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BRADLEY POLICY RESEARCH CENTER

SHADOW OPEN MARKET COMMITTEE (SOMC)

Policy Statement and Position Papers March 10-11, 1996 PPS 96-01

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SHADOW OPEN MARKET COMMITTEE

The Shadow Open Market Committee met on Sunday, March 10, 1996 from 2:00 p.m. to 5:30 p.m. in Washington, DC.

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SOMC POLICY STATEMENT SUMMARY

Washington, D.C. March 11—The Shadow Open Market Committee warned today that Federal Reserve policy is "too restrictive" and "is not consistent with maintaining steady growth with price stability." The Committee noted that growth of the monetary base (bank reserves and currency) had fallen to a rate of 2 percent. The SOMC warned that "a likely result of continued 2 percent growth of the monetary base would be sluggish growth and possible recession."

The Shadow, a group of academic and business economists who comment regularly on public policy, said that "We again urge the Federal Reserve to lower its interest rate target until the monetary base grows at an annual rate of 4 percent." Such a course, the SOMC said, would help achieve "price stability with sustained economic growth."

The Shadow Open Market Committee, which meets in March and September, was founded in 1973 by Professor Allan H. Meltzer of Carnegie-Mellon University and the late Professor Karl Brunner of the University of Rochester.

The SOMC attacked economic nostrums advanced by Republican Presidential candidate Patrick J. Buchanan. "His claims about trade and wages are nonsense, without any basis in theory or any factual support."

The Committee took news organizations to task for not questioning the substance of Mr. Buchanan's statements. "The political campaign shows the disgraceful extent of economic literacy."

The SOMC cautioned Presidential candidates not to overstate the possible benefits of tax reform, including a flat tax. "Our committee has always favored a consumption tax in place of the corporate and personal income taxes. These reforms would raise saving, encourage investment and increase living standards for workers and owners of capital." However, "tax reform should not be sold on politicians' false promise of substantially raising the economy's sustained long-term growth rate."

The Committee charged the Clinton Administration had misled the public about Mexico. "The recent Mexican loan repayment was a media event staged to show that

Mexico could now repay U.S. loans. The repayment was achieved by increasing Mexico's loans from the International Monetary Fund and by borrowing in Europe at a higher rate of interest than on the U.S. loan. The cost of Mexicans of such mistaken policies rose again."

The SOMC also called on Congress to "eliminate the (federal) debt ceiling, refocus its efforts on tax reform and control of government spending—especially spending on entitlements." Failing that, the SOMC said, "Congress should vote for a straight extension (of the debt limit) without adding other budgetary matters."

SHADOW OPEN MARKET COMMITTEE

Policy Statement March 11, 1996

The Committee issued the following statement:

Monetary policy remains too restrictive. It is not consistent with maintaining steady growth with price stability. The recently announced February employment and

unemployment data, properly analyzed, do not change the basic picture. Unemployment

is a poor predictor of inflation.

The political campaign shows the disgraceful extent of economic literacy. Many

in the media are critical of Patrick Buchanan's allegedly conservative views, but they

often counter their criticism by saying: "At least he speaks to an important issue." Few

go on to say that his claims about trade and wages are nonsense, without any basis in

theory or any factual support.

The Clinton administration has recently again acted to mislead the public about

Mexico. The recent Mexican loan repayment was a media event staged to show that

Mexico could now repay U.S. loans. The repayment was achieved by increasing

Mexico's loans from the International Monetary Fund and by borrowing in Europe at a

higher rate of interest than on the U.S. loan. The cost to Mexicans of their mistaken

policies rose again.

The debt ceiling has never served to restrict spending or the size of budget

deficits. Congress should eliminate the debt ceiling, refocus its efforts on tax reform and

control of government spending—especially spending on entitlements.

MONETARY POLICY

Conventional wisdom denies that money growth bears any relation to inflation or

growth of nominal output. This is an error. Our record for the past 2 1/2 years is

summarized below to show that forecasts based on money growth accurately foreshadow

the main movements in the economy. The following excerpts from the past five meetings

of the committee show that Federal Reserve policy has been successful because, by

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chance, it has followed polices very close to the policies we advocated based on an adaptive monetary rule.

September 1993: The monetary base had grown 11 percent for the year ending in August. We described Federal Reserve policy as "imprudent" and predicted that long-term interest rates, then approaching 5 3/4 percent, would increase either because inflation would increase or because the Federal Reserve would reduce growth of the monetary base and money. Although standard forecasts saw no danger of inflation or rising long-term interest rates, based on our rule, we urged the Federal Reserve to act promptly to control inflation by reducing growth of the monetary base to a maximum of 8 percent. The Federal Reserve moved in February 1994 to increase short-term interest rates.

March 1994: Annual growth of the monetary base had slowed to 10 percent. We again urged the Federal Reserve to tighten policy. Further increases in short-term interest rates reduced growth of the monetary base to 8.7 percent in August 1994, thereby reducing the threat of higher inflation.

<u>September 1994</u>: Our rule implied that the economy was on a path "consistent with 2 percent to 3 percent inflation," at a time when standard forecasts talked of a reacceleration of inflation in 1995. Based on our rule, we urged the Federal Reserve to reduce the growth rate of the monetary base to a 7 percent annual rate. By raising interest rates several more times, the Federal Reserve reduced the growth rate of the base.

March 1995: Annual base growth was 6.7 percent for the year ending in March. We urged the Federal Reserve not to "overreact as it often has in the past." Our rule suggested that the Federal Reserve maintain base growth at 7 percent to maintain high growth with declining inflation.

<u>September 1995</u>: By September, annual growth of the base had fallen to 4.5 percent. We praised the Federal Reserve for achieving growth with low inflation. We urged it to "promptly reduce short-term interest rates until the monetary base grows at a 6 percent annual rate." We warned that there was a rising risk of recession if base money growth did not increase. The economy was weak in late 1995 and remains weak at present.

<u>Currently</u>: Growth of the monetary base and money remain below the rate that our rule suggests is consistent with steady growth in output and price stability. We again urge the Federal Reserve to lower its interest rate target until the monetary base grows at an annual rate of 4 percent. The Federal Reserve can, at last, achieve price stability with sustained economic growth. Current Federal Reserve policy will not do that.

If the base continues to growth at the 2 percent annual rate of the past year, nominal GDP growth can grow at the 3.8 percent rate of 1995 only if velocity increases. This is a matter of arithmetic. To bring this about would require an increase in long-term interest rates, equivalent to the 1995 decline. A likely result of continued 2 percent growth of the monetary base would be sluggish real growth and possible recession.

Periodically the Federal Reserve is accused of preventing output from growing at a higher rate. The claim is that the Federal Reserve keeps the growth of chain-weighted output to a maximum rate of 2 percent. We have long been critical of the Federal Reserve's use of unemployment or real output as short-run indicators of monetary policy. We believe use of these indicators increase variability and mislead the Federal Reserve at times like the present.

The Federal Reserve cannot affect the long-term real growth rate. If the critics were correct that money growth was too slow on average, the price level would fall, but the long-term rate of real growth would not be changed.

NONSENSE ABOUT TRADE AND WAGES

Evidence from several countries suggests that the distributions of income and worker compensation have changed in recent years. Upper-income groups have gained relative to lower-income groups. The United States is one of the countries in which this has occurred. But it is evident also in data for other countries whether they have trade deficits—such as Britain and Canada—or trade surpluses—such as Japan.

One candidate for President has used changes in income distribution and the U.S. trade deficit to attack trade agreements and open trade disadvantageous to American workers. This premise is false. The widely used data on compensation showing

declining hourly wages and salaries are but one of several measures of compensation trends. Other measures show gradual increases.

More importantly, the discussion reveals a degree of economic illiteracy that is shocking even by the low standards of political discussion. Neither the media nor the other candidates expose the fallacious reasoning. Indeed some appear to bless the argument by commenting that Candidate Buchanan speaks to an important issue. They do not add that what he says is nonsense.

The wider spread between high and low incomes reflects changes in the demand for different types of employees in an economy undergoing technological change. The demand for skilled, educated workers has increased relative to the supply of such workers, so their wages and incomes have increased. The demand for unskilled workers has increased slowly relative to supply, so wages and incomes for these workers have increased slowly or declined in some cases.

Many of the unskilled are not only computer illiterates, they are functionally illiterate. Texas Governor George W. Bush, in a recent speech, noted that 25 percent of the students failed the reading examination in Texas's public schools. Not only can these students not operate computers, they cannot even read the screen. They are destined to work at jobs that do not require literacy. Such jobs require little skill and pay low wages.

For years, governments at all levels have promised to improve the educational system. A decade ago, we heard about a nation at risk. Later we had the education president and Goals 2000. Yet, most of these promises are unfulfilled; school systems have done little to increase the reading and computational skills of their students.

U.S. exports are dominated by products requiring for their production not just literacy but considerable skill. Our principal exports include aircraft, machine tools, computers, software and many different services ranging from health care and professional education to financial services and entertainment.

Many of the proposals to raise incomes would make the problem worse. Trade barriers would bring retaliation and restrictions on our exports, lowering the demand for both skilled and unskilled workers. It is not clear that the income gap would narrow but, if it did, it would be because of a relative decline in the wages of the skilled workers in the export industries as other countries retaliated.

Raising the minimum wage would reduce the employment opportunities for low-skilled workers. This would worsen the problem and deprive unskilled workers of on-the-job training, one of the most important sources of their education.

The way to shrink the difference between rich and poor is to improve education and skills, remove barriers to trade, expand trade, increase saving, and shift resources toward investment. The federal government should abandon its role in education. It is a job for local government and private markets.

TAX REFORM

Tax reform is an urgent public policy issue.

Proper tax reform should encourage private saving, reduce the enormous burden of record-keeping, accounting, and compliance, and curb opportunities for special favors. Important reforms include simplification, integrating corporate and personal income taxes, and reducing the double taxation of income from corporate capital.

Our committee has always favored a consumption tax in place of corporate and personal income taxes. This reform would raise saving, encourage investment, and increase living standards for workers and owners of capital. Resource use would be improved, and the economy would be more efficient.

Tax reform should not be sold on politicians' false promise of substantially raising the economy's sustained long-term growth rate. Except for very brief periods, the United States did not have an income tax for its first 127 years. From 1916 to 1930, income tax rates were low and the income tax was paid by only a small fraction of the population. Income and output did not average substantially higher growth than in the postwar years for any sustained period.

THE DEBT CEILING AND SPENDING

The debt ceiling has been in place since 1917. Whenever the ceiling was approached, it was raised. The debt ceiling has never prevented deficit spending. The

debt has grown from a few billion dollars in 1917 to almost \$5 trillion today. This measure of debt does not include future obligations for social security and health care.

The recent discussion of default is intended to force a reduction in the growth of spending, particularly spending on entitlements. We favor these reductions, but a threat of permanent default is not credible and should not be contemplated. A temporary default would do nothing to reduce the outstanding debt. Debt issues would be delayed, not prevented.

To date, there is no evidence that the market anticipates a default. If a default were considered likely, government bond rates would rise relative to corporate bond rates and might exceed interest rates on high quality corporate bonds. This has not happened. The spread between high quality corporate and government bonds has not changed.

We agree with the administration: Congress should vote for a straight extension without adding other budgetary matters. A better proposal would be repeal of the debt ceiling. The way to control deficit finance is not by preventing the sale of debt after the spending has been voted. Congress must vote to control the growth of spending.

The Congress has shown foresight and courage by voting to reduce farm subsidies and the rate of growth of spending on welfare and health care. Every knowledgeable person knows that these programs—and social security—must grow more slowly in the future. The least painful way to reduce spending on these programs is to legislate well in advance.

The Clinton administration has so far missed the opportunity to reduce permanently the growth of spending on entitlements. Its unwillingness to reduce growth of spending is irresponsible.

MEXICAN DEBT

Last year Mexico borrowed heavily using short- and medium-term debt. The short-term debt to the United States was repaid in October 1995 and January 1996. The administration used the occasion of the final repayment to promote the idea that the reason Mexico could repay its debt was that it was emerging from its recent crises.

This is misleading. The repayments of short-term debt to the Federal Reserve and the Treasury's Exchange Stabilization Fund were financed by (1) drawing on the International Monetary Fund and (2) borrowing from German banks. The German loan carries a 9 3/8 percent interest rate for five years. This rate is higher than the interest rate on the loans that were repaid and reflects the market's assessment of the true risk.

Mexico remains in debt to the United States. The Treasury's Exchange Stabilization Fund has \$10.5 billion of medium-term loans outstanding to Mexico. Mexico has open lines of credit that permit additional borrowing from the U.S. and the IMF.

Mexico has borrowed from the U.S. to stabilize the peso-dollar exchange rate on many occasions since 1936. At first, the loans were for \$40 million. The limit was raised many times thereafter until it reached a maximum of \$20 billion in 1995. Mexico is the only Latin American country to have swap arrangements with both the Federal Reserve and the U.S. Treasury. The existence of these borrowing arrangements probably contributes to Mexico's periodic financial crises by encouraging imprudent practices.

In the past, the Treasury has financed some of its Mexican lending by borrowing from the Federal Reserve. This lending, called warehousing, is a type of off-budget finance made without Congressional appropriation. Authority for warehousing remains at the discretion of the Federal Reserve. Congress should revoke this authority.

THE ROAD TO RECESSION

H. Erich HEINEMANN Heinemann Economic Research Division of Brimberg & Co.

Federal Reserve Chairman Alan Greenspan told Congress last month that in late January "the evidence suggested sufficient risk of subpar performance going forward to warrant another slight easing of the stance of monetary policy." The Fed cut its target for short-term interest rates of 5.25 from 5.5 percent (third such action since last summer) and approved an identical reduction in the discount rate.

Mr. Greenspan, just named by President Clinton to a third four-year term as Fed Chairman, was less than candid with his Congressional mentors in calling the central bank's action as "an easing," slight or otherwise. Since the Fed's first rate reduction in July 1995, the DROP in total bank reserves accelerated to an annual rate of 8.1 percent, more than double the 3.7 percent contraction from February 1994 to July 1995. This January and February, reserves fell at an annual rate of 14.5 percent.

Bank reserves act as raw material for the U.S. money supply, the basic fuel for total spending in the economy. Sustained changes in reserve growth are the best yardstick of Fed policy. Rapid increases in reserves usually show easy money; declines normally indicate restraint.

The immediate result of the sharp cut in reserve growth over the last two years is likely to be a recession, perhaps in time for this fall's Presidential election. Long-lingering aftereffects of Mr. Greenspan's money freeze from 1988 through 1991 helped put Mr. Clinton in the White House. Mr. Greenspan may want to do the same thing for the Republican nominee this year to prove that Fed policy is non-partisan.

Investors who are counting on stable prices and low interest rates to support the stock market should recognize that the longer-run effects of excessive monetary restraint are likely to be inflationary. If history is a guide, Fed officials are likely to compensate for money which is too tight with money which is too easy.

The pattern of go-stop-go policy has been especially evident since the 1980s. Bank reserves grew at a rate of 14.75 percent in 1985 and 1986 (full-year average to full-year average), but only 2.33 percent from 1988 through 1991. In 1992 and 1993, reserve growth averaged 15.39 percent. In 1994 and 1995 it was less than three-tenths of one percent.

The Baseline Forecast by Heinemann Economic Research predicts that the Fed's policy of super-tight money will play the key role in triggering a recession beginning in the fourth quarter of 1996. Jobs, industrial production, and corporate profits are all likely to show substantial declines through the first half of 1997. Unemployment will be up. Real gross domestic product—output of goods and services measured in fixed-weight 1992 dollars—is likely to decline about \$150 billion, roughly 2 percent.

The forecast indicates that the Fed is likely to respond in classic fashion to the onset of economic weakness. Bank reserves are likely to decline on balance in 1996, but then rise more than 10 percent in 1997. If history is a guide, monthly growth rates of reserves will likely be in a range between 15 and 20 percent.

At first, rapid growth of high powered money may help to hold long-term interest rates down and could even push them lower. Over time, however, easy money will reignite of inflationary fears and push rates up and bond prices down.

Remember the bond market debacle in 1994. Bonds collapsed in early 1994 because traders finally recognized the inflationary potential of three years of easy money. Bonds rallied in 1995, even though Fed policy was progressively tighter, because traders understood that Mr. Greenspan's preemptive strike would prevent inflation from taking root. Investors take note.

The battle over "balancing" the federal budget by 2002 has already led to a violent, unsustainable tightening of fiscal policy. If the economy declines later this year as we expect, the Treasury's red ink will increase, regardless of budgetary plans on Capitol Hill.

The surplus in the U.S. Treasury's operating, or primary budget (revenues minus outlays except net interest) soared to a record \$89 billion at an annual rate in the fourth

quarter, up sharply from a rate of \$68 billion during the summer months. This surplus was equal to 1.21 percent of gross domestic product.

Except for 1989, this ratio was the highest in almost a quarter century. Note that the Treasury's operating surplus of 1.28 percent of GDP in he first half of 1989 was followed by a recession within a year. A surplus in the Treasury's operating budget has preceded every downturn since World War II.

The double-barreled drag from tight money and tight fiscal policy has already slowed business activity. Even with a big surge in nonfarm payrolls in February, job growth has dwindled. Moreover, more than 80 percent of the new jobs that employers added in the year ending February 1996 appear to have been in new businesses in the private service sector. These firms are not only typically very small (less than five workers per company), but also they are unstable—here today and gone tomorrow.

The Labor Department's index of hours worked in the private nonfarm economy averaged 132.57 (1982=100) in the three months ended February, essentially unchanged in the past year. In the comparable period of 1994-95, hours worked rose 4.23 percent. The gross value of industrial output—measured in constant 1992 dollars—shows a similar pattern. Based on three-month moving averages, output rose one-half of one percent in the year ended January 1996, down from 5.1 percent the year before.

A key component of this slowdown was a drop in the production of business equipment. However, a remarkable turnaround in demand for civilian aircraft is likely to sustain the capital goods market for an extended period. Except for aircraft, the inflow of new orders to the nation's manufacturers has slowed substantially.

New orders for aircraft, by contrast, almost doubled in the six months ended January compared to the 1994-95 period. Jet aircraft are big-ticket items with very long lead times. Shipments of aircraft, which fell much less than new orders from 1993 through early 1995, are likely to increase slowly in the months ahead. Shipments, of course, determine actual investment in producers' durable goods.

Business and government employers added more than 8.2 million workers to their payrolls since the end of the last recession in March 1991. Almost 90 percent of these new jobs were full time. According to the employees themselves, 70 percent of the new

workers (5.9 million) were hired for managerial, technical, sales or administrative occupations.

As one consequence, after-tax income (in current dollars at a seasonally adjusted annual rate) has increased more than \$1.1 trillion. Per capita income, in both nominal and real terms, has also rise materially.

The Bureau of Labor Statistics recently published revised measures of productivity showing that real output per hour rose at an average annual rate of 2.04 percent during the period 1959-1995 compared to its earlier estimate of mean growth rate of 1.81 percent. The new measure shows a faster rate of productivity growth in each decade except for the 1990s. The shortfall appears to be in nonmanufacturing businesses.

Faster growth in productivity is consistent with huge investments in recent years in information processing and communications equipment. At the same time, the slowdown in productivity in nonmanufacturing (mostly private services and construction) reflects the fact that gains in employment in the 1990s have been concentrated in business sectors (retailing and health services are good examples) with relatively low levels of output per worker.

Less credible is the picture of productivity and real compensation in manufacturing. The data say that worker pay, adjusted for inflation, has hardly changed over the last 20 years, while productivity has gone up more than 50 percent. This result is not consistent, either with economic theory or our understanding of typical business practices in both union and non-union sectors. BLS should take another look at its numbers.

Small, often newly-formed firms in the private service sector have been the primary force driving the growth in employment. Recently, however, the incentive for these employers to hire has started to erode.

While large multinational corporations (which dominate the stock market) have record profits, small service businesses (which create new jobs) face a profit squeeze. Growth in revenue has slowed, and costs are up—not the least from the increase in the work force. When it becomes unprofitable for small businesses to add workers, they will stop doing so, and the recession will begin.

HENEMANN ECONOMIC RESEARCH/DIVISION OF BRIMBERG & CO. Baseline Forecast - March 1996

	IV'95 A	I'96 F	II'96 F	III'96 F	IV'96 F	I'97 F	II'97 F	III'97 F	IV'97 F	1995 A	1996 F	1997 F
THE ECONOMY:	11 35 A	.,	, , ,	,		.,,,						•
Gross Domestic Product (\$92)	\$6,821.2	\$6,842.6	\$6,868.6	\$6,874.0	\$6,834.2	\$6,778.7	\$6,725.0	\$6,814.0	\$6,918.0	\$6,768.7	\$6,854.8	\$6,808.9
Pct Chg	1.50%	1.3%	1.5%	0.3%	-2.3%	-3.2%	-3.1%	5.4%	6.2%	2.29%	1.3%	-0.7%
Personal Consumption (\$92)	\$4,626.5	\$4,640.4	\$4,647.3	\$4,642.7	\$4,639.0	\$4,592.6	\$4,543.0	\$4,570.2	\$4,605.0	\$4,591.4	\$4,642.3	\$4,577.7
Pct Chg	1.04%	1.2%	0.6%	-0.4%	-0.3%	-3.9%	-4.3%	2.4%	3.1%	2.51%	1.1%	-1.4%
Business Investment (\$92)	\$741.2	\$749.8	\$760.6	\$768.2	\$754.9	\$745.7	\$732.5	\$752.6	\$779.2	\$723.2	\$758.4	\$752.5
Pct Chg	8.34%	4.7%	5.9%	4.1%	-6.7%	-4.8%	-6.9%	11.4%	14.9%	10.46%	4.9%	-0.8%
Structures (\$92)	\$184.6	\$186.2	\$190.1	\$192.0	\$190.1	\$186.3	\$184.5	\$182.6	\$180.8	\$181.4	\$189.6	\$183.5
Prod. Dur. Equip. (\$92)	\$556.7	\$563.6	\$570.4	\$576.1	\$564.8	\$559.3	\$548.0	\$570.0	\$598.4	\$541.8	\$568.7	\$568.9
Residential Invest. (\$92)	\$265.5	\$265.4	\$266.2	\$268.2	\$252.1	\$255.4	\$264.6	\$277.8	\$296.7	\$262.8	\$263.0	\$273.6
Pct Chg	4.33%	-0.1%	1.1%	3.1%	-21.9%	5.3%	15.2%	21.6%	30.1%	-2.27%	0.1%	4.0%
Change in Inventory (\$92)	\$21.7	\$12.7	\$8.7	\$4.7	(\$5.3)	(\$20.3)	(\$30.3)	(\$5.3)	\$9.7	\$35.7	\$5.2	(\$11.6)
Net Exports (\$92)	(\$88.8)	(\$84.4)	(\$78.5)	(\$75.0)	(\$70.5)	(\$64.9)	(\$61.9)	(\$60.3)	(\$58.5)	(\$108.0)	(\$77.1)	(\$61.4)
Govt Cons & Invest (\$92)	\$1,255.1	\$1,258.6	\$1,264.3	\$1,265.2	\$1,264.0	\$1,270.3	\$1,277.1	\$1,278.9	\$1,285.8	\$1,263.6	\$1,263.0	\$1,278.0
Pct Chg	-3.55%	1.1%	1.8%	0.3%	-0.4%	2.0%	2.2%	0.6%	2.2%	0.17%	-0.0%	1.2%
Final Domestic Sales (\$92)	\$6,888.3	\$6,914.3	\$6,938.4	\$6,944.3	\$6,910.0	\$6,863.9	\$6,817.2	\$6,879.6	\$6,966.7	\$6,840.9	\$6,926.7	\$6,881.9
Pct Chg	1.05%	1.5%	1.4%	0.3%	-2.0%	-2.6%	-2.7%	3.7%	5.2%	2.66%	1.3%	-0.6%
Gross Dom. Prod. (\$ Current)	\$7,348.1	\$7,451.0	\$7,540.4	\$7,615.8	\$7,662.2	\$7,655.3	\$7,632.4	\$7,766.8	\$7,915.1	\$7,247.7	\$7,567.3	\$7,742.4
Pct Chg	2.75%	5.7%	4.9%	4.1%	2.5%	-0.4%	-1.2%	7.2%	7.9%	4.56%	4.4%	2.3%
Disposable Income (\$92)	5010.2	\$5,034.3	\$5,051.8	\$5,064.3	\$5,054.2	\$5,046.5	\$5,055.7	\$5,083.4	\$5,141.4	\$4,948.5	\$5,051.2	\$5,081.7
Pct Chg	3.64%	1.9%	1.4%	1.0%	-0.8%	-0.6%	0.7%	2.2%	4.6%	3.44%	2.1%	0.6%
Savings Rate (Percent)	4.90%	5.4%	5.5%	5.8%	5.7%	6.0%	5.8%	5.6%	5.3%	4.53%	5.6%	5.7%
Operating Profits (\$ Current)	\$581.8	\$584.5	\$574.8	\$569.1	\$544.3	\$524.8	\$493.9	\$511.9	\$540.8	\$579.4	\$568.2	\$517.9
Pct Chg	-19.9%	1.8%	-6.4%	-3.9%	-16.3%	-13.6%	-21.5%	15.4%	24.5%	10.03%	-1.9%	-8.9%
Industrial Prod. (1987=100)	122.39	123.1	123.7	124.0	122.6	120.0	116.2	117.7	120.4	121.97	123.4	118.6
Pct Chg	0.20%	2.4%	2.0%	1.0%	-4.7%	-8.2%	-11.9%	5.1%	9.5%	3.28%	1.1%	-3.9%
Housing Starts (Mill. Units)	1.398	1.41	1.41	1.37	1.26	1.33	1.42	1.47	1.50	1.355	1.36	1.43
Pct Chg	-5.3%	4.0%	-0.9%	-11.7%	-26.8%	23.4%	31.1%	13.0%	9.7%	-6.32%	0.6%	5.1%
Tot Vehicle Sales (Mill Units)	14.92	14.73	14.37	14.21	13.88	13.39	12.72	13.11	13.98	14.735	14.30	13.30
Pct Chg	-3.15%	-4.9%	-9.6%	-4.1%	-9.1%	-13.3%	-18.5%	12.6%	29.6%	-1.85%	-3.0%	-7.0%
Nonfarm Payroll Jobs (Mill)	117.195	117.5	117.7	118.0	117.9	117.7	116.5	116.8	117.6	116.606	117.8	117.1
Pct Chg	1.42%	1.0%	0.9%	0.8%	-0.1%	-0.8%	-3.9%	0.8%	2.9%	2.26%	1.0%	-0.5%
Unemployment Rate (Percent)*	5.57%	5.7%	5.7%	5.9%	6.2%	6.5%	6.7%	7.0%	6.9%	5.61%	5.9%	6.8%
Comp. Per Hour Non-Farm Bus**	109.9	110.9	112.0	113.0	114.0	114.9	115.7	116.6	117.6	108.22	112.4	116.2
Pct Chg	4.0%	3.7%	4.1%	3.7%	3.6%	3.2%	2.8%	3.2%	3.6%	3.56%	3.9%	3.3%
Productivity Non-Farm Bus**	102.1	102.2	102.4	102.2	101.7	101.1	101.3	102.4	103.2	101.76	102.1	102.0
Pct Chg	0.1%	0.3%	0.7%	-0.5%	-2.2%	-2.4%	0.8%	4.6%	3.4%	1.05%	0.4%	-0.1%
Unit Labor Cost Non-Farm Bus**	107.6	108.5	109.4	110.5	112.1	113.7	114.2	113.9	113.9	106.32	110.1	113.9
Pct Chg	4.1%	3.4%	3.4%	4.1%	6.0%	5.7%	2.0%	-1.3%	0.3%	2.48%	3.6%	3.5%
GDP Deflator (1992=100)	107.72	108.9	109.8	110.8	112.1	112.9	113.5	114.0	114.4	107.07	110.4	113.7
Pct Chg	1.22%	4.4%	3.3%	3.7%	4.9%	2.9%	2.0%	1.7%	1.5%	2.23%	3.1%	3.0%
Consumer Prices (1982-84=100)	153.87	155.3	156.7	158.0	159.5	160.6	161.7	162.7	163.8	152.49	157.4	162.2
Pct Chg	2.37%	3.9%	3.6%	3.2%	4.0%	2.8%	2.7%	2.3%	2.8%	2.81%	3.2%	3.1%
Fed'l Deficit (\$ Current NIA)	(\$148.7)	(\$151.1)	(\$128.4)	(\$126.1)	(\$139.1)	(\$152.1)	(\$158.6)	(\$168.6)	(\$175.2)	(\$161.0)	(\$136.2)	(\$163.6)
FINANCIAL MARKETS:	e ====	5 50	5 aa/	4 007	4 404							
Federal Funds Rate	5.72%	5.5%	5.2%	4.8%	4.4%	3.8%	3.4%	3.4%	3.6%	5.84%	5.0%	3.6%
Three-month Bills (Discount)	5.26%	5.1%	4.9%	4.5%	4.0%	3.4%	3.1%	3.1%	3.2%	5.49%	4.6%	3.2%
Prime Rate, Major Banks	8.77%	8.2%	7.9%	7.5%	7.1%	6.5%	6.1%	6.1%	6.3%	8.84%	7.7%	6.3%
10-Year Treasury Bonds	5.89%	5.7%	5.6%	5.4%	5.3%	5.2%	5.2%	5.1%	5.3%	6.58%	5.5%	5.2%
Money Supply (M-1, \$ Current)	\$1,128.5	\$1,115.0	\$1,112.8	\$1,133.4	\$1,161.7	\$1,199.4	\$1,235.4	\$1,262.0	\$1,293.0	\$1,141.9	\$1,130.7	\$1,247.5
Pct Chg	-5.01%	-4.7%	-0.8%	7.6%	10.4%	13.6%	12.6%	8.9%	10.2%	-0.29%	-1.0%	10.3%
Velocity (Ratio: GDP to M-1)	6.51	6.68	6.78	6.72	6.60	6.38	6.18	6.15	6.12	6.348	6.69	6.21
Trade-Weighted \$ (1973=100)	84.44	86.1	87.2	88.1	89.9	91.7	93.5	95.4	97.3	84.30	87.8	94.5
A=Actual F=Forecast Billions of dolla	is unless noted.											

^{*}Break in series, January 1994. ** Compensation, productivity and unit labor costs are index numbers, 1992=100.

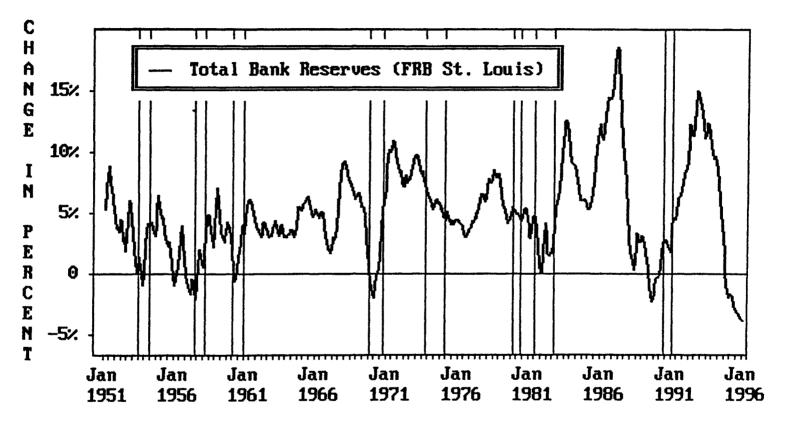
Sources: Haver Analytics; Heinemann Economic Research

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Federal Reserve Bank of St. Louis

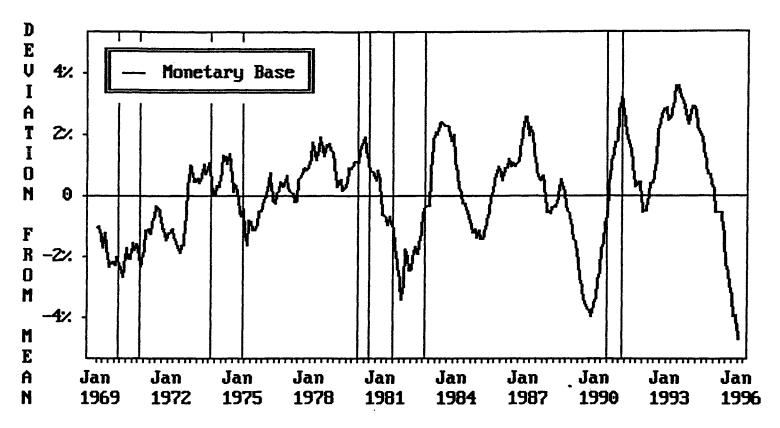
CYCLICAL CHANGES IN MONETARY POLICY



Notes: The chart shows annual percentage changes in total bank reserves adjusted for shifts in legal reserve requirements. FRB St. Louis monetary base minus currency. Three-month moving averages, SA. Vertical lines show recessions.

Sources: Haver Analytics: Heinemann Economic Research

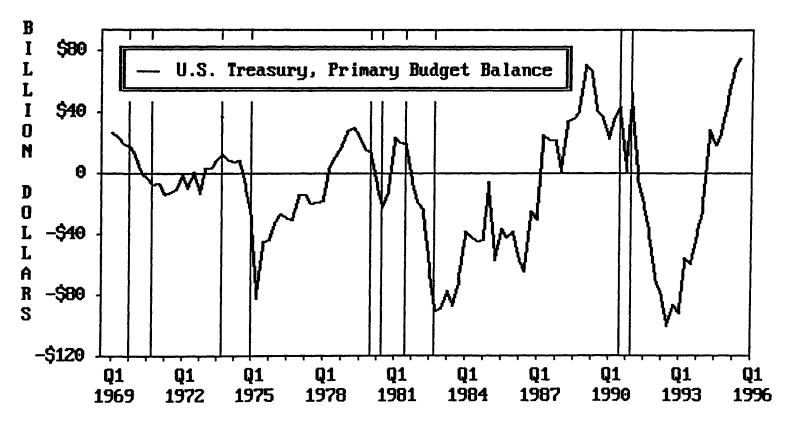
CYCLCIAL CHANGES IN HIGH-POWERED MONEY



Notes: The chart shows annual changes in the monetary base less its mean rate of change, 1969-1995 (7.8%). Federal Reserve Board concept adjusted for reserve requirement changes. Current \$. January 1996 plotted. Vertical lines show recessions.

Sources: Haver Analytics: Heinemann Economic Research

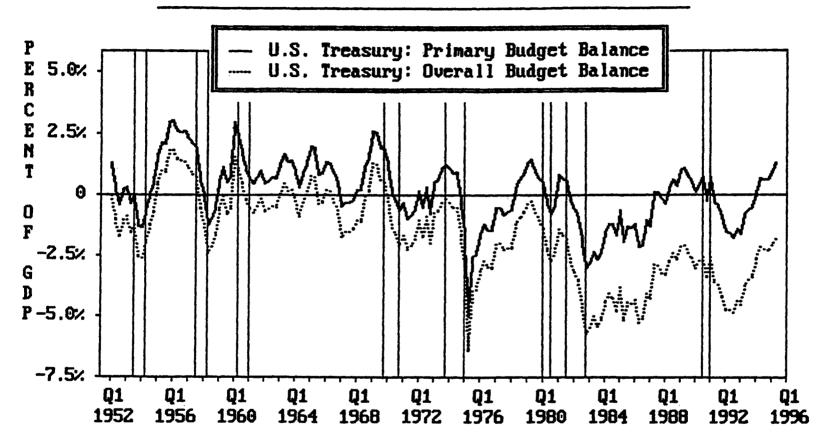
A RECORD SURPLUS IN THE PRIMARY BUDGET



Notes: The chart shows the primary balance in the federal budget — revenues minus outlays except net interest. Billions of current dollars, NIPA concept. Third quarter 1995 plotted. The vertical lines show recessions.

Sources: Haver Analytics; Heinemann Economic Research

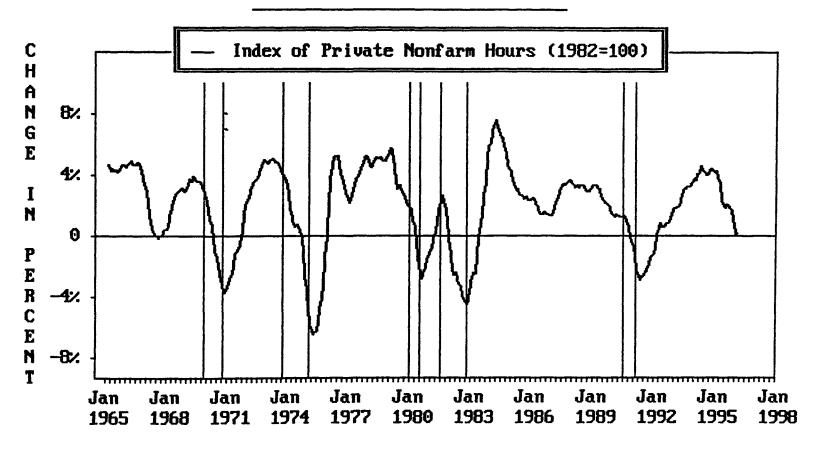
SURPLUS OR DEFICIT - TWO VIEWS OF THE FEDERAL BUDGET



Notes: The chart shows the federal government's primary budget balance (revenues minus outlays except net interest, line) and overall balance (revenues minus outlays, dot) as a percent of GDP. The vertical lines show recessions.

Source: Haver Analytics: Heinemann Economic Research

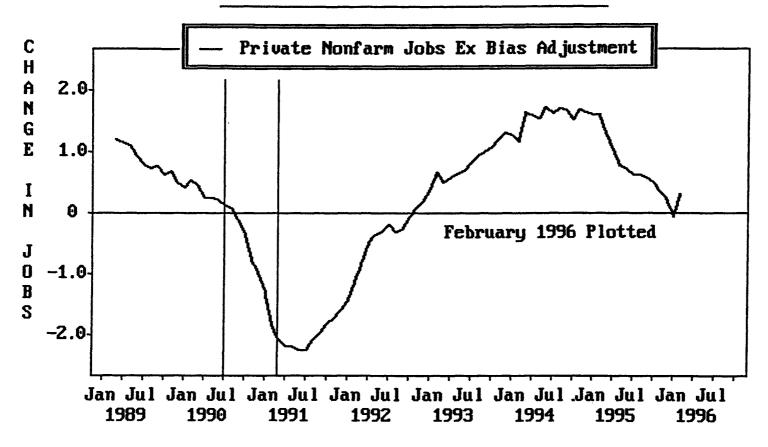
CYCLICAL CHANGES IN LABOR INPUT



Notes: The chart shows year-over-year percentage changes in the Bureau of Labor Statistics index of hours worked in the private nonfarm economy. Three-month moving averages. February 1996 plotted. The vertical lines show recessions.

Sources: Haver Analytics; Heinemann Economic Research

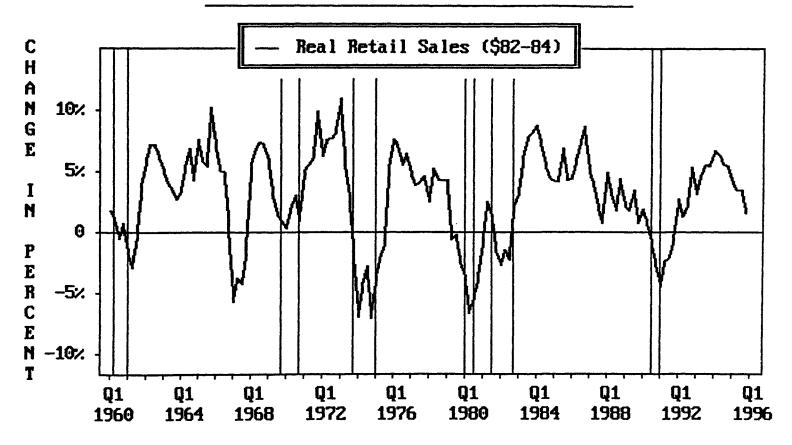
NET JOB CREATION BY EXISTING EMPLOYERS



Notes: The chart shows annual changes in private nonfarm jobs minus the Bureau of Labor Statistics' monthly "bias adjustment" for net job creation by newly-formed employers. Millions of jobs. Vertical lines show the 1990-91 recession.

Sources: Haver Analytics: Heinemann Economic Research

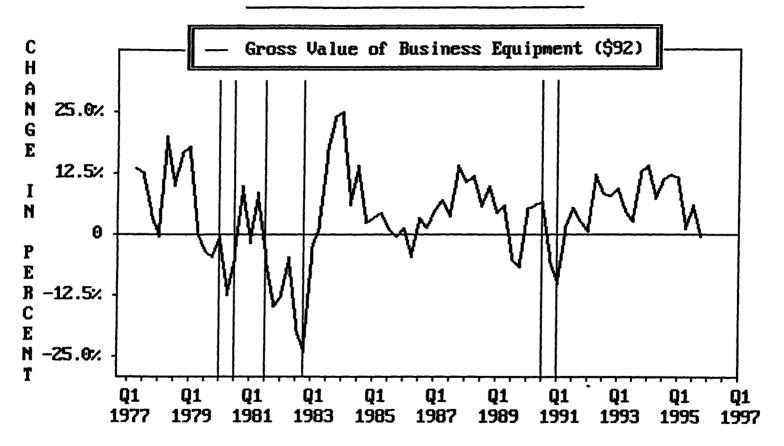
THE CYCLICAL SLOWDOWN IN CONSUMER SPENDING



Notes: The chart shows annual changes in total retail sales deflated by the commodities component of the consumer price index (CPIU). 1982-84 Dollars. Fourth quarter 1995 plotted. The vertical lines show periods of recession.

Sources: Haver Analytics: Heinemann Economic Research

THE CAPITAL GOODS BOOM IS COOLING

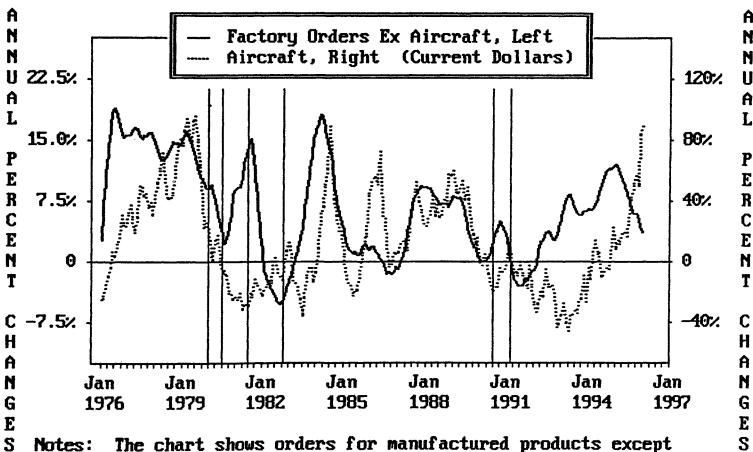


Notes: The chart shows quarterly changes at seasonally adjusted annual rates in the real gross value of industrial production of business equipment. Fourth quarter 1995 plotted. The vertical lines show periods of recession.

Sources: Haver Analytics; Heinemann Economic Research

EXCEPT FOR AIRCRAFT, MANUFACTURING IS SLOWING

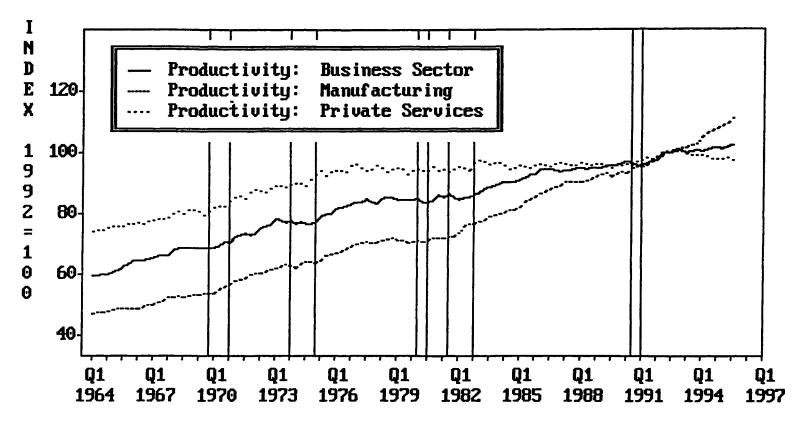
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civilian aircraft (left scale, line) and for civilian aircraft (right scale, dot.) Six-month moving averages; January plotted. The vertical lines show recessions.

Haver Analytics: Heinemann Economic Research

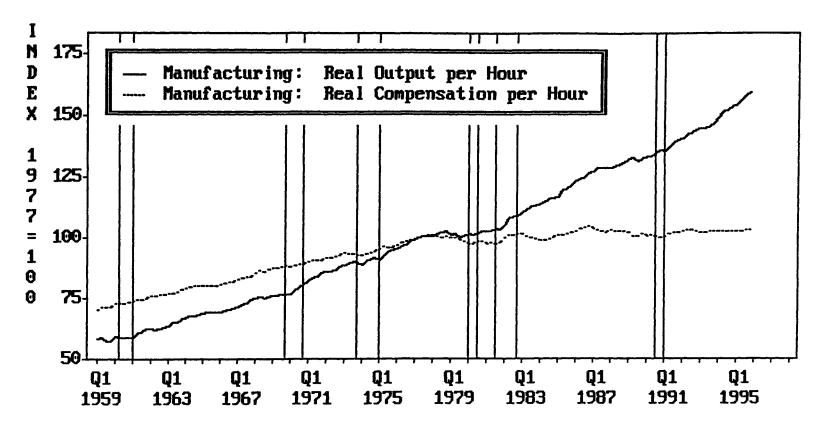
LONG-TERM TRENDS IN PRODUCTIVITY



Notes: The chart shows BLS indexes of output per hour in the business sector (line), in manufacturing (close dot) and a separate index of real private service consumption per hour (wide dot). 1992=100. The vertical lines show recessions.

Sources: Haver Analytics: Heinemann Economic Research

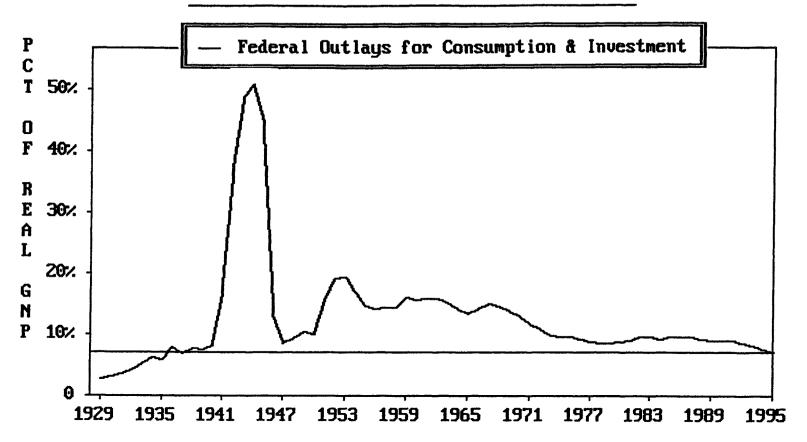
MANUFACTURING PRODUCTIVITY AND COMPENSATION



Notes: The chart shows Bureau of Labor Statistics indexes for manufacturing of real output per hour (line) and real compensation per hour (dot). Rebased by Heinemann Economic Research, 1977=100. The vertical lines show recessions.

Sources: Haver Analytics; Heinemann Economic Research

THE U.S. SHARE OF CONSUMPTION AND INVESTMENT



Notes: The chart shows real federal spending for consumption and gross investment as a percent of real gross national product. The horizontal line is the value for 1995, 7.02% Data prior to 1959 estimated by Heinemann Economic Research.

Sources: Haver Analytics: Heinemann Economic Research

BALANCED BUDGETS, LIMITED GOVERNMENT, AND ECONOMIC WELL-BEING

Lee HOSKINS The Huntington National Bank

"EVERYBODY WANTS TO GO TO HEAVEN BUT NOBODY WANTS TO DIE"

Everybody in Congress and the Administration says they want a balanced budget but nobody actually want to do it. If they do, why are they waiting until 2002? And why back-end load the spending cuts and wrangle over CBO scoring? The answer is law makers fear the steps to a balanced budget lead to political death. By focusing on the real reason to balance the budget, legislators can solve a pressing public policy problem and get credit for it. The reason to balance and reform the budget is to raise economic growth by (1) restraining the government grab, (2) shifting spending from consumption to investment, and (3) reforming tax policies to reduce disincentives to work, save and invest. The real culprit is the size and composition of government spending combined with flawed tax policies that lead to misallocation of society's resources. In a kernel, a balanced budget discipline can help prevent the central government from eating the nation's seed corn.

Bringing spending into balance with current revenues, while changing the mix in favor of investment, would boost the economy by giving individuals better choices and greater freedom in making spending, saving, and investment decisions. Although the budget can be temporarily balanced without altering Social Security, both the deficit and the share of spending devoted to consumption will increase without changes to current law. The economy's full potential cannot be unearthed without fundamental reform of federal entitlement programs. By increasing future economic growth through higher investment and fixing the insolvent Social Security System, Congress can preserve the promise of rising living standards to future generations while keeping promises to current retirees.

BALANCED BUDGET: A MEANS TO AN END

Economists search for the effects of deficits on interest rates, saving and investment, productivity and exchange rates. The results of their efforts are inconclusive. The reason to eliminate deficits cannot be found in the data alone but rather in the goal of improving economic performance by holding the government accountable for spending only what it raises through explicitly legislated taxes. Deficits allow government to spend without being accountable to the electorate. The incentive for government to spend more than it raises in tax revenues stems from the fact that the benefits of spending programs are concentrated on the few while the costs are spread across all present and future taxpayers. Beneficiaries of spending programs have strong incentives to lobby and contribute to the election of those officials who grant the largess. The cost of individual taxpayers of each spending program is so small that they have insufficient incentive to lobby against them separately. Future taxpayers have no say at all.

The fiscal history of the last 40 years in the U.S. shows that unchecked spending is the source of the deficit (Chart 1). Annual revenues have been 18-20 percent of GDP since 1956, despite numerous changes in the tax laws. Revenues amounted to 19.3 percent of GDP in 1995. Spending increased from 17.0 percent of GDP in 1956 to a peak of 24.4 percent in 1983 and was 21.6 percent of GDP last year.²

The main source of spending growth has been outlays for entitlement programs that fuel consumption. From 1966 to 1995, more than half of the increase in non-interest outlays occurred in nonmeans-tested transfer programs. These categories grew more than twice as fast as total non-interest spending. As a result, the share of consumption-oriented transfers in total federal outlays roughly doubled to 46 percent between 1966 and 1995³ (Chart 2).

The way to balance the budget is to restrain growth in entitlement spending. The reason to do it is to reverse the bias toward consumption and away from investment. Thus, restraining the growth of spending as a share of GDP is a principal reason for balancing the budget. Demands for term-limits and a balanced budget amendment are efforts to reduce the incentive to spend and hold government accountable.

As government spending increases relative to the economy, economic growth is at risk because the private sector, which manages resource more productively, is reduced in relative terms. There are but two ways to organize our economy's resources. One is to rely on individuals to make decisions about work, investment, and consumption in competitive markets. The other is to allow government to direct resource use through spending programs, regulations, and tax policies. The historical landscape of the last 50 years is littered with economies wrecked by government direction of resources. Market economies with limited government direction have thrived. To paraphrase Ronald Reagan, government direction of economic resources is the problem not the solution. A balanced budget amendment that would bring the government expenditure share of the economy down to the tax share, is a good vehicle for enhancing growth prospects for the economy.

The time to start is now. Yet neither the Balanced Budget Act of 1995 nor the Administration's 1997 budget are projected to make any progress until 1988. Even under favorable economic assumptions, both plans pack approximately half of the deficit reduction into years six and seven.⁴ (Charts 3-5).

Concerns that quickly bringing outlays into line with revenues would imperil the economic expansion are steeped in Keynesian mythology. As Mickey Levy has explained, balancing the budget by reducing nonmeans-tested transfers, such as Social Security and Medicare, relative to the economy would raise the long run rate of economic growth.⁵

SHIFTING RESOURCES FROM CONSUMPTION TO INVESTMENT

How the budget is balanced or the deficit reduced has a significant bearing on how efficiently resources are used in our economy. Budget actions that reduce or eliminate biases against saving and investment throughout the economy will promote a higher future standard of living. Actions that hinder saving and investment will negatively impact living standards. Increases in saving to build the capital base and raise productivity require reductions in the rate of consumption. The portion of national

income directed to consumption must shrink to permit the increases in saving and investment necessary for faster growth in incomes.

These measures to balance the budget should focus on shifting rresources away from consumption and towards investment. Taxes on saving should be eliminated. Taxes should be levied on consumed income. Current proposals to replace the current federal income tax system with a consumed income tax (Nunn-Domenici), a national sales tax (Archer), or a flat tax (Armey-Shelby-Craig and others) are steps in the right direction.

Spending programs that are biased toward consumption should be reduced, capped, or eliminated. Programs that directly misallocate the economy's resources, such as agricultural subsidies, should be eliminated. Progress is being made in agriculture. This means revising most of the "entitlement" programs put in place over the last 60 years. These programs are not uncontrollable. Much of the increase in outlays is due to legislated changes in benefits and eligibility requirements. The Great Society has collided with the nation's budget constraint, requiring that benefits and eligibility standards be lowered and tightened and some programs entirely eliminated. Entitlement programs shift resources away from savers to high consumption groups. Such actions, while reducing the deficit, will more importantly increase growth in domestic investments, meaning each U.S. worker will have more capital to work with. More productive labor earns higher real wages. Growth of our economy is key to a more secure economic future. Charles Plosser has pointed out that "the difference between an economy that grows at 2 percent a year and one that grows at 3 percent a year is enormous due to compounding. After 30 years the economy growing at 2 percent is about 80 percent wealthier while the economy growth at 3 percent is almost 150 percent wealthier."6

The silver lining in the current Washington budget follies is that both parties are talking about tax reduction and spending cut backs. They may actually stumble into actions that shift the bias away from consumption and towards investment. A balanced budget requirement, limiting expenditures to 20 percent of GDP or less, would provide the incentive for Congress to enact pro-growth measures and strip out programs and

regulations that hinder investment. The only way for lawmakers to get more dollars for spending on constituents to ensure their political viability would be through a faster growing economy. Politically doable? A balanced budget amendment recently failed by one vote in the Senate and many state governments have found a balanced budget requirement politically achievable.

GROWING CAPITAL, ALLEVIATING SOCIAL INSECURITY

Even if Congress were to achieve a balanced budget by 2002, its reprieve from budget pressure would be short lived. By 2013—and possibly sooner—payments from the Social Security System will exceed receipts. By 2030 the Trust Fund will be broke. Tinkering around the edges with marginal changes in the retirement age and the payroll tax rate and limit will buy little time. A fundamental fix is to alter economic policies to promote the saving and investment necessary to expand the rate of growth in the economy. Another alternative is to privatize the System. Individuals can provide more effectively for their well-being in retirement than can the government. For example, if individuals born in 1970 invest the amount they currently pay in Social Security taxes in financial markets, they will receive an estimated six times the benefits they are scheduled to receive under Social Security. Moreover, there is a safety net in place for those who misplan or fall upon unfortunate circumstances—welfare, preferable delivery at the state or county level, as well as neighborhood charitable organizations.

Eliminating Social Security has little political support. A more likely outcome is a patch to the current system—raising the eligible retirement age, cutting the cost-of-living adjustment, increasing taxes or perhaps privatizing a compulsory system. As Mickey Levy pointed out in his recent Congressional testimony, Social Security reform needs to be included in the current fiscal debate. Failure to make adjustments now only exacerbates the problem. We, as a society, have simply not accumulated the capital necessary to permit a relatively smaller work force to generate the promised benefits.

Growing the economy by saving more now is the key to a higher standard of living. Curbing the growth in Federal expenditures to generate saving will not derail the

economy in the short run as long as the fiscal plan is credible and shifts spending away from consumption and towards investment. The long-term benefits are substantial.

TAKING THE FIRST STEP

The persistent structural budget deficit is not a crisis. The country is not at a crossroads. If it were, Americans would recognize and overcome the challenge. Instead, the threat is the insidious erosion of living standards compared with what they would be in the absence of distortions in resource allocation and disincentives to saving and investment. The public perception that the economy is falling short of expectations might be the beginning of enlightenment. By the time the source of the threat is widely acknowledged, if ever, it will be too late. The path to the solution is clear, and it leads to higher living standards, not political death. Lawmakers must take the first step by embracing fiscal reforms that remove the bias against saving and incentive to consume and begin to dismantle growth-inhibiting entitlement programs. A balanced budget amendment is a good vehicle for carrying this load.

Notes

¹Based on current law and mid-range projections of economic activity and demographic changes, the net present value of the Social Security Trust Fund is deeply negative.

²Economic Report of the President, February 1996, p. 368.

³Historical Tables, Budget of the United States Government, Fiscal Year 1996.

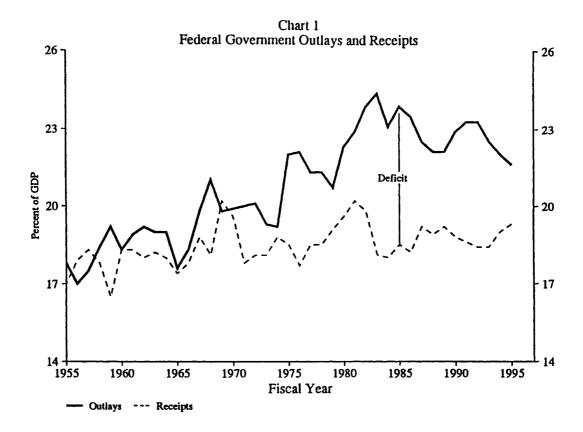
⁴Budget of the United States Government, Fiscal Year 1997 and "The Economic and Budget Outlook: December 1995 Update," CBO Memorandum.

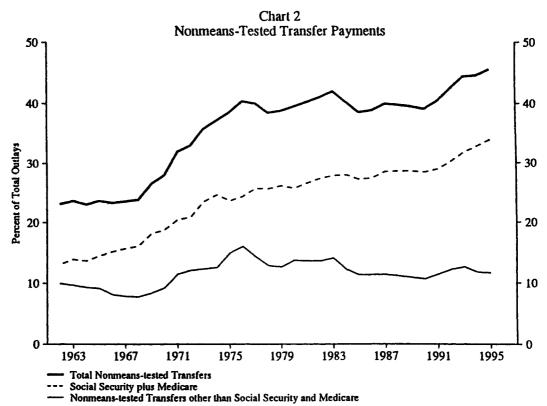
⁵Mickey Levy, "Perspectives on the Federal Debt Ceiling and Budget Policy," Testimony to the Committee on Banking and Financial Services, U.S. House of Representatives, February 8, 1996.

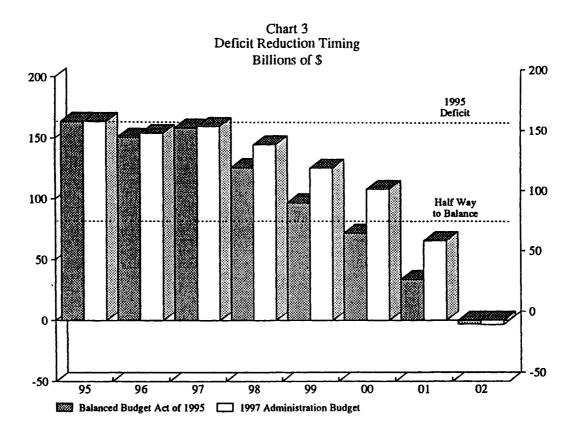
⁶Charles Plosser, "Is a Balanced Budget the Key to Our Economic Future?" Presentation in Rochester, New York, December 4, 1995.

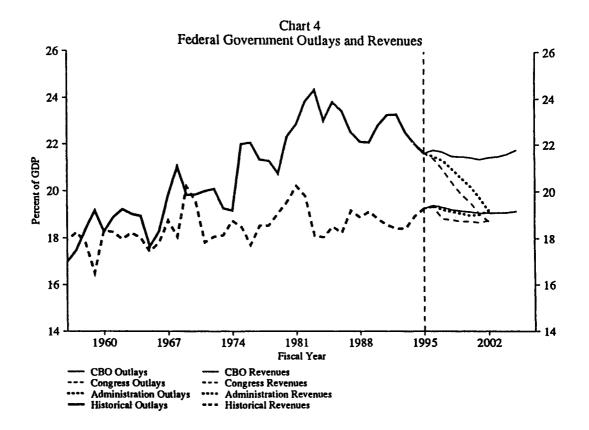
⁷William G. Shipman, "Retiring With Dignity: Social Security vs. Private Markets," Cato Institute Social Security Project no. 2, August 14, 1995.

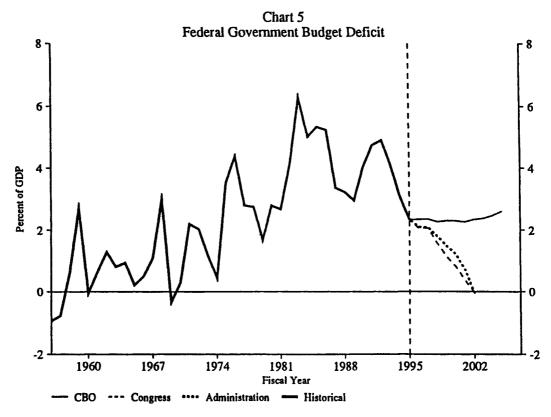
⁸Levy. op.cit.

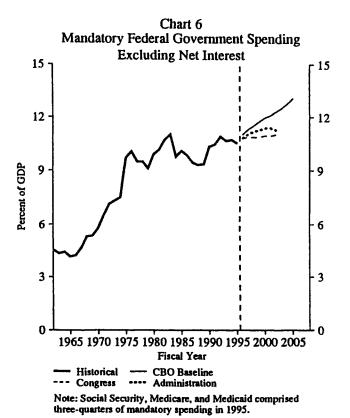


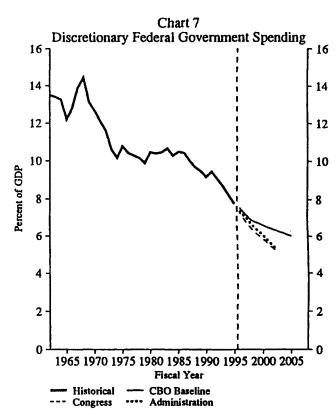


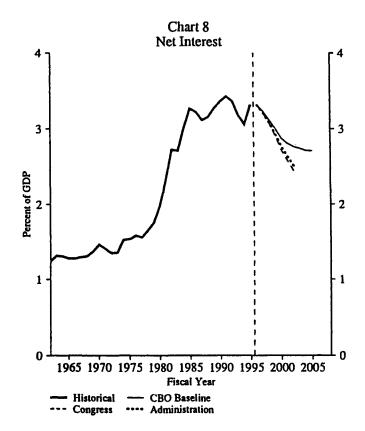




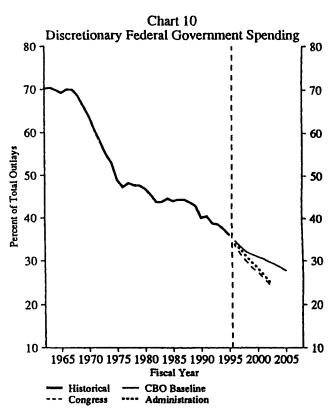


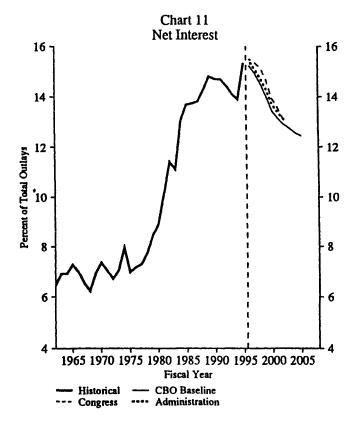












ECONOMIC CONDITIONS

Mickey D. LEVY NationsBanc Capital Markets, Inc.

The economy is sound structurally, but weak cyclically. The probability of recession remains relatively low, as heightened business efficiencies and the Federal Reserve's disinflationary monetary policy have reduced potentially disruptive imbalances in the economy. However, the Fed's sustained monetary restrictiveness has generated undesirably anemic economic growth, and I forecast the cyclical slump to continue at least through mid-year 1996. Inflation has begun to recede, a trend that will continue into 1997. This environment of modest economic growth and declining inflation will remain favorable for financial markets. The structural soundness generated by heightened business efficiencies and the Fed's disinflationary monetary policy create the foundation for sustained economic expansion, but a crucial issue is, at what pace, and what can policymakers do to enhance long-run economic growth? Fiscal reform remains the missing ingredient to support stronger long-run economic growth and higher standards of living.

CURRENT ECONOMIC CONDITIONS

Recent economic performance reflects two general trends: the ongoing restructuring characterized by dramatic innovations and associated adjustments to production processes and labor markets, and the temporary cyclical slowdown in economic activity generated by the Fed's sustained monetary restrictiveness. The stalemate in he fiscal policy debate and the uncertainty surrounding it has aggravated the economic weakness.

The Cyclical Slowdown

The Fed's pre-emptive and aggressive monetary tightening in 1994 generated a sharp slowdown in demand, paving the way for the desired soft-landing in 1995 and preventing the widely anticipated cyclical rise in inflation. Inflation is expected to recede

in 1996-1997, a favorable trend the Fed correctly recognizes as a necessary ingredient for healthy sustained economic expansion.

My biggest concern is that economic activity has slowed too much—annualized quarter-over-quarter real GDP growth was below 1 percent in three of the four quarters in 1995, following 3.5 percent growth in 1994—and that the Fed's restrictive monetary policy will generate a continued cyclical slump.

Similar to recent cyclical slowdowns, the weakness emerged first in housing and durable goods consumption. Real consumption, which grew 3.0 percent form Q4:93 to Q4:94, slowed to 1.9 percent growth in 1995, as auto sales fell and department store sales slumped. Housing activity weakened sharply, with declining sales of existing and new homes forcing developers to cut back new construction in order to limit the rise in unsold inventories.

In response to mounting evidence of weak demand, businesses have slowed production and become increasing cautious. They have cut output in an attempt to control inventories, slowed investment growth and trimmed labor inputs. Industrial production rose a scant 1.5 percent from Q4:94 to Q4:95 compared to 6.6 percent in the previous year. Inventory building dropped below \$20 billion in Q4:95 from an average \$60 billion in 1994. Absent a rebound in product demand, a further reduction in inventory building may be necessary. Also in response to the anticipated weakness in demand and slower growth in corporate profits and cash flows, business investment in producer durable goods and structures has slowed sharply to 5.0 percent annualized growth since Spring 1995, half its 1994 pace.

These cutbacks in production have involved a significant adjustment in labor inputs: non-farm payroll growth has averaged about 110,000 per month since Spring 1995, compared to its 294,000 average monthly gain in 1994, and overtime hours have been reduced over 8.0 percent in the last year. As a result, aggregate hours worked have barely grown since early 1995, following their 4.3 percent rise in 1994. This has slowed growth in disposable personal income. Growing uncertainties about job stability also have dampened consumer confidence.

The delayed budget negotiations in Washington and government shutdown have subtracted from economic activity in several ways. The decline in real government purchases has accelerated, subtracting from GDP. In addition, the government shutdown and the resulting uncertainty have negatively affected a wide array of private businesses that rely on government functions. The lack of fiscal credibility has a negative impact that cannot be quantified; at a minimum, the stalled budget negotiations have contributed to the recent rise in interest rates.

A decline in the net export deficit is contributing positively to GDP, but largely because of slowing imports, a sign of weakness. Exports continue to growth robustly—9.4 percent annualized in the second half of 1995—despite weak economic conditions in Europe and lingering recessionary-type conditions in Japan. The abrupt slowdown of import growth to 0.5 percent annualized in the second half of 1995 from its earlier 8.2 percent pace reflects the slump in domestic consumption and a moderation of business fixed investment.

Improved Structural Soundness & Lower Inflation Reduce Probability of Recession

Potentially disruptive imbalances in the economy have been reduced by efficiencies in production and the heightened ability of businesses to adjust to fluctuations in aggregate demand, the Fed's credible disinflationary monetary policy, and the flexibility of wages and prices. This lowers the probability of recession and establishes a sound foundation for sustained economic expansion.

In recent years, the magnitude of the cyclical fluctuations of current dollar spending growth has been dampened by the Fed's more persistently disinflationary policies, which has reduced the adjustments necessary for businesses to modify production and control labor inputs, supplies, and inventories. Since 1980, each succeeding peak in nominal GDP growth has been lower, an every peak-to-trough swing in aggregate demand has been smaller. This reduces the potential for large disruptive imbalances.

Moreover, a wide array of innovations and improvements in production processes, strong growth in business fixed investment, and more efficient uses of labor inputs have raised productivity and constrained unit labor costs. Productivity gains have played a larger role fueling economic growth this expansion than in recent expansions, while rises in labor inputs have been more modest. Unit labor costs in manufacturing in the U.S. are significantly lower than nearly all other industrialized nations. Very low unit labor cost inflation has enabled businesses to maintain margins. The resulting healthy profit gains have provided the cash flows necessary for investment and expansion, and reduced the burden of debt service. At the same time, improving production processes have kept inventories at manageable levels. Entering 1995, these improvements provided businesses a healthy buffer against the cyclical slowdown.

Businesses have cut back production and labor inputs more rapidly and efficiently in the current demand downdraft than in previous cycles, maintaining healthy productivity gains, profit margins and cash flows, in sharp contrast to all recent cyclical slowdowns. In a sense, the efficient business response suggests the unobservable but powerful impact of the Fed's heightened inflation-fighting credibility—that monetary policy will remain consistent with a moderate growth/low inflation environment and relatively small swings in demand.

Recent recessions have occurred as sharp deceleration in demand generated by the Fed's aggressive monetary tightening in response to rising inflation, coupled with slow business responses, have generated disruptive imbalances in the economy. Avoidance of those trends in both demand and supply reduces the probability of recession. The risk remains, however, that a persistently restrictive monetary policy generates a continued deceleration of nominal spending, making the adjustments necessary to avoid recession increasingly difficult.

Labor Market and Wage Trends

In recent years, a stream of corporate layoffs has generated a growing sense of job insecurity, real wages of laborers have languished, and wage and income differentials between skilled and unskilled workers have widened. These trends, may of which are prevalent throughout the industrialized world, are receiving substantial attention, and some clarification is necessary to avoid policy mistakes.

First, continued growth of employment suggests that big-headline layoffs have been more than offset by new hiring. The average duration of unemployment has not increased, although some evidence suggests that dismissals may have risen relative to involuntary job departures. Clearly, unencumbered by the rigidities that inhibit labor markets in other industrialized nations, the U.S. has significantly larger flows into and out of jobs. The continuous reallocation of labor is a source of economic strength and long-run job creation, and should not be overshadowed by highly visible layoffs.

Second, the lack of real wage gains reflects in part the rapid growth of nonwage compensation, the long-term effort by U.S. businesses to re-establish international competitiveness, and high taxes on labor. In addition, there are notable flaws in the average hourly earnings statistical series, including the deflators used to arrive at a measure of real wages; other measures of earnings show an improving trend. In the early 1980s, following a decade during which wage compensation growth soared while productivity declined, U.S. unit labor costs in manufacturing far exceeded those in other industrialized nations, driving down U.S. exports. The adjustment of wage compensation relative to productivity, along with the decline in the U.S. dollar, has reversed those fortunes. Recently, average real wages have resumed growing, a trend that should continue as nonwage compensation slows and real wages catch up to the sustained gains in productivity.

Third, production innovations and the internationalization of the labor markets have lowered the demand for unskilled labor and raised the demand for skilled workers, widening wage and income differentials. Empirical analysis confirms the obvious: actual and expected compensation is increasingly linked to education and skills.

Growth, enhancing remedies for narrowing wage differentials and lifting standards of living necessarily involve improving the education and skill levels of the low skilled, opening international goods and labor markets and promoting free trade, and reducing taxes on labor and rigidities that inhibit labor supply and demand. The crux of the problem is raising the value-added of low-skilled job entrants and workers, not reducing the real wages of high skilled workers. Subsidizing low-skilled, low-wage earners involves disincentives that raise unemployment; witness the double-digit

unemployment rates throughout Europe. The misguided populist initiative of protectionism would reduce average real wages, suppress economic activity, and lower standards of living; ironically, it would be particularly harmful to the low income workers. It is crucially important that policymakers consider constructive, growthenhancing measures of raising the wages and incomes of the low-skilled, and avoid wrong-headed initiatives that address the symptoms, not the sources of the problem.

Positive Financial Responses

Interest rates have receded with the slowdown in real economic growth, lower inflationary expectations, and the associated belief that the Fed will reduce its funds rate target. These trends are projected to continue. The strength of the stock market has stemmed from the decline in rates, which raises price/earnings multiples, and production efficiencies that have lifted productivity and enabled businesses to maintain margins and achieve growth in profits and cash flows. The expected stream of future earnings has been enhanced by the perceived low probability of recession. Insofar as the improved structural soundness and the Fed's credible disinflationary monetary policy represent a departure from the 1970s-1980s, ranges of P/E multiples in those decades are not appropriate guidelines for the 1990s. Nevertheless, the largest risk to the stock market is softening corporate profits in a weakening economy.

More Cyclical Weakness Ahead

Product demand is projected to remain sluggish through mid-year, generating continued cautious business behavior. Retail sales and employment are not expected to rebound dramatically in February-March, suggesting that their January declines were not just weather-related. In response, businesses will modify production and hiring plans in order to reduce inventory building and operating costs. Real GDP, which grew an anemic 0.9 percent annualized in Q4:95, is projected to grow approximately 1.0 percent annualized in the first half of 1996.

The anemic growth is decidedly below the projections—and desired ranges—of official forecasts in Washington and most private forecasters. The Congressional Budget

Office and the Administration both forecast 2.2 percent growth from Q4:95 to Q4:96, while the Federal Reserve's central tendency forecast is 2.0-2.5 percent. The Blue Chip Consensus, which has become less optimistic in recent months, projects 2.0 percent growth in calendar 1996. Economic performance likely will fall short of these expectations. At the same time, however, I project that consumer price inflation will recede from its 2.8 percent rise in 1995 toward 2.0 percent by year-end 1996 and remain low in 1997, while government forecasts are more pessimistic. The CBO projects the CPI to rise 3.0 percent in 1996 and 3.1 percent in 1997, the Administration projects 2.9 percent inflation in both years, and the Fed's central tendency forecast for 1996 is 2.875-3.25 percent. The Blue Chip Consensus forecasts a slight decline to 2.7 percent.

Federal Budget Implications

A sustained cyclical slump would negatively affect federal budget outcomes. With a lag, weaker-than-projected growth of output and employment would suppress tax receipts and push up spending growth for unemployment insurance, welfare, and entitlement programs. The resulting rise in deficits above baseline projections would heighten the legislation required to balance the budget.

When Will the Economy Rebound Cyclically?

While business investment and restructuring have expanded capacity and set the stage for healthier expansion, the Fed's restrictive monetary policy continues to generate decelerating aggregate demand and is the primary source of the cyclical slump. Accordingly, the speed and timing of a cyclical rebound toward trendline growth depends primarily on how quickly the Fed adjusts monetary policy toward neutrality. The process is underway with the Fed's recent rate cuts, but more is needed.

The Fed's Restrictive Monetary Policy

Beginning in late 1994, the Fed's funds rate hikes were associated with year-overyear declines in bank reserves and narrow monetary aggregates, and a sharp flattening of the yield curve, clear indicators of monetary restrictiveness and accurate predictors of the equilibrium level of interest rates associated with the weakening economic and credit conditions, and the result has been a continued contraction of real money supply. In 1994-1995, financial innovations have skewed the relative growth of the monetary aggregates; in particular, banks' practices of using sweep accounts in order to reduce required reserves have lowered bank reserves and M1. However, using the Fed's own estimates, adjusting bank reserves and M1 for the impact of sweep accounts suggest that monetary policy remains restrictive, although less so than in 1995.

It is particularly noteworthy that the most interest sensitive sectors of the economy—consumption of durable goods, business fixed investment and business investment in inventories—continue to weaken despite the decline in interest rates. I'm not surprised: rates have declined as a reflection of weakening economic and credit conditions; while they have provided an effective cushion against economic contraction, they are not simulative and are not a substitute for monetary easing.

The Fed's failure to ease appropriately stems primarily from it excessively cautious inflation forecast based on a perceived unemployment rate-inflation tradeoff. This Phillips Curve approach is a misleading basis for forecasting inflation and for conducting monetary policy. Inflation is driven by excess demand, not low unemployment or real economic growth; the Phillips Curve fails to capture productivity innovations (either positive or negative), changes in production processes, the industrialization of the labor markets or other factors. Positive productivity innovations likely lower the natural rate of unemployment. But the bottom line is that nobody really knows what the natural rate of unemployment is, yet analysts talk as if they do and policymakers base policy on it.

Inflation has begun to recede, despite the unemployment rate remaining below earlier estimates of the NAIRU. The Fed misinterprets the low unemployment rate as an indication that the economy is operating full potential and grudgingly lowers its implicit assumption of the natural rate; in contrast, I believe the low unemployment rate has occurred as business investment and productivity gains have raised potential output and

capacity, while restrictive monetary policy has constrained demand. That suggests inflation will decline further.

A sustained pickup in aggregate demand is expected to lag the Fed's move to monetary neutrality; until then, businesses will remain cautious in their production and hiring plans. Just as the Fed moved pre-emptively to short-circuit inflation pressures in 1994, presently it needs to easy policy to reduce the risk of recession. Importantly, doing so would be entirely consistent with the Fed's long-run objective of price stability. A sustained cyclical rebound is not expected until later this year.

The Longer-term Outlook

The economic outlook for 1997-1998 looks favorable; I project stronger growth than the CBO or the Administration (2.3 percent per year), or the Blue Chip Consensus (2.1 percent growth in 1997). My optimism for the next several years and beyond is based on favorable environment created by business restructuring and the Fed's heightened inflation-fighting credibility. These factors will generate continued healthy productivity gains, and will raise the portion of nominal spending that is real growth while reducing inflation.

My assessment is that productivity gains have tilted upward, although there is insufficient data to verify conclusively any structural shift. The empirical issue about the trend in productivity is complicated by the new chain-weighted GDP index, which reveals slower real growth and productivity gains than the fixed weight GDP series, but similarly fails to capture many of the obvious efficiency improvements in the service-producing sectors, thereby understating rising standards of living. Even using the chain-weighted index, productivity growth has accelerated during the current cyclical slowdown, in contrast to every recent cyclical slowdown, and has been steady through the 1990s.

If sustained, seemingly small differences in real GDP growth are huge: sustained one-quarter percentage point faster growth would raise the level of GDP 5 percent in the 20th year, an equivalent of \$337 billion in 1996 dollars; in present value terms, the

cumulative increase would be 32 percent of current real output, or \$2.13 trillion. Thus, the importance of lifting potential output overwhelms current concerns about how to address the current cyclical slump.

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Economic and Financial Perspectives

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SHADOW OPEN MARKET COMMITTEE WASHINGTON, DC

March 10-11, 1996



	_	S N	A	P	S		_	Γ				
		Lev			Quar		ange (ann	ualized)	Y		Change	
QUARTERLY DATA	Q1-95	199 Q2-95		Q4-95	Q1-95	Q2-95	995 Q3-95	Q4-95	Q1-95 C		95 Q3-95 C)4-95
Nominal GDP	7147.8	7196.5	7298.5	7348.1	3.9		5.8	2.7	5.5	4.5	4.4	3.8
GDP	6701.6	6709.4	6768.3	6783.8	0.€	0.5	3.6	0.9	3.0	1.9	1.9	1.4
Domestic Demand	6816.9	6832.0	6879.4	6875.3	1.4		2.8	-0.2	3.2	2.1	1.9	1.2
Final Sales	6647.5	6677.4	6733.3	6763.9	0.7		3.4	1.8	2.8	2.6	2.4	1.9
Domestic Final Sales	6762.7	6799.9	6844.4	6855.4	1.5		2.6	0.6	3.0	2.7	2.4	1.7
Disposable Personal Income Consumption	4895.5 4530.9	4896.1 4568.8	4950.3 4600.4	4992.0 4609.7	3.6		4.5 2.8	3.4 0.8	4.9 2.5	2.4 2.5	3.0 2.6	2.9 1.9
Residential Investment	265.9	256.6	262.3	265.2	-6.4		9.2	4.5	0.9	-5.5	-3.0	-1.9
Business Investment	704.4	710.6	719.7	730.7	15.3		5.2	6.3	12.1	11.1	9.0	7.5
Inventory Investment	54.5	30.6	33.2	20.4	NA		NA	NA	NA	NA	NA	NA
Government Purchases	1263.0	1265.8	1263.6	1251.7	-1.1	0.9	-0.7	-3.7	0.9	1.3	-0.6	-1.2
Exports	755.8	764.3	779.1	799.6	2.6		8.0	10.9	11.1	8.5	7.5	6.5
Imports	874.9	891.2	893.4	893.7	8.7		1.0	0.1	11.9	9.1	6.6	4.3
Current Account (c)		-43.3	-39.5	NA	4.3		3.8	NA	-8.8	-5.3	0.2	NA
GDP Deflator	106.7	107.3	107.9	108.5	3.4		2.3 2.3	2.2	2.5	2.6	2.6	2.6
Employment Costs (Private) Unit Labor Costs (Non-Farm)	124.3 105.3	125.2 105.9	125.9 106.6	127.0 107.5	2.3 4.7		2.3 2.7	3.5 3.4	2.9 1.5	2.8 2.0	2.5 3.1	2.8 3.3
Productivity (Non-Farm)	105.3	103.9	102.2	107.5	-1.2		1.6	-0.4	1.0	1.4	1.1	0.8
Compensation (Non-Farm)	106.4	107.8	108.9	109.7	3.6		4.1	3.0	2.6	3.4	4.1	4.1
Corporate Profits A/T (a		374.1	385.1	NA	5.6		2.9	NA	25.5	13.2	11.9	NA
Operating Profits A/T (a		561.1	614.9	NA	-1.6	0.3	9.6	NA	22.7	5.6	11.8	NA
Net Cash Flow (a	616.9	615.8	628.2	NA	3.0		2.0	NA NA	14.4	7.7	6.9	NA_
		Lev	els .		1,200,000	Monthly %	6 Change		1	2 Month	% Change	
MONTHLY DATA	N 05	D 05	100 00	EAL OC	Nov-95	Dec-95	Jan-96	Feb-96	Nov-95 T	Dec-95	Jan-96 F	eb-96
Purchasing Managers Index	Nov-95 46.0	Dec-95 46.0	Jan-96 44.2	Feb-96 45.2	-1.3			2.3	-22.6	-17.9	-21.5	-16.8
Non-Farm Payrolls (b	1	117.373	117,172	NA	212			NA	1.55	1.51	1.18	NA NA
Manufacturing Payrolls (b	7	18.316	18.244	NA.	-29			NA	-0.91	-0.84	-1.39	NA
Unemployment Rate (c	1	5.6	5.8	NA	0.		0.2	NA	0.0	0.2	0.1	NA
Average Workweek (sa)	34.4	34.3	33.7	NA	-0.6	-0.3	-1.7	NA	-0.6	-1.2	-3.2	NA
Avg. Hourly Earnings (sa)	11.58	11.62	11.68	NA	0.0			NA	3.0	3.1	3.5	NA
Total Vehicle Sales, incl. Lt. Truck		15.9	14.0	NA	4.2			NA	-3.1	4.8	-1.6	NA
Domestic Unit Auto Sales	7.1	7.7	6.6	7.6	1.0			15.8	-2.4	4.3	-3.7	10.0
Industrial Production	122.4	122.6	121.9	NA	0.3			NA	1.6	0.9	0.1	NA NA
Capacity Utilization	82.8	82.7	81.9 129.9	NA NA	-0.1 0.4			NA NA	-2.1 2.0	-2.8 2.2	-3.8 2.3	NA NA
PPI Ex. Food & Energy	128.7 141.2	129.5 141.5	141.4	NA NA	0.4			NA NA	2.7	2.5	2.2	NA NA
CPI	153.8	154.1	154.7	NA NA	0.			NA.	2.6	2.6	2.7	NA
CPI Ex. Food & Energy	163.1	163.3	163.8	NA	0.			NA	3.0	3.0	3.0	NA
Retail Sales	198.4	199.7	199.1	NA	0.9	9 0.6	-0.3	NA	3.5	4.1	3.0	NA
Housing Starts	1458	1385	1446	NA	7.9			NA	-3.1	-8.0	5.5	NA
Permits	1448	1478	1372	NA	4.0			NA	6.6	4.1	6.1	NA
Federal Budget Surplus/Deficit (d		5.3	19.3	NA	-1.			NA	-156.5	-146.4	-142.7 3.7	NA NA
Durable Goods Orders Manufacturing Orders	165.2 304.1	170.2 309.5	170.6 311.1	NA NA	-0.i			NA NA	3.7	4.9 3.3	3. <i>1</i> 3.1	NA NA
Personal Income (\$)	6203.7	6242.1	6249.6	NA	0.			NA	5.5	5.4	4.6	NA.
Personal Outlays (\$)	5138.1	5181.6	5157.4	NA	0.			NA	4.2	4.9	4.1	NA
Personal Saving Rate (c	1	4.6	5.3	NA	-0.	4 -0.2	0.7	NA	0.8	0.2		NA
Leading Economic Indicators	100.5	100.7	100.2	NA	-0.				-1.9	-1.9		NA
Total Business Inventories	980.7	976.3	NA	NA	0.				7.3	6.3		NA
Inventory/Total Sales (0	1.42		NA	NA	-0.0				0.04 3.0	0.03 1.1	NA NA	NA NA
International Trade (c 3 Month Bill (c	-6.7 5.36	-6.8 5.14	NA 5.00	NA 4.83	0.0				0.07	-0.46		-0.94
3 Month Bill (c 2 Year Note (c		5.32	5.11	5.03	-0.2				-1.67	-2.27		-2.08
10 Year Note	4		5.65		-0.1				-2.03	-2.10		-1.66
30 Year Bond (d	4		6.05		-0.1				-1.82	-1.81	-1.80	-1.37
DJIA	4935.8	5136.1	5179.4		3.				30.1	36.2		39.6
S&P 500	595.53		614.42		2.				29.2	35.0		34.8
U.S. Dollar (FRB)	84.1		86.2		0.				-4.1	-5.1		-1.0
Yen/\$	102		106		1.				4.0	1.7		7.7
DM/\$	1.42		1.46		0.				-7.9 -1.7	-8.3 -2.1		-2.3 NA
M1	1129.0 3653.2		1119.0 3684.8		-0. 0.				4.2	-2.1 4.6		NA NA
M2 Bank reserves	56269		55594		-1.				-5.3	-5.1		NA NA
C&I Loans & Non-Financial CP	894.4		NA NA		1					10.4		NA
Consumer Credit	1.0					.0 0.8				13.3		NA

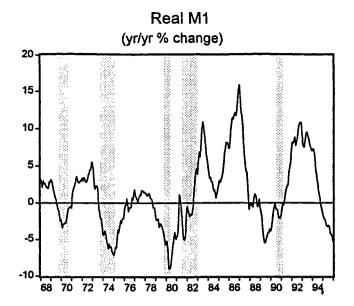
⁽a) Quarterly % changes are not annualized
(b) Monthly changes are in levels
(c) All changes are in levels or basis points

03/07/96

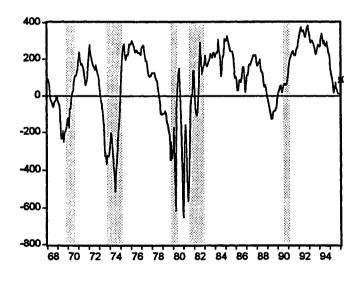
⁽d) Monthly: change from same month last year; Annual: sum of past 12 months

Note: All GDP data reflect chain-weighted measures. Monthly real consumption data are not yet available.

Chart 1 MONETARY THRUST AND DOMESTIC PRODUCT



Spread of 10-Yr T-Bond minus Federal Funds Rate



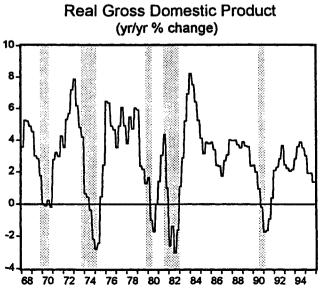
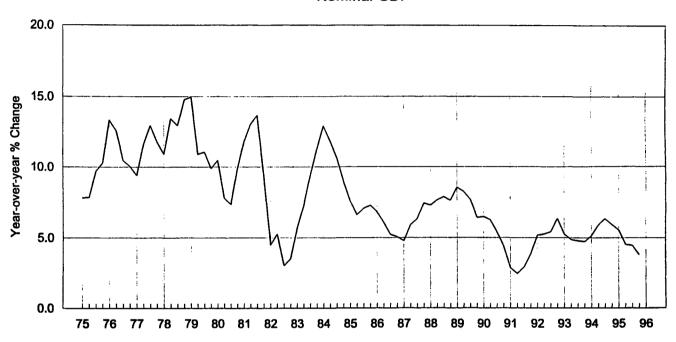


Chart 2
Nominal Spending Decelerates

Nominal GDP



Growth Patterns During Expansions

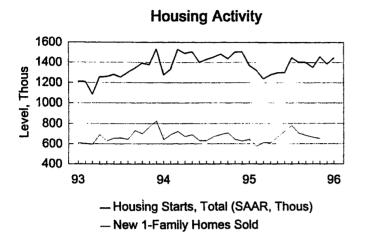
Annualized Growth From Recession Trough:

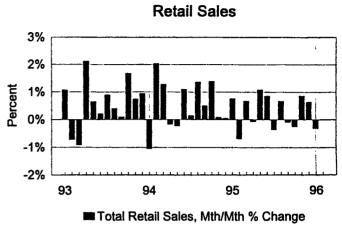
	91:Q2	82:Q4	<u>75:Q2</u>	<u>71:Q1</u>	61:Q1
Real GDP	2.4	4.2	4.4	5.2	5.6
Real Disposable Income	. 2.4	3.5	3.9	5.6	5.5
Employment	1.6	2.8	3.5	3.3	2.7
Productivity	1.4	2.0	1.6	3.1	4.3

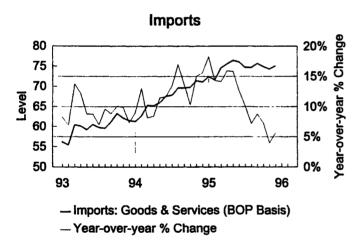
Note: For each expansion, except Q1:71, the table measures annualized growth for its first 19 quarters; the 1971 expansion was only 12 quarters long.

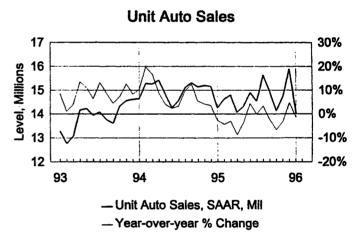
Chart 3

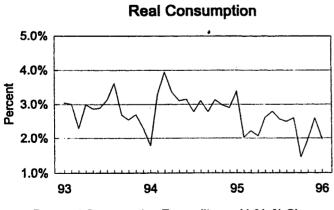
Aggregate Demand Remains Sluggish

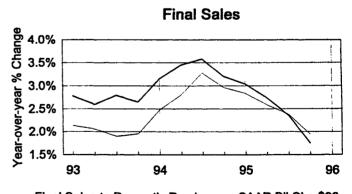










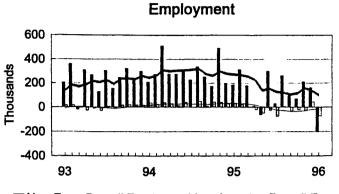


- Personal Consumption Expenditures, Yr/Yr % Change
- Final Sales to Domestic Purchasers, SAAR Bil Chn \$92
- Final Sales of Domestic Product, SAAR Bil Chn \$92

RONDTBLE.WK4

Chart 4

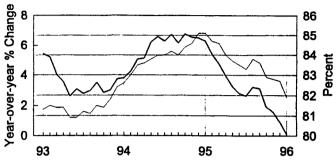
Production and Employment Soft



■ Non-Farm Payroll Employ Manufacturing Payroll Em

- 6-Month Avg - 6-Month Avg

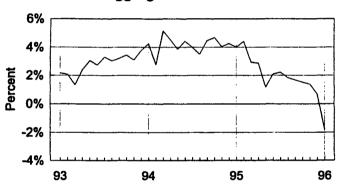
Industrial Production & Capacity Utilization



- Industrial Production: Total Index (Yr/Yr)

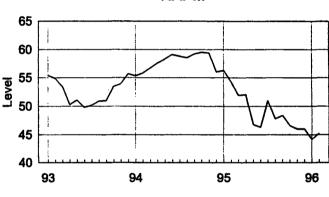
- Capacity Utilization: Total Industry (%)

Aggregate Hours Worked



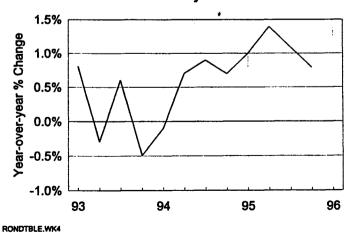
- Weekly Hours Index, Private Nonfarm, Yr/Yr % Change

NAPM



- NAPM: Composite Index

Labor Productivity-Nonfarm Business



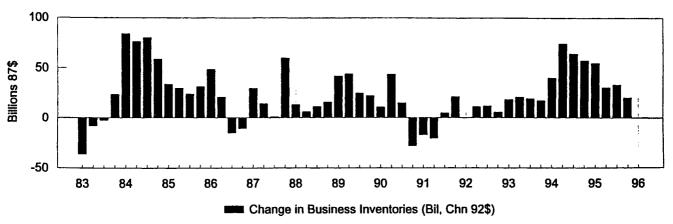
NAPM Details

	Change in Last			
	6 Months	12 Months		
Composite Index	-2.6	-9.1		
Production	-6.4	-11.4		
New Orders	-2.6	-10.5		
Supplier Delivery	-0.6	-11,2		
Inventories	-1.0	-3.4		
Employment	-1.2	-5.6		
Prices	-10.6	-42.8		
New Export Orders	-5.7	-7.5		
imports	-4.5	-5.0		

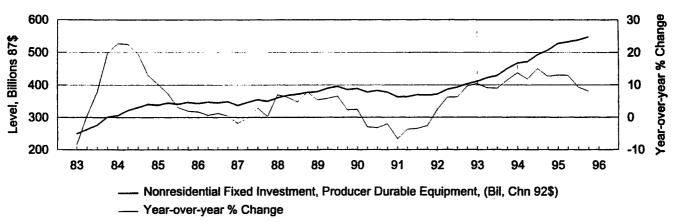
Chart 5

Business Investment Decelerates and Inventory Adjustment Accelerates

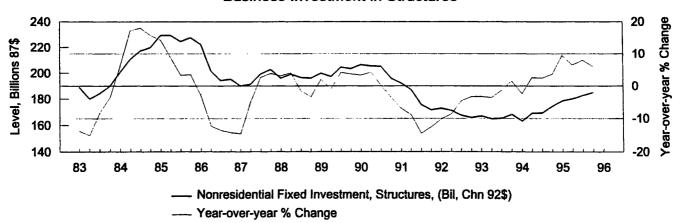
Change in Business Inventories



Business Investment in Producer Durable Goods

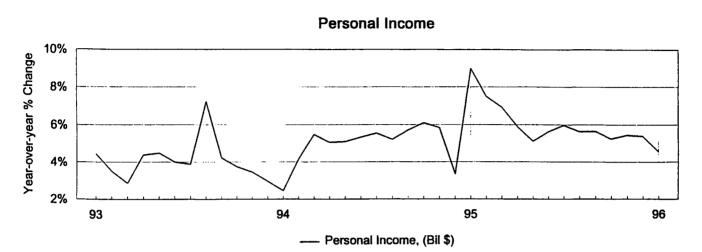


Business Investment in Structures

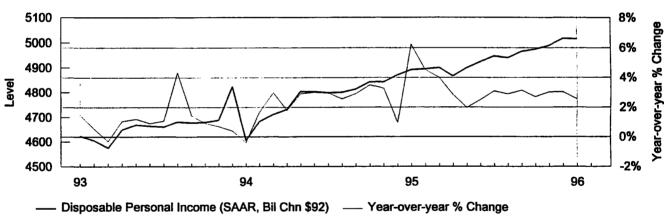


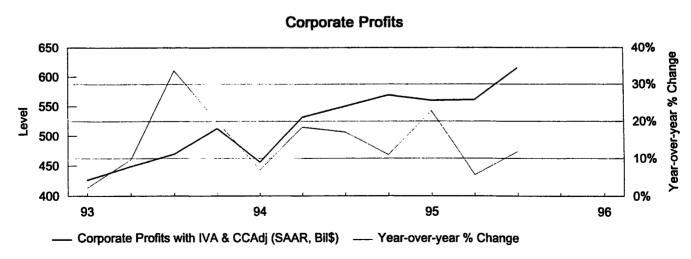
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Chart 6
Income and Profit Growth Moderate



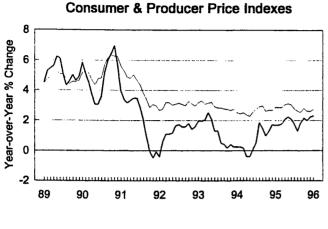
Disposable Personal Income



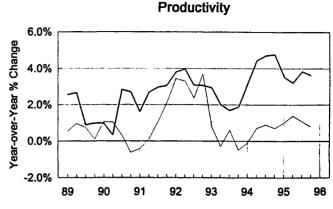


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Chart 7 Optimism on Inflation: Low and Going Lower...

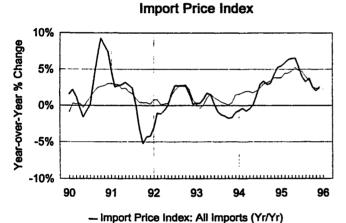


- CPI-U, All items (SA) - PPI-U, All Items, (SA)



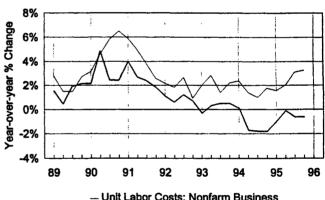
- Nonfarm Business Sector: Output Per Hour of All Persons

- Manufacturing Sector: Output Per Hour of All Persons



- Import Price Index: Non Petroleum (Yr/Yr)

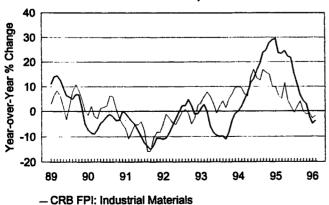
Unit Labor Costs



- Unit Labor Costs: Nonfarm Business

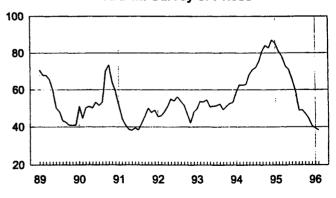
- Unit Labor Costs: Manufacturing

Commodity Prices



-- CRB Spot Commodity Market Index: Raw Industrials

NAPM: Survey of Prices

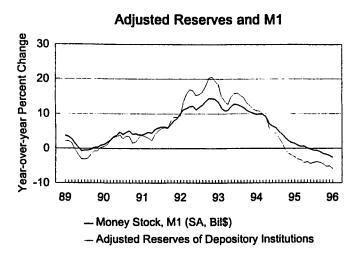


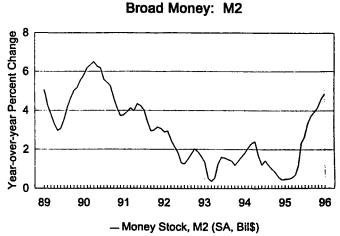
- NAPM Survey-Diffusion Index, Prices, SA, (%)

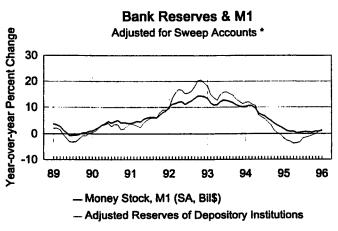
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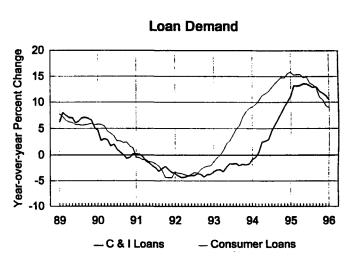
Chart 8

Money and Credit Market Conditions

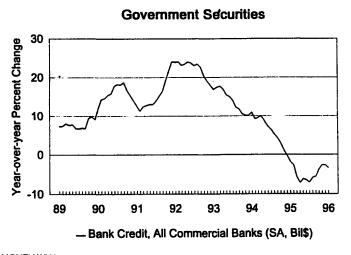


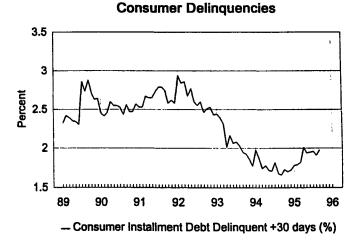








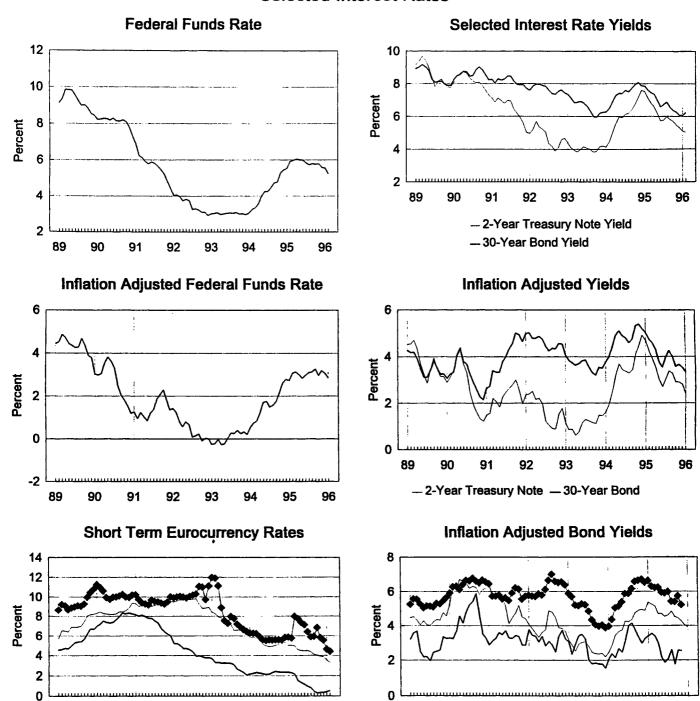




MONEY.WK4

Chart 9

Selected Interest Rates



SOMC.WK4

89

90

91

◆ France

89

90

91

◆ France

93

92

- Japan

94

- Germany

95

96

93

92

— Japan

94

- Germany

95

96

UNEMPLOYMENT, GOLD, MONEY AND FORECASTS OF INFLATION

Allan H. MELTZER

Carnegie Mellon University and American Enterprise Institute

Conventional wisdom in the United States holds that money growth is now

irrelevant for judging Federal Reserve action or inflation. Various reasons are offered to

explain this striking departure from basic economics. The most common explanation is

that financial innovation has distorted the growth rates of monetary aggregates and the

meaning of "money."

Several measures are now widely used to predict inflation. Chief among them is

the unemployment rate. High unemployment is said to lower inflation. Almost every

time a new statistic appears, market watchers and the financial press report that strength

(weakness) in the economy will cause inflation to rise (fall).

Chart 1 compares the annual rate of inflation (four quarter average) to the lagged

unemployment rate quarterly of the past ten years. At times the two series move in the

same direction (1985-86, 1990, 1992-94); at times they move in opposite directions as

suggested by the belief that inflation and unemployment are negatively related (1987-89,

1991-92). On average, the predicted negative relation comes through and is statistically

significant. But the forecasting power is weak, as the chart suggests.

Ouarterly inflation rates are more variable than average annual rates, so the

relation is weaker for quarterly than for average annual data. Chart 2 compares the

lagged unemployment rate to the quarterly rate of inflation (annualized). Again, there is

evidence of the predicted negative relation on average. There are also periods in which

the two move in he same direction.

The conclusion to be drawn form these data is that there is a weak association

between inflation and the unemployment rate. The unemployment rate contains some

information about inflation; but, as discussed below, the information is not superior to the

information in some monetary aggregates.

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The Wall Street Journal advocates use of the level of the gold price to predict the rate of inflation. This is at best a mistake. Inflation is calculated as the rate of change of some broad index of prices. The <u>level</u> of the gold price cannot and should not be expected to predict the rate of inflation.

Chart 3 compares the lagged <u>rate of change</u> of gold prices to the rate of inflation using annual rates (four quarter average). Chart 4 uses quarterly data (at annual rates). There is no evidence of any relation at all. Inflation rises with falling gold prices from 1987 to 1990 and falls with rising gold prices from 1992 to 1995. This is opposite to the alleged relation. Computation shows that there is a negative relationship on average, but it is weak and not statically significant. Changing the lag structure does not improve forecast accuracy.

Contrary to repeated assertions, money growth continues to play a useful role in forecasting inflation. Chart 5 shows that the forecast of inflation improves significantly using a forecasting equation that assigns importance to Federal Reserve actions. This equation includes the annual growth rate of the monetary base relative to the average growth of the real base, lagged one quarter, the lagged value of the unemployment rate and lagged rates of inflation. The estimated equation implies that a 1 percent change in the growth rate of the monetary base—say from 3 to 4 percent—changes inflation by 0.4 percent within a quarter. The direct effect on the measured rate of inflation is about the same as a 3/4 percentage point change in the inflation rate (from 5 1/2 to 6 1/4 percent). If the two variables changed in the same direction in the proportion 1 and 3/4, the combined effect would approximately cancel for the inflation rate.

This comparison appears to make the unemployment rate and the growth of the monetary base about equally important. However, the base is more variable than the unemployment rate, so a 1 percent change in its growth is a smaller relative change than a 3/4 percentage point change in the unemployment rate. A 1 percent change in the base is about 1/2 the standard deviation of the growth of the base (56 percent), but a 3/4 percentage point change in the unemployment rate is more than a full standard deviation of the unemployment rate (118 percent).

Table 1 compares forecasting accuracy of the three forecasting methods. The average rate of inflation for the period is 3.2 percent. Two times the standard error from the equations tells the range within which the forecast error would lie 95 percent of the time using the particular method of forecasting. For the unemployment rate and the rate of change of gold prices, the range is 100 percent or more of the average rate of inflation. A central bank using either of these methods, to achieve say 2 percent inflation during 1985-95, could expect no better than that the inflation rate would remain between -1 and +5 percent using only the unemployment rate to forecast inflation. (Using the rate of change of gold prices gives an even larger range.) Neither variable has been useful for forecasting inflation during this period.

Table 1

Measures of Forecast Accuracy

Standard Error

Unemployment rate	±1.5
Percentage change in gold price	±1.7
Base money growth plus (see text)	±0.7

A more precise version of the relation between unemployment and inflation would introduce the "natural rate" of unemployment or NAIRU as an additional variable. Deviations of unemployment from NAIRU, not the unemployment rate itself, are said to be negatively related to the rate of inflation.

A problem with this explanation is that NAIRU is not constant, and it cannot be expected to remain constant. Changes in regulation, tax rates, the terms of trade, and the demographic composition of the labor force affect the value of NAIRU. In recent years, the assumed value of NAIRU has drifted from 6.5 percent to 6 percent to 5.8 percent to 5.6 percent.

NAIRU appears to be near the prevailing level of unemployment, whenever that is, as long as inflation is not rising. Inability to find the value of NAIRU removes most of the content from this explanation of inflation.

The point of this exercise is not to suggest that we at the Shadow Committee can forecast inflation with sufficient accuracy to offer a short-term forecasting procedure. We cannot, and neither can the Federal Reserve. Table 6 shows their forecast errors for the period based on the mid-point of the projections they release at the Humphrey-Hawkins hearings.

Our point is a different one. Federal Reserve officials and market watchers, who profess or act as if inflation depends closely on the unemployment rate, have to recognize that such dependence as there is in the data gives no basis for the belief that the Federal reserve can control the inflation rate by responding to the unemployment rate.

As we noted at our September 1995 meeting:

- (1) there is substantial uncertainty about the value of the "natural rate of unemployment and how it changes in response to changes in tax rates, regulation, the real exchange rate and other forces;
- (2) there is substantial uncertainty also about how much inflation responds in the short-run to changes in unemployment.

Money growth remains the principal determinant of long-run inflation and changes in the growth rate of the base have an important influence on short-run changes in the rate of inflation. As shown in Chart 5, based on our rule, inflation will continue to fall toward zero even if the Federal Reserve would increase the growth rate of the monetary base to a 4 percent annual rate from the current rate of 2 percent or less. The projected path for 1996, shown in Chart 5, is based on an annual 4 percent growth rate in the monetary base beginning in fourth quarter 1995 and a 5.8 percent unemployment rate.

Annual Inflation versus Unemployment

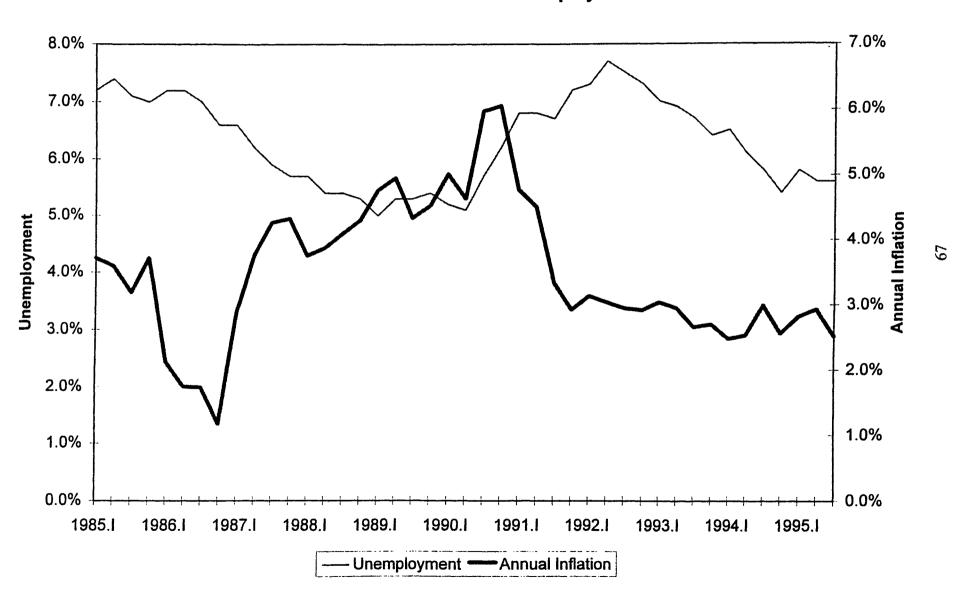
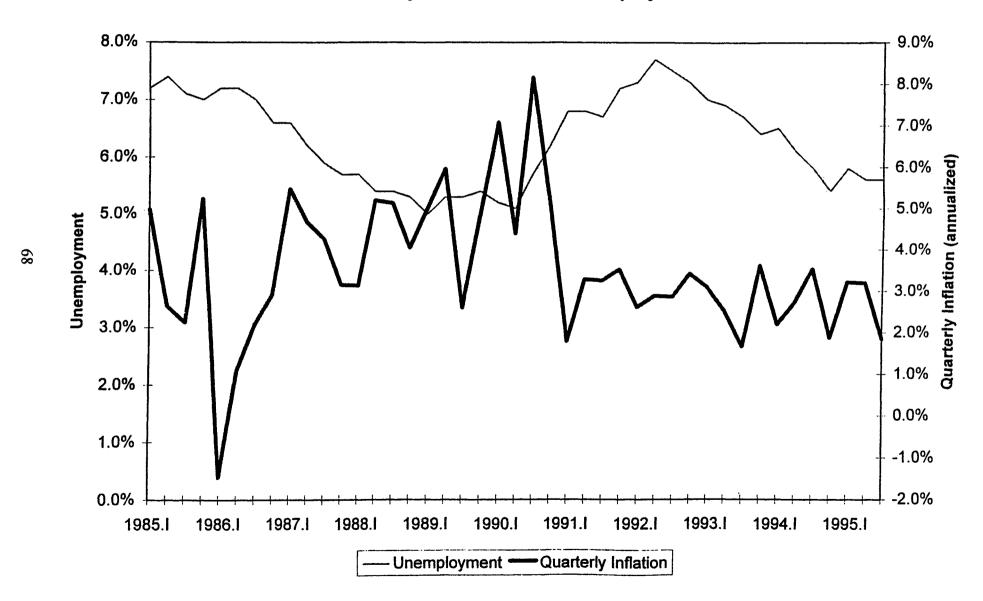
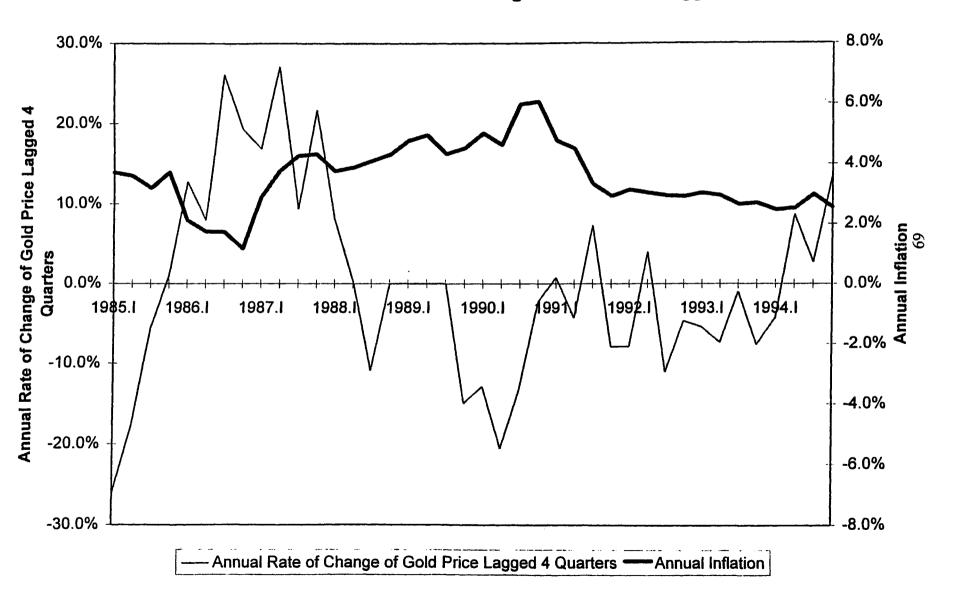


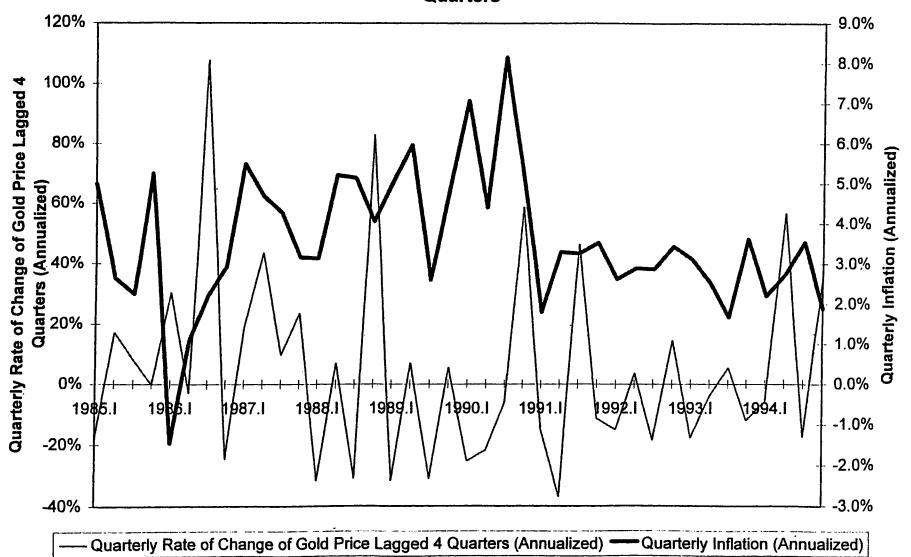
Chart 2

Quarterly Inflation versus Unemployment



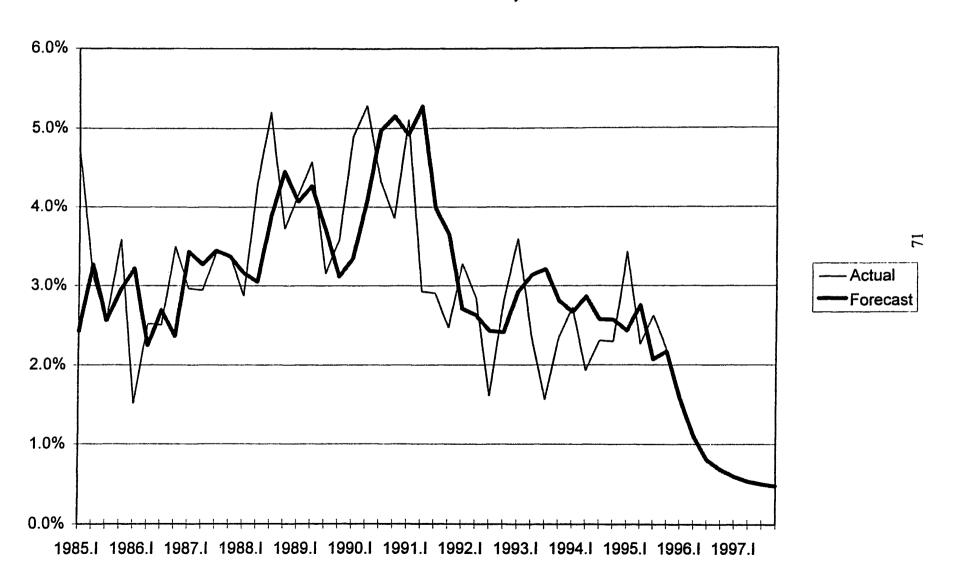
Annual Inflation versus Annual Rate of Change of Gold Price Lagged 4 Quarters



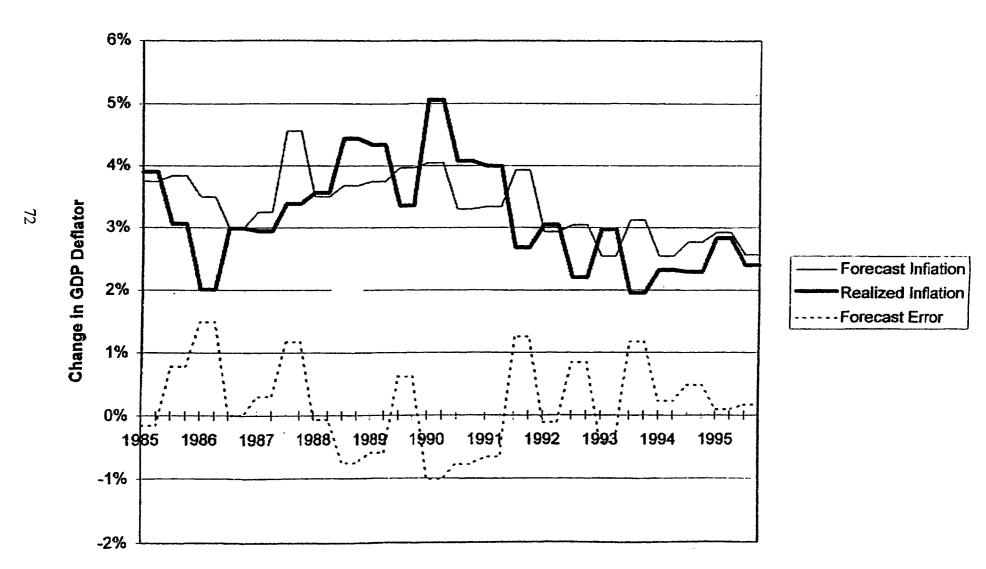


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Actual vs. Forecast Inflation; Base Growth = 4%



FOMC Forecasts of Inflation vs. Realized Inflation



THE DEBT CEILING

William POOLE* Brown University

No Money shall be drawn from the Treasury, but in Consequence of Appropriations made by Law; and a regular Statement and Account of the Receipts and Expenditures of all public Money shall be published from time to time.

(Constitution of the United States, Article I, Section 9.7)

A monumental battle over the federal budget began last year; the impasse over raising the debt ceiling is a part of that battle. The *Constitution* provides that the Congress must approve all federal spending, but that does not mean the current Congress. Today, only about one-third of the budget is so-called "discretionary" spending; two thirds is "mandatory," reflecting permanent spending programs enacted into law by prior Congresses plus interest on the federal debt. Much discretionary spending is necessary, such as some base level of defense, the court system, routine operation of Congress, and so forth.

So unless Congress changes mandatory spending the amount of spending that can be cut is only a small part of the total. The budget problem cannot be solved without addressing mandatory spending. Mandatory spending is an auto pilot, and can only be changed by legislation signed by the President, or passed over the President's veto. The Republican majority in the Congress can, and has, passed bills to reduce mandatory spending but the President has vetoed these bills. The current majority does not command enough votes to pass important budget legislation over the President's veto. In an effort to gain control over spending decisions, the Congress has refused to raise the debt ceiling. Is this a satisfactory strategy which will in fact enable the current Congress to make progress in controlling federal Spending? So far, the answer is clearly "no."

At the end of the last fiscal year, 29 September 1995, the total federal debt subject to the debt ceiling was \$4,884.605 billion, just \$15.395 billion below the debt ceiling of \$4,900 billion. For fiscal year 1996 through the end of January, new borrowing from the public was \$28.588 billion. By any normal accounting, a simple subtraction (\$28.588)

billion less \$15.395 billion) suggests that the federal government must have violated its debt ceiling by about \$13 billion. But, as everyone knows, the federal government does not adhere to generally accepted accounting principles, and perhaps not even to the usual rules of addition and subtraction.

In this memorandum I'll provide a little background on the debt limit, take up some budget issues that lie behind the fight over the debt limit, and then return to debt-limit issues once again.

DEBT AND THE DEBT LIMIT

The Congressional Budget Office has recently discussed debt-limit issues (Chapter 4 in *The Economic and Budget Outlook Update*, August 1995). The CBO noted that, "Before World War I, the Congress generally had to approve each separate issuance of federal debt. Since the Second Liberty Bond Act was passed in 1917, however, the Congress, by statute, has simply set an overall dollar ceiling on the amount of debt that the Treasury can issue." The CBO points out that the debt limit does not apply to certain debt issued by the federal government, such as obligations of the Federal Financing Bank and of federal agencies such as the Tennessee Valley Authority. At the same time, the debt limit does apply to most of the Treasury obligations owned within the federal government by trust funds such as the Social Security trust fund. Although the debt ceiling was \$4.9 trillion at the end of last fiscal year, the amount of federal debt owned by the public was just a bit over \$3.6 trillion. Thus, about \$1.3 trillion of official Treasury debt reflects internal bookkeeping transfers.

Whatever may have been the original merits of the requirement for congressional approval of individual debt issues, or of the overall amount of debt, today the debt limit is a confusing mishmash. The debt limit does not apply to some debt issued to the public and does apply to internal bookkeeping transfers within the federal government. Battles over the debt limit have never affected the amount of bonds sold to the public, at least so far.

As a matter of accounting, the difference between total government spending and total government revenue must be financed by some combination of issuing new debt to

the general public and printing money. Fortunately, no one has suggested that current budget issues could be resolved by printing money beyond normal Federal Reserve practice, and so the government has in fact been issuing new debt to the public equal to the difference between spending and revenue. This fact is obscured by intergovernmental transfers; a number of government trust accounts hold securities issued by the Treasury. Under existing law, the Treasury is able to stop investing funds in certain trust accounts running surpluses to leave room to issue more securities to the public without violating the debt ceiling. Instead of accumulating Treasury securities that count against the debt ceiling, these accounts accumulate Treasury I.O.U.s that do not count against the ceiling.

It is important to realized, however, that these intergovernmental accounts, though useful for a number of purposes, have no bearing on the accounting identity that for the federal government as a whole the difference between total spending and total revenue is financed by selling additional bonds to the public. The thousands upon thousands of hours of time devoted by Congress, the Treasury, and others to the debt-limit issue have not affected by one dollar the amount of debt the government has sold to the general public. Most will regard the current system of substituting I.O.U.s that do not count against the debt limit for Treasury securities that do count against the limit as simple foolishness.

For the debt limit to make any conceivable sense, it would have to apply to all debt held by the public. If this debt is not permitted to rise, and if revenue is determined by existing tax law, then enough spending must be cut to live within existing revenue, short of printing money to pay bills. If Congress and administration cannot agree on what spending to cut, then the Treasury must somehow decide what bill not to pay, or to defer paying. The Treasury cannot write checks on an empty checking account.

The recent (and still current) battle over the debt ceiling is not just a *part* of the overall budget battle, but is the *same thing* as the budget battle, given the accounting identity linking debt issuance to the difference between spending and revenue. It may seem politically convenient to argue over the debt ceiling rather than over revenue and spending, but I doubt that anyone's views on budget issues are much affected by putting the debate this way.

On the surface, it might appear to some that the federal government would be O.K. if it were to stop paying interest on its debt. Excluding interest, spending is below revenue at this time. But, of course, many financial institutions would be insolvent if the value of government debt went to zero, which means that the federal government would immediately be faced with huge demands to make good on deposit insurance. Just starting to spin out a scenario such as this shows how silly the exercise is. The federal government won't walk away from its debt because the voters would demand that the government live up to its obligations.

What about a temporary default for, say, two weeks? A temporary default would resolve nothing. At the end of the two weeks, the government would still have to sell bonds to finance the difference between spending—including interest if the default were not to continue—and revenue. One way or another, Congress and the Administration must decide this year's spending and revenue, and finance the difference (if any) with new debt.

Given the absurd structure of the debt limit in current statues, and the methods the Treasury can (and should) use to avoid breaching the limit, it is clear that recent disputes over the debt limit have nothing to do with debt management itself. Congress, recently and on a number of occasions over the last 15 years, has tried to use the debt limit to pressure the administration and to make a public statement about the budget debate. Given the intensity of feeling in the debt-limit debates of recent months, it makes sense to comment briefly on the current budget debate.

THE BUDGET DEBATE

The U.S. budget debate started in earnest during the Reagan years. President Reagan spoke often and eloquently of the need for our society to trim government, and the budget deficit that arose in the early 1980s drew much additional attention to budget issues. President Reagan was successful in constraining growth in total spending, but he was not successful in rolling back spending in any significant way. More importantly, he was not successful in addressing the need for major structural reforms in Social Security and Medicare.

President Reagan was unsuccessful because Congress—including most Democrats and most Republicans—and the American voting public were not prepared in the 1980s to face the reality of our budget situation. It is instructive to look closely at the Reagan budget for Fiscal Year 1986, which was perhaps the most complete and serious effort during the Reagan years to introduce fundamental reforms in spending programs. This budget proposed spending reductions in numerous politically sensitive areas, including many affecting traditionally Republican constituencies. Reagan proposed reductions in subsidies to business, to upper-income groups, to agriculture, to Amtrak, and to others. He proposed reductions in Medicare, in certain veterans' programs, in retirement programs for military and civilian government employees, and on and on.

The FY1986 budget was a courageous one, but it went nowhere at the time. Nevertheless, many of the budget issues raised during the Reagan years are now attracting serious attention, and new proposals reflecting equal political courage are on the table. The current budget battle is a battle over priorities and the role of government in our society.

Our nation will survive if fewer wasteful programs are cut than the SOMC would prefer. But the really big issue is Social Security and Medicare; our society will be shaken to its foundations if we do not face this issue soon, before the Great Retirement begins. At present, there are about 3.3 workers for each Social Security beneficiary. Just five years from now that ratio will begin a rapid decline, reaching only 2.0 workers per beneficiary by 2030, according to intermediate population estimates. Financing existing Social Security and Medicare benefit schedules might require an addition to the payroll tax of 10 percent of the covered wage base as more and more retired workers will have to be supported by each member of the labor force. If we do not act, within 25 years we face a generational conflict between retirees and workers totally unprecedented in our history.

The urgency of acting soon is nicely illustrated by *The 1995 Annual Report of the Board of Trustees of the Federal Hospital Insurance Trust Fund.* This report, which covers the hospital part of Medicare, is signed by the trustees, including Secretary of Treasury Robert E. Rubin, Secretary of Labor Robert B. Reich, and Secretary of Health

and Human Services, Donna E. Shalala. The *Report* concludes that, "[the] HI program is severely out of financial balance and the trustees believe that the Congress must take timely action to establish long-term financial stability for the program. ... The trustees believe that prompt, effective, and decisive action is necessary."

The current budget debate includes proposals for revisions to Medicare; the Congress would do more, and the Administration would do less. Neither Congress nor Administration would address Social Security at this time.

Some future Congress and Administration will address Social Security, because the demographic facts cannot be brushed away. We need to adjust the Social Security and Medicare programs to encourage later retirement and more efficient use of medical resources. The adjustment would have been easier if we had started 10 years ago, and easier yet if we had started 20 years ago. The longer we wait, the more difficult the adjustment will be, and the greater the chance of serious generational conflict.

Much of the acrimony over the debt limit reflects the political pain of retirement policy issues. I am very sympathetic to those who ask this question: "If we cannot begin now by introducing reforms to Medicare, how will we ever be able to begin again, before it is too late, to tackle the even more difficult issues that surround Social Security?"

THE DEBT LIMIT ONCE AGAIN

It is easy to understand the frustrations of those in the Congress who want to begin to set our fiscal affairs on a sustainable long-run path, and who are willing to hold up an increase in the debt limit until the Administration negotiates a satisfactory budget deal. Nevertheless, the debt limit is the wrong place to force a confrontation. The unwritten rules of political engagement do not include risking the credit of the United States Government.

Some argue that the market has reacted benignly whenever threat of default was raised in recent months; others attribute increases in interest rates to the threat of default. Both misread the evidence. In fact, the evidence is clear that the market has never assigned any significant probability to default. If default talk had changed views in the

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bond market, we would have seen a dramatic narrowing of the spread between highquality corporate securities and Treasury securities. We haven't seen any such thing.

Consider four examples.⁷

- On Monday, 25 September 1995, The Wall Street Journal carried this headline: "Gingrich's Threat Spooks Bond Investors." The Journal article said that the threat was unveiled the previous Thursday. On Wednesday, the 30-year Treasury bond closed at 6.46 percent, and on Thursday rose to 6.56 percent. At the same time the long Treasury bond yield was rising by 10 basis points, Aaa corporate bonds were rising by 8 basis points; the spread between the two narrowed by 2 basis points, which is a trivial amount. Changes in the spread of this amount are common, and mean
- On 10 November 1995 *The Wall Street Journal* quoted White House spokesman Mike McCurry as saying the previous day that, "default is becoming increasing likely," The day of McCurry's statement the 30-year bond yield rose by four basis points, and the spread with Aaa bonds narrowed by a mere one basis point.
- On Friday, 5 January 1996, *The Wall Street Journal* ran a headline saying, "GOP's Threat Against Rubin Roils Markets." The stock market fell and the 30 year bond yield rose from 5.96 percent to 6.03 percent. However, the spread with Aaa corporates stayed constant at 75 basis points.
- On Wednesday, 24 January 1996, *The Wall Street Journal* began its story on the credit markets this way: "Bond prices tumbled as some investors began to fear that the Clinton administration might not get congressional approval to raise the government's borrowing limit in time to avoid a default." The 30-year Treasury bond yield rose by five basis points, whereas the Aaa corporate bond yield rose by four basis points. The spread fell from 75 to 74 basis points.

Clearly, the debt-ceiling battle has from time to time created uncertainty in the markets, but the uncertainty has been about the general course of the fiscal policy debate and not over default per se. The market simply does not believe that default can occur. We should be comforted by this finding, for it demonstrates that our nation's finances are truly strong. Default is unthinkable, and the market believes that the political process will find a way, somehow or other, to service the debt. Neither political party will in fact jump over that cliff. Congress should recognize that public sentiment for honoring our federal government obligations is overwhelming, and that the issue of default should be put behind us by routine action to increase the debt limit whenever required for the government to pay its bills without interruption. No constructive purpose is served by forcing the Treasury to engage in strange financial gymnastics.

CONCLUDING REMARKS

An important principle of our government is that it must honor its contractual commitments. We may today regret that certain commitments were made by the government in the past, but we must still honor them. Servicing the debt is one of those contractual commitments.

Little mandatory spending, other than interest, is contractual in a legal sense, but it is quasi-contractual in a political sense. How the government should modify Social Security and Medicare promises, and other quasi-contractual political commitments, is a difficult issue. The government will have to modify those promises, but until the political parties are in closer agreement, or one party is strong enough to control both Congress and White House, or strong enough to pass legislation over the President's veto, we will just have to live with a political stalemate. That this stalemate permits continued mandatory spending at a high rate as a consequence of decisions made in prior years is the unavoidable result of living under the provisions of the U.S. Constitution.

The debate over the debt limit has served the useful purpose of emphasizing just how important our budget issues are. But our disputes are over spending an taxes, and not over servicing the debt. It is time to put this phase of the political debate behind us; Congress should pass and the President should sign a simple extension of the debt limit. Over the longer term, the Congress should examine whether the debt limit serves any useful purpose in our current fiscal system. It seem clear to me that the debt limit no longer serves any useful purpose and so should be abandoned.

The larger budget issue, however, must not be allowed to die. We must make some choices and the sooner we make them the better off we will be. The United States will face budget issues for the indefinite future, and the longer we wait to cut the more difficult the job will be.

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NOTES

*Portions of this memorandum were included in my recent testimony on the debt ceiling before the Committee on Banking and Financial Services of the United States House of Representatives, 8 February 1996.

¹Treasury Daily Statement, Friday, September 29, 1995, Table III-C.

²Treasury Monthly Statement, For Fiscal Year 1996 Through January 31, 1996, and Other Periods, Table 7.

³The Economic and Budget Outlook Update (August 1995), p. 47.

⁴See Congressional Budget Office, *The Economic and Budget Outlook Update* (August 1995), Table 22, p. 53.

⁵This estimate is from the 1995 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds. Table III.C1 shows a combined Social Security and Medicare surplus of 0.29 percent of GDP in 1995. Under intermediate projections, in 2030 the combined surplus has become a deficit of 3.63 percent of GDP; the swing from surplus to deficit amounts to 3.89 percent of GDP (0.29 percent plus 3.63 percent). In Table III.C2, under the intermediate projection, the taxable payroll will be 0.389 of GDP in 2030. Thus, we can express the swing from surplus to deficit in Social Security and Medicare combined as either 3.89 percent of GDP or 10 percent of the payroll taxable under these programs.

⁶The 1995 Annual Report of the Board of Trustees of the Federal Hospital Insurance Trust Fund, p. 4.

⁷Kevin Jewell and Chris Tachiki dug out these examples for me; I appreciate their help.

A NOTE ON THE BEHAVIOR OF INTEREST RATE SPREADS IN EXPANSIONS AND NEAR CYCLICAL PEAKS IN THE U.S.

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The shape of the yield curve of interest rates has attracted attention both as a potential leading indictor of inflation and of real economic activity. The purpose of this note is to review the behavior of the term structure of U.S. government securities during expansions and near cyclical peaks.

The interest rates considered here are the Federal funds rate, the three month Treasury bill rate and the rates on U.S. government notes and bonds at constant maturities of one, three, five and ten years. The data are obtained from F.R.E.D. at the Federal Reserve Bank of St. Louis World Wide Web site (http://www.stls.frb.org). Each of the latter five rates is plotted against the Federal funds rate in the top panel of Figures 1-5. The shaded areas in those graphs represent NBER dated periods of recession, starting with the recession of 1958. The second panel in each of these figures indicates the spread between the funds rate and one particular longer maturity rate, if the economy is in an recovery or expansion phase of the business cycle <u>and</u> the rate spread is positive. This variable is set to zero for all observations during periods of recession.

The spread between the Funds rate and the Treasury bill rate during periods of recovery and expansion behaves differently that the spread between the Funds rate and longer maturity rates. As seen in Figure 1, this spread is generally very small during early recovery phases, alternating between positive and negative (plotted as zero in the lower panel), but then shows different patterns as the economy approaches a cyclical peak. Prior to the 1958 and 1960 cyclical peaks, there was no systematic pattern. As the economy approached the 1970, 1973 and 1980 cyclical peaks, the Funds rate-T Bill rate spread increased rapidly. During the recovery and expansion of 1982-90, this spread remained large and did not exhibit any particular trend; if anything the spread had a negative trend before the 1990 cyclical peak. Since 1990 the pattern of this spread seems to have reverted to the characteristics of the pre-Vietnam inflation period.

The spreads between the Funds rate and the longer term government rates (Figures 2-5) show very similar patterns across the maturity spectrum. Prior to the mid 60s, these spreads generally remained negative; the dominant pattern was a positive slope in the yield curve during recovery and expansion phases of the business cycle. After 1965 the pattern changed. In the beginning of the recovery phase the spread was negative at all maturities. This pattern continued after the 1990-91 recession. In the late stages of the expansions after 1966, the spread between the Funds rate and the rates with maturities over one year became positive; in this range the slope of the yield curve became negative. In the middle of several expansionary periods there are episodes during which the spread became positive, but then reversed, only to become positive again immediately before the cyclical peak. With the exception of the 1990 peak, the spread reached a maximum at the cycle peak. In 1989 the positive Funds rate spread at all of these maturities reached a maximum and then disappeared before the 1990 cyclical peak. In 1995, the spread between the Funds rate and the intermediate maturity rates (up to five years) has again become positive, but relatively small compared to the maximum spreads achieved before the last four cyclical peaks.

Table 1 provides some quantitative information on the size and duration of the positive Funds rate spreads prior to cyclical peaks since 1966. For each maturity and each business cycle peak, the months during which the indicated Funds rate spreads was positive is recorded, together with the duration of the positive spread in months, and the mean of the spread during the months prior to the cyclical peak. In the 1990 peak, two sets of statistics are recorded. The first is based on the number of months between the first occurrence of the positive Funds rate spread and the cyclical peak, including the months immediately before the peak during which the rate spreads became negative. The second is based only on the duration of the last interval of a positive Funds rate spread prior to the cyclical peak. The final set of statistics reports similar data for the positive Funds rate spreads prior to the end of the sample period (December, 1995).

There is some suggestion of a pattern over the past five business cycle peaks in the behavior of the Funds rate spread against government securities with maturities of one year or more, but it is probably dangerous to read too much into these patterns. The sample is very small, and all observations are drawn from an inflatinary period. Generally it appears that the positive rate spreads have emerged 12 to 18 months prior to the cyclical peak and have averaged from 75 to 150 basis points. The exception is prior to the 81 peak, but the duration of the positive spread here is restricted by the short period between the credit controls recession in early 1980 and the onset of the 1981-82 recession. This period also coincides with the New Operating Procedures experiment. Compared against this standard, the positive Funds rate spreads at these maturities during recent months have been of short duration and relatively small magnitude.

Perhaps a more interesting leading indicator of cyclical peaks is provided by a different segment of the government security yield curve. Figures 6-8 show the spreads between the three, five and ten year maturity rates and the one year rate when the economy is in a recovery or expansion phase and those spreads are positive (this segment of the yield curve is positively sloped). With the exception of the 1990 cyclical peak, the slope of the yield curve in these maturity segments has consistently approached zero, or become negative prior to all cyclical peaks since the mid 1950s. In 1989, the slope in these maturity segments went negative for a few months, but then became positive again prior to the 1990 cycle peak. Note that in recent months the slope of the yield curve in these maturity segments has become very small, but still remains positive. In the latest weekly data available on these rates (mid February, 1996), the spreads between these maturities and the one year rate have become smaller in the three to five year range, but larger at the ten year maturity than they were at the end of December, 1995.

There is another interest rate spread that has been mentioned as a leading indicator of real economic activity in recent years. In a number of studies employing VAR analysis, Friedman and Kuttner (1989, 1992, 1993a, 1993b) argue that the spread between the commercial paper rate and the Treasury bill rate of comparable maturity contributes significantly to forecasts of future changes in measures of real economic activity. However, a recently published study (Emery, 1996) shows that the Friedman/Kuttner results on this interest rate spread depend critically on the inclusion of two observations: one in 1974 at the time of the Franklin National Bank crisis and the second in 1980 coincidental with the imposition of the Carter Credit controls. Emery argues that without

the inclusion of these two observations there is no significant evidence for a role of the commercial paper-Treasury bill rate spread in predicting future changes in the growth of real economic activity. These particular incidents do not contaminate the results in Figures 1-8, or in Table 1, since both occurred during periods dated by the NBER as recessions.

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REFERENCES

Emery, K. M. (1996), "The Information Content of the Paper-Bill Spread," <u>Journal of Economics and Business</u>, 48:1-10.

Friedman, B. and K. Kuttner (1989), "Money, Income and Prices After the 1980s," NBER Working Paper 2852.

Friedman, B. and K. Kuttner (1992), "Money, Income, Prices and Interest Rates," American Economic Review, 82:472-92.

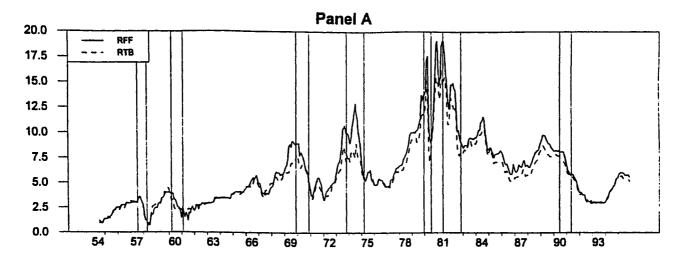
Friedman, B. and K. Kuttner (1993a), "Another Look at the Evidence on Money-Income Causality," <u>Journal of Econometrics</u>, 57:189-203.

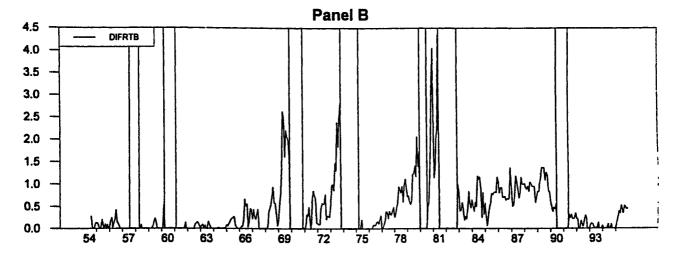
Friedman, B. and K. Kuttner (1993b), "Why Does the Paper-Bill Spread Predict Real Economic Activity?," in <u>New Research on Business Cycle Indicators and Forecasting</u>, (Stock and Watson, eds.), Chicago: University of Chicago Press.

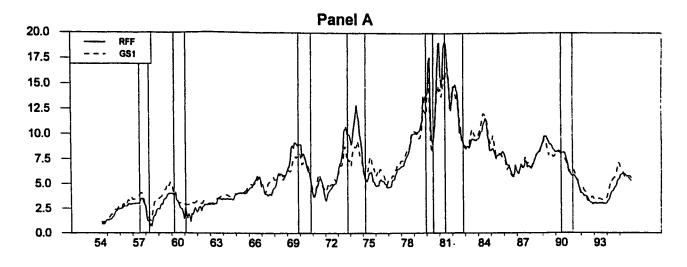
Table 1
Spreads between the Federal Funds Rate and Selected Interest Rates before Business Cycle Peaks

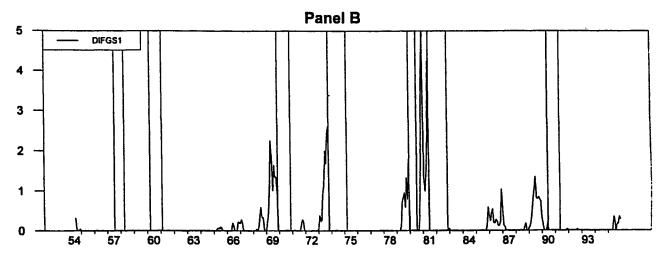
NBER Cycle	T-bill Rate	1-year	3-year	5-year	10-year
Peak		Government	Government	Government	Government
		Rate	Rate	Rate	Rate
69:12	68:4-69:11	69:2-69:11	69:1-69:11	69:1-69:11	69:1-69:11
	20	10	11	11	11
	1.10	1.23	1.23	1.30	1.56
73:11	71:8-73:10	73:1-73:10	73:3-73:10	73:3-73:10	73:3-73:10
	27	10	8	8	8
	0.85	1.19	1.93	2.06	2.09
80:1	77:2-79:12	79:5-79:12	78:9-79:12	78:9-79:12	78:9-79:12
	35	8	16	16	16
	0.73	0.89	1.22	1.40	1.46
81:7	80:8-81:6	80:10-81:6	80:10-81:06	80:11-81:6	80:10-81:06
	11	9	9	8	9
	2.09	2.37	3.11	3.70	3.69
90:7	82:12-90:6	89:1-90:6°	89:2-90:6°	89:2-90:6*	89:1-90:6°
	91	18	17	17	18
	0.77	0.49	0.48	0.51	0.48
		89:1-90:2	89:1-90:2	89:2-90:1	89:1-90:1
		14	12	12	13
		0.62	0.67	0.72	0.66
last	95:2-95:12	95:9-95:12	95:11-95:12	95:11-95:12	
observation	11	4	2	2	
(95:12)	0.39	0.25	0.22	0.10	

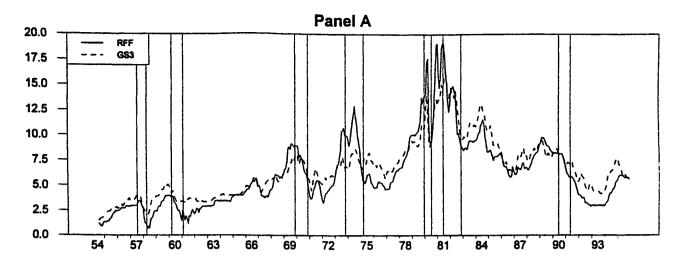
^{*}The differential between the Funds rate and these rates went negative before the cycle peak in July, 1990. These entries indicate the number of periods and the average spread from the date at which the spread first went positive to the peak in July, 1990.

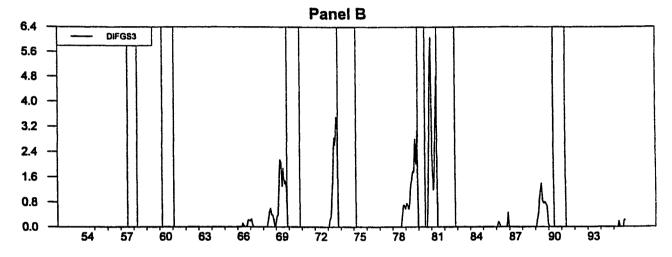


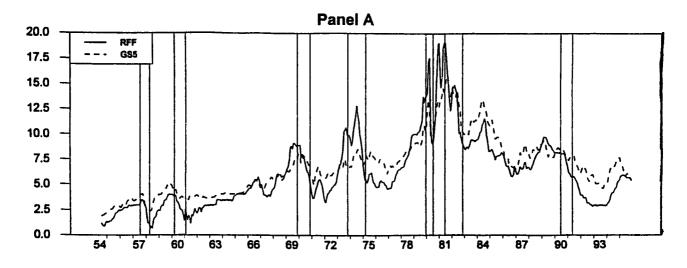


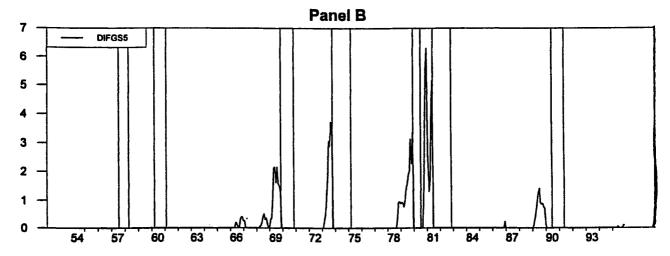


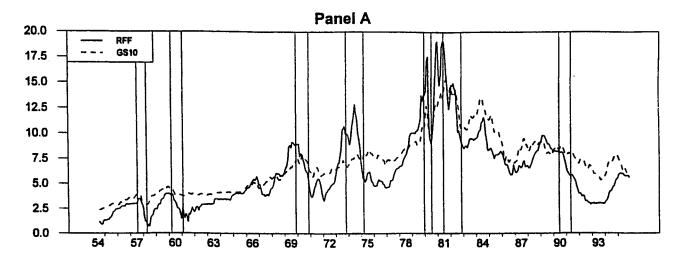












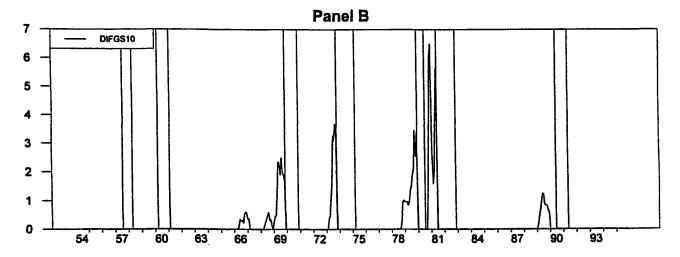


Figure 6

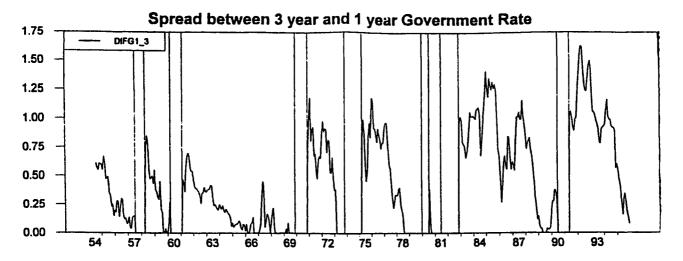


Figure 7

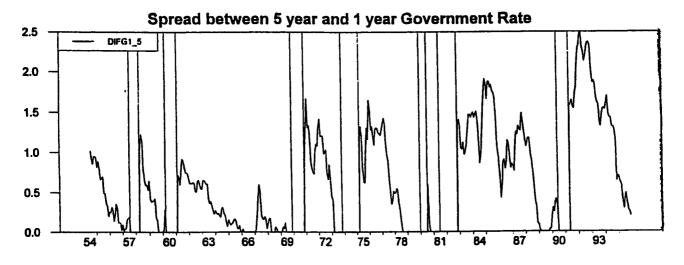
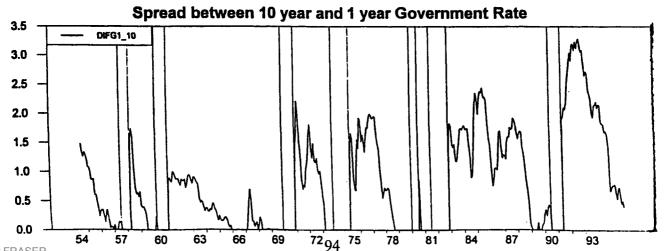


Figure 8



Digitized for FRASER http://fraser.stlouisfed.org/ Federal Reserve Bank of St. Louis

THE MEXICAN LOAN REPAYMENT SLEIGHT OF HAND

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When the spectacular devaluation of the peso occurred at the end of 1994, 91-day swap lines of credit of \$3 billion each—dollars for pesos—were available to the Bank of Mexico at the Federal Reserve and the Treasury's Exchange Stabilization Fund (ESF). These were known as regular swap lines. The first response on January 2, 1995, of the authorities to Mexico's crisis was to establish in addition temporary swap lines, initially of \$1.5 billion at the Fed and the ESF, on February 1 increased to \$3 billion at the Fed, but not at the ESF.

On January 31, 1995, President Clinton announced that the ESF would provide a \$20 billion line of credit, less any outstanding drawings on the short-term facilities, that would be available for medium-term swaps and government securities guarantees between the Mexican government and the ESF.

I report on transactions during the past year first at the short-term and then at the medium term facility. I also discuss Mexico's total indebtedness to official agencies and the private market, and I offer some observations about Mexico's dependence on the United States for financial succor over the past 60 years. I conclude with comments on the FOMC's discussion in March 1990 of foreign exchange market intervention and warehousing of ESF foreign currencies.

MEXICO'S 90-DAY SWAP BORROWINGS

Mexico has drawn only on the regular swap line the amount of \$1.5 billion at each source, \$500 million on two dates in January, and \$1 billion on February 2. Table 1 shows the original amounts of the 91-day swap facility with the Bank of Mexico at the Fed and at the ESF, dates the amounts advanced were renewed, dates and amounts of drawings and repayments.

Neither the Federal Reserve nor the ESF in their usual quarterly reports publishes the interest rate charged on swap drawings. However, the Mexican Debt Disclosure Act of 1995 (passed after the drawings had taken place) requires the Secretary of the Treasury to report to appropriate congressional committees "the interest rates and fees charged to compensate the Secretary of the Treasury for the risk of providing financing." The table shows the Treasury's data in the monthly reports on interest rates charged since 31 May, 1995, pursuant to the Mexican Debt Disclosure Act of 1995.

The swap agreements with the Bank of Mexico set the rate as the latest auction rate on U.S. 91-day T-bills. The January borrowings of \$500 million each from the Fed and the ESF were repaid on time on March 14. The February 2 borrowing of \$1 billion from each source was renewed when due 91-days later on May 3, and again on August 1. The rate was reset on each of the renewal dates based on the latest T-bill auction. The renewal date after August 1 would have been October 30. On October 10, however, Mexico repaid \$350 million of the \$1 billion it owed to each authority, and the rate on the balance of \$650 million was reset on October 30. It was this balance that was repaid on January 29, 1996.

The repayment of \$700 million in October 1995 and \$1.3 billion in January of this year in total extinguished Mexico's short-term borrowing from the Fed and the ESF. Each repayment was the occasion of congratulatory remarks by Treasury Secretary Robert E. Rubin on Mexico's achievement. What he failed to remark was that in both cases Mexico replaced its U.S. loans with other loans. On October 5, 1995, Mexico sold to German banks 1 billion DM-denominated 5-year Eurobonds, roughly equivalent to \$700 million, paying 9 3/8 percent interest, similar to an earlier issue in the German capital market in July 1995. The interest rate on both borrowings was about 400 basis points higher than German bonds of comparable maturity paid. That was also the margin by which the U.S. loan was underpriced. On December 20, 1995, before the January 29 due date for the \$1.3 billion, the IMF increased its loan to Mexico by \$1.3 billion (converting 1,104.06 SDR millions into dollars). Is borrowing form Peter to pay Paul a sign that all is well with Mexico?

It is clear that what motivated the Mexican Debt Disclosure Act was the Treasury's treatment of Mexico as a triple-A borrower, free of default risk, and entitled to the risk-free rate at which the Treasury itself borrowed short term. It cost Mexico

between 3.475 and 4.125 percentage points more to repay the United States with money it borrowed in Germany than the U.S. loan cost, so its annual interest payments will increase between \$104 million to \$124 million over the term of the German loan compared to the U.S. loan.

From the Treasury's viewpoints, a comparison of the T-bill auction rate charged Mexico and 9 3/8 percent on the mark-denominated 5-year Eurobond is invalid. The Treasury required Mexico to provide collateral against default in the form of its oil proceeds on deposit at the Federal Reserve Bank of New York. There is no comparable backup for the German loan. In addition, in return for U.S. dollars, the Fed and the ESF show among their foreign currency holdings dollar equivalents of pesos the Bank of Mexico has swapped. The ESF does not mark-to-market its peso holdings, but the Fed does. In the final quarter of 1995, the Fed sold about one-third of its peso holdings, the ESF, which held both short- and medium-term peso swaps, sold 5 percent of the total. The investment income on Mexican swaps is sold back to Mexico by both authorities.

This episode highlights the senseless duplication of the service of two agencies (with different accounting procedures) in dealing with a borrower of dollars, when the need for even one may be questioned. It is also a sucker's game for Mexico, which hasn't reduced its liability by one hard-currency unit after paying back \$3 billion to the United States.

MEXICO'S MEDIUM-TERM SWAP BORROWINGS

In addition to short-term swap, Mexico borrowed \$10.5 billion from the ESF medium-term facility at four dates in March, April, May, and July, shown in Table 2 along with the amortization schedules. The schedule differs for each tranche. The amount of the repayment of principal of the March borrowing of \$3 billion is \$375 million due at the end of each quarter starting June 1998 with a final \$750 million due on December 31, 1999. Repayment of the April borrowing of \$3 billion is scheduled to begin a year earlier than the March schedule, with 11 end-of-quarter paybacks of \$245 million and a final \$305 million on March 31, 2000. The timing of repayments of the \$2 billion borrowed in May is similar to the April schedule, but the 11 end-of-quarter

amounts are \$170 million, and a final \$130 million on March 31, 2000. Amortization of the July \$2.5 billion borrowing begins September 30, 1997, again as 11 end-of quarter paybacks of \$205 million, and a final payment of \$245 million on June 30, 2000. If there are no extensions of the amortization schedule, Mexico will repay \$1.655 billion in 1997, \$3.605 billion in 1998, \$4.355 billion in 1999, and \$0.885 billion in 2000.

Legislation sponsored by Senator D'Amato in the Mexican Debt Disclosure Act of 1995, signed into law on April 10, changed the process of setting the interest rate. Prior to the enactment of the legislation, the ESF interest rate on medium-term swaps with Mexico was a sum of the latest auction rate on U.S. T-bills, reset at the end of each quarter based on the latest T-bill auction rate, plus a credit-risk premium. Under the April 10 law, the rate is a fixed percentage set at the date of the loan and is not reset at the end of each quarter. The credit risk premium the ESF has changed has varied between 2.25 percent and 3.75 percent in 1995, according to the Treasury, but it may be as high as 4.50 percent, according to Table 2.

In addition to the amounts of principal Mexico is expected to repay at the end of each quarter beginning June 30, 1997, it must also pay the interest on its outstanding loans. In the year ending January 29, 1996, Mexico paid, according to the Treasury, about \$750 million in interest on its short- and medium-term swaps. According to a GAO report, Mexico made \$736 million in interest payments on its U.S. borrowings, hailed by Rep. Jim Leach of Iowa as evidence that U.S. taxpayers "were earning a profit" on the loan. He has obviously never known about opportunity cost. (The GAO figure may differ from the Treasury's because it covers a shorter period.)

MEXICO'S TOTAL INDEBTEDNESS

In arranging the rescue package for Mexico last year, it is not clear that the administration considered how much debt Mexico had the capacity to service and repay. The size of the package seems to have been determined by the sum of the short-term tesobonos and CETES, as well as the dollar-denominated debt with near due dates of private firms, government enterprises, and banks. (It is widely understood that the so-called Mexican rescue package was instead designed to rescue U.S. funds that had

heavily invested in Mexico.) If Mexico's capacity to repay its borrowings had been a high priority, it is doubtful that repayment of its short-term swaps within a year would have been stage-managed, since it was in no position to repay without borrowing elsewhere.

The Mexican government has incurred a liability of hard-currency debt that it will have to repay in coming years, currently amounting to about \$50 billion. I have not seen an estimate of private sector hard-currency debt. The loans the government has obtained are mainly from official sources including the IMF, the World Bank, and the Inter-American Development Bank. Mexico has the right until August 1996 to draw on the balance of the \$20 billion the Treasury extended last year, although it may be politically difficult. It can draw at least an additional \$5.1 billion from the IMF in February, May, and August of 1996, if it meets the requirements for further borrowing. In addition to official sources, Mexico owes German banks \$1.5 billion dollar equivalent of D-marks. (Mexico will be in luck should the mark depreciate against the dollar in coming years, as that will ease the burden of repayment to the German banks.)

What sources can Mexico count on to service and amortize its dollar obligations? It can draw on its international reserves and the income from foreign trade. Will these amounts in 1996 suffice to service the U.S. medium-term swap and the debts owed to official agencies? No data are available on the interest payments the private sector owes on its hard-currency debt. Accordingly, it is difficult to judge how serious a burden servicing Mexico's debts constitutes.

A major difference between Mexico's situation in 1982, when it could not service its \$80 billion syndicated commercial bank loans, is that the official agencies, which are its current creditors, charge lower interest rates and are readier to roll over debt when due than are private market sources, and even to increase it should Mexico lack the means to honor its commitments.

Nevertheless, the specter of trouble in meeting its obligations looms over Mexico.

A LONGER PERSPECTIVE

An ESF agreement with Mexico to stabilize the dollar-peso exchange rate dates back to January 1936. The United States then agreed to buy monthly up to 6 million ounces of newly mined silver from Mexico. Neither the acquisition price per ounce nor the total dollar outlay was specified. The agreement was renewed in December 1937, and suspended in March 1938. In November 1941 the agreement was reinstated, but this time an upper limit of \$40 million was stipulated. Periodically renewed until May 1947, the agreement was then altered to obligate the United States to purchase pesos instead of silver, and the potential dollar outlay was raised to \$50 million. By 1953 the figure was raised to \$75 million.

In 1954, the first time the ESF agreement was combined with an IMF standby loan of \$50 million. In 1958 the IMF standby loan was raised to \$90 million and an EXIM Bank loan of the same amount was arranged. The 1965 agreement for the first time was refereed to as a reciprocal swap agreement. In 1967 the ESF dollar commitment was raised to \$100 million, and for the first time the Federal Reserve established its own swap agreement of \$130 million in May of that year. The amount was periodically raised to \$180 million in 1973, then to \$360 million and to \$700 million, until in 1995 the agreement reached \$3 billion regular and \$3 billion temporary.

Mexico did not invariably draw on the ESF or the IMF. It made drawings on the ESF in 1949 when the peso was devalued from 4.855 to 8.65 to the dollar, and it drew on the IMF in 1954, when it devalued the peso from 8.65 to 12.50 to the dollar. It drew on the Federal Reserve swap line in 1974-76 and in 1982, when it devalued—based on the new pesos used today from 0.037 per dollar to 0.113 per dollar. In 1982-83 it also drew on its ESF swap line. In 1986 it drew on both the ESF and Fed lines. In 1989-90 it drew on the Fed and in 1988-89 also on the ESF.

So from a \$40 million stabilization agreement in 1941, in 1995 the ESF raised the ceiling on Mexico's borrowing needs to \$20 billion, a 500 percent increase, far in excess of any change in Mexico's economic growth rate and in the world inflation rate over the period from 1941. Nor is Mexico the sole recipient of this Treasury benevolence. At

least 14 other Latin American countries at one time or another have had ESF bilateral stabilization agreements, but none has had as sustained a connection with the ESF as Mexico, and Mexico is the only Latin American country that has a swap arrangement also with the Federal Reserve, which, as noted above, increased the authorized amount from \$130 million in 1967 to \$3 billion regular plus \$3 billion temporary in 1995.

Nearly 60 years have elapsed since the first ESF dollar-peso stabilization agreement. Is it possible that, far from stabilizing the Mexican economy, the loan agreements have contributed to a permissive culture there that periodically ignores the eternal varieties of sound finance, secure in the knowledge that its transgressions will be forgiven?

The Treasury has regularly orchestrated loan packages for less advanced countries, drawing on all the postwar aid agencies. In the aftermath of the Mexican crisis, proposals to expand loan availability include creation of an emergency bailout fund at the IMF to aid countries in financial difficulties and doubling of the GAB's lending authority. What proof is there that loans have succeeded in setting even one country on the path to stable economic development?

WHY INTERVENTION AND WHY WAREHOUSING?

At the FOMC March 27, 1990, meeting, the participants had a full-dress discussion of the rapid growth of the Fed's foreign currency balances and the legality of Fed warehousing of ESF foreign currencies. At that meeting, with three dissenting votes (Angell, LaWare, and Hoskins), the FOMC raised the upper limit of authorized Federal Reserve foreign currency balances from \$21 billion to \$25 billion, and the upper limit of warehousing from \$10 billion to \$15 billion.

What worried the FOMC was the political fallout of possible losses on its expanding foreign currency portfolio, but the majority argued in favor of continuing to intervene as a means of moderating Treasury initiatives. According to the dissenting members, warehousing, in effect a loan by the Fed to the ESF, was illegal on its face, and was subversive of congressional appropriations powers. The Treasury, instead of asking the Fed to warehouse foreign currencies it could not afford to buy, should have requested

an appropriation from Congress. This is also the position of the SOMC but the majority was persuaded that an opinion of the Board's General Counsel in 1952 justified warehousing as well as foreign exchange operations. The warehousing operation permits the ESF to transfer to the Fed major country currencies acquired in its intervention mode in order to have funds for dollar swaps with less advanced countries. The Federal Reserve for its part resists transfer by the ESF of currencies other than those of major industrialized countries.

The FOMC discussion leaves the legal and economic doubts surrounding intervention and warehousing far from settled.

Did the ESF agreement to lend Mexico \$20 billion in February 1995 involve warehousing? On December 31, 1994, ESF assets totaled \$38.2 billion, of which \$8.2 billion was a deposit at the Federal Reserve Bank of New York, \$10 billion was in SDRs valued in dollars, and \$19.3 billion was in mark and yen balances or government securities denominated in those currencies. The question is, how did the ESF finance the loan to Mexico?

The amount of warehousing authorized by the FOMC was reduced to \$5 billion in February 1992. An outstanding amount of \$2 billion was repurchased by the Treasury from the Fed in April 1992, leaving the warehouse empty. Authorized warehousing would have been inadequate to cover the \$20 billion Treasury loan, and would have had to be increased if it was the means by which the Treasury financed the loan. Indeed, at the January 31-February 1, 1995, FOMC meeting, the committee approved an increase from \$5 billion to \$20 billion (Lindsey and Melzer dissenting) in the warehouse for the Treasury and the ESF. However, no warehousing operations have been reported to date since the loans to Mexico in 1995 was extended.

According to the March 31, 1995, ESF balance sheet, the main change in the composition of ESF assets since the Mexican loan was a \$4 billion decrease in the agency's deposits at the Federal Reserve Bank of New York, matched by the entry of a \$4 billion dollar equivalent of Mexican pesos. The June 30, 1995, balance sheet (the latest one available as of the date of the SOMC meeting), shows that the Federal Reserve Bank deposit during the second quarter was further decreased by \$3 billion and mark and yen

balances were decreased by approximately \$1.3 billion. Mexican peso balances show a \$5 billion dollar equivalent increase.

Table 1

FEDERAL RESERVE AND ESF 91-DAY SWAP FACILITY WITH BANK OF MEXICO

Date	Orig Amo		Renewal	Drawings on Regular Swaps	Interest Rate Charged (per cent per annum)	Repay- ments	Outstan- ding	
		(billions	s of dollars)			(billions of dollars)		
1. Federal	Reserve Arrang	ements						
<u> 1995</u>	Temporary	Regular						
Jan. 2	1.5	3.0		_				
Jan. 11				.250 🚶	5.90		.50	
Jan. 13				.250				
Feb. 1	1.5			-				
Feb. 2				1.000	5.80		1.50	
Mar. 14						.500	1.00	
May 3			√.		5.75			
Aug. 1			√		5.45		1.00	
Oct. 10			✓			.350	.69	
Oct. 30					5.25			
<u> 1996</u>								
Jan. 29						.650	0	
	ge Stabilization		ements					
<u>1995</u> Jan. 2	Temporary 1.5	Regular 3.0						
Jan. 2 Jan. 11	1.0	3.0		.250)				
Jan. 13				.250	5.90		.50	
Feb. 2				1.000	5.80		1.5	
Mar. 14					3.33	.500	1.0	
May 3			√		5.75			
Aug. 1			√		5.45		1.0	
Oct. 10			√		J .	.350	.6	
Oct. 30					5.25		,•	
<u> 1996</u>					J			
1330								

Table 2

EXCHANGE STABILIZATION FUND MEDIUM-TERM FACILITY WITH MEXICAN GOVERNMENT

Date	Original Amount	Drawings	Interest Rate Charged and Reset on 3/14 Swap	Implicit Credit-Risk Premium (col. 3)	Interest Rate Charged on 4/19, 5/19, and 7/15 Swap	Implicit Credit-Risi Premium (col.5)
	(billions o	of dollars)			(percent per annum)
	(1)	(2)	(3)	(4)	(5)	(6)
<u>1995</u>						
Feb. 21	20.0 ^a					
Mar. 14		3.0	8.20	2.43		
Mar. 31			8.10	2.46		
Apr. 19		3.0			10.16	4.46
May 19		2.0			10.16	4.45
June 30			7.80	2.45		
July 5		2.5			9.20	3.67
Sept. 30			7.55	2.41		
Dec. 31			7.30	2.39		
		Amort		E FOR 1995 MEDIUM-T	ERM SWAPS	
		Mar. 14	Apr. 19	May 19	July 5	Total
1997		0	735	510	410	1655
1998		1125	980	680	820	3605
1999		1875	980	680	820	4355
2000		0	305	130	450	885
Total		3000	3000	2000	2500	10500

 $^{^{\}mathrm{a}}\mathrm{Less}$ the amounts outstanding from short-term swaps and securities guarantees.