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INFLATION

HEARING BEFORE THE JOINT ECONOMIC COMMITTEE CONGRESS OF THE UNITED STATES

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INFLATION

TUESDAY, APRIL 18, 1989

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

The committee met, pursuant to notice, at 2:35 p.m., in room 2322, Rayburn House Office Building, Hon. Lee H. Hamilton (chairman of the committee) presiding.

Present: Representatives Hamilton and Upton.

Also present: Joseph J. Minarik, executive director; and Lee Price, Joe Cobb, William Buechner, and Chad Stone, professional staff members.

OPENING STATEMENT OF REPRESENTATIVE HAMILTON, CHAIRMAN

Representative HAMILTON. This afternoon the Joint Economic Committee takes up the issue of inflation.

Recent monthly reports on the producer and consumer price indices have received a lot of attention. The two back-to-back 1 percent increases in the PPI for January and February raised eyebrows and worries in the financial markets. While subsequent reports on both the PPI and the CPI have shown lower increases, the rates of inflation are nonetheless faster than a year ago.

Twice in the 1970's the inflation rate broke into double digits after 3 or 4 years of expansion. In both cases an inflationary spiral had begun before oil prices spiked. In both cases the spiral was broken by a very serious recession.

In the 1980's we have been fortunate that inflation was relatively low in the early stages of the expansion and that the raise in inflation has been more moderate than in the expansions of the 1970's.

We look forward to hearing from our distinguished panel and their views on future inflation and the policy options to handle it.

Our witnesses today are Mr. Joel Popkin, an economic consultant on inflation; Mr. Jerry Jordan, chief economist at First Interstate Bancorp; and Mr. Larry Summers, professor of economics at Harvard University.

Each of you gentlemen has a prepared statement. The prepared statement, of course, will be entered into the record in full. I would ask you to summarize briefly your prepared statements and then we will turn to questions.

So we will open it up with your testimony, and we are very pleased to have you here.

Mr. Jordan, you may begin.

**STATEMENT OF JERRY L. JORDAN, SENIOR VICE PRESIDENT AND
CHIEF ECONOMIST, FIRST INTERSTATE BANCORP**

Mr. JORDAN. Thank you, Mr. Chairman.

I am going to comment on several aspects of the issue: One, the prospects for higher inflation and whether some of the concerns being registered about the recent trend should be extrapolated into higher inflation this year; two, some of the forces giving rise to the inflation that we are currently seeing; three, what some of the impact of this is going to be and has been both on other countries, and on American consumers and later for businesses; four, then a few comments about the relationship between economic policies—both budgetary policies and monetary policy—on inflation; and, five, finally, what I think we ought to do about it.

First, there is nothing current monetary policy can do about current inflation. The seeds of this inflation were sown 2 or 3 years ago at least. Economists disagree on the length of the lags and they disagree on the total effect of various lags of monetary impulses or fiscal impulses on inflation, but they don't disagree that the lags are long.

These inflationary pressures are a result of highly stimulative policies taken some time back, and if monetary policies were to continue to tighten month after month in an attempt to lower the inflation rate—a sort of a whites-of-the-eyes approach waiting until they saw the first signs of sharp deceleration of inflation or a falling out of employment—then a recession would be unavoidable.

In our view, the economy is in the early stages of a very substantial deceleration of economic activity. Most business forecasters have the economy slowing markedly beginning now and continuing through the yearend. In fact, something like 90 percent of all business economists have a recession forecast before the end of next year.

But the issue of recession or no recession isn't the proper way to put it. It's a case of a mild deceleration in economic activity, possibly a minirecession, a two- or three-quarter saucer shaped slow down in economic activity or, on the other hand, running the risk of possibly a deep and a hard recession in 1990, which some forecasters have that in their view.

In a broader context, the inflation has been rising for at least 2 years. We saw the lows for the cycle, the lowest for the last 25 years in fact, in 1986, but a lot of that is an illusion.

The drop of inflation to under 2 percent in 1986 was in part the one-time effects of the drop in oil prices, the mirror image of the quadrupling of oil prices in 1974 and the 2½-fold increase in 1979 and 1980. So we should discount some of that drop of inflation in 1986. So that means that the trough of inflation for this cycle was about 4 percent. We peaked out around 12 percent in 1980 and we have come down to 4 percent.

Now inflation is trending higher. The last 2 years it has averaged over 4½ percent. This year it's going to be 5 to 5½ percent. The most recent quarter—the numbers we received this morning—shows that from December 1988 to March it was over a 6-percent annual rate.

I think that the first quarter of 1989 is going to be the high for the cycle, that inflation will peak at the 6 percent level and for the balance of the year we are going to see a deceleration, and in 1990 inflation is going to be lower than this year. That's not my concern. My concern is that the 4 percent was too high of a trough and that we have to worry about ratcheting higher and higher over subsequent cycles.

For about 18 years, from the early 1960's to 1980 we had four or five major cycles—depending on how one likes to count the 1966-67 credit crunch—where each peak of inflation was higher than the prior peak and each trough was higher than the prior trough. So we kept ratcheting to higher and higher levels.

By 1980 we had the worst of all worlds, high unemployment and high inflation at the same time, and then was launched the major disinflationary policies of the early 1980's. Now we are starting off on a new cyclical increase of inflation with a low point of 4 percent and we are heading into the range of 5 to 6 percent or somewhat above this year.

The question then is, are we going to come down a little bit next year and then start to move back up, where the next trough will be above 4 percent and we are going to slowly work our way back up to the double-digit range? I certainly hope not, but I think that that is a considerable risk.

There has been a major element that I consider to be a false dichotomy between people that identify themselves as progrowth versus anti-inflation, what economics call the Phillips curve, the idea that we have to choose between inflation at times as the No. 1 priority or unemployment at times, and I think that that view has led us into a lot of trouble in the past.

Recently Chairman Greenspan in his Humphrey-Hawkins oversight hearings emphasized that the Fed's longrun objective is maximum sustainable real economic growth, to get the unemployment rate down as far as possible and keep it there. The role of monetary policy to do that is to move toward price stability and keep it there.

That is a very, very important statement coming out of the central bank for the first time in its 75-year history—they are rejecting any idea of choosing between inflation on the one hand and unemployment on the other. The policies of the Federal Reserve have to be geared toward sustaining a low-inflation environment if we are going to maintain maximum output growth and keep unemployment from ratcheting higher. That's one of the reasons for being concerned about inflation.

Another is inflation is highly devious. Economists generally agree that inflationary processes tend to be regressive. They fall hardest on the low income. The people that are less able to protect themselves are the renters, the minimum wage level people, new entrants into the work force, young people, old people and minorities, and that the income distribution worsens as a result of inflation.

Inflation is in fact a tax. It's just a different way to finance government. But it's an unlegislated tax, and because it's regressive and worsens the income distribution, it tends to be a very devious

form of a tax. Yet, it's tempting to policymakers at times and it becomes very popular.

I think that the problem erupted in 1985 and 1986 when a lot of us were concerned about the growing trade deficit and the weakness of the producer sectors of the American economy. Manufacturing was very weak in part because of import competition caused by the earlier, much higher level of the U.S. dollar in foreign exchange markets. As a result, the middle part of the country was very weak.

There were a lot of comments made at that time about the bi-coastal economy, the two-tier economy, the souffle economy—firm around the edges and soft in the middle—comments to the effect that we were seeing all of the growth occur in 16 States up and down the Atlantic Coast and the Pacific Coast and not much in the middle.

So a policy was adopted to drive down the dollar on foreign exchange markets to make foreign goods more expensive to American households and to make American goods cheaper to foreigners. It was a form of monetary protectionism, the idea that a weak currency policy could help our trade deficit. I don't disagree with the analysis, but the implications of it were that by raising the price of foreign goods, we inevitably were going to wind up raising the price of domestic goods to domestic households both because there is less competition for foreign goods in the United States and because of stronger foreign demand for what we produce.

The other aspect of it at the time was a form of a monetary tax increase. In view of the budgetary deficit—the \$220 billion deficit we saw in fiscal 1986—and a weak currency policy, an inflationary policy was chosen as an alternative to either cutting government spending or raising taxes to do something about the deficit.

So in a long-term context these were very tempting shortrun responses to immediate problems—the economic stagnation in the Great Lakes, Mid-Atlantic regions of the country, throughout the Energy Belt, the Agricultural Belt and down into the Southwest. So easy money, weak dollar monetary policies were adopted, reinforced by the concerns of the budget deficits, and now we are paying the price for that and there is nothing we can do about it.

There are two risks at the current time. If the Fed were to be overly concerned about these price numbers and continued tightening month after month as long as the inflation were above some acceptable threshold, then we would have a recession, and I have been worried that they were going to proceed in that way. Recently I think that they are not doing that.

The other major mistake would be that once we see the first signs of a soft economy, rising unemployment again, output and overall employment just stop growing or maybe even decline for a quarter or two, the Fed could become overly anxious to stimulate recovery to prevent a cumulative process leading to a deep and long recession. That, too, would be a mistake, because that would sow the seeds of the next upsurge and it would set us on the track of a secular increase of inflation and not just a cyclical increase.

So I think there is a very fine line to walk in here, and they are going to have a very difficult time resisting the pressures on both sides—from Wall Street and foreign exchange markets to tighten

up to show their commitment to resist inflationary pressures, on the one side, versus the inevitable pressures to ease up when the economy starts to soften—and it's going to be a tough environment for our central bank.

Thank you, Mr. Chairman.

Representative HAMILTON. Thank you, Mr. Jordan.

[The prepared statement of Mr. Jordan, together with attached charts, follows:]

PREPARED STATEMENT OF JERRY L. JORDAN

INFLATION

Mr. Chairman and members of the Committee, I am pleased to have this opportunity to appear before you today and present my views on the subject of U.S. inflation. My comments will focus on five issues: (1) prospects for higher inflation; (2) fundamental forces behind inflation; (3) impact of inflationary policies on this and other countries; (4) recent trends in the relationships between monetary policy, economic activity, and inflation; and (5) policies necessary for the reduction and control of inflation.

Prospects for Inflation The resurgence of inflation has been under way for over two years. The seeds of this reacceleration of price increases were sown by the "easy money, weak dollar" policies of 1985 and 1986. The U.S. inflation rate of under 2 percent in 1986, as measured by the consumer price index, was the lowest in over 20 years. In my view, it will turn out to have been the lowest inflation rate for the rest of this century.

The low reported inflation for 1986, however, was misleading. The small increase in the consumer price index that year substantially understated the ongoing rate of inflation.

The sharp drop in oil prices resulted in the mirror image of the overstatement of inflation that occurred in 1974 and again in 1979-80 during periods of rising oil prices.

Abstracting from the transitory influence of falling oil prices in 1986, the underlying inflation rate has been between 4 and 5 percent since 1982. In 1987 and 1988, the inflation rate averaged 4.4 percent. Prices will rise by 5 to 5.5 percent in 1989. In other words, 4 percent was the low point for the disinflationary cycle of the early 1980s, and we are now in the third year of increasing inflation.

The low level of inflation reported for 1986 coincided with the lowest interest rate levels in nearly ten years. Subsequently, but not coincidentally, we have seen substantial increases in market interest rates. Prompted by the rising trend of inflation, financial market participants have incorporated higher inflation expectations into decisions that affect interest rates. In turn, rising market interest rates have raised the interest expense of the U.S. Treasury and added to the budget deficits and the national debt.

Higher interest rates are a result of inflation, not a cause. The relatively low interest rates in Japan and several European countries are a reflection of the low inflation rates they have been able to maintain. High interest rates in Latin America reflect high inflation.

Fundamental Forces Behind Inflation Although the rise of inflation was accommodated by highly expansionary monetary policy in the mid 1980s, the root cause of higher inflation is

the political pursuit of an illusory, short-run trade-off between faster growth of output and employment on the one hand and rising prices on the other. In other words, the inflation we are now experiencing is the price we must pay for the "pro-growth" policies during 1985-87.

The "pump-priming" monetary stimulus of 1985 and 1986 was viewed by some policymakers as an alternative to protectionism. "Monetary protectionism," achieved by cheapening the dollar, was viewed as preferable to legislated protectionism in the form of tariffs, quotas, and subsidies.

Furthermore, the "unlegislated tax" of inflation has been viewed by some as preferable to the hard choices involved in achieving budget deficit reduction. In absence of further, sustained cuts in government spending as a share of national income, "monetary taxation" was viewed as more acceptable than explicit tax revenue increases. The very substantial disparity in economic performance among various sectors, regions, and industries across the country in recent years produced political support for expansionary monetary policies. Indeed, many observers view higher inflation as one of the solutions to the persistent problems of some sectors and regions.

In the final analysis, any country that is not able to control government spending in line with tax revenue is likely to yield to the temptation to resort to the only unlegislated form of general tax increase--inflation. Ultimately, monetary policy is simply another way to finance the government. That has been true at least since the time of the Roman Empire.

Debasement of the national currency is an age-old solution to the kinds of problems that the United States has been experiencing.

The dramatic increase and subsequent plunge of world energy prices and, similarly, the substantial rise in the foreign-exchange value of the U.S. dollar, followed by an even larger drop, exerted highly uneven effects on the nation's regional economies. States on the east coast, west coast, and a few in the Great Lakes region of the country were prospering, while many other states, especially those whose economies are more agriculture and energy based, were still stagnant. This disparity of economic performance produced interest groups which favored more expansionary policies.

On a national average basis, 1988 was the sixth year of the current expansion. For many states, such as Alaska and those in the Rocky Mountains, Great Plains, and south central regions of the country, however, 1988 was only the first or second year of recovery. An activist fiscal policy of the traditional type--consisting of public works or other "job-creating" programs or tax relief for the hard-hit energy, agricultural, and real estate sectors of the economy--has not been possible in view of the large federal budget deficit. Consequently, the blunt instrument of monetary policy was relied on to stimulate the depressed regions and sectors of the country at the expense of over stimulation in other regions.

Regional economic disparities forced the monetary authorities to choose between adhering to a somewhat more restrictive monetary policy in order to cool off the very strong

expansion of some areas on the east coast and in the west or, alternatively, pursuing a more expansionary policy in an attempt to stimulate the still-depressed regional economies. During 1985 and 1986, the opinion of some key policymakers in the executive and legislative branches of government and at the Federal Reserve was that the public was willing to run the risk of somewhat higher inflation as part of the price to be paid for greater prosperity in the short run. In other words, the cost of stimulating recovery in Kansas, Michigan, and Texas was acceptance of some overheating on the east and west coasts.

Impact of Higher Inflation Should we worry about inflationary policies and the resurgence of inflation? The answer is clearly "yes" both because of the impact on American households and businesses and the repercussions of our economic policies on other nations.

In my view, inflation is the most regressive, divisive, and dishonest form of taxation. It is regressive because it often falls hardest on lowest-income families. It is divisive because of the redistributive effects of unanticipated inflation. It is dishonest because it involves no explicit vote by elected officials and, thus, no assignment of responsibility.

To an economist, there is an inconsistency between the Congressional reluctance to increase excise taxes on the grounds that they are regressive and the willingness to pursue a weak-currency policy in foreign-exchange markets. Depreciation of the national currency also can be regressive. Reducing the purchasing power of the dollar on foreign markets raises the

prices to American consumers of VCRs from Taiwan, color TVs from Korea, and a wide array of goods from Japan and Europe.

It should be clearly understood that it is impossible for the country to reduce the *international* purchasing power of the dollar without also reducing its *domestic* purchasing power. Higher prices of imported goods, caused by a highly expansionary monetary policy in pursuit of a weak currency, will be accompanied by higher prices of domestically produced goods. Import competition for domestically produced tradable goods has declined, and domestic producers have been able to raise their prices in response to stronger demand.

There is little debate about the adverse effects of inflation on the level of real income and on income distribution. Around the world and over time, countries that have experienced higher inflation rates also have experienced increased disparity in the distribution of incomes. Less educated and lower-income people, especially renters, are generally unable to protect themselves against the redistributive effects of reduced purchasing power of money. More affluent and better educated, middle-income groups, especially homeowners, are better able to protect themselves against wealth losses caused by inflation. More sophisticated investors attempt to profit from accelerations of inflation and the correspondent increases in nominal interest rates.

When budget deficits present a choice between expenditure reductions or a legislated increase in tax rates, it is tempting to do neither and opt instead for an unlegislated tax in the

form of inflation. Those who are most hurt by the inflation tax--low-income individuals--are less likely to vote. Those who are better able to protect themselves against the effects of the inflation, but not against the effects of budget reductions or tax increases--middle- and upper-income individuals--are more likely to be politically active. It thus seems that there is a political bias in favor of tolerating inflation rather than making the choices involved in explicit cuts in governmental expenditure programs or tax revenue increases.

The international implications of our inflation should not be overlooked. Economic policies of the United States can have a pronounced impact on the economic policies and conditions of other nations. The subject of intervention by the Federal Reserve on foreign-exchange markets should be put in its proper context. Most internationally traded commodities are denominated in dollars, and the dollar is the dominant international reserve currency held by governments and central banks around the world.

In a policy context, a potential problem arises in the sense that the United States and West Germany cannot target different exchange rates between the dollar and the deutschemark. If our central bank pursues an expansionary monetary policy while foreign central banks choose to intervene in order to slow the rise of their own currencies, foreign countries experience higher monetary growth than they otherwise would (unless they undertake offsetting domestic policy actions, generally referred to as sterilization). As a result, overall

monetary policies tend to be more expansionary than they otherwise would be, a phenomenon labeled "imported inflation" by other countries. From the standpoint of ministers of finance and central bankers in the rest of the world, it would be preferable for the United States to engage in intervention to slow the decline of the dollar. We would then bear the exchange-rate risk. Such actions would, however, reduce U.S. monetary growth if not sterilized by domestic actions.

The traditional prescription for the problems of a country that is experiencing a large fiscal deficit, a large and growing external foreign debt, mounting debt in its business and household sectors, rising inflation, and a weak currency in the context of a very large trade imbalance would be fiscal and monetary austerity. Typically, foreign creditors or the International Monetary Fund dictate that the troubled country cut spending, raise taxes, and adopt a more restrictive monetary policy in order to curb inflationary excesses, reduce its trade deficit, and strengthen its currency. In the case of the United States, however, there is no single country or institution that could force the Administration, the Congress, and the Federal Reserve to discipline U.S. monetary and fiscal policies.

The United States is a part of the global economy, but there is an asymmetry: If the United States pursues a more inflationary policy while other countries attempt to maintain a lower inflation rate than our own, their currencies must persistently appreciate or be periodically revalued upwards relative to the dollar. The short-run impact of the rising

value of their currencies causes an adverse effect on the tradable goods sectors of their economies. Because they generally have a larger share of their employment related to tradable goods than does the United States, the political pressures for more expansionary domestic policies to limit the rise of their currencies becomes substantial. Consequently, the rhetoric about convergence or coordination of economic policies among major industrialized countries really means that foreign countries feel compelled to adopt policies similar to those of the United States, if we cannot be persuaded to alter our fiscal and monetary policies.

As we have seen in the 1980s, higher inflation and, especially, expectations in the financial markets of higher average rates of inflation tend to cause a larger inflation premium in market interest rates. Consequently, the nominal interest expense of all debtors--and especially the world's largest debtor, the U.S. government--is raised because of inflation.

Historically, governments have gained from inflation in several ways: (1) increased revenue resulting from "bracket creep" in a progressive income-tax structure; (2) the reduction of the level of the government's real liabilities due to unanticipated inflation; (3) higher tax revenue because corporate or other business income taxes are not indexed and consequently earnings are overstated as a result of inflation; and (4) higher revenue from capital gains on real productive

assets and common equities that are not indexed, so gains are overstated due to inflation.

Although the government still gains from inflation in several ways, there is no longer the ratchet effect of bracket creep in the U.S. personal income tax system. Meanwhile, inflation causes an increase in interest expense on the national debt that may not be fully offset by other gains to the government due to inflation. So it is not clear whether there is any longer a net benefit to the government from pursuing policies that lead to inflation.

Monetary Policy, Economic Activity, and Inflation Recent events have led some observers to question the linkage between changes in the money supply and economic growth and inflation. Careful research highlights three aspects of this relationship. First, velocity--the relationship between total income and money--was affected in the early 1980s by deregulation, by lower inflation, and by falling interest rates. Deregulation, by allowing the explicit payment of interest on checking accounts, has increased the amount of money balances people wish to hold for given levels of wealth and income. The reductions in inflation and interest rates in the early 1980s also raised the amounts of money individuals were willing to hold. More recently, however, adjustment to the new regulatory framework, higher inflation, and higher interest rates have once again reduced money demand and caused velocity to rise, with income growing more rapidly than the money supply.

Second, the relation between money and asset prices should be considered, as well as the linkage between money and product prices. Rapid money growth can lead to expectations of faster growth in future earnings, which may be capitalized in asset prices. The recent, sharp rise in house prices in some parts of the country would appear to reflect this process.

Third, the link between money and economic activity has traditionally been studied in terms of the relation between a monetary aggregate and GNP. GNP, however, measures *production*, whereas theory would suggest that the connection is between money and *spending*. The distinction is irrelevant in a closed economy, but becomes important when there are sizable flows of exports and imports. For example, during 1985 and 1986, real GNP in the United States grew at an average rate of only 2.8 percent, which some analysts thought was too weak. The problem, however, was not inadequate demand. Fueled by expansive monetary and fiscal policies, total real spending by American consumers, businesses, and government expanded at an annual rate averaging 6.2 percent. This divergence between spending and production was due to a small decline of exports and a sizable increase in imports.

The acceleration in money supply growth in 1985 and 1986 initially acted to stimulate more spending by U.S. consumers and produced a greater influx of imports--hence, the growing trade deficit. Subsequently, growth of domestic output and employment accelerated in 1987 and 1988, while growth of final demand slowed. The producer sectors of the U.S. economy, especially

"smokestack America," have been very strong, but the consumer services and retail trade sectors have been showing signs of weakness.

It is of fundamental importance to view the control of inflation as a *means* to achieving maximum sustainable real growth. It is simply not true that society must choose between inflation and employment (or unemployment) objectives. Tolerance of inflation, and especially a variable and unpredictable rate of inflation, reduces the output growth of society over time and consequently causes standards of living to be lower. This result comes from the general reduction in the efficiency of society's resource utilization as resources are diverted to unproductive, inflation-hedging activities and also because time horizons of savers and investors are altered, causing them to opt for shorter-term investment opportunities.

Policies Necessary to Reduce or Control Inflation As Chairman Greenspan has emphasized recently, the *ultimate* objective of the central bank is "to achieve maximum sustainable growth over time." "The primary role of monetary policy in the pursuit of this goal is to foster price stability."¹ To achieve and maintain price stability, a few changes in the conduct of monetary policy are essential.

First, the growth of the monetary base must be narrowly constrained. The degree of discretion in conducting policy actions has to be limited. In the spirit of this year's

¹ "1989 Monetary Policy Objectives," Testimony of Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System; February 21, 1989.

bicentennial celebration of the ratification of our Constitution, the country would be well served if the Federal Reserve were guided by a "rule of law" instead of a "rule of men." A judgmental approach to monetary policy presupposes a knowledge that no one possesses. No one understands fully the interactions and reaction times among the multitude of economic variables. The magnitudes and even the signs of the multipliers for various policy variables are subjects of debate. For example, economists have disagreed about whether a reduction in the federal budget deficit would lead to stronger or weaker economic growth or to a stronger or weaker dollar. An activist monetary policy is inappropriate in this environment of uncertainty.

Second, monetary policy should not be used to address the problems of regional disparities. As I have mentioned, monetary policy is too blunt a tool to be used for such purposes. If Congress deems the income disparities to be too pronounced, microeconomic policies involving regional-specific programs would be more effective and less costly.

Third, monetary policy should not accommodate the mistakes of fiscal policy. If federal spending and consequent deficits are overly expansive, monetary policy should not validate those policies with rapid monetary growth. Even if the effects are not immediate, the ultimate impact will always be higher inflation.

In conclusion, the recently reported higher rates of inflation should not be taken as a sign of a sustained

acceleration of price and wage increases. Recent inflationary pressures are the result of excessively expansionary policies in 1985 and 1986. Current monetary policy actions cannot influence current inflation, only future inflation and near-term real growth.

The substantial deceleration of monetary growth, starting in 1987 and intensifying in 1988, means inflation will be lower next year. Real output and employment growth will slow sharply this year, but that is unavoidable in view of the growing inflation. The challenge to policymakers will be to maintain a steady, disciplined monetary growth path. That will not be easy in view of pressures on one side to "tighten" policy in response to the inflation, or on the other side to "ease" policy to prevent recession.

The long-run benefits, in terms of a less volatile and more prosperous economy, make price stability a goal that should receive highest priority. In absence of a disciplined fiscal policy, it would be easy to underestimate the difficulty of restraining inflationary pressures. But, that does not mean that we should not try.

INFLATION

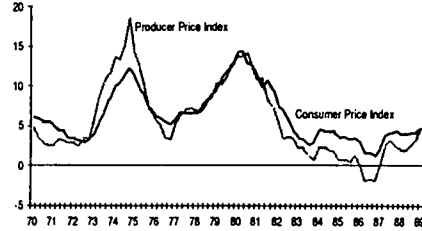
CHARTS SUPPLEMENTING STATEMENT OF

*Jerry L. Jordan
Senior Vice President and Chief Economist
First Interstate Bancorp*

Joint Economic Committee of the
United States Congress
Washington, D.C.

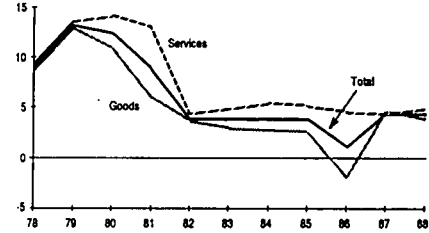
April 18, 1989

CONSUMER AND PRODUCER PRICES
(Percent change, year to year)



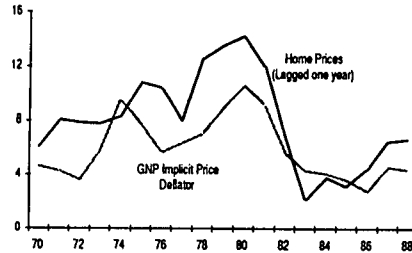
Producer and consumer goods prices tend to move together, rather than one leading the other.

CONSUMER PRICES
(Percent change, December to December)



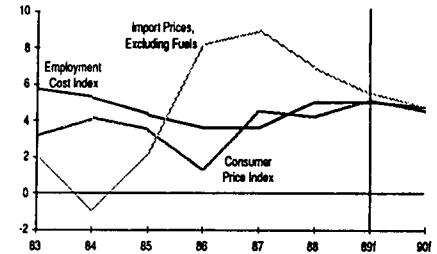
The small rise in consumer prices in 1986 was mainly due to a decline in goods, notably energy, prices.

ASSET AND GOODS PRICES
(Percent change, annual averages)



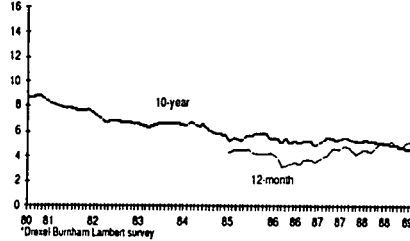
Prices of assets tend to respond more quickly than the general price level as inflation expectations are reflected rapidly in financial markets.

CONSUMER, EMPLOYEE AND IMPORT COSTS
(Percent change, 4th quarter to 4th quarter)



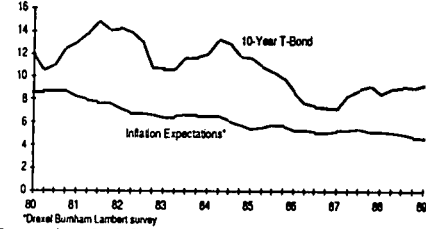
Increases in wages and import costs are not a *cause* of inflation, but instead a result of the basic force behind rising prices—overly expansive monetary growth.

INFLATION EXPECTATIONS*
(Annual percentage rates)



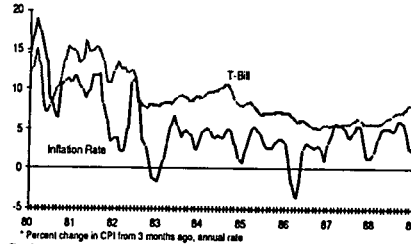
While the near-term outlook has turned towards some increase in inflation, the longer-term view remains relatively optimistic.

10-YEAR TREASURY BOND & EXPECTED INFLATION
(Quarterly averages, percent)



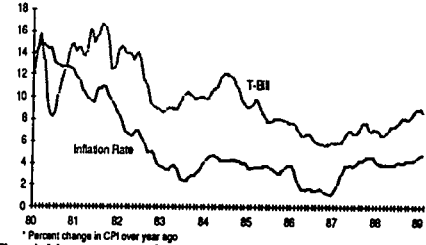
Expectations for inflation are the major factor determining the level of long-term interest rates.

3-MONTH TREASURY BILL & INFLATION RATE*
(Percent)

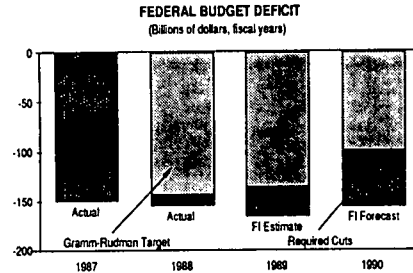


Inflation also affects the level of short-term interest rates, such as the rate of 3-month Treasury bills.

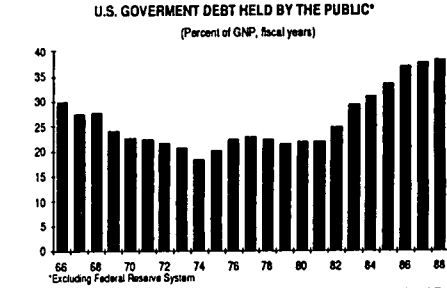
1-YEAR TREASURY BILL & INFLATION RATE*
(Percent)



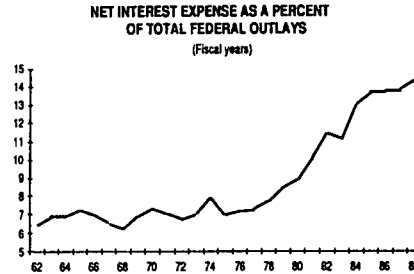
The yield on one-year Treasury bills closely parallels the year-to-year changes in consumer prices.



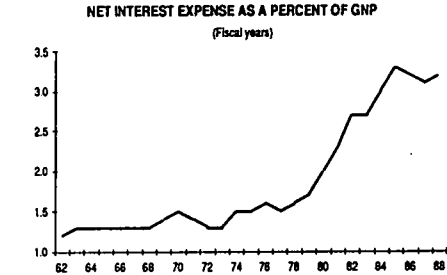
The actual federal budget deficit may exceed substantially the Gramm-Rudman target in fiscal 1990.



U.S. government debt held by the public has climbed significantly in recent years as a percent of GNP.

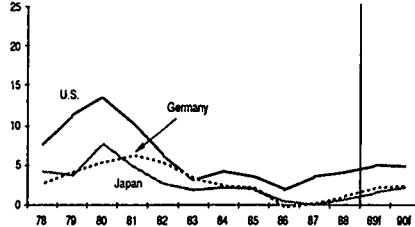


Higher inflation raises interest rates and hence the interest portion of the federal budget.



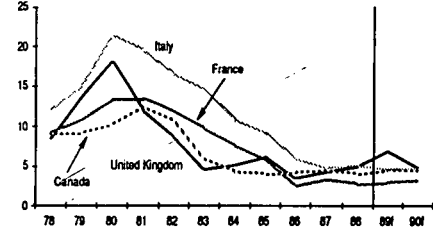
Net interest expense amounted to more than \$150 billion in fiscal 1988, or about 3% of GNP.

U.S., GERMANY, AND JAPAN - INFLATION
(Annual percent changes in average CPI)



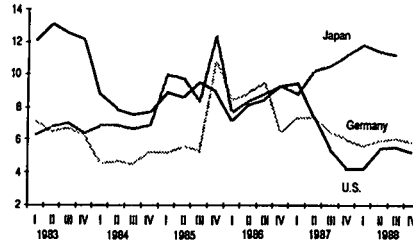
The U.S. continues to record a higher inflation rate than West Germany and Japan.

CANADA, FRANCE, ITALY, AND U.K. - INFLATION
(Annual percent changes in average CPI)



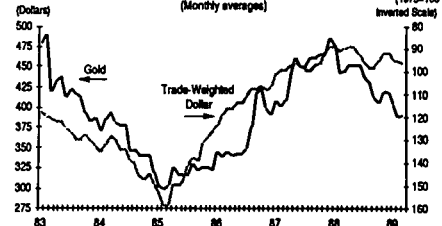
Although the U.K. is experiencing a rise in inflation this year, most of the major industrialized countries appear to be controlling the rate of price rise.

M2 GROWTH—U.S., JAPAN, AND GERMANY
(Percent change from year-ago quarter)



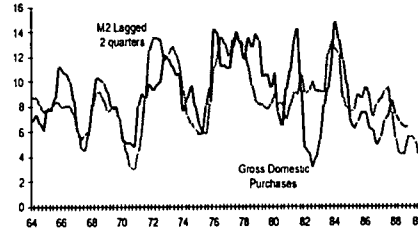
U.S. monetary growth has slowed to rates below those of both Japan and Germany. This has given support to the dollar.

GOLD PRICES AND THE TRADE-WEIGHTED DOLLAR
(Monthly averages)



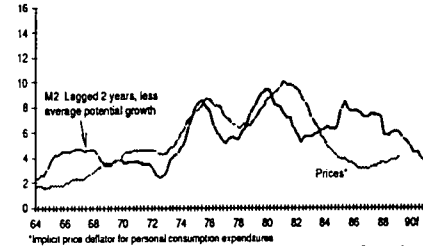
Gold prices tend to move inversely with the foreign-exchange value of the dollar.

MONEY AND SPENDING
(Percent change from year-ago quarter)



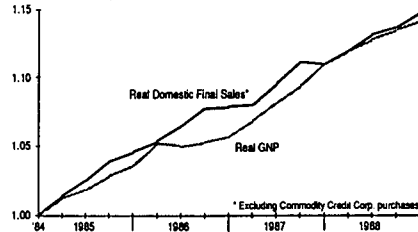
Monetary growth affects the growth of total spending in the economy by consumers, businesses, and government.

MONEY AND PRICES
(Average annual percent, based on 3-year changes)



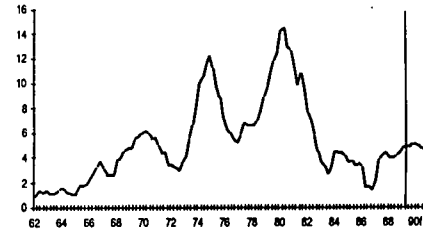
Inflation is essentially a monetary phenomenon. After a lag of about two years, accelerations or decelerations in money growth lead to increases or decreases in inflation.

SPENDING VS. PRODUCTION
(Cumulative change from 4th qt. 1984, Index=1.00)



The monetary stimulus and weak-dollar policies of 1985-86 caused demand in the U.S. economy to grow faster than production. This gap in growth rates has recently closed.

U.S. INFLATION, 1962-80
(Percent change in CPI from year-ago quarter)



Inflation in the past few years has averaged between 4% and 5%. The challenge is to reduce that rate rather than allow it to ratchet even higher.

Representative HAMILTON. Mr. Popkin, please proceed.

STATEMENT OF JOEL POPKIN, PRESIDENT, JOEL POPKIN & CO.

Mr. POPKIN. Thank you, Mr. Chairman.

I want to focus in my testimony on the issue of really defining whether today's inflation is in fact severe. I have been involved in price measurement analysis for about 25 years and I have never seen a time when there seems to be more diversity of opinion about whether the inflation numbers are good or bad.

We had a Consumer Price Index come out today of five-tenths of 1 percent. Looked at over a 1 month or a 3 months' span, that's about a 6-percent annual rate, and the stock market I'm told is up by 40 points. So I think there is a lot of diversity of opinion.

In this testimony I'm looking for a way of trying to put this in some kind of historical perspective. Is inflation in the 5 to 6 percent range something that should be of concern.

Unfortunately, economic theory doesn't give us a clear-cut basis for determining the inflation rate that has to prompt a strong policy response. As a result, that threshold has been defined differently by different U.S. Presidents and by different Federal Reserve Board Chairmen.

President Kennedy imposed voluntary wage-price guidelines and chewed out the steel industry for its announcement in April 1962 to raise steel prices by 3½ percent. Both events occurred at a time when the inflation rate as measured by the CPI was rising at an annual rate of less than 2 percent.

President Nixon imposed mandatory wage and price controls in 1971 when the CPI was rising at a 5-percent annual rate.

President Carter pursued a voluntary wage price program during his administration, and during most of his tenure. Until the second OPEC price increase the CPI was rising at an average annual rate of 6 percent.

Both President Reagan and FRB Chairman Volker thought double-digit inflation was high enough to combat, not with wage price policy, but rather with highly restrictive monetary policy.

So the perception of the significance of inflation and the policy response to it have been highly variable over the past 30 years, and I think that that diversity of viewpoint is perhaps best captured by comparing statements made by the current FRB Chairman and his immediate predecessor.

Each statement, incidentally, was made last October within a week of each other. Chairman Greenspan was quoted while in Japan as saying that U.S. inflation is now at a stage of expectation, not a reality. At about the same time former Fed Chairman Volker said that if you consider today's inflation rate moderate, then I guarantee you that you will see a higher rate in the future.

The best and perhaps only place to find information to permit an evaluation of the present severity of the U.S. inflation is in the past, and I have attached to my prepared statement two charts which I think are quite revealing in that respect.

The charts show the U.S. inflation rate as measured by the CPI going back to 1968, and the data in those charts are adjusted to reflect the present treatment of housing costs in the Consumer Price

Index. In the past they used to include the mortgage interest rates and now they don't. The whole series is now on a rental equivalence basis in both of those charts. The upper chart is the CPI, and the lower one is the CPI excluding food and energy.

As you'll note, and as I think you mentioned in your comments, Mr. Chairman, at the outset of this session, there are the two big spikes of inflation, in the 1973-74 period and in the 1979-81 period, and you can see that in both those the Consumer Price Index total in the top chart started to rise before the Consumer Price Index that excluded food and energy.

That I think makes clear the point that to a large extent the steepness and the height of those peaks reflects those sharp increases in oil prices, and I would like to refer to that kind of inflation as relative price inflation. Monitorists may regard it as non-monetary inflation, but it is to be distinguished from the inflation that is visible in the lower chart during most of the period from 1968 to 1987, and that I call generalized inflation. It's the reflection of smaller, slower increases, but increases that are inexorable nonetheless.

Thus, if you look at the lower panel of the chart, from 1968 to 1971, inflation, excluding food and energy, accelerated from 4 to 5½ percent, and it did so interrupted by the recession of 1969-70—no price relief from that recession.

From 1975 through 1978 it generally accelerated with occasional short-lived dips from an immediate postrecession low of about 5½ percent to about 7 percent just before the onset of the second OPEC oil price increase.

In the wake of the end of the second OPEC oil price increase and the recession of 1981-82, nonfood and nonenergy inflation receded markedly. In 1983 it fell to about 4½ percent. Then it began to accelerate, reaching 5.5 percent during the early part of 1984. But by yearend it was pushed back to 4½ percent by restrictive FRB policy, one aspect of which was manifested in high real interest rates, about 5 percentage points or so at the short end. That policy reinforced by a strong dollar and deregulation in key industries pushed generalized inflation down to a rate of about 3¾ percent by mid-1986.

Inflation stayed around the 4 percent mark until the fourth quarter of 1987 when it embarked on its present course of slow but persistent acceleration. The foregoing analysis I think suggests that an assessment of the severity of inflation is not independent of its source.

In a very real sense inflation caused by a large increase in an important set of relative prices is of less concern, despite its ability to temporarily raise U.S. inflation to double-digit rates. That kind of inflation is amenable to reversibility, especially if it gets some prodding from restrictive monetary policy. It occurs because as oil prices go up, people conserve on their use of energy products, while at the same time there is more exploration and supply is increased.

So the relative price inflation that I refer to has a tendency to fall of its own weight, and I think that that's manifest in the sharp decelerations that you see immediately preceding those two big accelerations.

The more insidious kind of inflation is generalized inflation. Such inflation when it has occurred in the past 20 years, has proceeded in the United States at rates in the 4 to 7 percent range. The fact that it has never hit double digits or accelerated from one year to the next by more than about 1 percentage point does not make it less troublesome. In fact, it is more troublesome than relative price inflation. That is because there is no precedent in post-war experience that suggests that such generalized inflation of the sort we have today is readily reversible.

The Fed has embarked on a policy it thinks can reduce the current generalized inflation by slowing economic growth but stopping short of prompting a recession. Whether or not the FRB policy will slow the economy or toss it into a recession, albeit a mild one in all probability, is not as important as what is going to happen over the next several quarters as this is happening.

When you slow an economy or put it into a mild recession, productivity growth slows or drops, turns negative. When that happens, unit labor costs shoot up even if there is no acceleration of wage rate increases.

Historically a third to a half of that acceleration in unit labor costs is pushed through into prices. That's why a slowdown or a mild recession does not really result in much relief on the price side, and that's why it's so difficult to come up with a policy that will combat this slow, yet inexorable generalized price inflation.

I think in summary that the current U.S. inflation is of that type. It doesn't accelerate rapidly and has never produced double-digit inflation during the post-World War II period, but it's precisely because it does not accelerate to high levels rapidly that policymakers do not have the public support to promulgate the kinds of recessions that can reverse such inflation. Once started, generalized inflation seems impervious to slowdowns in economic growth and even mild recessions.

Thus, the only practicable cure for such inflation is preventive medicine. We lost our opportunity for that kind of treatment because of policies pursued I believe in late 1987 and through the middle of 1988. The Federal Reserve loosened monetary policies especially as manifested in the behavior of interest rates and initially in response to the stock market break, but subsequently during the winter, in response to their perception that the economy was in danger of going into a recession.

It wasn't really until last August that interest rates regained the peaks that they reached in October 1987 prior to the stock market crash. So I think the Fed can only claim credit for a policy of tighter monetary growth and behavior of financial markets since October. And I think it was more or less in the 9 months, if you will, from October to August that I think our economy underwent the rebirth of inflation. I think it's during that period of time that we lost the opportunity to keep the inflation rate low.

As a result, I think it's unlikely that during the rest of this century the U.S. inflation rate will retreat to the lows it reached after the 1981-82 recession unless it gets a helping hand from relative price disinflation reflecting a fall in farm and/or energy prices.

Thank you.

Representative HAMILTON. Thank you, Mr. Popkin.

[The prepared statement of Mr. Popkin, together with attached charts, follows:]

PREPARED STATEMENT OF JOEL POPKIN

Mr. Chairman and members of the Committee, thank you for inviting me here today to give my view of the inflation situation our economy faces in 1989. My perspective is conditioned by the fact that I have been an "inflation watcher" for almost 25 years, first as Assistant BLS Commissioner in charge of the Consumer and Producer Price Indexes, then as the inflation analyst at the President's Council of Economic Advisers and, since 1978, as President of an economic consulting firm specializing in the measurement, analysis and forecasting of wages and prices.

My objective in testifying before this Committee is to present a basis for evaluating the degree of concern that should be associated with the rate of inflation our economy faces currently. Economic theory provides no clear cut basis for determining the inflation rate threshold that must prompt a policy response. As a result that threshold level has been defined differently by different U.S. Presidents and by different Federal Reserve Board chairmen. President Kennedy imposed voluntary wage-price guidelines and "chewed-out" the steel industry for its announcement in April 1962 to raise steel prices. Both events occurred at a time when the inflation rate, as measured by the Consumer Price Index (CPI), was rising at an annual rate of less than 2 percent. President Nixon imposed mandatory wage and price controls in 1971 when the CPI was rising at a 5 percent annual rate. President Carter pursued a voluntary wage-price program during his administration; during most of his tenure (until oil prices shot up for the second time in a decade in 1979) the CPI was rising at an average annual rate of 6 percent. Both President Reagan and FRB Chairman Volcker thought double-digit inflation was high enough to combat, not with wage-price control programs, but rather with highly restrictive monetary policy. So the perception of the significance of inflation and the policy responses to it have been highly variable over the past 30 years.

Today there is considerable disagreement about the severity of inflation, the direction inflation is headed, the policy that should be pursued and the likely success of each policy. That diversity of viewpoint is perhaps best captured in quotations from

the current FRB Chairman and his immediate predecessor; each statement was made last October within a week of each other. Chairman Greenspan was quoted while in Japan as saying that U.S. inflation is now at a stage of "expectation," not a "reality." At about the same time former FRB Chairman Volcker said that if we consider today's inflation rate moderate, "then I guarantee you that you will see a higher rate in the future."

The best, perhaps the only place to find information to permit an evaluation of the present severity of U.S. inflation is in the past. The attached two-part chart shows the behavior of inflation since 1968 as measured by the CPI and the CPI excluding food and energy. Both series are calculated to reflect the consistent treatment of the CPI housing component based on the rental-equivalence method introduced in 1983. The BLS only calculated these series back to 1967 which is why data on the charts begin in 1968.

The charts show that the two occasions that the CPI measures reached double digit rates were when energy prices rose sharply - in 1973-4 and 1979-81. Throughout most of the rest of the 20-year period, inflation hovered between four and seven percent. There are two periods when it rose more slowly than four percent - 1971-3 when there were mandatory wage and price controls and 1986 when oil prices took their second sharp decline in the decade of the 1980's.

This history serves to distinguish two types of inflation -- generalized inflation and inflation associated with a sharp change in an important set of relative prices.¹ The latter kind of inflation has, because it quickly pushed the CPI to double-digit rates of increase, been more visible. As a result, it has been possible to coalesce public opinion to support highly restrictive policies to slow such inflation. A large part of relative-price inflation falls of its own weight. In the case of oil, users find substitutes and suppliers are induced to explore for more oil. In addition, monetary policy weighs in to point the secondary effects of such inflation -- prices feeding onto wages and back onto prices -- in a downward direction. Thus, with relative price inflation the periods of sharp acceleration are typically followed by periods of sharp deceleration.

The first kind of inflation -- generalized inflation -- is, however, completely different from relative price inflation. It is best seen in the chart of the CPI excluding food and energy. Its acceleration is slow, yet inexorable. From 1968 to 1971, it accelerated from 4 percent to 5.5 percent and did so uninterrupted by the 1969-70 recession. From 1975 through 1978, it generally

¹Monetarists refer to generalized inflation as monetary inflation and relative price as nonmonetary inflation.

accelerated -- with occasional short lived dips -- from an immediate post recession low of about 5.5 percent to about 7 percent just before the onset of the second OPEC oil price increase in 1979.

The combination of the end of the second OPEC oil price increase and the recession of 1981-82, nonfood, nonenergy inflation receded markedly. In 1983 it fell to about 4.5 percent then it began to accelerate, reaching 5.5 percent during the early part of 1984. But by year end, it was pushed back to 4.5 percent by restrictive FRB policy, one aspect of which was manifested in high real interest rates -- about 5 percentage points or so at the short end. That policy, reinforced by a strong dollar and deregulation in key industries, pushed inflation down to a rate of about 3 3/4 percent by mid-1986.

Inflation stayed around the 4 percent mark until the fourth quarter of 1987 when it embarked on its present course of slow but persistent acceleration. The latest data available show that in the six months ending February 1989, the nonfood, nonenergy CPI pushed above the 5 percent level.

The foregoing suggests that an assessment of the severity of inflation is not independent of its source. In a very real sense, inflation caused by a large increase in an important set of relative prices is of less concern, despite its ability to temporarily raise U.S. inflation to double-digit rates. That kind of inflation is amenable to reversibility, especially if it gets some prodding from restrictive monetary and fiscal policy.

The more insidious kind of inflation is generalized inflation. Such inflation, when it has occurred in the past 20 years, has proceeded in the U.S. at rates in the 4 to 7 percent range. The fact that it has never hit double digits or accelerated from one year to the next by more than about one percentage point does not make it less troublesome. In fact it is more troublesome than relative price inflation. That is because there is no precedent in postwar experience that suggests such generalized inflation is readily reversible.

The FRB has embarked on a policy it thinks can reduce the current generalized inflation by slowing economic growth, but stopping short of prompting a recession.² As evidence of the pursuit of these objectives it points to a rise of about 3.5 percentage points in short-term interest rates from their lows in the winter of 1988. But that contention ignores the fact that only

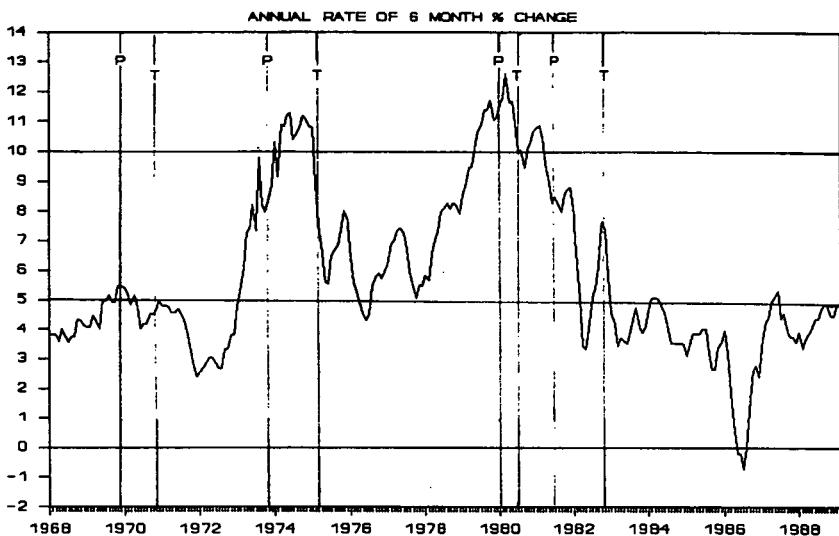
²Additionally, Chairman Greenspan has the objective of bringing the inflation rate to zero -- like Japan and West Germany's -- in four years.

since August 1988 have interest rates exceeded those that prevailed in October 1987 before the stock market decline. It was only in August that 3 month T-bill rates exceeded the 7 percent rate they were at in mid October 1987. On that basis, the FRB policy has been to raise interest rates by 2 percentage points, not 3.5 percentage points. That degree of restrictiveness, though less than the FRB thinks it has imposed, is contributing nonetheless to the slowdown in the economy.

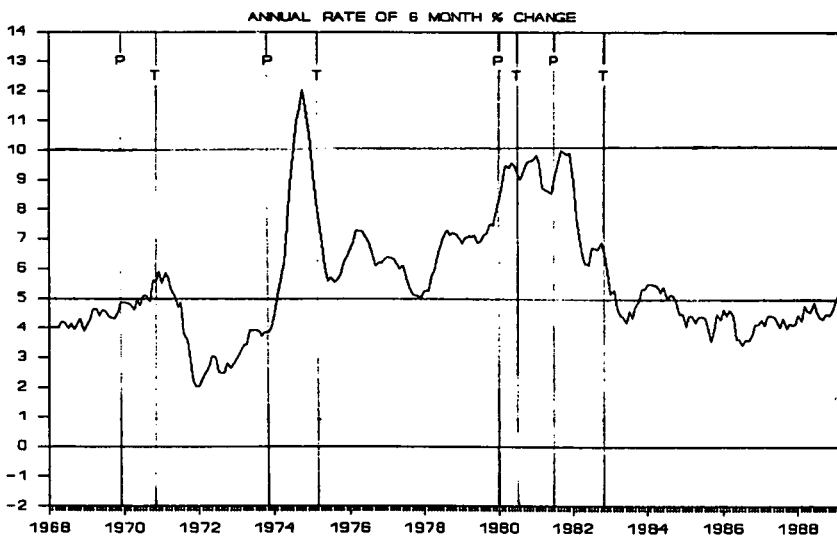
But a marked slowdown in growth or even a mild recession is unlikely to reduce inflation. The reason is that the first impact of a weakening in the economy is on productivity which will slow or even fall. This will quicken the rise in unit labor costs even in the unlikely event that wage rates do not move up faster. Historically, one-third to one-half of such acceleration in unit labor costs is passed through into prices, the rest absorbed by margins. So prices continue to drift up in the early stages of a slowdown or recession. Only a prolonged or steep recession can reduce the inflation rate. If the policy to produce such developments is not likely to be forthcoming, then we can expect that generalized inflation in the 5-6 percent range will likely endure for the foreseeable future. This means that monetary policy will have to remain fairly restrictive and the U.S. economy will grow less than it otherwise could.

In summary, current U.S. inflation is of the type that can be characterized as generalized inflation. Such inflation does not accelerate rapidly and has never produced double-digit inflation during the post World-War II period of U.S. economic history. But it is precisely because it does not accelerate to high levels rapidly, that policy makers do not have the public support to promulgate the kinds of recessions that can reverse such inflation. Once started, generalized inflation seems impervious to slowdowns in economic growth and even mild recessions. Thus, the only practicable cure for such inflation is preventative medicine. We lost our opportunity for that kind of treatment because of policies pursued in late 1987 and through the middle of 1988. As a result it is unlikely that during the rest of this century, the U.S. inflation rate will retreat to the lows it reached after the 1981-82 recession, unless it gets a helping hand from relative price disinflation reflecting a fall in farm and/or energy prices.

CPI



CPI x FOOD & ENERGY



CPI calculated based on present treatment of housing

Joel Popkin and Company
Economic Consultants

Representative HAMILTON. Mr. Summers, please proceed.

**STATEMENT OF LAWRENCE H. SUMMERS, PROFESSOR OF
ECONOMICS, HARVARD UNIVERSITY**

Mr. SUMMERS. Mr. Chairman, my colleagues on this panel have done an excellent job of describing the evolution of inflation and the evolution of our problem to this point. I want to concentrate on policy issues from this point forward. In my testimony I want to make five points.

First, by any measure the economy is currently operating very close to capacity. You can see that in one of two ways. You can see it by looking at direct indicators of how much capacity is being utilized, the fact that the employment rate is now lower than it has been at any time since 1973 and the fact that capacity utilization is at levels above its levels and the late 1970's when inflation accelerated. You can see in reports that the lags that people experience in trying to get products delivered are longer than they have been at any time recently.

You can see signs also that the economy is now operating near capacity in the behavior of wages and prices. As both my fellow panelists have explained, inflation has picked up somewhat over the last 6 months.

While coming out of the recession there was substantial economic growth to be had not only because the economy's capacity to produce was expanding, but also because that capacity came to be utilized more and more fully. We have now pretty much exhausted the gains that are possible through increased utilization of the economy's capacity at least in the macroeconomic sense. There may be areas where there is excess capacity, but it is only targeted policy that can get that capacity to be utilized.

The consequence of that is my second point. Slow growth will be steady growth. We cannot, if what I have said so far is correct, expect increased output to result from using more and more resources. We have driven the level of unemployment about as low as we are likely to be able to drive it without setting off very rapid inflation and similarly with the level of capacity utilization.

The question is whether we manage to continue in the situation we are now where supply and demand are closely balanced or whether we allow demand substantially to outstrip supply, and if demand substantially outstrips supply the danger is that wages and prices will start to rise quite rapidly.

My judgment is, and I think this would be a judgment that is widely shared, that the capacity to produce in the American economy is now expanding at a rate of somewhere between 2 and 3 percent with 3 percent probably being too optimistic a figure. That means the room for growth that is consistent with even constant inflation or even the absence of accelerating inflation is growth at a rate of no more than about 2½ percent over the next year or two, and that is a growth target that is not consistent with significant further reductions in the unemployment rate.

If we achieve that, there is a real prospect that inflation will stabilize at current levels and we will not face the kind of accelerating inflation that we had during the Vietnam war period.

Any effort to have the economy grow more rapidly than that, unless we are very lucky in terms of the economy's capacity to produce in terms of supply shocks, imported goods and so forth, is likely to lead to inflation picking up at a very rapid rate.

The question then is what policy tools can best be used to maintain the rate of economic growth, which brings me to my third point. Fiscal policy, not monetary policy is the best way to restrain and moderate the rate of economic growth in our economy. Monetary policy as a device for slowing down the economy in the current situation is flawed in four important respects.

First, monetary policy, because it works through higher interest rates, is an anti-investment strategy. Reducing growth in the economy through contractionary monetary policy is a strategy that means higher interest rates and less investment, which is surely not what we need given our competitive difficulties.

Second, those higher interest rates exacerbate all of our many debt problems. Higher interest rates raise the cost of the S&L bailout, they make the problem of Latin American debtors more serious. A 1 point increase in the interest rate raised the Federal budget deficit by \$10 billion. They don't help precarious leverage buyouts any either. So reducing financial strain is another reason to avoid restraint through higher interest rates.

A third reason for not wanting to apply restraint via monetary policy is the international dimension. As we have already seen, during the period when inflation threats were particularly severe in the early part of this year interest rates rose in anticipation of the Federal Reserve's actions to restrain inflation and the dollar rose quite sharply as well tending to discourage exports from the United States and to encourage imports.

It's arguable whether a weaker dollar than the dollar we have right now would be desirable, but I don't think there is any serious case to be made for substantial appreciation in the dollar from current levels, and that would be the consequence of restrictive monetary policies directed at reducing inflation.

Finally, monetary policy is very difficult to apply accurately and to apply in a controlled way. The analogy I use in teaching introductory students is that stopping an economy with monetary policy is like trying to get catsup out of a bottle. You shake and you shake and nothing happens, and then you keep shaking and much too much comes out. It's the same thing as the Federal Reserve tries to restrain the rate of inflation.

For all of those reasons, lower interest rates, more investment, more control and a more favorable trade deficit and reduced fiscal stimulus, which means lower budget deficits, is the right way to moderate the economy and to maintain stable growth.

From that point of view, the recent budget compromise is very far from satisfactory. There is more smoke and mirrors than substance in that budget compromise, and that budget compromise's reliance on figures, on optimistic projections, as your report makes clear, are beyond the fringe of private forecasts, and sends a signal that is exactly the wrong kind.

Realistically though, for the next some number of months the budget situation is not likely to change radically and the Federal Reserve will have to act or not act.

So the question that one has to ask is, if the economy is operating at capacity, there isn't room for super rapid growth from current levels and, on the other hand, the Federal Reserve has acted over the last year to restrain growth. Interest rates have risen 3 percentage points in the last year and it is the case that on every occasion since World War II when short-term interest rates have risen by that much that what has followed has been a recession. Likewise, it is the case that on every occasion when short-term interest rates have exceeded long-term rates, as they do today, that weakness in the economy has followed.

For that reason I am inclined to think that while the situation has to be monitored very closely, that it is likely that the lagged effects of the policy steps that have already been taken will be to reduce the rate of growth down to the 2- to 2½-percent range that I spoke of, or to reduce the rate of growth below and therefore it would be inappropriate at the current time to tighten significantly further.

Conversely, in the very desirable, but very unlikely event that serious reduction in the budget deficit were to come forth, it would be appropriate for the Federal Reserve to accommodate that reduction in the budget deficit with monetary policies that permitted interest rates to decline.

The fifth observation is really a general observation about policy discussions of this sort and doesn't focus on the current situation, and that is simply to reaffirm the desirability of maintaining the independence of the Federal Reserve from direct control by either the President or the Congress.

I think the reason for insulating to some degree monetary policy from political control parallels closely the reason for other things that we insulate from political control. In the short run the temptation to expand is always very strong. The benefits come quickly in the form of increased output, the costs in the form of increased inflation and the costs in the form of an expectation of increased inflation, which means higher interest rates, come only much more slowly.

In situations of that kind it is best to let democracy operate at some distance. Let me support that point in two ways as I conclude.

If you look at table 2, which is right at the back of my prepared statement, you see a table put together by my colleague, Alberto Alesina, who, as his name suggests, comes from the highest inflation country in that table. What that does is rank, and it's done by some political scientists, but what it does is rank all the countries' inflation rates from 16 down to 4, and then you see a measure of how independent their central bank was.

So 1 corresponds to a central bank that is very directly subject to political control, 4 corresponds to a central bank that is entirely insulated from political control, and I think what you see there is a rather clear, though not perfect, pattern. Where central banks are more subject to political control, what you see is considerably higher inflation rates.

As examples of New Zealand, Spain, and the United Kingdom suggest, it is not the case that that extra inflation that results is associated with any great improvement in the form of economic

growth or unemployment. Those countries have performed relatively poorly as well.

A different way of making the same point is to simply note that while the Federal Reserve is frequently subject to political criticism, that political criticism invariably comes in only one direction, and that is urging more expansionary policy.

And, yet, as one looks over the history of the last 30 years, you can argue that the Federal Reserve made a mistake at this time or at another time, but it is difficult I think to believe that we would be better off if substantially more money had been printed over the last 30 years and that the price level was substantially higher today, and that almost certainly would have been the result of less Federal Reserve independence.

So to conclude my advice is to respect the independence of the Federal Reserve, recognize that the economy is near its limits of capacity, and I think in that way we can have sustainable growth.

Thank you.

[The prepared statement of Mr. Summers follows:]

PREPARED STATEMENT OF LAWRENCE H. SUMMERS

Combatting American Inflation:1989SUMMARY

1. The risk of a renewed outbreak of inflation is as serious now as it has been at any time in the 1980s. With unemployment below 5 percent and capacity utilization at levels that are high by historical standards, the American economy has largely exhausted the growth opportunities created by the underutilization of capital and labor resources.
2. Previous economic recoveries have not died of old age. They have been murdered by the Federal Reserve in an effort to prevent inflation. Allowing inflation to accelerate from current levels would undermine the Federal Reserve's hard won credibility and lead directly to a sharp increase in long term interest rates. This would lead ultimately to a serious slow down in the economy. The best prospects for continued high levels of employment in economic policies which seek to avoid the economy's reaching a sharp, unsustainable cyclical peak. This means that monetary and fiscal policies should aim at growth in demand consistent with the 2-2.5% growth rate in the economy's capacity to produce.
3. Now when the economy is operating near peak levels of utilization is the ideal time for serious efforts at budget deficit reduction. Stabilizing growth through reduced Federal deficits is a pro-investment, pro-trade strategy. Relying on monetary policy to restrain economic growth means higher interest rates and lower levels of investment and exports. Furthermore, now when the economy is strong is the right time to reload the fiscal cannon by reducing Federal deficits so that there will be room for them to increase if another recession does come.
4. There is clear evidence that the Federal Reserve has been acting to restrain the economy over the last year. Short term interest rates have risen more than 300 basis points and the yields in on 3 year Treasury securities now exceed the yields on 10 year US Treasury securities. These indicators suggest that the economy is likely to slow down in coming months. This suggestion is confirmed by recent reports on industrial production, retail sales, and a host of other economic indicators. For the moment there is probably no need for further monetary tightening especially since it would probably push the dollar above current levels.
5. The most important thing that the Administration and Congress can do to avoid an inflationary outbreak, or the sharp rise in long term interest rates and decline in the dollar that would occur if the markets came to expect an inflation outbreak is, to respect the independence of the Federal Reserve. Both logic and experience suggest that monetary policy works best when it is insulated from day to day political pressures.

My name is Lawrence Summers. I am a Professor of Economics at Harvard University and a research associate at the National Bureau of Economic Research. I am pleased to have this opportunity to testify before this distinguished committee on the subject of the potential inflation threat to the American economy. While forecasts of our economic future are notoriously unreliable, my analysis of our current economic situation suggests five conclusions.

- * The risk of a renewed outbreak of inflation is as serious now as it has been at any time in the 1980s. With unemployment below 5 percent and capacity utilization at levels that are high by historical standards, the American economy has largely exhausted the growth opportunities created by the underutilization of capital and labor resources.
- * Previous economic recoveries have not died of old age. They have been murdered by the Federal Reserve in an effort to prevent inflation. Allowing inflation to accelerate from current levels would undermine the Federal Reserve's hard won credibility and lead directly to a sharp increase in long term interest rates. This would ultimately lead to a serious slow down in the economy. The best prospects for continued high levels of employment lie in economic policies which seek to avoid the economy's reaching a sharp, unsustainable cyclical peak. This means that monetary and fiscal policies should aim at growth in demand consistent with the 2-2.5% growth rate in the economy's capacity to produce.
- * Now while the economy is operating near peak levels of utilization, is the ideal time for serious efforts at budget deficit reduction. Stabilizing growth through reduced Federal deficits is a pro-investment, pro-trade strategy. Relying on monetary policy to restrain economic growth means higher interest rates and lower levels of investment and exports. Furthermore, now, while the economy is strong is the right time to reload the fiscal cannon by reducing Federal deficits so that there will be room for them to increase if another recession does come.
- * There is clear evidence that the Federal Reserve has been acting to restrain the economy over the last year. Short term interest rates have risen more than 300 basis points and the yields in on 3 year Treasury securities now exceed the yields on 10 year US Treasury securities. These indicators suggest the likelihood that the economy is likely to slow down in coming months. This suggestion is confirmed by recent reports on industrial production, retail sales, and a host of other economic indicators. For the moment there is probably no need for further monetary tightening. It would certainly be undesirable for monetary policy to push the dollar above current levels.
- * The most important thing that the Administration and Congress can do to avoid an inflationary outbreak, or the sharp rise in long term interest rates and decline in the dollar that would occur if the markets came to expect an inflation outbreak is to respect the independence of the Federal

Reserve. Both logic and experience suggest that monetary policy works best when it is insulated from day to day political pressures.

In the remainder of this testimony, I will develop briefly each of these points.

I. The Economy is Operating Very Close to Capacity

Figure 1 describes the evolution of unemployment and inflation during the 1980s. It illustrates clearly that the sharp increase in unemployment during the early part of the decade coincided with a dramatic reduction in the inflation rate. Since December of 1982, unemployment has declined more or less continuously without any increase in inflation. However it is also clear that while inflation decelerated in 1985 and 1986, its pace has picked up in recent months. This suggests that the economy may now be reaching the point where extra output can be called forth only by sharp price increases.

This judgment is confirmed both by looking more carefully at the behavior of wages and prices or and by examining indicators of the degree of slack in the economy. Recent PPI and CPI reports suggesting inflation at rates as rapid as 1% a month almost certainly provide a misleadingly pessimistic indication of our inflation situation. But the longer term trends reflected in Table 1 suggest cause for concern. Employment costs grew at 4.7 percent annual rate in 1988, more than 1 percentage point faster than in the previous 3 years. As a consequence of rising labor costs, and slowdown in productivity growth that always occurs at the end of expansions, unit labor costs rose at a 4.0 percent rate in 1988 up from 1.4 percent in 1987. And consumer price inflation has been running at a rate of nearly 5

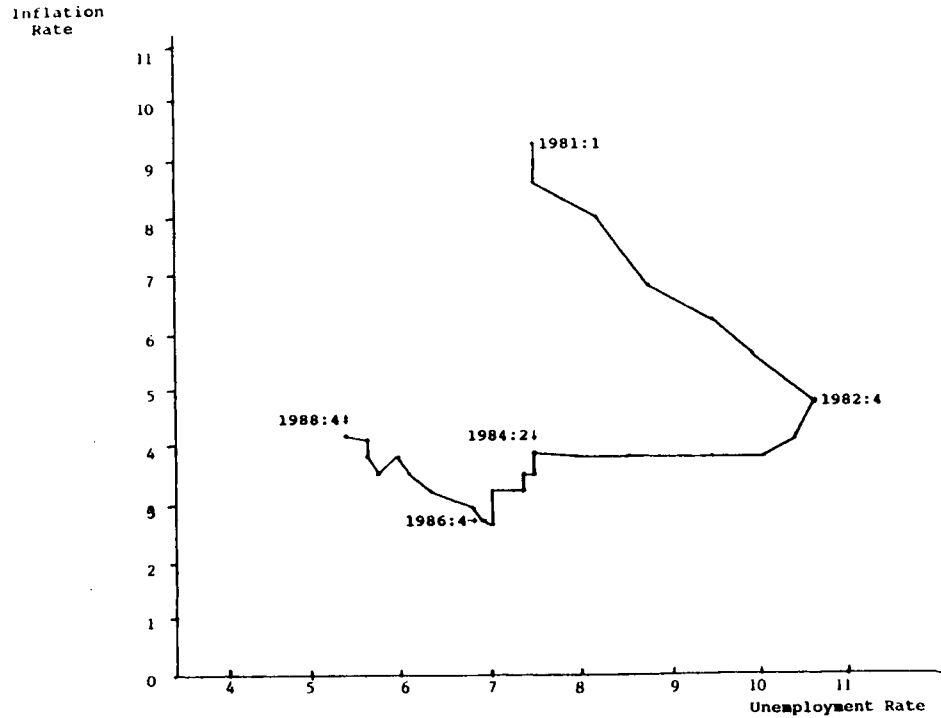


Figure 1.* The U. S. Inflation-Unemployment Loop, 1981-88

* From "U.S. and Worldwide Inflation," by Robert J. Gordon. March 14, 1989.

percent over the last 12 months, up by a nearly a percentage point from its previous level.

These increases in inflation almost certainly reflect in large part the pressure of demand rather than supply factors. They have occurred even in the face of a significant appreciation in the value of the dollar, and are not confined to any one sector of the economy. Furthermore, indicators of the level of demand relative to the economy's capacity to produce suggest that the economy is operating near capacity. As has been widely noted, unemployment is now at its lowest level since 1973. (This statistic may be somewhat misleading. Low unemployment in the late 1980s reflects primarily a dramatic decline in the unemployment of adult women. The unemployment rate for married men remains almost 50% above its 1973 level.) And inflation accelerated sharply after 1973 and in 1978 and 1979 at higher levels of unemployment. Rates of capacity utilization are now high compared with their 1979 peak and approaching their levels at earlier cyclical peaks.

These data do not imply that the economy is facing a wall where further increases in employment and output are impossible. They do imply however that further increases in output relative to capacity would be likely to coincide with sharp increases in the inflation rate. There is no sense in which the economy now has an insufficient demand problem. If anything, it has the opposite problem of overheating.

This has a clear policy implication. Unless we are willing to accept accelerating inflation, for the near term, increases in output and employment in one sector of the economy will come at the expense of reductions in output and employment in other sectors. Unlike the situation in the 1930s, or even the early 1980s, arguments for spending programs or

trade measures on the grounds that they will create jobs are not valid.

With the economy close to capacity, new demand stimulus measures will either cause sharp increases in inflation or crowd out other forms of spending.

II. Slow Growth Will be Steady Growth

No American recovery since the War has died of old age as demand petered out or inventory accumulation proved excessive. Fears that recoveries would run out of steam, like those expressed during 1985 and after the Crash have always proven wrong. Instead, recoveries have ended when they were murdered by the Federal Reserve with inflation control as the motive. This is what happened in 1958, 1967, 1970, and most dramatically in the 1974 and 1979-1981 periods.

This historical record suggests that the greatest danger to the current recovery is that the economy will reach an unsustainable peak and force the Federal Reserve to take actions which would bring on a recession. As I have already argued, the economy is now very near full employment. This means that sustainable growth can occur only at rates consistent with growth in capacity. Without structural changes in the labor market, there is little scope for reductions in unemployment, and without increases in productivity growth, there is not room for increases in output much above the 2-2.5 percent range.

Allowing the economy to grow more rapidly than this range, as called for in the Administration's economic projection, would run several risks. First, there is the real likelihood of a sharp increase in the inflation rate and an associated increase in instability. In both the late 1960s and

TABLE 1
 Growth in Wages, Productivity, and Labor Cost
 for the U.S., 1978-88 *

	Average Hourly Earnings Index	Compen- sation per Hour	Employ- ment Cost Index	Labor Product- ivity	Unit Labor Cost	Trend Unit Labor Cost	Memo: CPI
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Four-Quarter Growth Rates Ending in:							
1978:Q4	8.0	8.5	7.3	1.1	6.2	6.5	8.5
1979:Q4	7.7	9.1	8.3	-2.7	11.0	7.4	11.9
1980:Q4	9.1	10.3	9.3	1.0	8.3	8.1	11.9
1981:Q4	8.0	8.0	9.4	-0.6	10.0	8.1	9.2
1982:Q4	5.9	7.0	6.2	0.9	5.3	5.0	4.4
1983:Q4	4.0	3.3	5.5	3.5	2.0	4.3	3.3
1984:Q4	2.8	4.0	4.8	1.4	3.3	3.5	4.0
1985:Q4	3.0	3.7	3.8	1.0	2.8	2.6	3.5
1986:Q4	2.3	4.7	3.2	1.2	2.0	1.9	1.3
1987:Q4	2.6	4.0	3.3	1.9	1.4	2.1	4.4
1988:Q4	3.4	4.7	4.7	0.7	4.0	3.5	4.2

*This Table originally appeared in "U.S. and Worldwide Inflation," presented by Robert J. Gordon at the Boston Company Economic Advisors Economic Outlook Conference; London, March 14, 1989.

the late 1970s policymakers were slow to recognize the dangers of accelerating inflation. Increases in inflation were initially dismissed as random fluctuations and also attributed to special factors. There were periods when inflation rates slowed slightly and anti-inflation vigilance was relaxed. And yet, with the benefit of hindsight, it is clear that the economy was growing at an unsustainably rapid pace. In both cases, the ultimate consequence was a sharp downturn.

Second, if market participants conclude that inflation will accelerate the result will be a sharp increase in long term interest rates and a sharp decline in the value of the dollar. This is the "hard landing" that has long been feared. It would create an extremely difficult policy problem for the Federal Reserve because both inflation and unemployment rates would increase sharply if there was a loss of confidence in the dollar. Ironically, the consequence of not taking policy actions to restrain the economy, could well be market actions which restrained the economy more severely than the policy steps which were avoided. It is both the reality and the perception that inflation is under control in the United States that is crucial to maintaining smooth growth over the next several years.

III. Now is the Time for Deficit Reduction

For the short run, the Federal government has two policy tools at its disposal for controlling the level of demand in the economy—fiscal and monetary policy. At present, monetary policy is carrying the burden of restraining growth. On a cyclically adjusted basis the Federal budget deficit has actually increased over the past two years. This is

unfortunate. A healthier and more durable recovery would result if fiscal as well as monetary policy were used to restrain the level of demand in the economy. This is easily seen by comparing their economic effects.

Monetary policy affects the level of demand in the economy through its impact on interest rates. Tighter money means higher interest rates, which raises capital costs and discourages investment. A strategy of slowing the economy through monetary contraction is an anti-investment strategy. Because tighter money raises US interest rates, it also tends to raise the exchange value of the dollar reducing the competitiveness of American firms on world markets. This process has been evident in the markets in recent months as news of increased inflation has led traders to expect Fed tightening and therefore caused them to bid up the value of the interest rates and the dollar.

Monetary policy then can control growth but only by inhibiting investment and exports. Given the long term competitive problems of the United States, this is hardly desirable. Tight money has the additional cost of exacerbating debt problems of all kinds. A one point increase in interest rates means a \$20 billion increase in the Federal deficit. It adds about \$5 billion to Latin America's debt service burden. And it adds significantly to the cost of the ongoing S&L bailout.

The better approach to restraining demand in the economy is reductions in the budget deficit. Reductions in government spending, or increases in taxes which reduce private spending both restrain demand, and by reducing pressure in credit markets, reduce interest rates as well. This means that they lead to lower real interest rates, reduced financial distress and increased investment. They are also pro-competitive in that lower interest

rates would mean a weaker dollar and improved US export performance. From the point of view of stabilization policy, it makes little difference whether budget deficits are reduced via reductions in government spending or through tax increases which reduce private consumption.

There is an additional reason for favoring reductions in budget deficits as a way of controlling demand. Reduced budget deficits would leave room for fiscal expansion if another recession does come. Starting with budget deficits well in excess of \$100 billion, it will be difficult to rely on fiscal expansion to pull us out of recession. Unless we reload the fiscal cannon, the next recession is likely to be unnecessarily protracted.

IV. Demand Restraint Has Already Taken hold

The Federal Reserve has recognized the inflation risks inherent in our current economic situation. As a consequence it has permitted short term interest rates to rise by 300 basis points over the past year. This has led to a situation where the yield curve is ^{*}inverted, with short term interest rates in excess of long term interest rates. Over the post World-War II period whenever short rates have risen this much and yield curves have become inverted a recession has followed.

Changes in the financial system, notably the deregulation of consumer deposits and the securitization of mortgages, have probably served to somewhat insulate the economy from the effects of monetary policy. It would therefore be wrong to conclude that a slowdown is already guaranteed. But available indicators of economic performance suggest that the economy is weakening. These include reports on durable goods orders, industrial

production, vendor performance and employment. The best statistical estimates now suggest that the chances of a recession beginning by the end of the year are 1 in 3 or slightly greater.

Under these circumstances, there is no current need for further policy actions to restrain growth. Most likely, actions that have already been taken will be sufficient to slow growth and to cause some reduction in inflationary pressures. However, the Federal Reserve should and no doubt will monitor both inflation and growth closely as this prediction could easily prove incorrect.

There is another argument for avoiding further monetary tightening at the present time if this is possible without running undue inflation risks. Higher interest rates would mean an appreciation of the dollar. Currently the dollar is well above levels that are consistent with the elimination of trade imbalances. The strength of the dollar over the past year has already stalled progress in reducing the trade deficit. Further increases in the dollar's value would mean an increasing trade deficit, and would renew protectionist pressures. It would also increase American indebtedness and so make the economy more vulnerable to a loss of foreign confidence.

The best policy for the Federal Reserve at the current time would be to maintain interest rates near current levels while watching for signs of either an inflationary outbreak or a sharp slowdown in real economic performance. This should be consistent with a steady or declining value of the dollar. The Fed's job would be made much easier if meaningful action were taken to bring down the budget deficit. Such action would ease pressure on interest rates and the dollar and reduce the risk of an inflationary outbreak. Unfortunately, it does not appear likely.

V. The Independence of the Federal Reserve Should be Protected

As I have already stressed, it is important for economic stability that market participants retain confidence that the Federal Reserve will act to keep inflation under control. If confidence is lost, the result will be a sharp increases in long term interest rates and declines in the value of the dollar. This requires that both the Administration and the Congress respect the Federal Reserve's independence.

There are sound reasons why the Federal Reserve has some degree of structural independence. Unexpectedly expansionary policy is always attractive in the short run. It means increased output and only minor increases in prices. On the other hand, the expectation of expansionary policy is undesirable because it leads to higher interest rates and more rapid inflation. This conflict provides a rationale for preserving the independence of the monetary authority. An independent monetary authority can maintain relatively favorable inflation expectations if market participants can be convinced that it will not yield to the short run temptation to permit excessive inflation. This credibility is much more likely if the monetary authority is not subject to direct political control.

This is not just a theoretical point. As Table 2 illustrates, there is a very strong tendency for countries with independent central banks to have lower inflation rates than countries where monetary policy is subject to direct political control. Preserving the independence of the Federal Reserve is essential if American inflation expectations are to remain in check.

Table 2 INFLATION, CENTRAL BANK INDEPENDENCE AND GOVERNMENT SPENDING (1973-1985)*

<i>Countries</i>	<i>Degree of Central Bank Independence (1)</i>	<i>Average Inflation Rate (GNP Deflator) (2)</i>	<i>Rate of Government Spending Over GNP (percent) (3)</i>
Italy	1/2	16.1	35.6
Spain	1	15.2	26.2
New Zealand	1	12.7	36.4
United Kingdom	2	12.3	37.3
Australia	1	10.5	28.4
France	2	10.2	39.1*
Sweden	2	9.8	38.3
Denmark	2	9.1	39.7
Norway	2	8.8	38.3
Canada	2	8.1	23.1
United States	3	7.2	21.7
Belgium	2	6.8	36.0
Netherlands	2	5.8	35.4
Japan	3	5.0	16.2
Germany	4	4.1	29.3
Switzerland	4	4.0	9.0

Sources: (1) Bade-Parkin (1985), Masciandaro-Tabellini (1988); Fair (1980).

(2) Hansson (1987). Original source: International Monetary Fund, IFS.

(3) International Monetary Fund, IFS.

*ratio computed over GDP.

*From "Macroeconomics and Politics," by Alberto Alesina
in NBER Macroeconomics Annual 1988 p. 41.

This point may be made in another way. During almost every Administration there have been periods of conflict between the Administration and the Federal Reserve. Invariably, the Administration has preferred more expansionary policy. The same is true of conflicts between the Congress and the Federal Reserve. It follows that if elected officials had been consistently able to control monetary policy, more money would have been printed and more inflation experienced over the last 30 years. In all likelihood, this would have meant higher interest rates and lower levels of employment as well.

Representative HAMILTON. Mr. Summers, you don't have much confidence in the politicians on monetary policy, do you? You put it very euphemistically that you wanted to keep democracy at a distance.

Mr. SUMMERS. I think that's right. I think that perhaps a more charitable way of putting it would be that I don't have a lot of confidence in the voters to treat appropriately the politicians who do what is best for them.

Representative HAMILTON. Mr. Jordan, I want to make sure I heard you correctly. I jotted something down up here. There is nothing monetary policy can do about inflation.

Mr. JORDAN. Current policy, this month or next month cannot affect current inflation rates.

Representative HAMILTON. Because of the timelag.

Mr. JORDAN. The lags between these actions. The median lag that economists have talked about over the years is something like 24 months. Some people think it's longer than that, and some people think recently it's shorter, but we do agree that the lag on inflation is quite long, while the lag on output and employment is much shorter.

Representative HAMILTON. Now the administration is projecting about a 3½-percent real growth in 1989, and Mr. Greenspan I think is talking about slowing growth to about 2½ percent, and apparently he wants to achieve that with a monetary policy tightening up. Is that a policy you all support?

Mr. JORDAN. The Fed operates on nominal magnitudes. Monetary policy is a nominal kind of a thing. So it influences nominal GNP spending. The split between total spending in the economy—usually measured by GNP—between prices and output is not something that the Federal Reserve can control. I put some charts in my prepared statement. The last set of my charts show the relationship between money growth—the Fed's current favorite measure is M2—versus gross domestic purchases, the amount of spending going on by American households, businesses, and the Government sector.

Representative HAMILTON. Which chart are you referring to?

Mr. JORDAN. On page 5 in the upper left-hand corner. It's the growth of the M2 money supply plotted against the growth of gross domestic purchases, and you can see that they have a tendency to move very closely together.

There has been a substantial deceleration now in recent monetary growth, and I think that that's going to be followed by a deceleration of inflation, but the Fed's dilemma is they set an objective really of nominal GNP this year of about 7 percent and they hope that that consists of about 3 percent output and 4 percent prices.

But suppose the inflation rate is coming in higher, like the first quarter numbers, 6 percent, and output after the first quarter comes in much lower, say 1 percent or negative. Then should the Fed ease policy to fight recession or tighten policy to fight inflation? The correct answer is: Do neither, because they don't have that ability.

Representative HAMILTON. What ought they to be doing right now?

Mr. JORDAN. I think that they need to get reserve growth up. They have had very, very tight policies since last summer. We have had 10 months now of contracting bank reserves. All measures of money—M1, M2, M3 and the monetary base—have decelerated very sharply. As has been mentioned, short-term interest rates have been increased over 3 full percentage points and the yield curve is inverted.

Representative HAMILTON. So they ought to back off?

Mr. JORDAN. I think that they need to get reserve growth up.

Representative HAMILTON. I don't understand that. What does get reserve growth up mean?

Mr. JORDAN. The reserve growth has to be positive.

Representative HAMILTON. Let's put it in terms of tightening or loosening so I understand it.

Mr. JORDAN. It's looser in the sense of reserve growth. I'm concerned about the interest rate implication though. If it's perceived that the Fed has caved in to a sentiment in the country for easier money because of problems in the thrift industry, the energy sector, LBO financing, Latin America debt or whatever, they run a risk of triggering an increase in inflation psychology which would cause long-term interest rates to go up. That would hurt investment spending and that would hurt home ownership.

The Fed walks a very fine line in here, and there are a lot of people that believe that they will inflate because they should inflate because of all of these problems in the economy. What's remarkable is they raised short-term interest rates 3 points while long-term rates stayed stable compared to a year ago.

Representative HAMILTON. Mr. Summers, do you want to comment on that?

Mr. SUMMERS. I think that's about right. There is never an advantage to announcing that you're moving in an expansionary direction. It's sometimes advantageous for me to let students postpone their exams, but it's never advantageous to announce in advance that students are going to be allowed to postpone their exams. It's exactly the same principle with monetary policy.

I think the Federal Reserve is well advised at the current time to ease up a bit, but I think that there is danger of making a big announcement of easing that would lead to a feeling that Federal Reserve had given up on fighting inflation, which would be very undesirable.

Representative HAMILTON. Is the target that he set, is that a good target?

Mr. SUMMERS. About 2½ percent real growth and 7 percent nominal growth is a fine target. You can argue about whether 6½ or 7½ percent was better, but since they can't hit it within more than a percent or two, it's sort of a futile argument. They are doing the right thing.

Representative HAMILTON. Can you hit that growth rate of 2 or 3 percent without a reduction in the budget deficit?

Mr. SUMMERS. I think you can, but I think the risk of losing control is considerably greater.

Representative HAMILTON. With the big deficit?

Mr. SUMMERS. The risk is greater with the big deficit than it would be without the big deficit, but I think my best guess would

be right now that they are going to hit somewhere between 2½ and 3 percent. I think the risk is that 2½ to 3 percent won't be enough to bring down inflation, and then they will have to hit 1 percent. They will have to try to hit 1 percent next year, and when they miss we'll have a serious recession as the risk.

Mr. JORDAN. I'm very troubled by the emphasis on real output growth because whether my forecast is correct, that it's actually going to decline this quarter a small amount, or others' that it's going to be a very small positive, or others' forecasts like the administration—

Representative HAMILTON. You're predicting a decline?

Mr. JORDAN. Two quarters of small negative GNP.

Representative HAMILTON. Beginning when?

Mr. JORDAN. This quarter. The first quarter, which will be released in a few days, is going to be a very large increase, but most people understand that as having been the effect of the reversal of last year's drought on the statistics. The current quarter is going to be a very sharp deceleration at best. But suppose it comes in low, 1 percent or less, or a negative as I have.

If it then is viewed that the Fed is overanxious to prevent a further decline or a severe recession and eases policy substantially trying to hit a real growth objective in the short run, they run the risk of damaging the anti-inflation credibility they have been so carefully building up.

If that happens we could run the risk of a pattern like 1980 and 1981 when we had a brief recession in the spring of 1980—when President Carter put on the credit controls the economy went into a free fall—then they ripped the controls off, hit the accelerator hard—we were in a Presidential election year—we exploded for 6 months and then we couldn't sustain it and we became sort of like Wiley Coyote in the "Road-Runner" cartoons and we went into a free fall after that.

Representative HAMILTON. Mr. Popkin, you may want to elaborate on this some, but your testimony indicates that even if the Fed succeeds in slowing the economy to a growth rate of 2 or 2½ percent, it's not going to reduce the rate of inflation.

Mr. POPKIN. That's right, Mr. Chairman. As a matter of fact, I should first point out that I also have a forecast of a mild decline in real GNP in the second and third quarter, and you probably have the only two economists in the country who have that scenario before you today because this is clearly not a consensus forecast. But I don't want to quarrel whether it's actually going to be minus 1 percent flat or slowing to 1 percent.

I do think that the lagged effects of inflation coming through are not going to be resolved by this slowdown, and I guess I disagree with Larry Summers that we can orchestrate a growth rate say of 2½ percent designed to parallel the growth rate of supply when we are at already high levels of utilization. That's a very delicate balancing act that I would say if it goes in any one direction it's going to be toward an acceleration of inflation. Now I think the numbers that have come in this year so far—

Representative HAMILTON. That's a delicate balancing act by whom, by the Fed?

Mr. POPKIN. Let's assume that the Fed could achieve 2½ percent—

Representative HAMILTON. But by the Fed, right?

Mr. POPKIN. Yes. Let's assume that the Fed could achieve 2½ percent growth and that it matched the rate of growth of supply, that in my mind does not assure that inflation won't accelerate further because those are only aggregate numbers. They don't take into account bottlenecks that may exist throughout the economy which could push some prices up faster and they could spill over.

I think to be safe we have to not only slow the rate of growth of supply, but I think we have to back down some because the numbers on inflation that have come in so far this year make it clear I think to almost every one that this year's CPI is going to go up to almost 5½ percent. That's a full percentage point acceleration over last year.

I think that unless we back away from these higher levels of capacity utility we may in fact have another full percentage point of acceleration in store for us in 1990, and that I think indeed would bring on the sharp recession that Jerry Jordan is concerned about.

Representative HAMILTON. You talk in your statement as if we are going to have pretty good inflation for the rest of the decade.

Mr. POPKIN. I think so.

Representative HAMILTON. What do you mean, 5, 6, and 7 percent?

Mr. POPKIN. I think it stands a good chance of looking like the second half of the 1970's, the period between those two OPEC shocks.

Representative HAMILTON. Do you agree with that, Mr. Summers?

Mr. SUMMERS. I'm slightly more sanguine than Joel Popkin is. Where we all agree on this panel is that we are at or beyond capacity. There is no capacity left, and we may be beyond capacity. If we are beyond capacity and we try to keep going beyond capacity, then I think we all agree that the consequence isn't just higher inflation, but it's steadily accelerating inflation, and how much inflation accelerates each year will depend upon how much beyond capacity we are.

I'm cautiously optimistic that we are right about near capacity and therefore we can keep growing in a sustainable way. I think it's extremely unlikely that that guess is wrong in the direction that there is more room to expand.

Representative HAMILTON. You don't agree with their projections that we're going to have a deceleration here in the next quarter or two quarters?

Mr. SUMMERS. I think the quarter-to-quarter numbers have a lot of bounce in them having to do with inventories and having to do with the statistical treatment of the drought and so forth, and frankly they follow the quarter-to-quarter numbers more closely than I. So I wouldn't presume to question their judgment.

I think the question is whether the underlying rate of growth smoothing over four quarters, what rate it's running at, and I guess I think that my guess continues to be that that's running somewhere between 2 and 3 percent, which is where it should be

running. So I'm a little more optimistic in some sense on both than they are.

Representative HAMILTON. Congressman Upton.

Representative UPTON. Thank you.

Mr. Jordan, Milton Friedman, when we talk a little bit about some of these lags, suggested that the impact and changes of monetary growth generally were based on about 6- to 18-month lags, and you've just indicated that you thought it was 24 months. Why is it taking so much time for this instead of getting them a little shorter that they are actually increasing?

Mr. JORDAN. Well, statistical studies over the last 40 years now have generally said that the effect of monetary impulses on output and employment is just two or three quarters, a 6-month or a 9-month period, but that the average lag of the total effect of monetary impulses on inflation, it may start to work as soon as 6 months, but it still may be working beyond the 18 months.

I'm not sure whether Professor Friedman's reference to the 6- to 18-month lag was really the total effect or just sort of how most of the effect is distributed. It starts as early as 6 months maybe and it builds up to 18 months and maybe tails off after that.

I'm persuaded by the results showing a 2-year average, and I have had the forecast for going on 2 years now that inflation would accelerate in late 1988 or early 1989 and as a result we would have a recession. My forecast in October 1987, before the stock market crash, was that we would have a recession beginning in the spring and summer of 1989.

The logic was simply that inflation by then would start to build up, it would pass some threshold of acceptability to the public, and the Federal Reserve would tighten in response to this accelerating inflation. The shortrun effect would be to produce the worst of all worlds: prices still going up because of much easier earlier policies and output and employment going down because of much more recent restrictive policies. I think that that's the environment that we're trapped in.

The right time to be concerned about the current inflation was back in 1985 and 1986 or the early part of 1987, but inflation numbers were quite low at that time because of the drop in oil prices partly. So you couldn't get a good conversation going about inflation.

I am worried about something that Joel Popkin referred to—that the threshold of acceptability has notched higher and higher over time. There was a time in this country where 4 percent inflation was totally intolerable, and when you pushed up toward 4 percent you got a policy response. That's not true any more. You have to be threatening 6 percent—you have to be above the 5 percent level and intending to push higher—before you get a response.

It has also been true that unemployment at one time, the objective was 4 percent, and now it seems to be that as long as we are below 6 percent people seem to be comfortable.

I'm not happy with either one of those two conclusions. I think it's correct as far as what the public is doing, but I'm not comfortable with it. I don't think that we do have a capacity constraint problem in the country, and it's a question of how fast can we

grow. There is a problem if the Fed tries to force the economy to grow faster, and its natural policy tends to be procyclical.

But, in the longer term sense, the economy will grow faster on average if we have less inflation, and if we tolerate higher inflation, then we are going to grow more slowly. That has been a worldwide phenomenon. The high-growth countries in real terms are always the low-inflation countries, and the high-inflation countries are the slow-growth economies worldwide.

Representative UPRON. You indicated that you had predicted prior to the stock market crash in October that there would in fact be a recession beginning as early as this quarter or probably later in the spring or early summer. Is that where your forecast is as well?

Mr. JORDAN. Yes, it is. Larry Summers uses the catsup bottle analogy. Mine is one from a German central banker that inflation is like toothpaste. Once it's out of the tube it's hard to get back in. So it's better not to squeeze too hard in the first place.

I thought monetary policies were excessively stimulative in 1985 and 1986. I understood why—that we wanted to drive the dollar down and we wanted to reduce the trade deficit and we wanted to help the smokestack America industries in the middle part of the country—but now we're paying the price for those actions and there is really not anything that anybody in the short run can do about it.

Representative UPTON. What kind of economic changes, whether it be inflation or unemployment, would we want to look at in the next couple of months for you to change your mind? What statistics would change your mind relative to your prediction on a recession as early as later on this spring?

Mr. JORDAN. Well, if we see both in the current quarter and the third quarter, very strong real output growth, say 3 percent or above, coupled with inflation measured by the CPI or some other measures moving up into the 6 or 7 percent range on a sustained basis, then I will have to change my basic view.

There is in the Wall Street investment banking community a boom-bust sort of a scenario that there is a tremendous amount of inflationary momentum building up in the economy from past policies—because of exchange rates, because of a wage-push type phenomenon—and that inflation is going to be very, very strong this year—high single digits—and interest rates are going to rise sharply higher. One major investment banking firm has 11 percent government bond yields by Thanksgiving, an increase of 2 percentage points. Then they have a crash landing in 1990 as a result of the Fed responding very strongly to this very rapid real growth in inflationary momentum. If I saw something like that unfolding I would worry about a crash landing in 1990.

Part of my view is that inflations are caused by prior excessive stimulus. I know what causes my hangovers. It's getting drunk. It's not the stopping drinking that causes the hangover. And once you have overstimulated you're going to have to have at least a mild hangover. So I guess I should say my mild recession this year is a hopeful forecast because I think that the alternative—a delayed, deep and long recession next year—is much, much worse.

Representative UPTON. Thank you.

Representative HAMILTON. I get the impression in listening to you that you all accept the premise, or maybe you don't, that it's perfectly OK to use the Fed for finetuning the economy and fiscal policy.

Mr. JORDAN. I don't think it's good to use the Fed for discretionary finetuning in a procyclical—

Representative HAMILTON. That's what the Fed is doing now, isn't it?

Mr. JORDAN. Well, they are forced to in part because of the fiscal situation, and I would like to reemphasize something Professor Summers mentioned, but come at it in a different direction.

Representative HAMILTON. I understand that. I understand that the Fed is put in a tough spot because we're not handling the fiscal side well, but given that set of circumstances, is it the correct thing for the Fed to try to finetune the economy? You said you agreed with Fed policy basically a moment ago. They are trying to finetune it, aren't they?

Mr. JORDAN. Well, it's sort of an anticipatory finetuning. It is different under Chairman Greenspan than it was under his predecessors, but it still has too much discretion in it for my taste. Reserve growth over the last 10 months has been negative and they've been too tight, too long. I would say that you should not hit the accelerator now, and then hit the brake, and back and forth, but rather provide a rather steady growth, positive growth of bank reserves and money and credit and don't starve the economy on the one hand, but don't jam the accelerator either.

Representative HAMILTON. And do that without regard to fiscal policy status?

Mr. JORDAN. Well, that's very difficult because, as Larry Summers mentioned, if you have the budget deficits, and the way I would come at it is monetary policy is a fiscal instrument. It's a way to finance government. If you have an imbalance in the fiscal accounts, the deficit spending and the growth of real debt of the Government sector, then you raise real interest rates over time. That causes society to shift its resource utilization away from capital formation toward current consumption, as we saw through the 1970's. It slows the growth of the standard of living, and that becomes unacceptable. So you get political pressure on the central bank for easy money, and that produces inflation.

So I come at it a different way I think, but I come to the same conclusion that the fiscal imbalance forces monetary policy to be more inflationary than most of us would like, and it's going to be very difficult for society to have price stability or even very, very low inflation if you don't have fiscal discipline.

Representative HAMILTON. How about Mr. Popkin and Mr. Summers?

Mr. POPKIN. I don't think the Fed should be used for finetuning.

Representative HAMILTON. Do you think that's what they are doing now?

Mr. POPKIN. I do. I think that that finetuning is in this case merely an outgrowth of the diversity of opinion within the Board. Federal Reserve policy is made by the Federal Open Market Committee, which, as I'm sure you've read, there is a diversity of views

there. It's really policy made by a committee and not by an individual.

My own reaction is, and I certainly used to favor discretionary Federal Reserve policy, and I don't come at this from any dogmatic point of view on how economic theory works at the macro level, but it does seem to me that given the amount of discretion that the Fed has had, it hasn't managed the economy all that well, and simply on practical grounds I certainly would not disfavor any kind of policies which would take some of the discretion away from the Fed in favor of a more disciplined set of rules.

Representative HAMILTON. Mr. Summers.

Mr. SUMMERS. Finetuning is what you call something you don't like. I think that there is no alternative to making monetary policy on the basis of the information you get and when you get new information on fiscal policy, on exchange rates, on new statistics and letting it influence the monetary policy you have. Tying your hands and going on autopilot and we're going to set some number no matter what happens doesn't seem to me to be the right way to write a monetary policy.

Representative HAMILTON. Is that what Mr. Jordan is advocating?

Mr. SUMMERS. I don't know. I doubt that that's the language he would use to describe his position. There are many economists, Milton Friedman certainly, who would advocate a rule. We're going to make the money stock grow or we are going to make reserve growth be at a constant rate and whatever will happen will happen, but we won't try to get involved on a month-to-month basis. That would be a poor idea, in my view.

Representative HAMILTON. Should we be more concerned about inflation or recession right now?

Mr. SUMMERS. I think you should be more concerned about inflation than about a recession.

Representative HAMILTON. Do you agree with that, Mr. Jordan?

Mr. JORDAN. I think that the two go hand in hand, that if you tolerate the inflation on the front end, you're going to have a recession, and that the inflationary seeds that were sown have caused the risk of recession and that the cycle wouldn't be coming to an end, in my view, had we not allowed the inflation rate to get up too high a level.

Mr. SUMMERS. But, Mr. Jordan, we can come to some agreement. I mean if the Congress and the Fed decide that they think inflation is the main problem, then we'll act in a way that is much closer to the way that you would like them to be acting than if they decide that a recession is the main problem.

If deciding that a recession is the main problem means deciding that we should therefore move policy with a strongly expansionary thrust, I don't think that's what you're for.

Mr. JORDAN. No, but I'm worried about the sort of teeter-totter effect that we had for a period in the Phillips curve era where we would focus on inflation for a while until the unemployment rate was too high, and then we would focus on unemployment until inflation was too high, and the fulcrum on which this whole contraption was setting was going up, and it's that kind of back and forth.

The kind of finetuning I thought was most damaging was what I tended to characterize as a blind driver that listens for gravel on one side of the road, lurches the wheel to the other side until they hear gravel on the other side, and back and forth and back and forth.

Representative HAMILTON. You fellows have some great analogies here today, toothpaste tubes and catsup bottles. [Laughter.]

If you talk to my colleagues over here on the floor of the House, they are going to be saying now that we could well afford to have a little inflation if that permits us to avoid recession. I mean that would be the view, wouldn't it, Congressman Upton, now generally speaking?

[Representative Upton nods affirmatively.]

Representative HAMILTON. Is that a bad attitude for us to have?

Mr. JORDAN. Yes.

Mr. SUMMERS. History is that that is the attitude your colleagues had between 1965 and 1980, and if you like the outcome, then you like the attitude, and if you didn't like the outcome, you worry a little about the attitude.

Representative HAMILTON. Mr. Summers, you were indicating that unit labor costs have accelerated with productivity rising at a rate of less than 1 percent, and that's going to put pressure on producers to raise prices.

None of you, I don't think, have said anything about wages moving up here and that pushing inflation up. Is that correct? Do I read you correctly and, if so, why aren't we getting wage push here?

Mr. Popkin.

Mr. POPKIN. I think that we have—

Representative HAMILTON. Excuse me. Let me add one other thing into the question. We have had very sharp increases not so much on the wage side, but on health benefits and that sort of thing which has pushed up the cost of doing business of course. Why isn't that pushing us toward higher and higher inflation? Why don't you mention that?

Mr. POPKIN. I think a substantial amount of the current acceleration of inflation from the 4's now into the 5's really reflects the underlying movement of wages. Wages went up 3.3 percent in 1987 while the CPI was going up 4.4 percent. So workers lost 1.1 percent in real wages. Last year they narrowed the gap within several tenths of a percentage point, and now inflation has moved ahead up to the 5's.

At the end of this month the Bureau of Labor Statistics will release something called the employment cost index which measures increases in wages and those benefits that you—

Representative HAMILTON. Is that inflation that we are getting then a wage-push inflation?

Mr. POPKIN. I wouldn't characterize it as a wage-push inflation. I would interpret it more as a reflection of the strong demand for labor which has pushed the unemployment rate down to 5 percent. In other words, if wages go up because you demand more labor, I don't regard that as wage-push inflation. I regard wage-push inflation as something that workers can promulgate on their own, which I think was a situation that some used to characterize some

of the 1960's and 1970's when certain unions were very strong and led wage activity.

But I do think that wages are going to move up, and that really is the difficulty. That's what makes this inflationary process so intractable to policy. It's the fact that now you have prices feeding back on wages, and wages back on prices, and how do you intervene there unless you push the unemployment rate up dramatically?

Representative HAMILTON. You characterized us as in a generalized inflation period, right?

Mr. POPKIN. That's right.

Representative HAMILTON. What does that mean? I mean what kind of inflation is a generalized inflation?

Mr. POPKIN. Generalized means that wages and prices more or less across the board are going up.

Representative HAMILTON. But that's not wage push?

Mr. POPKIN. No.

Representative HAMILTON. Is it demand?

Mr. POPKIN. I think so.

Representative HAMILTON. Is that what we're in, Mr. Summers, demand inflation?

Mr. POPKIN. I was just going to say I think that 1988 was a stronger year in terms of economic activity than it should have been, and that's what has put us in this stew.

Representative HAMILTON. Did you have any comment to make, Mr. Summers or Mr. Jordan, on the wage situation? Do you agree with what Mr. Popkin said?

Mr. SUMMERS. I think that that's right. If you look at table 1 in my prepared statement you can see that the sharpest acceleration is in column 3, which is the employment cost index, which includes all the fringe benefits that you referred to.

I think there is always a temptation to blame inflation on this tax hike or this commodity change and so forth. I think that there are enough signs and that they are pervasive enough that Mr. Popkin's characterization that it's a general phenomenon reflecting the level of demand in the economy is probably the correct one.

Representative HAMILTON. Let me ask you about the impact of the world economy on our inflation rate. We had a witness testify here some weeks ago that the world is characterized by excess supply and overproduction and this is one of the constraints on how much U.S. wages and how much U.S. prices rise, and it identifies the world situation then as an important one in constraining our own inflation.

Do you all agree with that? Is that acceptable?

Mr. JORDAN. No, I don't agree with that.

Representative HAMILTON. Why not?

Mr. JORDAN. Well, in the last year we have seen Japan and all of the European economies grow very, very rapidly. Back in the early 1980's when the dollar was soaring on foreign exchange markets we saw a lot of commodity prices fall sharply—metals prices, agricultural commodities and all sorts of prices fell in dollar terms—but the foreign currency prices of those things were skyrocketing and therefore the demand was falling and that was part of our

problems in the middle part of the decade in the Middle West and Great Lakes regions of the economy.

Now we have had a long period of the dollar falling on foreign exchange markets, and all of these internationally traded commodities are denominated in dollars. So the foreign currency price has been falling. So their demand has been increasing substantially. Japan grew almost 6 percent last year, England grew over 4 percent, the fastest growing economy in the Common Market, and the rest of Europe have very, very strong growth, but part of the reason that they did so is in their local currency terms internationally traded commodities got cheaper.

I have some charts attached to my prepared statement where I show inflation rates of other countries. All of what is called the G7 are shown in two charts there at the top of page 4, and our inflation rate tends to be one of the higher ones, but they are all trending up in the last couple of years.

My guess is that this year our inflation rate will decelerate after the first quarter and fall next year, while the inflation rates of other countries, most other countries, will trend higher.

Representative HAMILTON. Do world inflation rates tend to move together?

Mr. JORDAN. They tend to in part because of the key currency phenomenon. The dollar is the world's international reserve currency. So when we have low inflation, the other countries may or may not. If they want to have a higher inflation than we do, then their currency is devalued or depreciates over time relative to our currency and they can live with it, we can live with it.

The opposite is not true. When the United States embarks on a high-inflation policy, if the other countries try to maintain a lower inflation rate than we do, their currency appreciates or it has to be revalued upward. They view that as losing export competitive advantage, that causes political pressure in their system from their exporting industries to come back on the central bank through the political process and say we want easier money, intervene, stimulate, do something.

So they feel compelled to inflate along with us. It's what they all exported inflation or from their vantage point imported inflation.

Representative HAMILTON. Does inflation in the rest of the world, and I guess by that I mean the big industrial powers, does that have an influence on the U.S. inflation rate?

Mr. JORDAN. It has a constraining effect in a situation like 1987. In 1987 the United States was still embarked on an easy money, progrowth type policy to drive the dollar down. The Germans and the Japanese said enough is enough. We don't want to buy your dollar denominated assets such as your Treasury bonds and we're not sure about all the rest of this stuff. So Secretary Baker was saying to Germany and Japan, "you ease your monetary policies," and they were saying back to the United States, "no, you tighten up your fiscal policies and cut your budget deficit." The two went eyeball to eyeball and the stock market crashed.

So in that sense they were able to force us to tighten up, and the Fed did tighten very sharply as a result of all of that, but it was forced on us because of the international conflict outside, and that's not sustainable in the long run.

Representative HAMILTON. I understand, and that's an interesting comment to me. So that the stock market crash, in your view, was brought about because of a conflict in macroeconomic policies of the major economic powers?

Mr. JORDAN. The last week before the crash there were a number of events that people cite as contributing factors, but the one that was most disturbing to financial market participants was Secretary Baker at the time leaning very hard in open public commentary on the Germans, and Finance Minister Stultenberg responding that they were not going to cave in to our pressure for easy money.

Our interest rates had risen 2 full percentage points up to that point, and yet the stock market looked high. Analysts looked at it and said something has to give. Either equity yields have to fall or bond yields have to fall, and it was equity yields.

Mr. SUMMERS. I think that there is a simpler way to think about the relations between the international inflation rates and ours. I don't think the international inflation rates have much to do with our inflation rate, and you can see that by looking back to my table in my prepared statement where you see that Italy has the highest inflation rate and Germany on its border has the lowest inflation rate.

So as long as exchange rates are flexible, which they weren't always, but are now, there is no reason why inflation in one country needs to have much to do with inflation in another country.

The really important international linkage I think comes through the exchange rate, and what that is telling you is that there is a tendency for the dollar's declining to be associated with increased inflation.

If you think as I do that sometime over the next few years the dollar is going to have to decline if the U.S. trade balance is ever to balance again, then that is an additional reason for being nervous about inflation.

Representative HAMILTON. We keep hearing economists say that the dollar must decline and that's the only way the trade balance is going to get straightened out, but the dollar seems to be going up.

Mr. SUMMERS. And the trade balance seems not to be straightened out.

Representative HAMILTON. The trade balance is not improving.

Mr. SUMMERS. I was careful to say that what I think economists can tell you with a fair degree of conviction is that if you just look at the prices of exports and imports we won't have balanced trade at the current level of the dollar.

What I think economists aren't very good at telling you, and it's very hard to judge, is how long we'll be able to keep borrowing from abroad, and it may well be that when office buildings sell for 50 times what they rent for in Tokyo, there are strong reasons for a lot of money to come here for a very long time, and that may continue. So I wouldn't want to predict an imminent decline in the value of the dollar, but in the long run either we will be like Canada was after World War II and borrow on a permanent basis, or the dollar will decline, and I think the second of those is more likely.

Mr. POPKIN. I just wanted to add a footnote to what has been said, a footnote in the sense that we have had a great deal of benefit in terms of keeping our own inflation rate down by the competition provided by countries like South Korea and Taiwan in United States markets, and those countries are now undergoing a great deal of labor unrest which is pushing their wages up very rapidly.

In a circumstance where they are being discouraged from expanding their share of U.S. markets, it seems to me that they will respond by raising the prices of the goods they send over here and that is going to add to our inflation rate, both per se and by taking place in an environment that lets domestic producers raise their prices in tandem. So we are not going to get quite the competitiveness effect that we have benefited from in a certain sense over the last several years.

Representative HAMILTON. I have some figures here on productivity and I just want you to explain them to me.

Output per hour rose 12.1 percent between 1977 and 1988 while real compensation per hour rose only 2.2 percent. Now if you had that kind of increased productivity, why didn't you get a rise in real compensation?

Mr. POPKIN. A first response to that would be that period of time encompasses the second OPEC shock and there was a big drain of real resources outside of the United States to the OPEC countries. That's part of the reason.

Representative HAMILTON. From the worker standpoint, if a worker increases his productivity he has a right to think he ought to get compensated, right?

Mr. POPKIN. But he has to pay a lot more for his gasoline in real terms and there goes his benefit, and I think there are also some other aspects related to the relative price of capital and labor, some general points, but if you start back in 1979, I think that second OPEC shock took a lot of real income out of this country.

Representative HAMILTON. Mr. Summers.

Mr. SUMMERS. I think the other half of the answer to that question is the problems that used to exist in the Consumer Price Index that caused the Consumer Price Index to be changed in the early 1980's which led the level of the mortgage interest rate to get much too much weight in that index and so overstated inflation in the late 1970's and at the very beginning of the 1980's.

A simple way to say it is the fact that the mortgage interest rate was going up was another factor that was showing up as higher prices and was leading to that real wage figure being so low. It was a little illusory because the mortgage interest rate was going up, but it was also true that people's houses were going up in value very fast because of the same inflation, but that didn't ever show up.

Representative HAMILTON. Let me ask you this. When we are trying to judge the inflation rate, is the Consumer Price Index or the Producer Price Index the better index for us to look at? I don't know that I understand the significance of those.

Mr. SUMMERS. Is it being unresponsive to suggest yet a third index?

Representative HAMILTON. What's a third index?

Mr. SUMMERS. The price index that goes with the GNP, the so-called GNP price deflator.

Representative HAMILTON. Is that the best one to keep our eye on?

Mr. SUMMERS. The fixed weight GNP price deflator would be the one that I would focus on at a point in time.

Representative HAMILTON. Mr. Popkin.

Mr. POPKIN. If I could just add something because I used to be responsible for putting out both the Consumer Price Index and the Producer Price Index. So when you say the GNP deflator ought to be used, that is put out by the Commerce Department, I should respond.

I agree with you, and as a matter of fact those figures that you cited on real wage growth may depend importantly on what price index was used to measure real wage growth. If the chairman is looking at real wage as defined by the PCE deflator, he doesn't have that problem because that never had interest rates in it to begin with.

Representative HAMILTON. Well, do you agree that the GNP deflator is the thing to keep your eye on even though it's produced by the Commerce Department?

Mr. POPKIN. I think with all due deference to the Commerce Department I would stick with the CPI, and the reason I would is because that's the index that best measures what the consumers are experiencing in the marketplace and I imagine that that prompts people to write letters to Congress or not write them. So I think from a policy point of view the Consumer Price Index is a much more important one to watch.

Mr. JORDAN. If I could comment on both of these points. My first set of charts shows you some Consumer Price Index data plotted with the Producer Price Index. There has been a tendency in recent press reports to say the PPI went up sharply and therefore the CPI is going to go up—

Representative HAMILTON. They move pretty closely together, don't they?

Mr. JORDAN. They do, but there is no lead or lag there. There is no tendency for one to cause the other to go up or down. They tend to move together. So it's not correct to say that if a PPI jumps up it's going to cause the CPI to and vice versa.

Representative HAMILTON. What happened in 1974 there when you had that big jump in the Producer Price Index?

Mr. JORDAN. That was the oil price increase, energy prices, and it fed into the CPI also at that time, but it exaggerated the movement of the PPI just because of what is in the basket. But those are very important periods to analyze. The Consumer Price Index at that time not only included home prices, and mortgage rates was mentioned, but also home prices, the actual price of the house. Well, if the price of people's houses go up, they feel like they are richer and increase their consumption by taking out home equity loans or something like that.

Yet we were calling it inflation at the time, and if you take that and you deflate nominal wages by a measure that has home prices and mortgage rates in it, it appears to reduce real wages at that point.

We at that time had a large number of labor contracts in the country that were indexed to the Consumer Price Index, especially in manufacturing industries, the highly energy-intensive industries. So real wages were going up because of a faulty price measure. We were raising real wages due to COLA's more than was appropriate.

Then we hit those same industries by high-energy prices due to OPEC. So the real value of the firm, such as steel companies, auto companies, aluminum, all of smokestack America, glass and paper companies all went down, but their wages went up because of the COLA's that they had in their contract. Well, when an industry is getting blind sided by higher energy prices and resources transfer out, as Mr. Popkin mentioned, and then we raise their wages because of cost-of-living contracts, that just clobbered a lot of smokestack America.

Representative HAMILTON. Mr. Popkin, let me ask you a question that older people put to me now and then, and that's this business of the CPI not measuring inflation for older people accurately. What do you think of that? You've heard that I'm sure.

Mr. POPKIN. Yes, I have, and when I was at the Bureau of Labor Statistics back in the early 1970's that was an issue then. I understand that the BLS has produced a reweighted Consumer Price Index for older people and that it doesn't show much difference, but I don't think that that exercise really addressed a more basic issue. The weights in the price index, in other words, how much medical care is in an older person's market basket versus an average person's, those are weights; weights don't make an awful lot of difference in the movement of price indexes.

I think it's important to measure the prices of the things that older people buy in the kinds of stores, like convenience stores that they may buy them in. In other words, the BLS exercise used the same prices and only changed the weights. I think you have to look at the prices that the older people pay, and then it may make a difference.

Representative HAMILTON. Are you saying that they have a legitimate beef on the COLA's, for example, because the CPI doesn't really measure the impact for them?

Mr. POPKIN. I'm saying that I don't know the answer to that, but the recent BLS studies do not answer it either.

I might add that because of the treatment of housing in the CPI that Mr. Jordan mentioned, another statistic that might interest you is that the CPI is also, as you know, used to index entitlements, and if the present treatment of housing in the CPI had been instituted back when we first recommended it back in 1971 and 1972 when I was at the BLS, the budget deficit would be \$50 billion smaller.

Mr. JORDAN. That's correct. The regional disparity is something that the senior citizen group has to focus on, too. You're going to hear from those that are in the area of the country where consumer prices are rising more rapidly. It's not uniform across the country. It's very, very uneven. So you're not going to hear from those people in parts of the country where prices are very slow.

Mr. SUMMERS. If anything, my guess is that the CPI may overstate the inflation, and the reason is that health care is a good

sized component now and health care costs are going up very fast. My guess is that a lot of the reason health care costs are going up is in some sense health care quantity is going up, too. You're in the hospital and they do more stuff to you. Probably the CPI assigns, if anything, too little of that to more quantity and too much of that to higher prices, and that would be the direction of producing a CPI that overstated the true inflation rate.

Representative HAMILTON. I think a vote is coming up here shortly on the floor. I think this has been an excellent panel, and we appreciate very much your participation.

Do any of you want to make any closing statement at all to round out the testimony?

[No response from the panelists.]

Representative HAMILTON. I think we have had an excellent discussion and we are most appreciative of your appearance.

Thank you all, and the committee stands adjourned.

[Whereupon, at 4 p.m., the committee adjourned, subject to the call of the Chair.]

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