of a recession that policy makers could tolerate to alleviate these matters?

Mr. Soss. My own judgment, Senator, is that the financial structure in that regard is not that significant to the macroeconomic problem. If the goal of policy makers is to keep the physical and other resources of the economy fully employed, there are plenty of ways to do that and I don't think it's really a function per se of whether the capital in the real economy is reflected in claims called debt or claims called equity.

The Japanese, for example, have a very much more leveraged structure in many ways than we and yet no one seems to think of their economy as at risk thereby. There are lots of other economies around the world that have less leverage than we and don't do nearly so well.

So it seems to me that that is much more a matter for financial stability and for the risk that financial blowoffs can from time to time impose on the real economy than for whether the policy makers can keep the economy productive independent of the financial structure.

The CHAIRMAN. Now that I'm about to retire—this is my last year—I have, I think, a more objective attitude toward recession than I did when I was running for reelection. If I were running for reelection I'd be up in November and undoubtedly a recession wouldn't help any incumbent's reelection chances. But it seems to me that one of the prices you pay for a free economy are regular recessions. You don't have recessions the same way in socialist economies. We have them in a free system and that's one of the things we have to do. Recession does have the salutary effect of providing a very tough discipline in the society. It means that people have to be more prudent, more careful. They have to exercise more judgment. It penalizes people who don't have that prudence. And not only from that general standpoint but also from the

standpoint of recognizing that you can't live beyond your means forever.

Mr. SOSS. That's another argument in the direction of the independence of the central bank.

Mr. BARBERA. If I could just add one thing, I do think in terms of notion that perhaps we're due for a recession in the United States to pay for past sins. We have had an exclusive focus here on the excess of spending in the United States vis-a-vis production and the fact that we've financed that by foreign capital.

I do think, though, if you turn it on its head, notwithstanding the admonition of most foreigners, we did do the world a favor. We allowed Latin America to essentially avoid default and Europe grew at about 2.5 percent, even though spending was rising at about 1.5 percent. Japan got to grow at 4 percent though spending was at 3.

The CHAIRMAN. What period are you talking about?

Mr. BARBERA. 1983 through 1986. And the Pacific Basin and Japan exploded, largely on the backs of our growth. I think we're done. I think it's absolutely impossible for us to perform in 1988 through 1992 as we did 1983 through 1986, but I think the risk is that there are no new volunteers in terms of the rest of the world to provide that kind of spending and that absorption of product. It seems to me that rather than the need for a U.S. recession we need a U.S. spending recession and some much better spending performances abroad.

The CHAIRMAN. Dr. Sachs, how enthusiastically do you endorse the views of Dr. Barbera?

Mr. SACHS. I have a growing inventory of small complaints on comments in the last 5 minutes.

First, I'd like to return to the Wall Street Journal statement about a recession being likely. I think it is important to point out that five of the last six Republican terms of presidencies started with a recession. No Democratic terms did, but five of the six Republican terms did.

The CHAIRMAN. That means if we elect a Republican this year we'll have a recession in 1990?

A DEMOCRATIC ADMINISTRATION

Mr. SACHS. Much more likely because what will happen this year, with all likelihood, in my view, is inflation will start to rise. A Democratic President won't care so much about that and will be more interested in job creation and getting the exports growing. A Republican administration will try to clean that up in the first year and could have a conscious policy of tightening monetary policy to stabilize the dollar. That may be how it's put next year.

There will be a difference in preference that will involve a real tradeoff of policy and judgment and values and people who will get hurt and who won't. Democratic administration is much more likely to lean toward job creation and continue growth of exports and I think a new Republican administration will be much more likely to say if inflation hits 6 percent we've gone far enough with the weak dollar, it's time to tighten up. So that's the way that it might be seen next year.

Recessions are created as a matter of policy in this country, mainly as anti-inflation policies, and I think that we may be heading for that cycle right now, given the 40 to 45 percent drop in the dollar.

Another point I wanted to make is that I think that the debt structure is a danger. We don't have a lot of the institutions which allow us to have the kind of leveraging the Japanese firms do where you have a close special relationship between banks and firms which allow for enormously high leveraging ratios. We do have some financial instability here, particularly in the banking system, that could mean that high interest rate policy once again could have very serious real consequences, in my view.

Finally, and this may be a quibble because it's past history, although I think it's more than a quibble, I don't think the U.S. did the world much of a favor at all in the last 7 or 8 years because while we did give them more export growth, we created enormously high world interest rates. That meant that while we gave in the sense of higher exports, we took away in the sense of reduced investment in those countries and, in my view, Europe was hurt much more by the reduced investments over the last few years as they sent capital here rather than investing in their own country rather than being helped on that by increased exports to the United States. Job creation in Europe was very much hurt by Reaganomics it seems to me and we contributed to the high unemployment in the European economies.

REDUCING DEFICIT WILL SPUR ECONOMIC GROWTH

The CHAIRMAN. What do you think of the point that Dr. Greenspan made for us the other day that if we cut the deficit we'll spur economic growth because the real interest rate would drop and that would compensate?

Mr. SACHS. I saw in the press reports that you expressed some surprise at that view.

The CHAIRMAN. I sure did. It's a refreshing notion that you can do that. I'm willing to pay the price.

Mr. SACHS. I actually share Dr. Greenspan's view of it, provided that he goes along and importantly accommodates our fiscal contraction with easier monetary policy. In other words, if the policy mix in this country changes toward—

The CHAIRMAN. But I can't get away from the view expressed by Martin so beautifully that you can't push a string. No matter how you flood the economy with credit, if you're in a recession people are just gloomy and pessimistic about it, they won't borrow. They won't care if they pay 5 percent interest rate instead of 10 percent.

Mr. SACHS. Well, I think the evidence is that if you're hanging at the end of the string because real interest rates have been so high for the last 10 years, that letting up on the string could give you some breathing space and let you start to grow again.

So in my view, a shift in the policy mix toward tight fiscal and easy money will not have contractionary effects abroad but indeed could have expansionary effects abroad and would likely in my view because I think it would give an investment stimulus to

Europe which is going to provide jobs there much more than the export stimulus has.

What I would agree with my colleague, Professor Cooper, point, an economy has to be ready for the transition to investment led growth from export led growth. Japan is in the midst of that transition now and it's very consciously in the midst of that transition. The European economies might not be consciously ready of shifting out of export industries and into domestic investment, but they will have the potential and we should give them the chance to do it by having a sharp cut in fiscal policy in this country balanced by easy money. I think the world will be much better off. The developing world, the debtors of this world, the financial structure, and the Europeans will be much better off in a low interest rate regime in the world economy.

Mr. BARBERA. Your point is that a lower budget deficit would be stimulative if compensated, but not in the U.S.

Mr. SACHS. Well, both. Yes, we need lower worldwide interest rates. By our interest rates coming down we will give the opportunity in Europe to have lower interest rates.

Mr. BARBERA. I agree, but the point I'm making is based on our trade deficit, it's wrong to think that there's any combination of events that can make it easier for us to spend more.

Mr. SACHS. I'm not calling for us to spend more. I'm calling for us to spend less.

Mr. BARBERA. There's a opportunity to make it easier for them to spend more.

Mr. SACHS. Exactly.

Mr. BARBERA. I don't think that's quite what Greenspan said.

The CHAIRMAN. Do you want to comment, Dr. Cooper?

Mr. COOPER. I think the way to reconcile this dispute, if I can put it that way, between you and Greenspan, is to introduce the time dimension quite explicitly. At least that's the way I reconcile it in my own mind. Greenspan presented and Sachs has just agreed with what I would call the classical economic view, which is the long-term interest rate makes things all come out right in the end.

But econometricians have tried for 40 years to discover the short run impact of that effect and they can't find it. And that's why I come down with you and Martin in the short run. You cannot push on a string. Lowering interest rates at the same time that you're contracting demand simply will not increase investment in the same short timeframe. There's no empirical evidence for it. During the last several years I have sat on several committees that make decisions about investments and the interest rate just doesn't figure in the calculations whether to undertake them.

In the long run, there will be an impact. Where there could even be a short-run impact these days is in the liquidity constrained less developed countries. They would get immediate relief from a reduction in dollar interest rates and are willing to spend more. So there you would get a relatively short-run effect. But I simply do not believe that fiscal contraction accompanied by a decline in interest rates will in the same time period be offset by increased investment at home or abroad. If demand goes down because of fiscal contraction, businessmen will wait before they make their investment decisions, even though interest rates are lower, until they see

reasonable prospects for setting the increased production. The most promising prospect today is higher exports, but that depends on continued demand abroad.

FLOATING EXCHANGE RATES

The CHAIRMAN. Let me ask you one final question. In Tuesday's Wall Street Journal, Edward Balladur, the Finance Minister of France, referred to the "anarchy of floating exchange rates during the past 15 years." In your statement you referred to this system as not wholly satisfactory, although probably superior to alternatives available during this turbulent period.

Your statement suggests that you do not join in Mr. Balladur's extreme condemnation of the system of floating exchange rates.

The question is, how urgent is reform of the international financial system in your estimation?

Mr. COOPER. Urgent suggests an immediacy, a crisis without it, and in that sense I do not think it's urgent. However, I do think that it's highly desirable. I think we have monetary arrangements now which are not sustainable over the long run and they are going to come and zap us in one way or another if we don't get ahead of the game. So I think that it's desirable to start in a systematic way to think about where we would really like the system to be 15 years from now. Fifteen years seem like a long time, but it isn't too soon to begin thinking about fundamental changes.

The CHAIRMAN. You talked about a world currency. That's a marvelous thought. What reality is there here? Is it a real possibility, do you think? What would be the consequences when we have an adverse balance of trade and we can't fool around with our currency and compensate in that way?

Mr. COOPER. Well, in the first place, just to be clear, I have not spoken of a world currency. I don't think a world currency is either desirable or necessary. What I have spoken of is a single currency in the core of the world system.

The CHAIRMAN. I should have said that.

Mr. COOPER. Europe, United States, and Japan. What other countries do is up to them—many of them would find it convenient to peg their currencies to this currency but they would not be participate directly in this system. An analogy to the United States is worth noting. We have, as you know, 12 currencies in the United States Act. Each Federal Reserve Bank issues currency. If you look in your wallet you can discover several currencies. Most people are not aware of it because these currencies trade at par and are freely interchangeable throughout the country.

That system has served this country well. I do not think it's desirable to break New England off, even though it's booming now, and break Texas and Oklahoma off and introduce floating exchange rates between their respective currencies.

The CHAIRMAN. How about starting with a Northern Hemisphere currency?

Mr. COOPER. That's up to Canada. It seems to me that that's less important for the world than to engage the major trading areas—Canada is one-tenth the size of the United States. Europe taken as a whole is equal in size to the United States, and Japan is about

half the size, so those are more important for the world monetary systems than Canada.

My view stems from the fact that I think the financial side of a system with flexible rates will increasingly be a source of disturbance to the real side of the economy. It already has been. Since we're really interested in the real side of the economy—that's what provides people with the goods and services that determine welfare. The financial side of the economy should serve the real side of the economy. We should worry about disturbances coming from the financial side. While it has some problems, moving to a single currency over the next 15 or 20 years, will have the offsetting advantages of eliminating a major source of uncertainty for and disturbances to the real economy.

One reason investment has been as weak as it has been in the last 5 years is exchange rate uncertainty. Until 1986, Europeans had been doing smashingly in terms of export orders but they were not willing to invest on it because they thought that 3 marks to the dollar or even 2 marks to the dollar was a temporary and couldn't last. They turned out to be right. Now you find American firms hesitating to invest because even though their export orders are way up, there's a question of how long this can last. They're not confident. They don't accept the economists' argument that the dollar is bound to go down rather than up. Exchange rate uncertainty is a general dampener to more investment.

The CHAIRMAN. Gentlemen, I want to thank you very, very much. This has been an excellent panel and you've certainly given me an education.

The committee will stand in recess.

[Whereupon, at 11:40 a.m., the hearing was adjourned.]