

**SHADOW OPEN MARKET COMMITTEE
(SOMC)**

Policy Statement and Position Papers

March 6-7, 1994

PPS 94-01

**BRADLEY POLICY
RESEARCH
CENTER**

**Public Policy Studies
Working Paper Series**

W I L L I A M E .
SIMON
GRADUATE SCHOOL
OF BUSINESS ADMINISTRATION
UNIVERSITY OF ROCHESTER
ROCHESTER, NEW YORK 14627

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SHADOW OPEN MARKET COMMITTEE

The Shadow Open Market Committee met on Sunday, March 6, 1994 from 2:00 PM to 6:30 PM in Washington, D.C.

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SOMC POLICY STATEMENT SUMMARY

Washington, D.C. March 7—The Shadow Open Market Committee called on the Clinton Administration to abandon its current trade policy toward Japan. The policy, the Committee said, "is short-sighted, wrong-headed, costly to our citizens and damaging to our long-term interests in peace and stability within Asia."

The SOMC, a group of academic and business economists who regularly comment on public policy issues, charged that the Administration's effort "even if achieved," would not change the bilateral or multilateral trade imbalances between the U.S. and Japan. "The main effect would be to cartelize markets and reduce pressures to innovate and improve products and services."

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

In a policy statement, the Shadow Committee repeated earlier warnings that "current monetary policy is too easy to sustain non-inflationary growth." The SOMC said that the monetary base (bank reserves and currency) "should grow at no more than an 8 percent annualized rate." The SOMC charged that "the Federal Reserve continues to suppress the rise in short-term rates" and that the quarter-point increase in rates last month was "not enough." The SOMC said that the Federal Reserve "now runs the risk of returning to its earlier pattern of go-stop-go policy."

The Committee recommended that Congress reject the Treasury Department proposal to consolidate four federal bank regulatory agencies into a single Federal Banking Commission. "A single regulator," the Committee said, "would greatly increase opportunities for political pressure, intervention, and corruption."

The SOMC proposed three changes to resolve the current controversy over Federal Reserve policy and disclosure of its actions:

(1) Policy decisions should be released at the end of each meeting of the Federal Open Market Committee. (2) A complete record of discussion and supporting staff documents used at the meeting should be released after a reasonable delay—say three to five years. (3) Congress should require the Federal Reserve to state an explicit objective for inflation, the time frame within which it proposes to achieve the objective and the program for achieving the goal.

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Consideration of these issues, the SOMC said, is marred by confusions between process and outcome. Decision making at the Federal Reserve would be hampered by a requirement that all comments must be on the public record. Decisions are an entirely different matter. Congress and the public should be able to audit and assess decisions and outcomes. The Federal Reserve should be held accountable for its actions.

SHADOW OPEN MARKET COMMITTEE

Policy Statement

March 7, 1994

Inflation has declined to the lowest levels in thirty years. This decline reflects slow money growth from 1987 to 1990.

Current monetary policy is too easy to sustain non-inflationary growth. The monetary base (currency plus bank reserves) and money (currency plus demand deposits or M1) have grown about 10 percent a year since 1990. Many people have been willing to add to their cash balances as interest rates fell. Money per dollar of GDP increased more than 20% in these years.

The opposite side of rising average cash balances is the relatively slow growth of spending experienced during the first two years of the currency recovery. Slow growth appears to have ended. Although the Administration takes credit for improved economic performance, recent growth mainly reflects past Federal Reserve policy. Private spending for consumption and investment accelerated in the second half of 1993, despite continued slow growth in California and other regions affected by defense cutbacks, weather and natural disasters.

The trend rate of growth of real output is 2 to 3 percent a year. The trend rate depends on growth of productivity and labor force. Actual growth is now significantly above trend, but it cannot long remain above its trend rate. Productivity and labor force growth have slowed. Nominal spending has now accelerated.

A sustained 7 percentage point difference between the money growth rate and the trend growth of real output can be reconciled in only two ways. Either the public continues to accumulate cash balances or the inflation rate rises. This is a matter of arithmetic. There are no other possibilities if base money continues to grow at recent rates.

MONETARY POLICY

A year ago, we warned that "recent growth of the domestic base is consistent with growth of nominal GDP of about 7 percent." We urged monetary restraint but expressed doubt that the Federal Reserve would act promptly to control inflation. At our September meeting, we warned that Federal Reserve policy was imprudent. We noted that to sustain recent rates of inflation, the public would

have to continue to increase its holdings of cash relative to income, and interest rates would have to decline further. We expressed doubt that long-term rates would continue to fall. We, therefore, expected spending to rise followed by higher inflation.

The Federal Reserve continues to suppress the rise in short-term rates. Last month the Federal Reserve responded belatedly to the recent increase in the growth of spending with a modest (25 basis point) increase in short-term interest rates and suggested possible further increases in the future. This is not enough. Short-term interest rates are unreliable guides to monetary conditions. Before 1980 the Fed was slow and hesitant to raise interest rates. It now runs the risk of returning to the earlier pattern of go-stop-go policy.

We believe that excessive money growth, not real growth, brings inflation. More decisive action is required to restrict the growth of spending by slowing money growth enough to prevent a rise in inflation. Based on recent growth of output and average cash balances, growth of the monetary base should be reduced immediately by two percentage points. The monetary base should grow at no more than an 8 percent annualized rate.

INTERMEDIATE GUIDES

At the recent Humphrey-Hawkins hearings, some members of Congress expressed disappointment that last month's 25 basis point increase in interest rates was followed by a rise in long-term rates in the next few days. A few days or weeks is too short a period to judge success or failure of policy actions. Short-term changes in interest rates are unreliable indicators of current or prospective inflation. The success of the Fed's policy will not be evident until we learn whether it was able to prevent a rise in inflation without aborting the recovery. If people expect policymakers to succeed, interest rates will reflect the anticipated low rate of inflation.

The Fed's chance of success would be improved if it adopted a stable policy guideline. Recent policy statements and actions suggest that the Fed has no clear guides. Last summer, Chairman Greenspan emphasized real rates of interest as the principal guide to policy. Last month he emphasized commodity prices, particularly the gold price. All of these measures change in response to both monetary and non-monetary events and anticipations. For example, wars or gold accumulation by foreigners can raise the gold price without affecting the U.S. inflation rate.

Inflation does not occur because of a rise in the gold price. To the extent that the gold price anticipates inflation, it does so because money growth is rising faster than the public wishes to add

to cash balances. Gold is one of the commodities people buy when they fear inflation, but they can also buy foreign currency, foreign asset, land and other hedges. All of these prices can and do change in response to foreign inflation or other events that may have no effect on the U.S. economy.

Excessive money growth causes inflation by increasing spending. We believe this is the principal reason for those increases in the prices of gold and other commodities that anticipate future domestic inflation. We doubt that the Fed will stay with its current indicator. We urge a return to a monetary target—preferably the monetary base.

DISCLOSURE OF FOMC DISCUSSIONS AND ACTIONS

The House Banking Committee recently reopened the issue of Federal Reserve secrecy. One issue concerns the immediate release of the policy directive following a meeting of the Federal Open Market Committee (FOMC). A related issue is the full disclosure of the deliberations of the FOMC discussion for the use of scholars.

Consideration of these issues is marred by confusion between process and outcome. Decision making at the Federal Reserve, or any other agency, would be hampered by a requirement that all comments must be on the public record. Immediate release of the minutes, even if possible, would disrupt the policy making process. Neither Congress nor the public has to observe the process by which policies are made to keep the FOMC accountable.

Decisions are an entirely different matter. Congress and the public should be able to audit and assess decisions and outcomes. Their concern is whether the Federal Reserve can do a better job of preventing inflation or deflation. The Federal Reserve should be held accountable for its actions.

The Committee recommends three changes in procedures.

1. The policy decision should be released at the end of each meeting. We find no basis for claims that immediate release would be harmful. Correct information is not harmful and does not reduce market efficiency.
2. The record of discussion and supporting staff documents used at the meeting should be released after a reasonable delay—say three to five years. As in the past, the Federal Reserve may choose to remove references to individuals, both those participating in the discussion and those referred to by name.
3. Congress should require the Federal Reserve to state an explicit objective for inflation, the time frame within which it proposes to achieve the objective and the program for achieving the goal. Central banks in New Zealand and Britain have

recently adopted zero or low inflation as a goal. Congress should impose that goal on the Fed. In the absence of Congressional action, the Fed itself should adopt and announce a program to achieve and sustain low inflation.

REGULATORY CONSOLIDATION

In November, the Treasury proposed to combine the four federal bank and thrift supervisory agencies into a single agency to be called the Federal Banking Commission (FBC). The Federal Reserve would have a representative on the board of the FBC, but its role would otherwise be limited to monetary policy, including service as lender of last resort to the financial system.

We believe the Treasury proposal is misdirected and misguided. The costs of duplication in the current regulatory system are overstated. A single super-regulator is not the right answer. Two major problems would arise if the Treasury proposal were adopted.

First, innovation would be reduced. Competition between regulators has not produced excessive laxity. It has provided opportunities for innovation and creativity that have increased financial services available to businesses and consumers.

Second, a single regulator would greatly increase opportunities for political pressure, intervention, and corruption. The thrift industry was regulated by a single regulator. The regulator at times responded more to pressure from individual Members of Congress than to the principles of prudent regulation. The resulting cost to the public far outweighs any prospective saving from consolidation.

The Federal Reserve does not require regulatory and supervisory powers to conduct monetary policy. The role of the Federal Reserve should not be confused with the desirability of multiple regulators.

The Treasury proposal should be rejected. There have been many proposals for fundamental reform of the financial system to lower risk, increase competition, enhance incentives for innovation and separate insurance from bank regulation. These proposals should be on the table.

THE U.S.-JAPAN TRADE IMBALANCE

The Administration's efforts to establish numerical targets for Japanese imports of selected products are not in the interests of the United States or Japan. Numerical targets, even if achieved, would not change the bilateral or multilateral trade imbalance. The main effect would be to cartelize markets and reduce pressures to innovate and improve products and services.

The Japanese current-account surplus with the United States and the rest of the world has increased in recent years. The principal reason is the long Japanese recession; Japan's imports have declined relative to its exports. For several years before 1991, the opposite was true. Japan's economy grew faster than ours, and its current-account surplus declined.

Focus on trade in goods and services or the current-account balance neglects the principal reason for imbalances. These imbalances are caused by differences in investment and saving in Japan, the United States and other countries. Between 1986 and 1990, Japan saved more than 19 percent of its GDP, invested 16 percent domestically, and lent or invested the difference, nearly 3 percent, abroad. Japan's surplus will continue as long as the Japanese save more than they invest.

During the same years—1986-90—the United States saved about 2 1/2 percent of GDP and invested (net) about 5 percent domestically. The excess of investment over saving was financed by borrowing, equity investment from abroad and sales of new and existing assets. The United States' large current-account deficit is the result. Our deficit, like Japan's surplus, is just the mirror image of our international borrowing and lending. The borrowing and lending are the result of differences between domestic saving and investment.

None of this has been changed by quotas on U.S. imports of autos, steel, textiles, machine tools, or computer chips, and none would be changed if the Japanese government (unwisely) agreed to the proposed numerical targets for specific Japanese imports. Increased exports of specific products to Japan cannot change the current-account balance. Deregulation of the Japanese economy can only affect the current-account balance by changing Japanese decisions to save or invest. An effect of this kind cannot be ruled out, but it is unlikely to be large.

Our discussion should not be read as a justification of restrictive practices by Japanese producers or the Japanese government. All countries—the U.S. included—restrict trade in one or another way. The burden of these restrictions falls mainly on the consumers in the home country. Consumers benefit when governments eliminate these practices; they lose when the practices increase.

In the postwar years, the United States led the world toward freer trade. This policy proved itself by providing impetus for the growth of world trade and the resultant increase in living standards at home and abroad. For the last seven years, under several administrations, the U.S. government has worked to improve the rules for trade and dispute settlement under GATT. The Clinton Administration successfully completed the most recent negotiation.

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We urge President Clinton to stop demanding numerical targets and threatening bilateral sanctions. The Administration should use the GATT mechanism to resolve specific complaints against Japan. The Japanese bilateral current-account surplus with the United States is on all fours with the United States bilateral surplus with Europe or Mexico. Bilateral imbalances are not a problem. If the U.S. wants to reduce its total current-account deficit, the best available means is to encourage domestic saving.

Current trade policy toward Japan is short-sighted, wrong-headed, costly to our citizens, and damaging to our long-term interests in peace and stability within Asia. It should be abandoned.

WHY ARE INTEREST RATES RISING?

H. Erich HEINEMANN
Ladenburg, Thalmann & Company, Inc.

Long-term Treasuries, which sold to yield 5.75 percent in October, now return about 6.75 percent. That is more than half way to our interim target for 1994 of 7.6 percent. Investors who bought puts on the Treasury bond future have doubled their money in four months.

The rise in yields reflects the reaction of market participants to actions by the Federal Reserve System. Our work indicates that since 1985 sustained changes in the second derivative of total bank reserves have been associated with analogous patterns in observed rates of so-called core inflation after a lag of about three years. Put differently, the 55 percent increase in total bank reserves from January 1984 to January 1987 eventually led to faster inflation, tight money and recession. We believe the 48 percent increase in total bank reserves from November 1990 to November 1993 is likely to have a similar result.

In our view, central bank policy has already planted the seeds of the next inflation. To overwork the metaphor, these seeds are now sprouting. They will blossom later this year. Recognition of the latent threat of inflation could unhinge the apparently placid relationship between the Federal Reserve System and the Clinton Administration. In the White House model, low nominal rates are necessary for growth. Pressure from the White House economic team to hold rates down would only fan the fear of inflation, but Mr. Clinton's advisors do not seem to recognize this risk.

Our Baseline Forecast of faster inflation in 1994 and 1995 may be incorrect. However, the short-term accuracy of this prediction is not relevant. Rates have gone up (and will go up), regardless of currently reported rates of inflation. Ladenburg, Thalmann & Co. warned clients a year ago that "Double-digit rates of expansion in reserves—the high-powered funds that represent raw material for the money supply—cannot go on indefinitely."

"Eventually, the Fed will have to slow the rate of reserve expansion, regardless of the objections on Capitol Hill. *When it does, the action will send a shock wave through Wall Street.* Rates will go up. The longer the Fed tries to keep interest rates down, the more they will ultimately rise." PROSPECTS FOR MONEY AND THE ECONOMY, March 8, 1993.

A year later, the central bank is saying essentially the same. "In conducting policy through 1993, the Federal Open Market Committee recognized that it was maintaining a very accommodative stance in reserve markets. Reserve conditions had been eased to this degree over the prior four years to counter the effect of some unusual factors restraining aggregate demand. The Committee recognized that, as these forces abated, short-term interest would likely have to rise to forestall inflationary pressures that would eventually undermine the expansion."

In theory, interest rates should move parallel to expected changes in inflation. Thus, some people were surprised when rates rose following (1) the Fed's announcement of a "tightening" designed to head off future inflation and (2) disclosure that the seasonally adjusted consumer price index was unchanged in January. This was the first month since August 1989 that this key measure of inflation did not increase. The actual inflation rate has changed little over the last six months.

In practice, bond investors are often more concerned with the short run results of actions by the monetary authorities than their long-term implications. Bond prices usually go up when the Fed eases (even though this may eventually be inflationary) and down when it tightens (even though this may be anti-inflationary).

Immediate prospects for changes in liquidity and the cost of carrying highly-leveraged bond positions appear more important than the eventual outlook for the real value of the investment. The most extreme example was the spring of 1984. Inflation was close to 4 percent and Fed policy was tight. Nevertheless, the yield on 30-year Treasuries hit 14 percent.

In our view, technical market forces exaggerated the rise in rates in the last few weeks. Traders in Treasury bond futures and options profit most when prices are volatile. Together with their acolytes in the economics community, they work overtime to whipsaw investor sentiment between euphoria and despair, and then back again.

Modern trading techniques make financial markets symmetrical. It is no more difficult for professionals to profit when bond or stock prices fall than when prices rise. The bond market's sharp response to otherwise encouraging economic news clearly had its roots in such speculation. For the moment, bonds now appear to be "oversold." Don't be surprised if the market rallies and rates decline temporarily.

Long-term, basic forces point toward a bear market in bonds. First, the Federal Reserve's easy money policy since 1991 has raised expected inflation. Market participants describe the Fed's recent decision to allow a quarter point in short-term rates as a preemptive strike against inflation. That perception does not square with reality.

Fed actions added a record \$26 billion to total bank reserves over the last 36 months (FRB St. Louis data). This high-powered money will be raw material for monetary expansion and inflation in 1994 and 1995. To repeat, the rise in bank reserves planted seeds of the next inflation. These seeds are likely to germinate this spring and summer, no matter how the Fed manipulates short rates.

Second, projections by the White House and the Congressional Budget Office show that the U.S. Treasury borrowing is likely to total more than \$800 billion during the Clinton Administration. This would be unchanged from President Bush—despite propaganda about budget cuts.

Treasury borrowing has had little effect on rates because net private credit demand has been at a postwar low. Now, by contrast, private borrowing has begun to rebound. Nonfinancial, nonfederal borrowing rose at a rate of about 5 percent in the second half of 1993. Compare that with the 2.8 percent rate of gain since mid-1991. Cyclical rises in the total need for funds are normally linked with higher nominal credit costs.

The Federal Reserve's decision to allow short-term rates to go up—while inadequate and tardy—at least holds hope of an eventual serious effort to contain inflation. Signs of parallel long-term fiscal restraint are hard to find, White House propaganda notwithstanding.

President Clinton imposed a Reaganesque clamp on U.S. spending in his first year in office. Federal cash outlays fell \$26 billion in calendar year 1993, compared to a \$119 billion surge in the year ended in the second quarter of 1992. Recession-related income maintenance programs have receded as the economy recovered, and U.S. disarmament (post Gulf War and post Cold War) has gathered momentum.

The White House cannot sustain such budgetary gains. Mr. Clinton has ambitious plans to boost the role of government. His plans all carry price tags. The official deficit forecast for fiscal year 1994 is \$235 billion. That is about equal to the actual shortfall for the 12 months ended January. Since Treasury revenues are now rising at an annual rate of more than \$75 billion, it follows that the President intends to boost outlays by that amount. Otherwise, the tide of red ink would fall.

If our model of the economic activity is correct, then the primary impact of the Federal Reserve's stimulus will show up in nominal, rather than real, demand for goods and services. Current dollar spending rose at an annual rate of 6.1 percent in the last two years, up from 4.2 percent in the two years ended in the fourth quarter of 1991. In the eight quarters ended in 1989, nominal

demand rose at an annual rate of 6.8 percent. The 1987-89 period was followed by accelerating inflation, while the rate of price change fell after the 1990-91 episode. Time will tell about more recent developments.

According to the Congressional Budget Office, the capacity of the U.S. economy for non-inflationary growth hit a postwar low in 1993. Sharp increases in marginal tax rates are likely to inhibit the net formation of new business. Over the last dozen years, newly-formed firms accounted for about 90 percent of net price job creation.

We continue to believe that weaker economic data are likely in the weeks immediately ahead. The surge in activity in the fourth quarter was too rapid to be sustained. Consumers have been spending much more than they have been earning. With job prospects still uncertain, capacity for additional debt is limited. Cutbacks in the growth of consumer outlays are inevitable. In a world of just-in-time inventory management, these cutbacks are likely to echo quickly through the industrial sector.

Here are a few examples of areas that we think are vulnerable:

1. Real merchandise exports averaged \$475 billion at a seasonally adjusted annual rate last fall, up at a rate of 32 percent from the average of \$433 billion in the three months ended August. A rate of increase of 7 to 7.5 percent is more likely in 1994.
2. The gross value of consumer durables produced soared at a 27 percent rate from September through January (also based on three-month moving averages). Our Baseline Forecast suggests that a growth rate well under 10 percent is probable this year, with a further slowdown likely in 1995.
3. Real contracts and orders for plant and equipment have gone up at a 33 percent rate over the last seven months and at a 56 percent rate over the last three months. We expect increases closer to 10 than 20 percent this year. New orders for nondefense capital goods, ex aircraft, were down almost 7 percent in January, the biggest monthly drop since early 1991. Aircraft orders were up, but that was only a temporary blip in a disastrous long-term slump.
4. Housing starts (both total and single family) soared at rates of in excess of 30 percent from March of last year through December. The big drop in starts in January was influenced by bad weather, but only modestly. The weather is always lousy in January and the data are adjusted for that. We expect starts to settle down in a zone around 1.3 million units a year, somewhat below the 1.46 million average in the fourth quarter.

Conventional wisdom in the financial community is that the economic expansion is now broad-based and thus likely to continue in a zone between 3 and 4 percent growth. A more accurate observation would be that the economy has a split personality. Consumer purchases of durable

goods, business fixed investment, housing and inventories have been rising at an annual rate of more than 10 percent during the 1991-93 period of recovery and expansion. However, these areas (the "cyclical sectors") are only 25 percent of the economy.

The other 75 percent of the economy (consumer nondurables, services, foreign trade and government purchases) has expanded at a rate of nine-tenths of one percent. Historically, growth of less than 1 percent in the noncyclical sectors has been associated with recession rather than expansion.

The overwhelming consensus for solid economic growth in 1994 rests on a belief that employers will pile on another 2 million or more new jobs on top of the 1.9 million they added last year. Investors should remember that the 2.3 million gain in nonfarm payroll employment thus far in the expansion is less than half of the standard of earlier recovery cycles.

Moreover, almost all the net job gains over the last two years have been in the relatively, stagnant noncyclical sectors of the economy. Productivity gains in the private service sector (which accounts for 100 percent of new creation over the last 15 years) have stalled. Flat productivity and rising unit labor costs in private services suggest a weak foundation for rapid growth in employment.

For January alone, job changes were close to the usual seasonal pattern. The number of nonfarm jobs dropped by more than 2.3 million, not seasonally adjusted, normal for that time of year. Retailing health, services and temps account for two-thirds of net jobs added in the last two years. All three have subpar wages and hours.

Recent conversations with leading business economists confirmed this picture of a two-tier economy. Hard goods are booming. Sixty percent of the output of the steel industry is on allocation and prices are rising rapidly. Some steel service centers (which handle odd-lot orders for the industry) report record-breaking activity. In Milwaukee, a prototypical capital goods town, industry executives say there are scattered shortages of skilled labor.

At least one U.S. auto company is now running its plants on a three-shift, 24-hour day basis. Another producer is still on two shifts a day, but it is scheduling so much overtime that its plants are operating about 20 hours a day.

Inventories of major kitchen appliances are at unusually low levels (in part due to a weather-induced shutdown). Appliance prices which have not changed since 1987, are likely to rise this year. However, appliance manufacturers expect a drop in sales of new single-family homes later this year to lead to a parallel reduction in purchases of their products.

Makers of a wide range of capital goods continue to enjoy the benefits (and endure the problems) of a roaring boom. One of the world's largest producers of high-technology equipment said its global order volume in the three months ended January was 35.2 percent ahead of the like period a year ago. Similarly, orders in the three months ended January 1993 were up more than 30 percent from 1992.

Outside the U.S., the pace is picking up as well. Total orders for manufactured goods are up more than 10 percent in Canada. Export orders in Germany, which were down for almost two years, are now solidly in the black and rising rapidly.

Among the major industrial economies, only Japan is still in a deepening recession. Analysts at a major diversified U.S. manufacturing company expect industrial production in Europe to rise more than 2 percent this year and close to 4 percent next year. In Asia, exclusive of Japan, gains of almost 10 percent are likely.

By contrast, growth in chemical output has been moderate and prices of most commodity chemicals are still flat to down. Major producers have cut back capital spending plans in the chemical and paper industries because of continuing problems with overcapacity.

Retail demand for durable goods continues to be strong despite an unexpectedly large drop in sales in January. However, growth in real spending is far ahead of advances in real income, so substantial cutbacks are inevitable. Increase in outlays for nondurables and services (85 percent of total consumer outlays) remain sluggish at best.

The basic factors that determine the long-term capacity of an economy for non-inflationary growth are (1) the number of workers and how much they work (labor input) and (2) how much each worker produces per hour (productivity). The 1.79 percent increase in U.S. economic capacity in fiscal year 1993 (a low for the postwar period) probably understates the potential for U.S. growth in the 1990s. Even so, the economy is more and more muscle bound.

Many forces influence the capacity of an economy to grow without inflation. The most important are demographics, saving, investment and foreign trade. A growing population may help growth, but not necessarily. High levels of saving and investment (in physical and human capital) give workers tools they need to increase productivity. Free trade channels resources to sectors that do best, which also boosts productivity.

In the U.S., gains in employment have slowed steadily since the 1970s. That is one result of a marked decline in population growth, partially offset by a huge expansion in the proportion of women who work outside the home. More recently, that ratio has appeared to level off, particularly in the age brackets between 25 and 44, the core of the work force. Similarly, the erosion in employment of older males, aged 45 to 64, also seems to be ending.

More troubling is the long-term slump in productivity growth. Many analysts challenge the data compiled by the Bureau of Labor Statistics which show this trend. The most common complaint is that the government fails to measure much of the output in the service sector, and therefore understates gains in productivity.

To avoid this problem, we use real after-tax income per full-time equivalent worker as a proxy for productivity. Clearly, real income per worker and productivity are essentially synonymous. A society cannot pay itself more than it can produce. Manufacturing productivity is rising at remarkable rates. According to the BLS, output per hour in that sector rose at a 7.8 percent annual rate in the fourth quarter of 1993. This is superb performance, but it will not sustain the growth of productivity in the overall economy. Manufacturing is only about 20 percent of total value added in the U.S.

Our analysis shows the slowdown in the growth of productivity has been mostly in services. Productivity in nonmanufacturing (services and construction) was little changed from the fourth quarter of 1992 to the fourth quarter of 1993. Service productivity has slumped despite a big gross investment in information technology. Partly, this reflects the fact that much of the job growth since World War II has been in very small companies in parts of the service economy where gains in real output per hour are hard to achieve. Health service occupations are a good example

Equally important is the long-term drop in net investment in the U.S. from about 5 percent of net domestic product in late 1970s to zero in 1992 and about 2 percent today. Gross investment has been high, but much of this was short-lived equipment. Thus, the rate of net addition to the nation's stock of real capital has gone down.

The conclusion is clear: The sustained ability of the U.S. to expand without inflation has fallen by roughly half in the last 40 years—from about 5 percent to about 2.5 percent. The economy is vulnerable to inflation, no matter how the Fed may try to manipulate short-term rates.

LADENBURG, THALMANN / HEINEMANN ECONOMIC RESEARCH
Baseline Forecast - March 1994

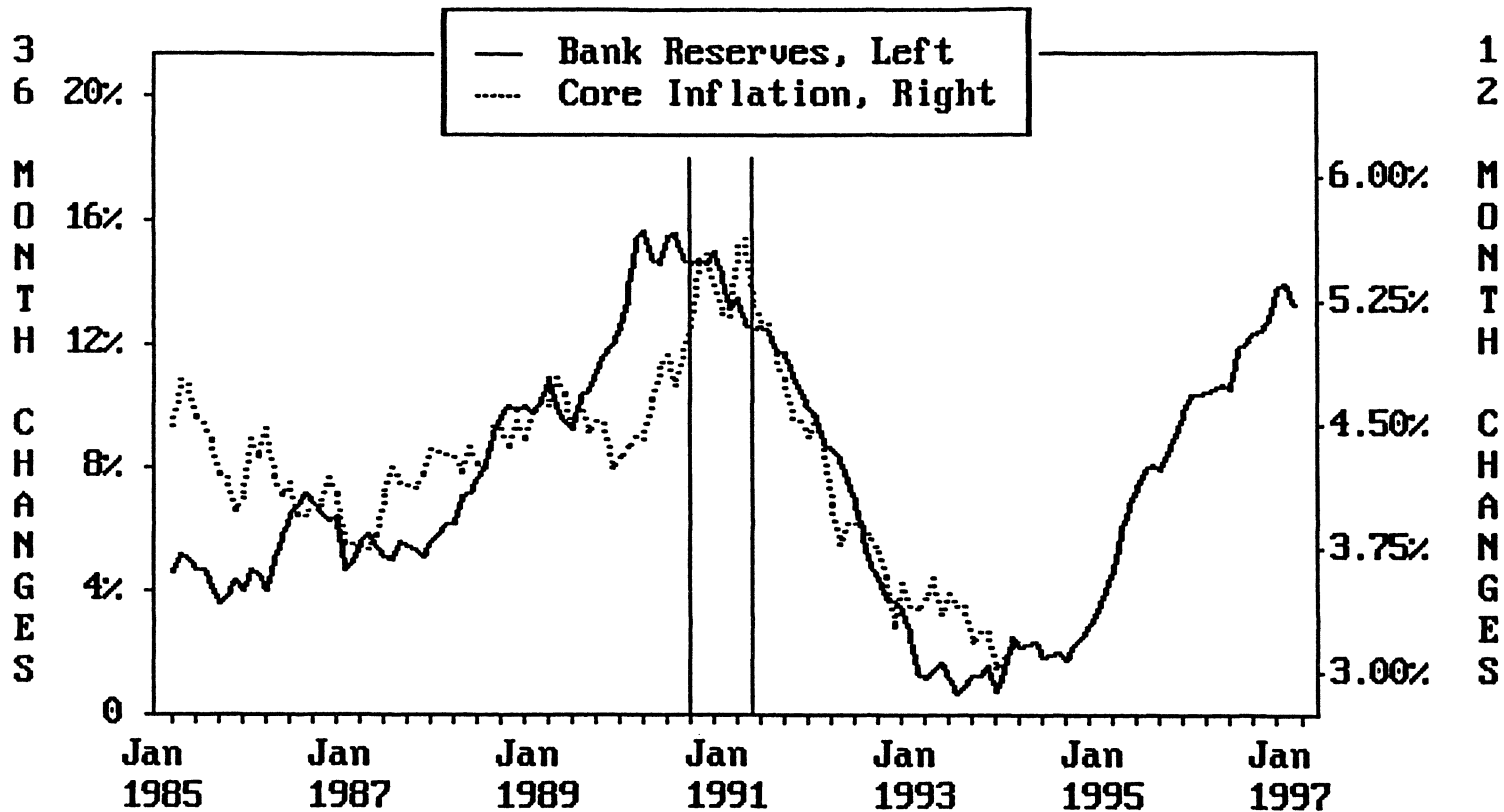
	IV'93 A	I'94 F	II'94 F	III'94 F	IV'94 F	I'95 F	II'95 F	1993 A	1994 F	1995 F
THE ECONOMY:										
Gross Domestic Product (\$B)	\$5,232.1	\$5,260.3	\$5,291.7	\$5,309.6	\$5,332.4	\$5,367.5	\$5,399.0	\$5,137.7	\$5,298.5	\$5,416.8
Pct Chg	7.50%	2.2%	2.4%	1.4%	1.7%	2.7%	2.4%	3.04%	3.1%	2.2%
Personal Consumption (\$B)	\$3,508.6	\$3,531.8	\$3,550.5	\$3,571.7	\$3,589.3	\$3,608.8	\$3,629.0	\$3,453.7	\$3,560.8	\$3,641.6
Pct Chg	4.57%	2.7%	2.1%	2.4%	2.0%	2.2%	2.3%	3.35%	3.1%	2.3%
Business Investment (\$B)	\$625.3	\$639.5	\$652.3	\$660.2	\$676.0	\$689.8	\$700.4	\$591.7	\$657.0	\$706.4
Pct Chg	22.14%	9.4%	8.2%	5.0%	9.9%	8.5%	6.3%	11.80%	11.0%	7.5%
Structures (\$B)	\$156.3	\$154.4	\$155.9	\$157.2	\$162.1	\$165.1	\$167.3	\$151.7	\$157.4	\$168.4
Prod. Dur. Equip. (\$B)	\$469.0	\$485.1	\$496.3	\$503.1	\$513.9	\$524.7	\$533.1	\$440.0	\$499.6	\$538.1
Residential Invest. (\$B)	\$226.9	\$239.0	\$243.9	\$236.6	\$233.5	\$239.8	\$242.1	\$214.2	\$238.3	\$242.2
Pct Chg	30.97%	23.0%	8.6%	-11.5%	-5.2%	11.2%	4.0%	8.62%	11.3%	1.6%
Change in Inventory (\$B)	\$13.4	\$12.4	\$14.4	\$15.4	\$18.6	\$17.0	\$20.8	\$15.6	\$15.2	\$23.3
Net Exports (\$B)	(\$84.1)	(\$105.2)	(\$115.0)	(\$121.9)	(\$130.6)	(\$134.5)	(\$141.2)	(\$76.4)	(\$118.2)	(\$145.3)
Government Purchases (\$B)	\$942.0	\$942.9	\$945.6	\$947.6	\$945.7	\$946.7	\$947.9	\$939.0	\$945.5	\$948.6
Pct Chg	0.13%	0.4%	1.1%	0.8%	-0.8%	0.4%	0.5%	-0.66%	0.7%	0.3%
Final Domestic Sales (\$B)	\$5,302.8	\$5,353.2	\$5,392.4	\$5,416.1	\$5,444.5	\$5,485.0	\$5,519.5	\$5,198.5	\$5,401.5	\$5,538.8
Pct Chg	6.64%	3.9%	3.0%	1.8%	2.1%	3.0%	2.5%	3.69%	3.9%	2.5%
Gross Dom. Prod. (\$ Current)	\$6,532.4	\$6,621.8	\$6,727.7	\$6,835.2	\$6,950.7	\$7,082.8	\$7,203.2	\$6,379.4	\$6,783.8	\$7,273.0
Pct Chg	8.81%	5.6%	6.6%	6.5%	6.9%	7.8%	7.0%	5.65%	6.3%	7.2%
Disposable Income (\$B)	\$3,761.3	\$3,786.1	\$3,808.7	\$3,823.9	\$3,842.9	\$3,858.8	\$3,877.4	\$3,701.8	\$3,815.4	\$3,883.9
Pct Chg	5.79%	2.7%	2.4%	1.6%	2.0%	1.7%	1.9%	1.91%	3.1%	1.8%
Savings Rate (Percent)	4.10%	4.4%	4.5%	4.3%	4.3%	4.2%	4.1%	4.05%	4.4%	4.0%
Operating Profits (\$ Current)	\$493.9	\$501.4	\$509.2	\$514.8	\$521.0	\$527.2	\$532.5	\$463.2	\$511.6	\$534.6
Pct Chg	23.51%	6.2%	6.4%	4.5%	4.9%	4.9%	4.1%	13.75%	10.5%	4.5%
Industrial Prod. (1987=100)	113.10	114.2	115.2	116.2	117.3	117.9	118.9	111.08	115.7	119.3
Pct Chg	7.51%	4.0%	3.6%	3.2%	3.9%	2.3%	3.2%	4.23%	4.2%	3.1%
Housing Starts (Mill. Units)	1.460	1.46	1.33	1.29	1.33	1.33	1.30	1.291	1.35	1.32
Pct Chg	54.13%	0.8%	-31.7%	-12.2%	12.3%	2.0%	-9.6%	6.88%	4.7%	-2.0%
Tot Vehicle Sales (Mill Units)	14.546	14.4	14.4	14.0	13.8	14.1	14.0	13.887	14.1	13.99
Pct Chg	32.49%	-4.3%	1.2%	-11.8%	-5.5%	9.6%	-3.9%	8.24%	1.9%	-1.1%
Nonfarm Payroll Jobs (Mill)	110.860	111.1	111.5	111.7	112.0	112.5	112.7	110.170	111.6	112.78
Pct Chg	1.74%	0.9%	1.3%	0.7%	1.2%	1.7%	0.7%	1.52%	1.3%	1.1%
Unemployment Rate (Percent)*	6.43%	6.8%	6.7%	6.6%	6.5%	6.3%	6.2%	6.73%	6.6%	6.2%
GDP Deflator (1987=100)	124.9	125.9	127.1	128.7	130.3	132.0	133.4	124.16	128.0	134.26
Pct Chg	1.23%	3.3%	4.0%	5.1%	5.1%	5.0%	4.5%	2.53%	3.1%	4.9%
CPI Less Energy (1982-84=100)	151.6	153.0	154.5	156.5	158.5	160.5	162.3	150.1	155.6	163.41
Pct Chg	3.07%	3.7%	4.0%	5.3%	5.1%	5.3%	4.5%	3.10%	3.6%	5.0%
Fed'l Deficit (\$ Current NIA)	(\$209.7)	(\$196.1)	(\$179.0)	(\$161.7)	(\$160.1)	(\$158.3)	(\$155.0)	(\$227.1)	(\$174.2)	(\$152.2)
FINANCIAL MARKETS:										
Federal Funds Rate	2.99%	3.3%	3.5%	3.9%	4.4%	4.9%	5.5%	3.02%	3.8%	5.6%
Three-month Bills (Discount)	3.08%	3.2%	3.3%	3.6%	4.1%	4.5%	5.2%	3.02%	3.6%	5.3%
Prime Rate, Major Banks	6.00%	6.2%	6.2%	6.5%	6.8%	6.9%	7.5%	6.00%	6.4%	7.6%
30-Year Treasury Bonds	6.13%	6.4%	6.7%	7.0%	7.6%	7.8%	7.9%	6.60%	6.9%	8.1%
Money Supply (M-1, \$ Current)	\$1,124.6	\$1,150.7	\$1,175.7	\$1,199.2	\$1,222.3	\$1,239.6	\$1,258.6	\$1,078.7	\$1,187.0	\$1,265.4
Pct Chg	11.06%	9.6%	9.0%	8.2%	7.9%	5.8%	6.3%	11.60%	10.0%	6.6%
Velocity (Ratio: GDP to M-1)	5.81	5.75	5.72	5.70	5.69	5.71	5.72	5.92	5.84	5.75
Trade-Weighted \$ (1973=100)	94.83	95.7	94.8	96.1	95.8	97.7	97.4	93.17	95.6	97.9

A=Actual F=Forecast Billions of dollars unless noted.

*Break in series, January 1994. **Compensation, productivity and unit labor costs are index numbers, 1982=100.

Sources: Haver Analytics; Heinemann Economic Research

MONETARY POLICY AND INFLATION

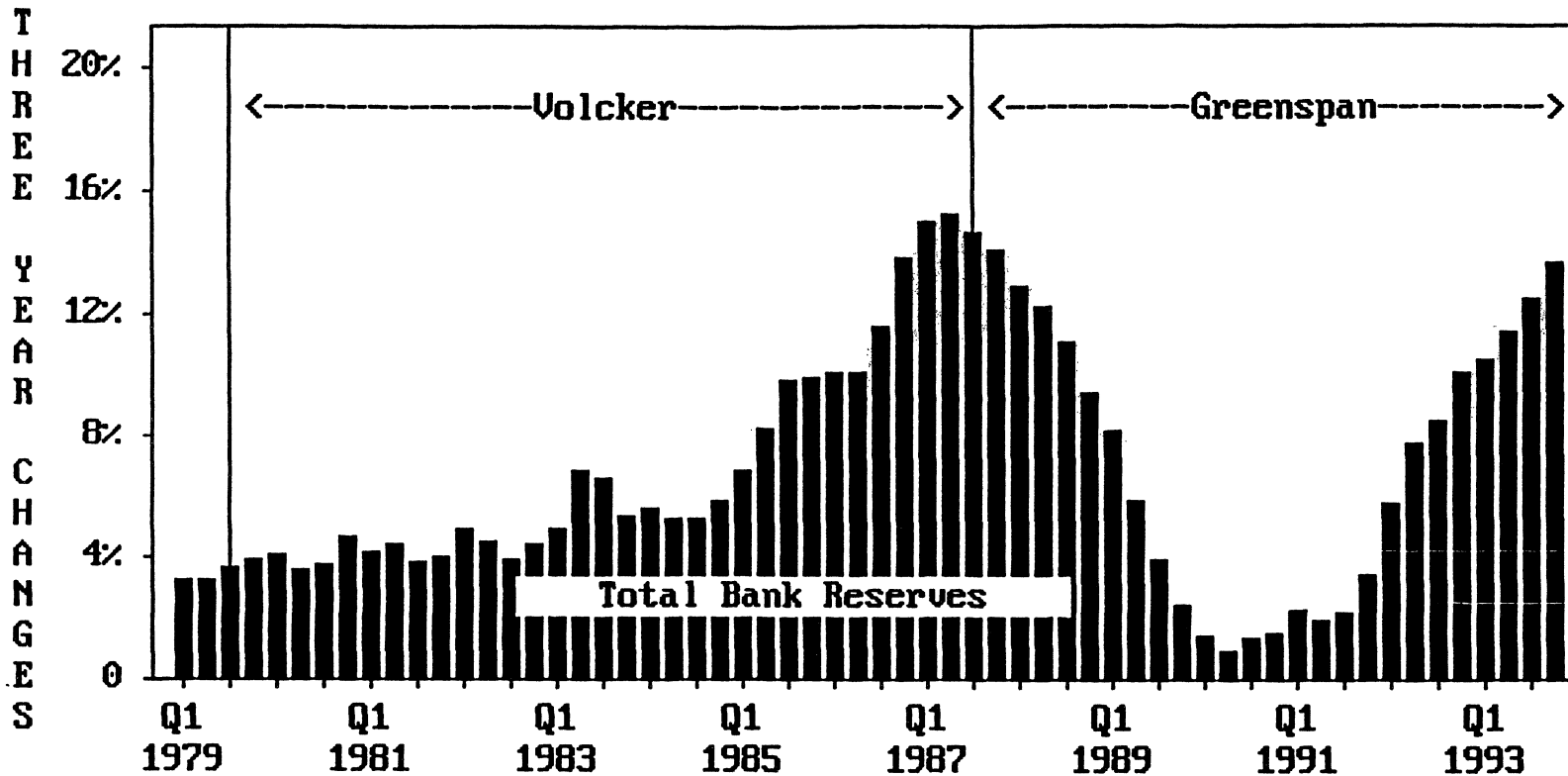


Notes: The chart shows annualized 36-month changes in total bank reserves lagged 36 months (left scale, line) and 12-month changes in the CPI less food and fuel (core inflation, right scale, dot). The vertical lines show recession.

Sources: Haver Analytics; Heinemann Economic Research

CYCLES IN FEDERAL RESERVE POLICY

March 6-7, 1994

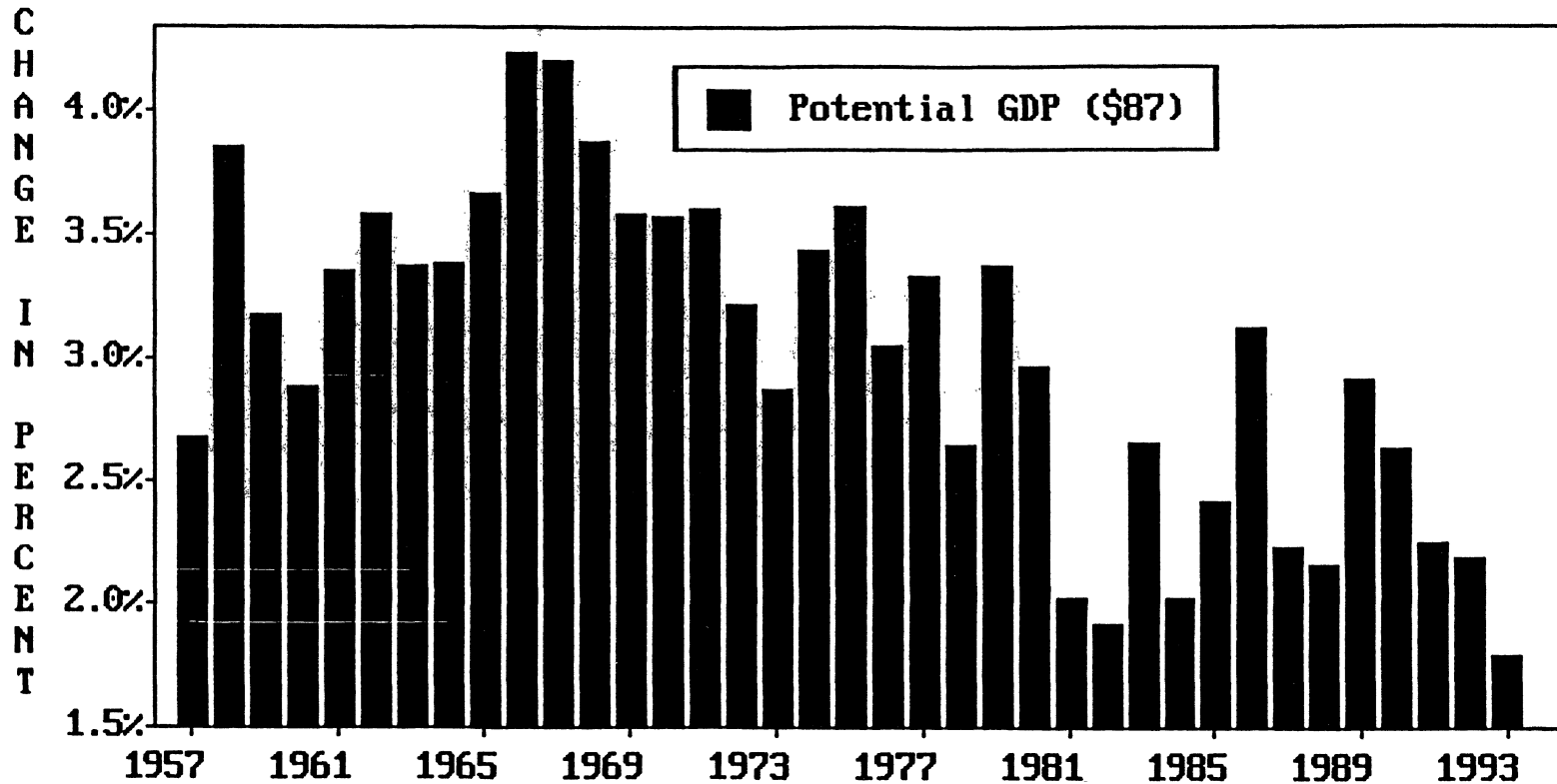


Notes: The chart shows three-year growth rates (SAAR) in total bank reserves adjusted for reserve requirement changes (FRB version). The vertical lines show the tenures of Paul Volcker and Alan Greenspan as Fed chairmen.

Sources: Haver Analytics; Heinemann Economic Research

THE DOWNTREND IN U.S. GROWTH POTENTIAL

Shadow Open Market Committee

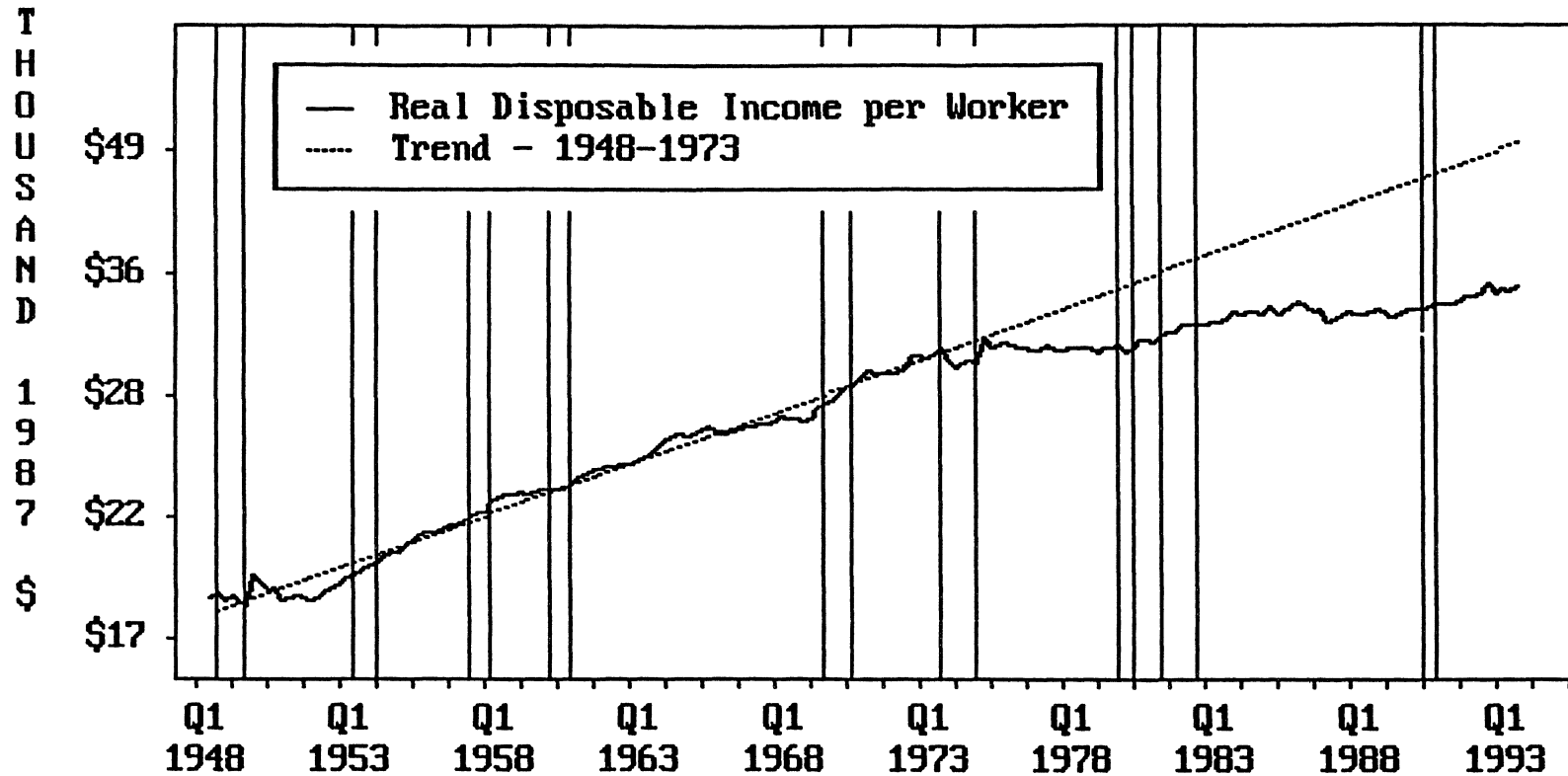


Notes: The chart shows year-to-year percentage changes in potential output (real GDP) as calculated by the Congressional Budget Office. Data are for fiscal years ending second quarter until 1976; third quarter thereafter.

Sources: Congressional Budget Office; Heinemann Economic Research

REAL INCOME PER WORKER IS BELOW TREND

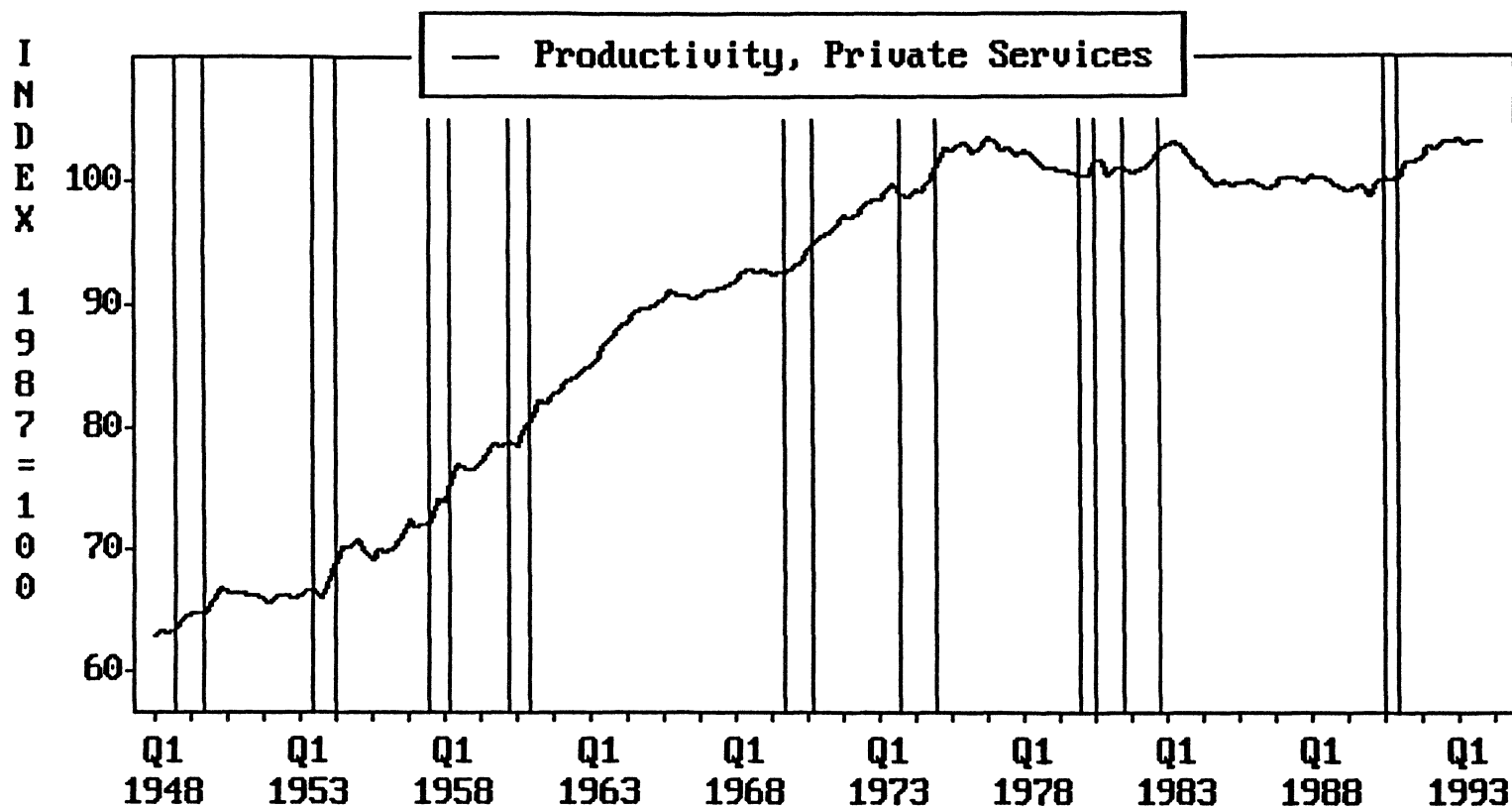
March 6-7, 1994



Notes: The chart shows real after-tax income per full-time equivalent worker. Trend line is based on data from 1948 through 1973. Data are natural logs transposed on the vertical axis. Vertical lines show recessions.

Sources: Haver Analytics; Heinemann Economic Research

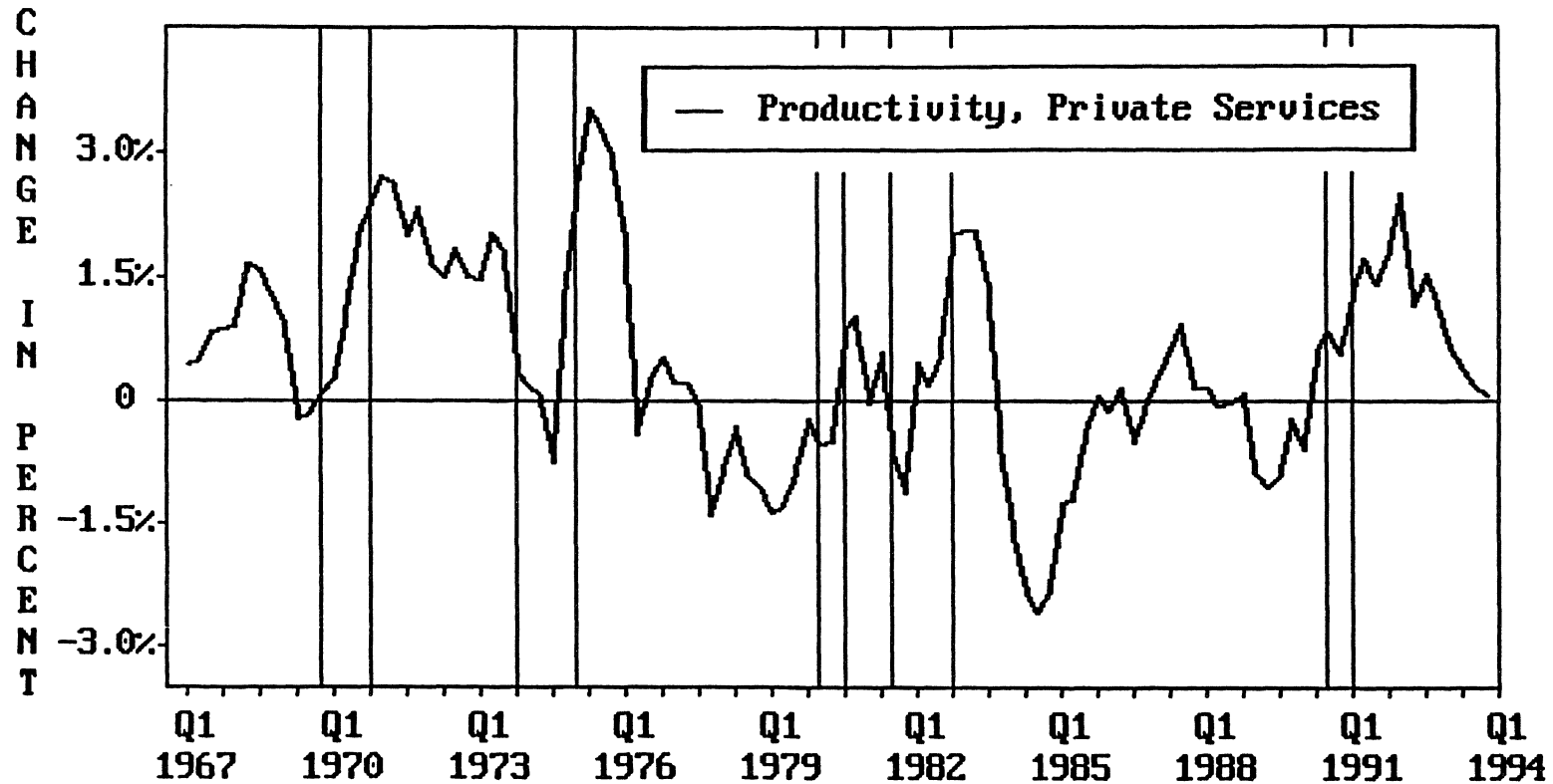
THE FLAT TREND IN PRIVATE SERVICE PRODUCTIVITY



Notes: The chart shows an estimate of productivity in the private service sector (real private service consumption per private service worker). Data are index numbers, 1987 = 100, SA. The vertical lines show periods of recession.

Sources: Haver Analytics; Heinemann Economic Research

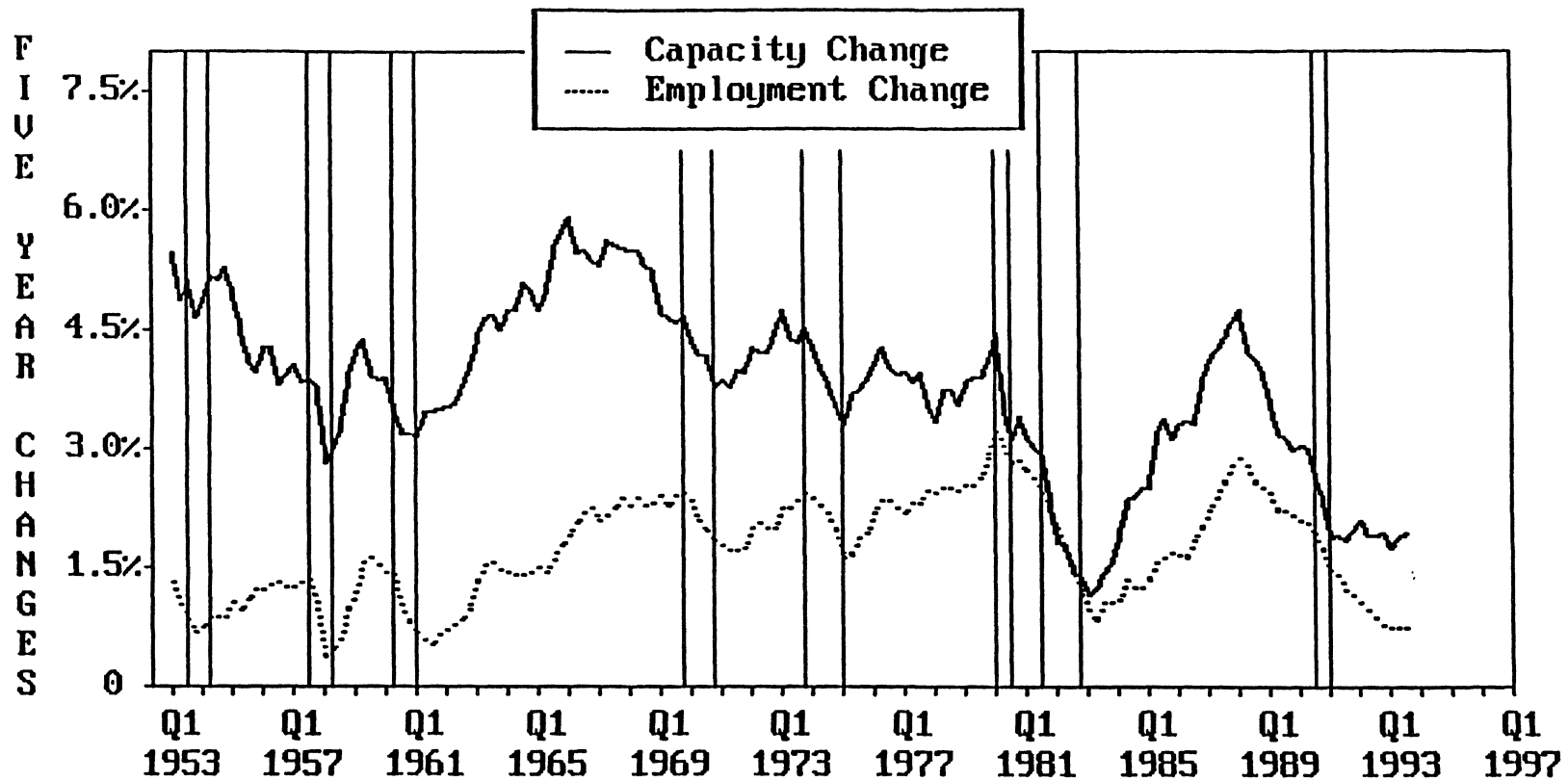
GAINS IN SERVICE PRODUCTIVITY HAVE STALLED



Notes: The chart shows annual percent changes private service productivity (real private service consumption per private service worker). Index numbers, 1987 = 100, SA. The vertical lines show periods of recession in the economy.

Sources: Haver Analytics; Heinemann Economic Research

PRODUCTIVITY AND EMPLOYMENT DETERMINE ECONOMIC CAPACITY

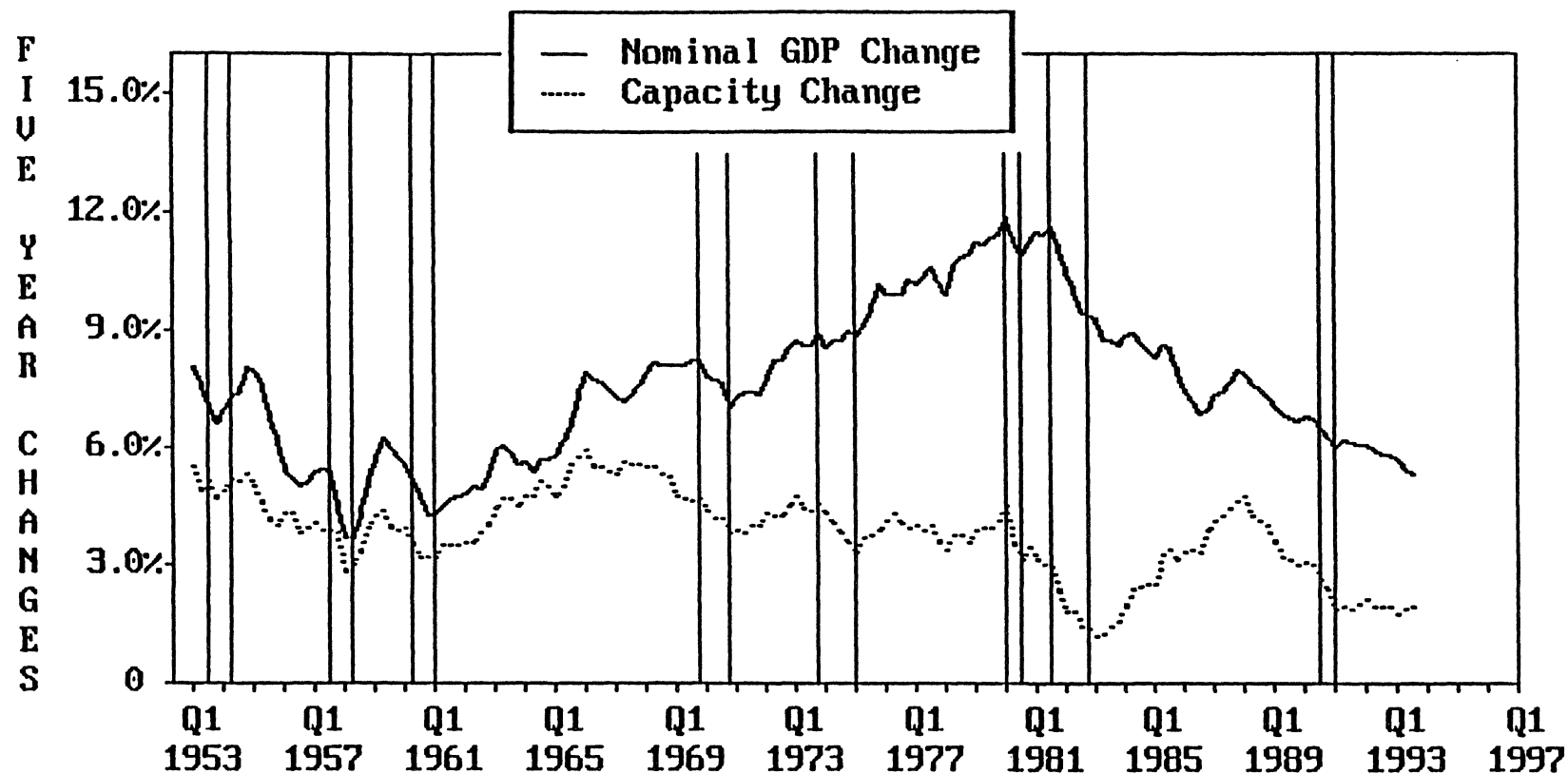


Notes: The chart shows changes in economic capacity (productivity plus employment, line) and changes in employment (dot). Space between line and dots is change in productivity (total business, 1982=100). Vertical lines are recessions.

Sources: Haver Analytics; Heinemann Economic Research

DEMAND IN MONEY TERMS AND ECONOMIC CAPACITY

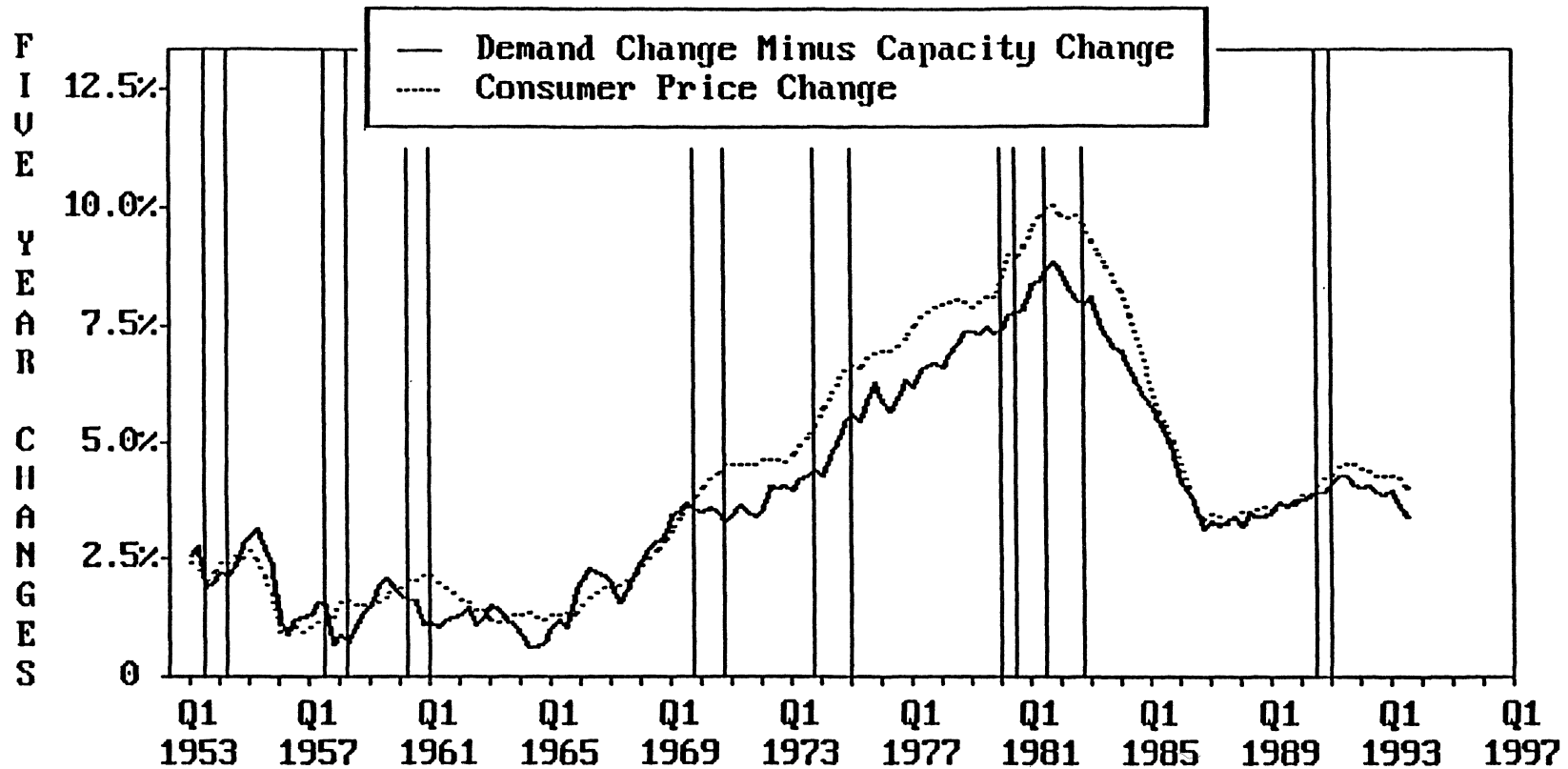
March 6-7, 1994



Notes: The chart shows changes in demand in money terms (nominal GDP, line) and changes in economic capacity (employment plus productivity, dot). The space between the line and the dots is the rate of inflation. Vertical lines are recessions.

Sources: Haver Analytics; Heinemann Economic Research

DEMAND CHANGE MINUS CAPACITY CHANGE EQUALS INFLATION CHANGE

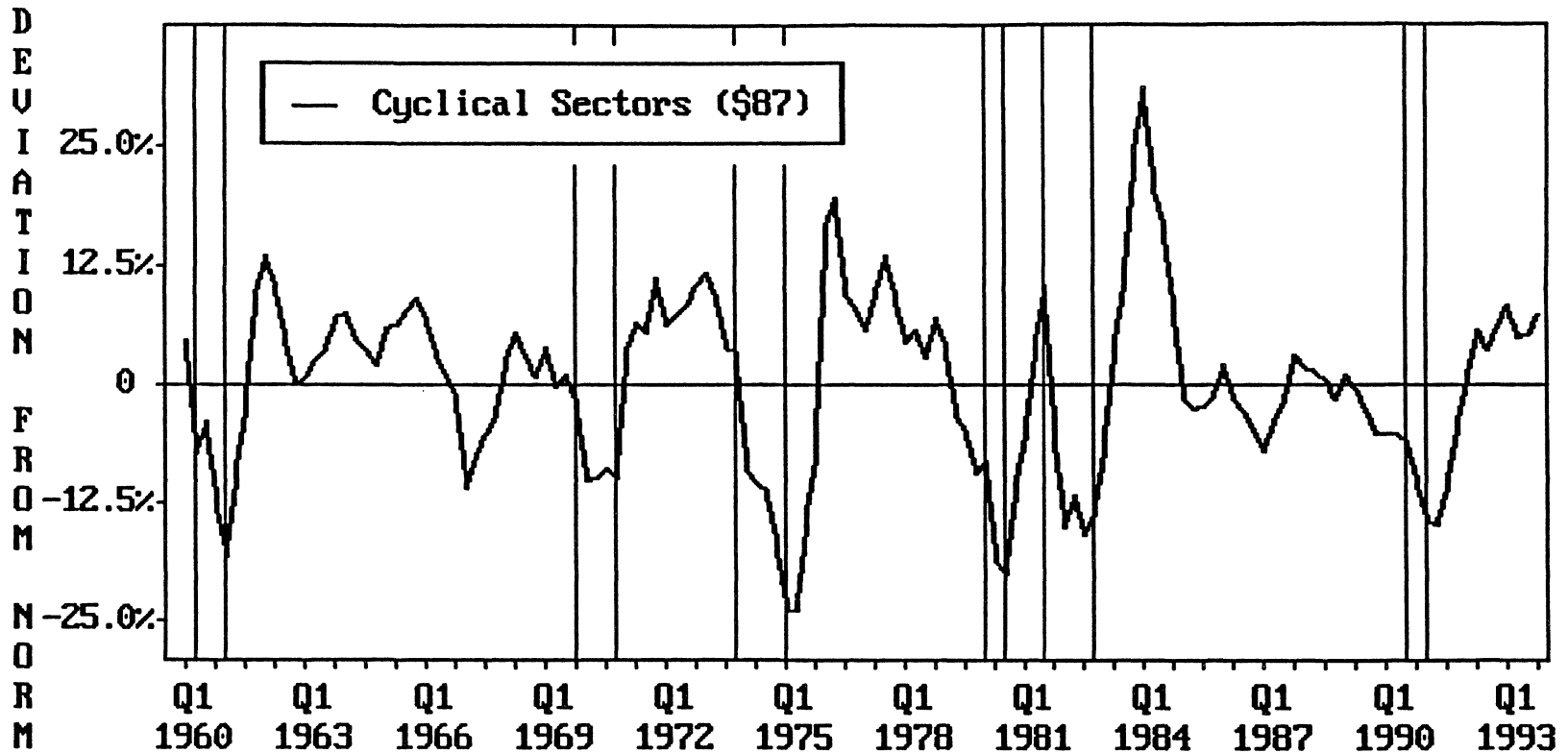


Notes: The chart shows changes in demand in money terms (nominal GDP) MINUS changes in economic capacity (employment plus productivity) line, and changes in the consumer price index (CPIU, 1982-84=100, dot). Vertical lines are recessions.

Sources: Haver Analytics; Heinemann Economic Research

GROWTH IN THE CYCLICAL SECTORS OF THE ECONOMY IS STRONG

March 6-7, 1994

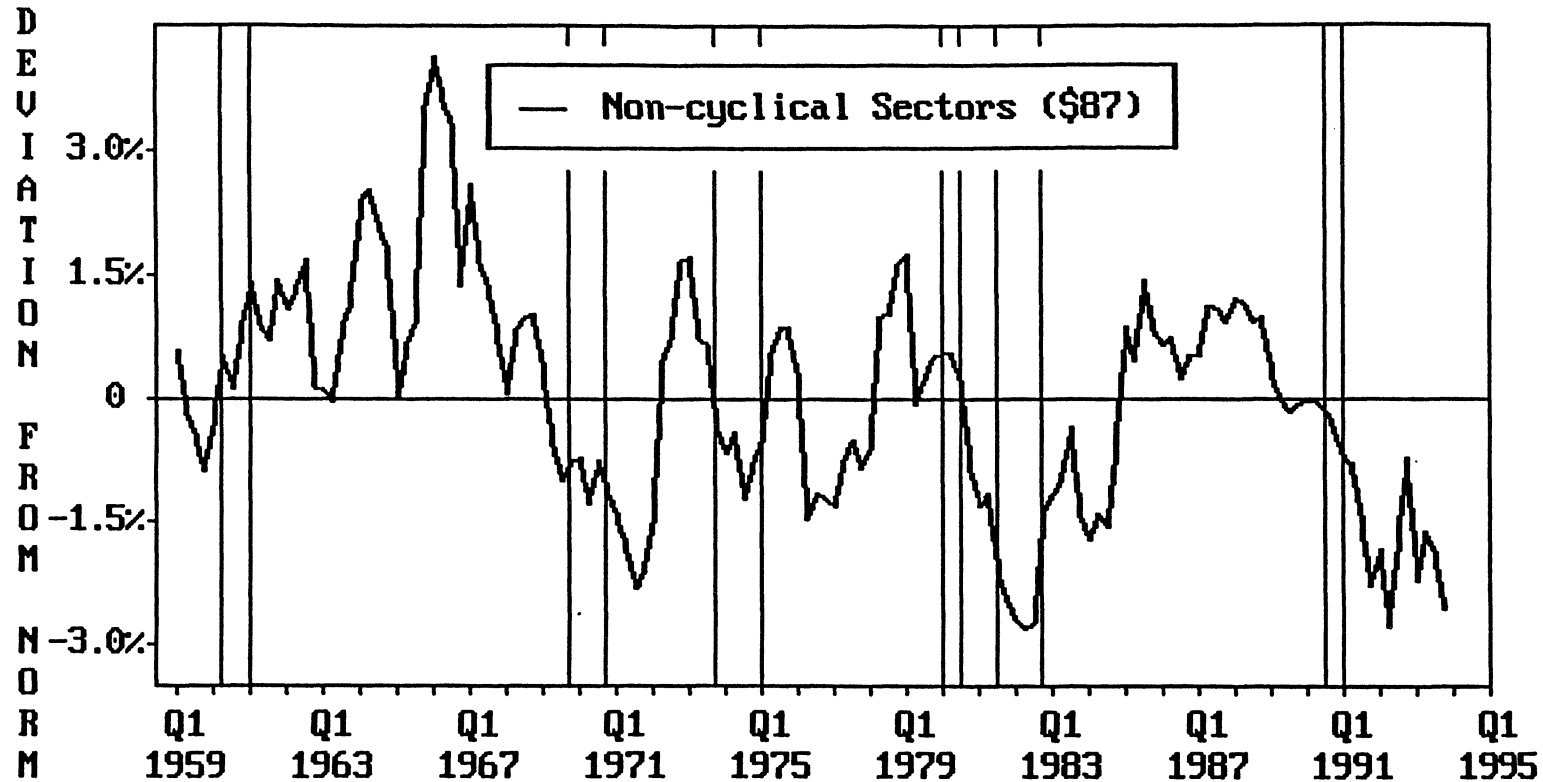


Notes: The chart shows year-over-year changes in the "cyclical" sectors (consumer durables, business investment, housing and inventories), minus the mean rate of change, 1959-1993 (3.90 percent). 1987 \$. Vertical lines are recessions.

Sources: Haver Analytics; Heinemann Economic Research

GROWTH IN THE NONCYCLICAL SECTORS OF THE ECONOMY IS WEAK

Shadow Open Market Committee



Notes: The chart shows year-over-year changes in "non-cyclical" sectors of the economy (GDP minus consumer durables and investment), minus the mean rate of change, 1959-1993 (2.76 percent). 1987 \$. Vertical lines are recessions.

Sources: Haver Analytics; Heinemann Economic Research

March 6-7, 1994

RÉGULATORY CONSOLIDATION

Lee HOSKINS
The Huntington National Bank

SINGLE REGULATOR: A BAD IDEA

The idea of a super-regulator for banks and thrifts misses the fundamental point. Given the rapidly changing financial marketplace, the real issue is not the regulatory structure itself, but the effects of regulation on the cost and availability of products consumers demand. The primary objective of any regulatory reform should be to free financial institutions from the regulatory burdens that prevent them from meeting consumer demands in an efficient fashion. Recent proposals that address the structure of the regulatory system are treating symptoms rather than the source of the problem—regulation itself.

The consolidation of all federal regulatory authority into a single institution is a bad idea for several reasons. First, it would stifle creativity and innovation on the part of both regulators and the regulated firms, with no guarantee of better or less costly regulation. Differences in the incentives, goals and powers among the separate regulatory agencies promote a flexibility in the conduct of regulation that cannot be legislated, even by the most vigilant and responsive of law-making bodies. Second, a single, monolithic federal regulator might be more susceptible to political pressure, especially if it does not have a truly independent charter and governing board. The record of the savings and loan industry demonstrates the dangers of insufficient checks and balances in the regulatory process. Third, and most importantly, stripping the Federal Reserve of its regulatory power would threaten the independence of the monetary policymaking process. The supervisory and rule-making authority of the Federal Reserve translates into substantial grass roots support that can be used to fend off challenges to the institution's independence.

RECENT REFORM PROPOSALS

The idea of banking agency reform has been around almost as long as the regulatory system itself. The latest version is a Treasury Department plan, announced last November 23, to combine the four federal bank and thrift supervisory authorities into a single new agency that would be called the Federal Banking Commission (FBC). The FBC would assume the current regulatory functions of the Federal Reserve System, the Federal Deposit Insurance Corporation (FDIC), the Comptroller

of the Currency (OCC), and the Office of Thrift Supervision (OTS). The stated intent of the proposal is to eliminate wasteful duplication and inconsistencies in the content and enforcement of statutes and modernize a system that is viewed as having grown out of disjointed reactions to past crises.

The Fed would retain its role as lender of last resort and its responsibilities in connection with monetary policy and the payments system. The FDIC would continue to manage the deposit insurance system, with authority to conduct special examinations of insured institutions. The entire responsibilities of the OCC and OTS would be assigned to the FBC and the existing agencies would be abolished.

The FBC would be governed by a five-member board, consisting of a chairman appointed by the President to a four-year term and confirmed by the Senate, the Secretary of the Treasury or his designee, a member of the Federal Reserve Board appointed by the Board, and two members with different political affiliations appointed by the President to staggered five-year terms and confirmed by the Senate.

The Federal Reserve has offered an alternative that would also merge the OCC and OTS and strip the FDIC of regulatory authority for healthy institutions, but would preserve and significantly expand the Fed's regulatory role. The primary regulator of a banking company would be determined by the charter of the institution's lead bank. The new agency would regulate thrifts and banking companies whose lead banks are nationally chartered. The Fed would regulate all companies whose lead banks are state-chartered and the holding companies and non-bank affiliates of selected large banks, regardless of charter. The Fed would also retain its bank holding company rule-making power and responsibility for foreign bank supervision. The number of federal regulatory agencies would be reduced to two, and each banking organization would have a single primary regulator. The Fed proposal demonstrates that it is not necessary to take the risks associated with a single regulator and give up the advantages of multiple regulators in order to achieve most of the benefits from consolidation.

PRESERVING INNOVATIONS

The multiple regulator system, which has evolved over decades is by no means perfect, but it does provide an effective means of encouraging adaptability to rapidly changing circumstances by regulators and permitting some degree of creativity and innovation on the part of regulated institutions. With respect to regulators, much of the evolution in permissible bank powers and products necessary to keep pace with the changing desires of consumers and businesses has been

driven by the constructive competition among federal regulators. For example, when the OCC liberalized restrictions on activities by national banks in the 1960s, the conversion option allowed state chartered banks to shift from Fed regulation to OCC regulation and exercise those broader powers. Again, during the 1970s, many banks changed their charters to avoid the high costs of Fed membership. This shift, in part, prompted an important legislative change—the Monetary Control Act of 1980.

With respect to the regulated institutions, the patchwork of federal regulatory agencies offers the opportunity to seek the most appropriate regulator for a given business mix, and in so doing helps protect financial firms and their customers from the supervisory inertia and high costs of a single regulator. An expansion-minded bank holding company, for example, can under certain circumstances reach across state lines more easily by purchasing a thrift institution, which faces fewer restrictions on interstate activity. In fact, a bank can conceivably convert from a national or state charter to a thrift charter in order to offer a growing list of services made possible by technological advances or made popular by evolving customer preferences but that it cannot legally provide under a commercial bank charter. An institution with a heavy focus on securities sales might find regulation by the OCC more appropriate than regulation by the Federal Reserve, which seems to place more onerous constraints on such activities. A large bank holding company might save time and trim expense by converting the charter of its lead bank from national to state to reduce the number of primary regulators examining the institution from two to one. In short, the existence of multiple federal regulators permits regulated institutions to adapt to change in the market place by changing charters. The resulting competition among regulators limited the need for such moves.

In addition, the projected cost savings from consolidation of the federal regulatory agencies might be overstated. Concentrated power breeds waste and inefficiency, while competition fosters innovation and efficiency. As a result, it is unlikely that the estimates of cost savings from regulatory consolidation can be realized, or if realized, then sustained. Much of the projected savings could be achieved through partial consolidation and better coordination among existing agencies, without forgoing the savings and other advantages that accrue from competition.

SAFETY AND SOUNDNESS

One argument that is often raised against a multiple regulator system is that safety and soundness of the banking system suffers because of a "competition in laxity" by the agencies. Banks

can and do shift charters for a number of reasons. However, over the last 60 years of multiple federal bank regulators there is little evidence that a competition in laxity weakened the commercial banking system.

Bouts of instability in the financial system often stem from government intrusion into private risk bearing activities. Such government intrusion reduces counterparty scrutiny—the essence of financial contracting. For example, Fed Wire and the finality of payment it provides means banks do not worry about the financial health of other banks they are doing business with over Fed Wire because the Fed guarantees the payment. The same argument applies to student loan programs, farm credit programs, housing programs and many more.

The most pervasive intrusion by the federal government into risk bearing activities of private parties is deposit insurance. The large cost born by taxpayers because of massive failures in the thrift industry stems more from unlimited deposit insurance than from multiple regulators and a competition in laxity. The Federal Home Loan Bank Board (FHLBB) was effectively the sole regulator for the thrift industry at the federal level. The Federal Savings and Loan Insurance Corporation had backup regulatory and examination authority, but poor coordination and control prevented the operation of meaningful checks and balances. Moreover, a single federal regulator is more likely to be vulnerable to political pressure than multiple regulators because it is more costly and difficult for members of Congress to influence multiple agencies with much broader constituencies. This is even the case if the governing board includes high ranking officials primarily accountable to the Executive Branch.

INFLATION AND REGULATORY AUTHORITY

It is not at all clear that to be a wise monetary policymaker and nimble lender-of-last resort, that the central bank must have regulatory authority. The Bundesbank has no such authority, yet it is generally regarded as a premiere monetary policymaking body. However, there is an important reason for the Fed retaining its regulatory role. Regulatory authority gives the central bank broad-based support that can be instrumental in preserving its independence in formulating and conducting monetary policy. The Federal Reserve's role as a regulator gives it substantial influence over the banking industry. The Fed's strong ties to prominent businessmen, community leaders, and academics through the system of Reserve Banks provides an extensive public relations network. The loss of supervisory authority would diminish the importance and influence of the Reserve

Banks, where the vast majority of the Fed's supervisory and regulatory personnel are located, thereby weakening the Federal Reserve's ability to marshal support for its independent control of monetary policy.

These concerns would be largely mitigated by a statutory objective that directed the Federal Reserve to achieve and maintain price level stability. There is a body of research that demonstrates the importance of central bank independence in promoting the highest sustainable rates of economic growth and standards of living by controlling inflation. Since no statutory authority for zero inflation exists, the Fed needs the broad-based support its regulatory apparatus provides. Imperfections that might result from continuing the system of multiple regulators are far outweighed by the substantial and verifiable benefits of at least partially insulating monetary policymakers from political pressures to inflate.

Finally, both the Treasury and Fed proposals for regulatory reform do not address several important considerations. First, consolidation should not entail the merging of the Savings Association Insurance Fund with the Bank Insurance Fund. Second, the regulatory function of the National Credit Union Administration should be reviewed, as well. Third, neither the Treasury's nor the Fed's proposal addresses the fact that bank mergers and acquisitions are the subject of redundant antitrust review by one of the existing federal banking agencies in addition to the Justice Department.

March 6-7, 1994

ECONOMIC OUTLOOK

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All of the factors are in place for strong economic growth through 1994. At issue is whether inflation pressures will mount and whether the Federal Reserve will appropriately tighten monetary policy from its presently accommodative stance. At stake is the eventual sustainability of the expansion.

REAL ECONOMIC PERFORMANCE

The economy is benefiting from strong cyclical momentum generated by stimulative monetary policy as well as a vastly improved foundation for economic expansion provided by the many noncyclical adjustments that have characterized the economy in recent years.

In contrast to recent recoveries that began with strong spurts of real growth that subsequently subsided toward a more sustainable pace of expansion, the rebound from the second quarter 1991 trough began very slowly. Real GDP growth would have been much closer to the average of recent rebounds if it had not been suppressed by the ongoing adjustments in the private and public sectors, many of which began well before the recession. The foundations for sustained economic expansion are stronger as a consequence. As such, the slow GDP growth understated actual improvement in economic performance.

Aided by the strong tailwinds of monetary stimulus, the winding down of these adjustments presently allows the economy to play catch-up. The pace of growth accelerated in the second half of 1993, and that momentum is carrying into 1994. The pickup in growth is evident throughout the private domestic sector. Real domestic final sales rose over 5 percent annualized in the second half of 1993. Government purchases continue to decline with the federal defense downsizing, and the trade deficit widened significantly in 1993, subtracting from domestic production. While exports have continued to grow, import growth has accelerated sharply with the stronger domestic consumption and business investment in producer durable goods.

Employment growth has increased 1.75 percent in the last year, and the average workweek has risen to new highs. The flow of layoffs associated with corporate restructuring has subsided, while strong product demand is forcing firms to increase labor inputs. Sharp gains in productivity

(over 4 percent annualized in the second half of 1993) have been a key factor driving the spurt in growth. The improvement in productivity has more than offset the continued modest increases in compensation and lowered unit labor costs. This has constrained inflation and widened profit margins. At the same time, product demand has accelerated, providing significant increase in corporate operating profits and cash flows.

The extraordinary 7.5 percent rate of growth in fourth quarter 1993 will not be repeated, but strong economic momentum will continue at least through second quarter 1994. Fourth quarter 1993 was boosted by unsustainable growth in residential investment (up 31.0 percent annualized), business fixed investment (up 22.1 percent), and a sharp rise in exports. Real consumption rose 4.6 percent, even faster than its robust 4.4 percent third quarter pace.

The strong economy in December lifted the level of GDP well above its fourth quarter 1993 average and real consumption rose in January. With this start, real GDP is projected to expand 4-4.5 percent in the first quarter 1994. Partially veiled by the bad winter weather, housing activity and demand for domestic autos remain strong, while manufacturers struggle to maintain adequate inventories. Business fixed investment is projected to continue growing, fueled by strong product demand, robust profits and cash flows, and low costs of capital. Continued increases in employment, hours worked and wages will generate sufficient income growth to sustain rising consumption.

The economy is receiving an additional boost from the government-subsidized rebuilding of Southern California following the earthquake. A supplemental appropriation of \$9 billion will be added directly to the economy, largely through government purchases. This may stimulate additional private sector activity. The government funds will be allocated throughout 1994. The extended period of bad weather may shift some growth from the first quarter into the second. The magnitude of this effect is uncertain.

The recent rise in interest rates will not dampen economic momentum in the near term. Rates are rising as a *reflection* of stronger economic growth, higher expected rates of return on investment, and higher inflation expectations. Monetary policy remains accommodative. The tax increases will lower disposable income and consumption from what they would be otherwise, but their adverse impact will be overwhelmed by the economic momentum and accommodative monetary policy.

Real GDP is projected to grow at a 3.25-3.5 percent pace in the second quarter and closer to 3 percent in the second half of the year. The risk is that the momentum will last longer than is generally anticipated. The cyclical momentum may be sustained by the improved structure of the economy, particularly the strong gains in productivity and low unit labor cost inflation, and the

vastly improved finances of businesses and households and capital positions of banks. Moreover, there are many new efficiencies in service-producing industries that are not reflected in the productivity statistics. These factors form the basis for healthy growth after the cyclical momentum fades. Moreover, enactment of NAFTA and GATT raise long-run potential growth. Real GDP is projected to expand approximately 2.75 percent in 1995.

MONETARY POLICY

Monetary policy has been decidedly stimulative for several years. Bank reserves and the narrow monetary aggregates have grown very rapidly (during 1992-1993, bank reserves grew 14 percent annualized; the monetary base, 10.3 percent; and M1, 12.4 percent) and the real funds rate has been kept close to zero since Fall 1992. As another symptom of accommodative monetary policy, the yield curve has remained steep and certain commodity futures prices and gold have risen. M2 growth has been slowed by the continued decline in small time deposits, with the largest drain flowing from thrift institutions.

Until recently, the rapid money growth and low interest rates were associated with an increased demand for cash balances and not faster spending. Rather than accelerate nominal GDP, the excessive liquidity growth merely raised the demand for financial assets and contributed to low interest rates and rising stock prices. Thus, the income velocity of the narrow monetary aggregates fell, while M2 velocity rose sharply. The ongoing noncyclical adjustments in the economy that inhibited spending, particularly the federal defense downsizing, and the shifts in demand among financial assets contributed to these patterns.

Through third quarter 1993, nominal GDP growth remained modest and consistent with low inflation. Following a robust fourth quarter 1992, quarterly GDP growth was below 4.5 percent in each of the first three quarters of 1993. The rising real growth was offset by a gradually declining GDP deflator, a higher favorable change in the real growth-inflation mix. Underlying this trend, however, continued rapid money growth added fuel to potential nominal spending.

Nominal GDP growth surged to 8.8 percent in fourth quarter 1993, and is projected to grow approximately 6.5 percent this quarter. Combined with the modest slowdown in growth of the narrow monetary aggregates and the beginning of a pickup in M2 growth, income velocity of the narrow aggregates is declining less rapidly while the sharp increase in M2 velocity is slowing. Expectation of further increases in short-term interest rates will reduce the demand for M1 relative to M2 and narrow their growth gap.

INFLATION

To date, broad measures of inflation have been flat or declining, but several indicators of future inflation are flashing warning signals. At issue is whether the warning signals are reliable predictors of rising inflation, or whether any of the recent changes in the structure of economy will suppress or at least postpone inflation pressures.

The CPI increased 2.9 percent in the year ending December, and 3.2 percent excluding the volatile food and energy components. Producer prices have been nearly stable: the PPI rose 0.3 percent, 0.6 percent excluding food and energy. The CPI and PPI rose only modestly in January. Increases in the GDP deflators have also been trending down: the implicit GDP deflator rose 2.2 percent from fourth quarter 1992 to fourth quarter 1993, while the fixed-weight deflator increased 2.8 percent. The implicit deflator rose only 1.5 percent annualized in the second half of 1993, reflecting the robust growth of business investment in information processing equipment.

Trends in unit labor costs have been every favorable. ULCs in the nonfarm business sector rose only 1.3 percent from fourth quarter 1992 to fourth quarter 1993, and actually declined 0.9 percent in the second half of the year. ULCs in the manufacturing sector dropped in both 1992 and 1993 and fell at a 3 percent annualized rate in the last year. The sharp decline in ULC inflation from 5.1 percent in 1990 reflects receding compensation increases as well as productivity gains. The most recent improvement has come primarily from sharp productivity gains while compensation increases have begun to stabilize.

Several key indicators point to a traditional cyclical reacceleration of inflation. Rapid money growth has been inconsistent with low inflation. The yield curve remains very steep, an early warning of recent cyclical bouts with rising inflation. Gold prices have risen. Commodity prices are up, although the alarming price increases are in futures while spot prices have been much more moderate.

The recent sharp acceleration of nominal GDP is a clear concern. Whereas the rising price variables are expectational, it is certain that if nominal GDP continues to grow anywhere near 7 percent, inflation pressures would mount. The Federal Reserve instead forecasts nominal GDP to grow between 5.5 and 6 percent from fourth quarter 1993 to fourth quarter 1994; implicit in this forecast is a deceleration of growth following first quarter 1994.

Despite the warning signals of price pressures, broader measures of inflation are projected to remain near 1993 levels through 1994. The CPI is projected to increase approximately 3-3.5 percent

(3 percent excluding food and energy) and the fixed weight GDP deflator approximately 2.5 percent. A continuation of recent trends in monetary policy and nominal GDP growth would push inflation above 4 percent in 1995. But even that rise may be avoided by appropriate monetary tightening.

This forecast of restrained inflation in 1994 stems from some of the unique characteristics of recent economic performance. The increase in aggregate demand that normally would have been generated by the stimulative monetary policy was constrained by restrictive fiscal policies (declining defense spending and higher taxes) and selected private sector adjustments. The restructuring and significant improvements in production processes have raised productivity (and generated efficiencies in the service-producing industries that are not captured in the productivity statistics) and allowed increases in aggregate supply without exerting price pressures.

These favorable adjustments *temporarily* postpone the inflationary impact of the stimulative monetary policy and economic pickup. The rising nominal GDP growth through 1994 will be largely real growth while inflation will remain low. The changes in production processes and labor markets reduce the already loose and unreliable correlation between inflation and either capacity utilization or the unemployment rate. Presently, neither measure indicates with any reliability tightness or lack of supply that would induce inflationary bottlenecks.

But inflation will not stay low without a slowdown in the pace of nominal growth. The gains in productivity have been part cyclical, and most of the structural improvement has been a one-time gain rather than a permanent increase in the rate of productivity growth. The mix of continued rapid growth of nominal GDP eventually would shift more toward inflation. Consequently, keeping inflation low requires monetary tightening and higher short-term rates. Yet, aided by favorable improvements in supply, appropriate tightening now would prevent inflation from accelerating in 1995.

INTEREST RATES

Until recently, interest rates followed a unique pattern relative to recent expansions, reflecting the gradual growth/low inflation environment. During the first 6 quarters of economic rebound, the Federal Reserve cut the funds rate in half, to 3 percent, and intermediate term rates fell nearly as much. With the Federal Reserve pegging the funds rate at 3 percent, the yield curve flattened through October 1993 entirely due to bond yields falling, and rates dropped to their lowest level in decades. This contrasts with the typical pattern of flattening during expansions by short-rates rising faster than long rates.

Since October 1993, rates have risen significantly and the yield curve has steepened. The primary culprit has been the sharp acceleration of economic growth and the associated fear of higher inflation and short-term rates. Recent rises in certain commodity prices, gold and the NAPM price index have added to these fears. Meanwhile, actual inflation has remained unchanged and the federal budget outlook has improved significantly.

The funds rate hike in early February heightened these concerns, raising rates and steepening the yield curve. Even though the Fed's action may not have been too late to prevent a rise in inflation, clearly it was too late to control inflationary expectations. Now financial markets recognize the need for higher short-term rates.

The Fed must raise the funds rate further. Pegging the funds rate close to the rate of inflation since September 1992 has involved excessive money growth. The acceleration of economic growth, a significant rise in expected rates of return on investment and surging business fixed investment, and rising loan demand raise the natural rate of interest. Preventing the funds rate from rising to reflect these fundamentals would involve continued excessive money growth and eventually higher inflation.

The required rise in the funds rate to be consistent with the economy growing along its potential path without rising inflation is uncertain; what is certain is that significantly slower narrow money growth is necessary and that requires higher rates. The Federal Reserve is correct in stating that an inflation-adjusted funds rate of zero is inconsistent with its inflation goals in an expanding economic environment. The Administration has projected modest increases in short-term rates (3-month Treasury bill rates averaging 3.3 percent in 1994 and 4.1 in 1995), but sustained economic momentum may require a funds rate above 4 percent by year-end and modestly higher in 1995.

The entire term structure of rates is projected to rise and the yield curve remain steep as long as the economic momentum is sustained and financial markets fear rising inflation and anticipate the need for tighter monetary policy. Treasury bond yields are projected to rise to 7-7.5 percent. Good inflation reports are necessary but not sufficient to lower bond yields. Long rates will recede only when the Fed has raised rates sufficiently and there are clear signs of slower economic growth. With appropriate monetary tightening, the yield curve would eventually flatten from both ends and bond yields would fall back to 6-6.5 percent.

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ECONOMIC AND FINANCIAL PERSPECTIVES

**MICKEY D. LEVY
CHIEF FINANCIAL ECONOMIST
NATIONS Banc CAPITAL MARKETS**

WASHINGTON, D.C.

MARCH 7, 1994

S N A P S H O T

QUARTERLY DATA	Levels				Quarterly % Change (annualized)				Yr-to-Yr % Change			
	1993				1993				1993			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
Nominal GDP	6261.6	6327.6	6395.9	6510.8	4.4	4.3	4.4	7.4	6.0	5.6	5.6	5.1
GDP	5078.2	5102.1	5138.3	5212.1	0.8	1.9	2.9	5.9	3.2	2.9	2.8	2.8
GNP	5080.7	5104.1	5145.8	NA	1.0	1.9	3.3	NA	2.9	2.9	2.8	NA
Domestic Demand	5138.1	5177.4	5224.6	5307.7	2.5	3.1	3.7	6.5	4.1	3.7	3.6	3.9
Final Sales	5048.9	5089.1	5131.8	5199.4	-0.8	3.2	3.4	5.4	2.5	2.9	2.9	2.8
Consumption	3403.8	3432.7	3469.6	3503.9	0.8	3.4	4.4	4.0	3.1	3.5	3.5	3.1
Residential Investment	211.4	206.2	212.1	227.2	1.5	-9.5	11.9	31.7	13.5	5.4	8.1	7.9
Business Investment	562.3	584.3	594.8	623.8	14.4	16.6	7.4	21.0	10.1	10.5	11.4	14.7
Inventory Investment	29.3	13.0	6.5	12.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Government Spending	931.3	941.1	941.7	940.1	-6.4	4.3	0.3	-0.7	-1.3	0.0	-0.9	-0.7
Exports	588.0	593.2	591.9	612.5	-2.4	3.6	-0.9	14.7	3.0	4.0	2.2	3.5
Imports	647.9	668.4	678.2	708.1	11.6	13.3	6.0	18.8	10.5	9.9	9.1	12.3
GDP Deflator	123.3	124.0	124.5	124.9	3.6	2.3	1.6	1.3	2.8	2.6	2.7	2.2
Employment Costs (Private)	116.8	117.9	118.9	119.9	3.9	3.8	3.4	3.4	3.5	3.6	3.7	3.6
Unit Labor Costs (Non-Farm)	137.4	138.2	138.0	137.6	4.8	2.3	-0.6	-1.2	2.3	2.4	1.8	1.3
Productivity (Non-Farm)	114.8	114.7	115.8	117.0	-1.7	-0.3	3.9	4.2	2.1	1.4	1.5	1.5
Compensation (Non-Farm)	157.7	158.5	159.8	161.0	3.0	2.0	3.3	3.0	4.5	3.9	3.3	2.8
Corporate Profits A/T (a)	258.9	272.3	274.3	NA	1.6	5.2	0.7	NA	0.6	6.2	20.4	NA
Operating Profits A/T (a)	271.2	284.8	299.1	NA	-4.7	5.0	5.0	NA	3.2	10.1	26.0	NA
Net Cash Flow (a)	518.7	533.7	542.3	NA	1.1	2.9	1.6	NA	0.2	3.1	8.4	NA
Current Account (c)	-22.3	-27.2	-28.0	NA	5.5	-19.5	-3.3	NA	-62.5	-35.7	-40.8	NA

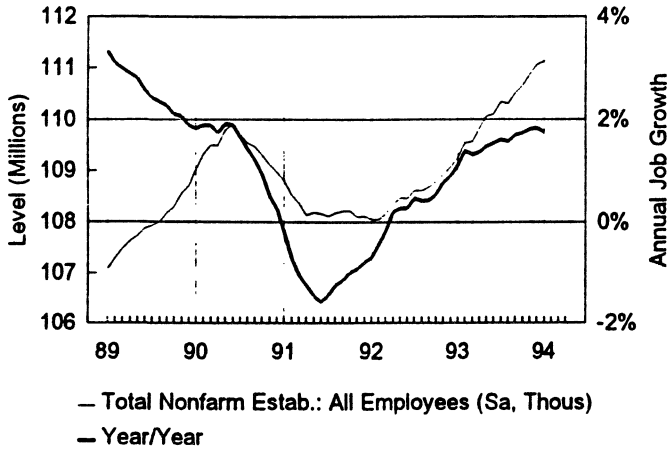
MONTHLY DATA	Levels				Monthly % Change				12 Month % Change							
	1993				1994				1993				1994			
	Oct	Nov	Dec	Jan	Oct	Nov	Dec	Jan	Oct	Nov	Dec	Jan	Oct	Nov	Dec	Jan
Purchasing Managers Index	53.5	55.3	57.1	57.7	6.4	3.4	3.3	1.1	6.2	1.5	3.6	0.7				
Non-Farm Payrolls (b)	110.664	110.880	111.070	111.132	162	216	190	62	1.7	1.8	1.8	1.7				
Manufacturing Payrolls (b)	17.709	17.735	17.737	17.763	11	26	2	26	-1.1	-1.0	-1.0	-1.0				
Unemployment Rate (c)	6.7	6.5	6.4	6.7	0.05	-0.24	-0.08	0.26	-0.54	-0.84	-0.92	-0.46				
Average Workweek (sa)	34.5	34.5	34.5	34.8	0.6	0.0	0.0	0.9	0.3	-0.3	0.6	0.9				
Avg. Hourly Earnings (sa)	10.92	10.93	10.95	11.03	0.6	0.1	0.2	0.7	2.5	2.2	2.5	2.8				
Total Unit Auto Sales	9.0	9.0	8.8	9.3	5.6	0.3	-2.3	5.0	7.8	8.2	1.7	6.6				
Domestic Unit Auto Sales	7.1	7.1	7.0	7.3	7.8	0.3	-2.3	4.6	12.9	12.7	4.8	9.0				
Industrial Production	111.9	112.8	113.9	114.4	0.5	0.8	1.0	0.4	4.1	4.1	4.6	4.7				
Capacity Utilization	81.7	82.2	82.9	83.1	0.4	0.6	0.9	0.2	1.9	1.7	2.3	2.3				
PPI	123.7	123.8	123.7	123.9	-0.1	0.1	-0.1	0.2	0.1	0.4	0.3	0.2				
PPI Ex. Food & Energy	135.7	136.1	136.3	136.9	-0.3	0.3	0.2	0.4	0.4	0.5	0.6	0.6				
CPI	145.6	146.0	146.3	146.3	0.3	0.3	0.2	0.0	2.8	2.8	2.9	2.4				
CPI Ex. Food & Energy	153.5	154.1	154.4	154.6	0.3	0.4	0.2	0.1	3.1	3.2	3.2	2.9				
Retail Sales	178.5	179.8	182.0	181.0	2.0	0.7	1.2	-0.5	7.0	7.6	7.7	6.9				
Housing Starts	1409	1406	1571	1294	3.7	-0.2	11.7	-17.6	14.9	14.7	22.2	10.5				
Permits	1304	1374	1476	1360	2.6	5.4	7.4	-7.9	14.3	21.0	23.4	17.5				
Federal Budget (d)	-45.4	-38.4	-8.3	15.6	3.4	-5.7	30.7	-14.2	-251	-257	-226	-240				
Durable Goods Orders	136.6	139.7	142.6	147.9	2.6	2.2	2.1	3.7	8.7	13.5	6.1	12.6				
Manufacturing Orders	258.3	262.8	266.0	NA	1.2	1.7	1.2	NA	5.5	8.1	3.6	NA				
Personal Income (\$87)	4283.7	4300.5	4322.7	NA	0.4	0.4	0.5	NA	2.3	2.9	-1.6	NA				
Consumption (\$87)	3496.9	3499.3	3515.6	NA	0.5	0.1	0.5	NA	3.3	3.2	2.9	NA				
Personal Saving Rate (c)	3.8	4.1	4.2	NA	-0.16	0.32	0.05	NA	-1.22	-0.47	-4.05	NA				
Leading Economic Indicators	99.1	99.6	100.3	NA	0.5	0.5	0.7	NA	1.1	1.4	1.1	NA				
Total Business Inventories	869.7	874.6	874.6	NA	0.3	0.6	0.0	NA	2.9	3.3	3.0	NA				
Inventory/Total Sales (c)	1.45	1.44	1.43	NA	-0.01	-0.01	-0.01	NA	-0.04	-0.05	-0.03	NA				
Merchandise Trade (c)	-10.9	-9.7	-7.4	NA	-0.28	1.22	2.27	NA	-3.66	-1.84	-0.44	NA				
3 Month Bill (c)	3.10	3.19	3.15	3.08	8	9	-4	-7	20	-2	-17	-5				
2 Year Note (c)	3.87	4.16	4.21	4.14	2	29	5	-7	-21	-42	-46	-25				
10 Year Note (c)	5.33	5.72	5.77	5.75	-3	39	5	-2	-126	-115	-100	-85				
30 Year Bond (c)	5.94	6.21	6.25	6.29	-6	27	4	4	-159	-140	-119	-105				
DJIA	3625.8	3674.7	3744.1	3868.4	0.9	1.3	1.9	3.3	13.4	13.5	13.3	18.0				
S&P 500	463.90	462.89	465.95	472.99	1.0	-0.2	0.7	1.5	12.5	9.5	7.0	8.7				
U.S. Dollar (FRB)	93.3	95.5	95.7	96.5	1.3	2.3	0.3	0.8	9.7	6.0	5.8	4.5				
Yen/\$	107	108	110	111	1.4	0.8	1.9	1.4	-11.7	-12.9	-11.4	-10.8				
DM/\$	1.64	1.70	1.71	1.74	1.1	3.7	0.6	1.9	10.5	7.1	8.1	7.9				
M1	1113.4	1122.4	1128.5	1133.6	0.8	0.8	0.5	0.5	10.7	10.1	9.9	9.7				
M2	3547.3	3558.8	3565.8	3572.4	0.1	0.3	0.2	0.2	1.6	1.8	2.0	2.5				
M3	4203.2	4216.1	4228.1	4231.8	0.1	0.3	0.3	0.1	0.5	0.9	1.6	2.3				
C&I Loans & Non-Financial CP	742.2	740.3	NA	NA	-0.1	-0.3	NA	NA	-0.5	-1.1	NA	NA				
Consumer Credit	775.6	782.6	789.8	NA	0.9	0.9	0.9	NA	5.6	6.3	6.6	NA				

(a) Quarterly % changes are not annualized
 (b) Monthly changes are in levels
 (c) All changes are in levels or basis points
 (d) Monthly: change from same month last year; Annual: sum of past 12 months

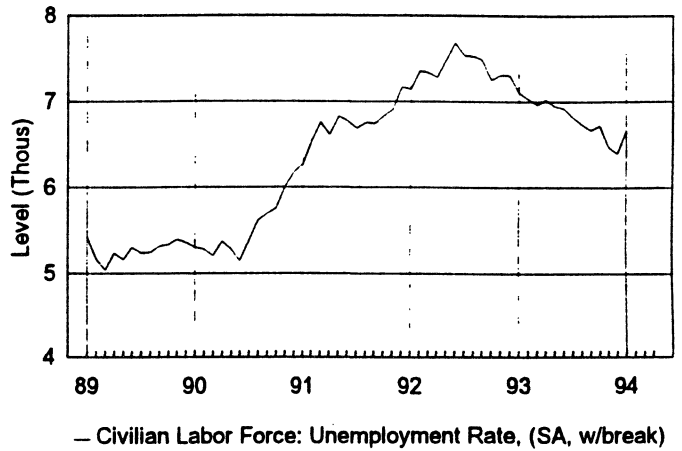
Chart 1

Selected Indicators: Employment and Earnings

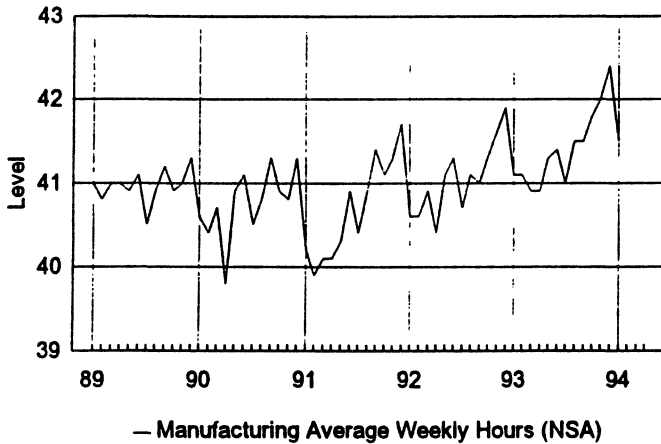
Non-Farm Payroll Employment



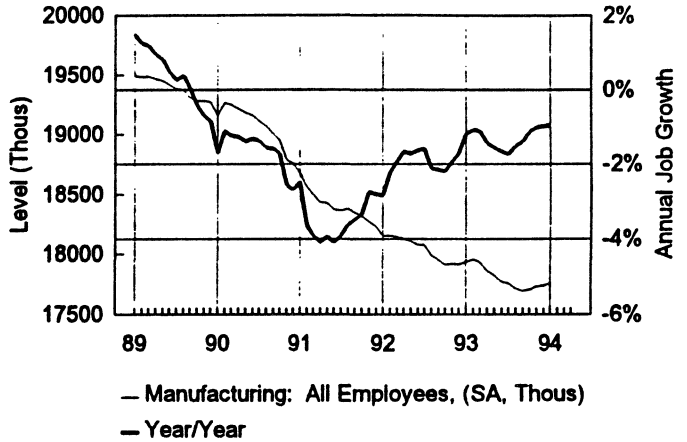
Unemployment Rate



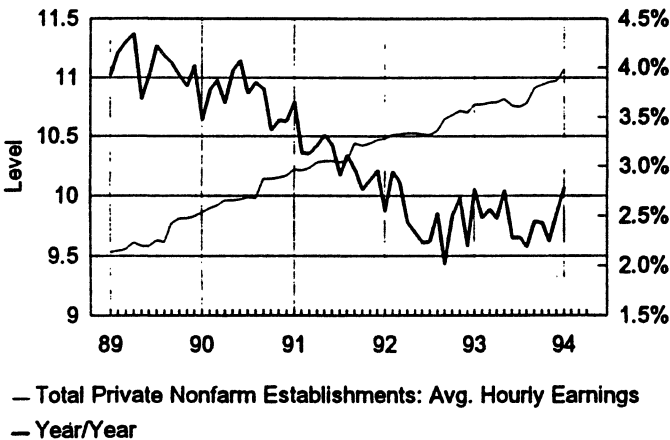
Average Workweek in Manufacturing



Manufacturing Jobs



Average Hourly Earnings



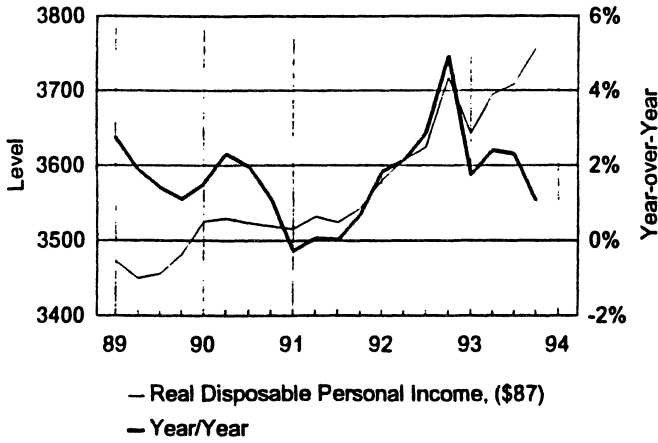
Employment/Population Ratio



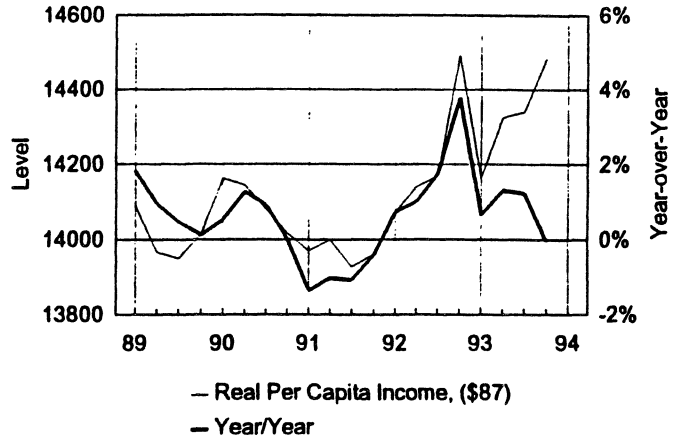
Chart 2

Selected Indicators: Income and Profits

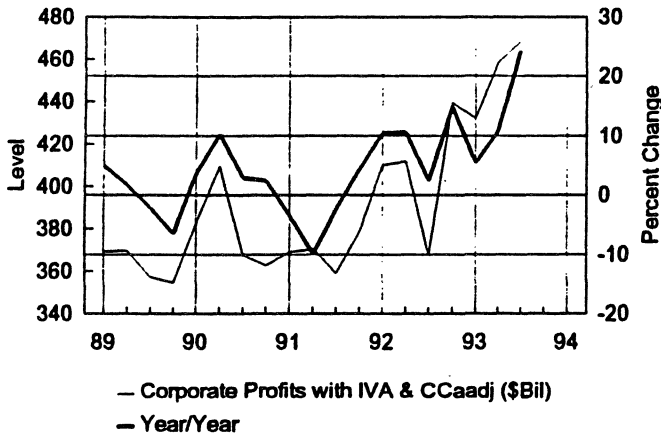
Real Disposable Personal Income



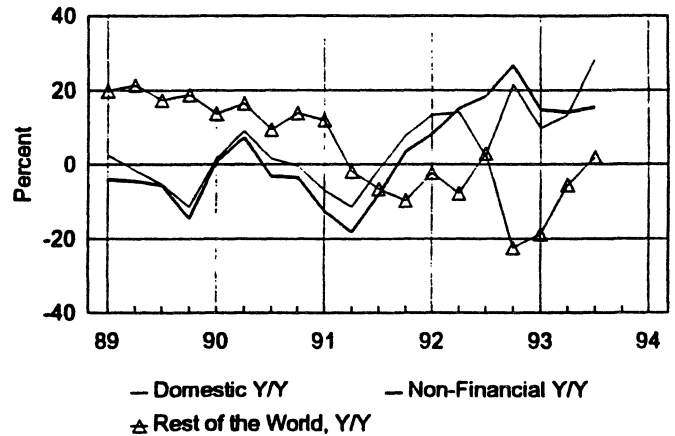
Real Per Capita Income



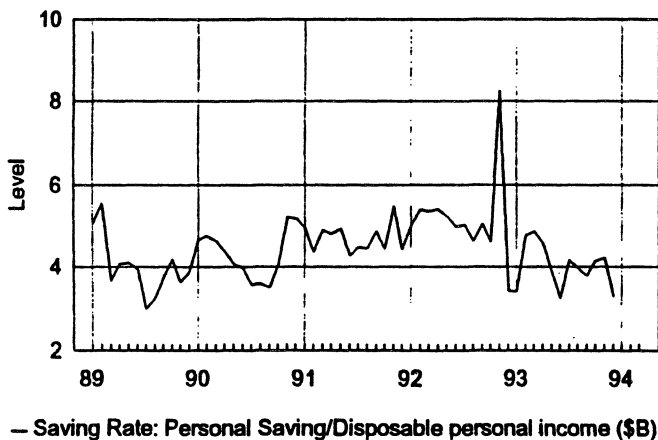
Corporate Profits



The Mix of Profits



Personal Saving



Undistributed Corporate Profits

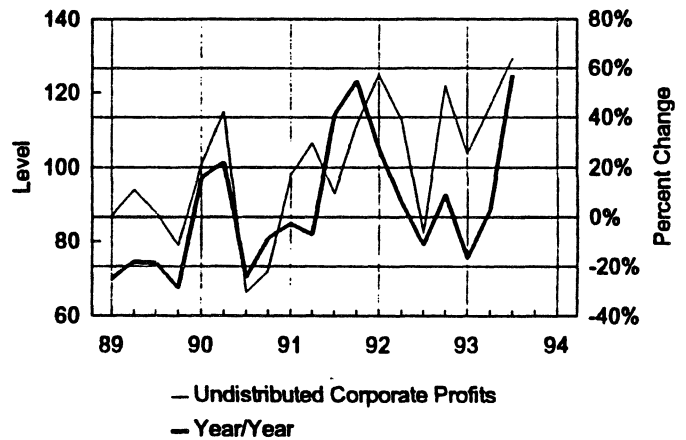
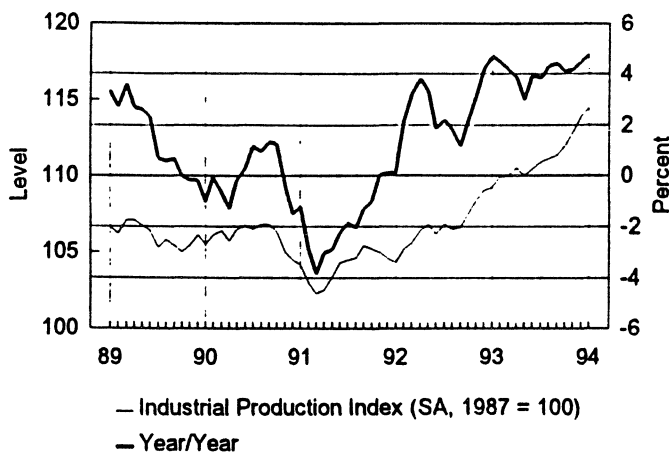


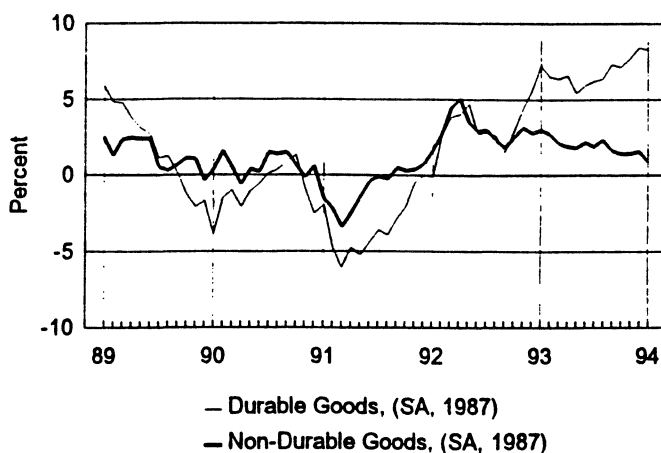
Chart 3

Indicators of Production

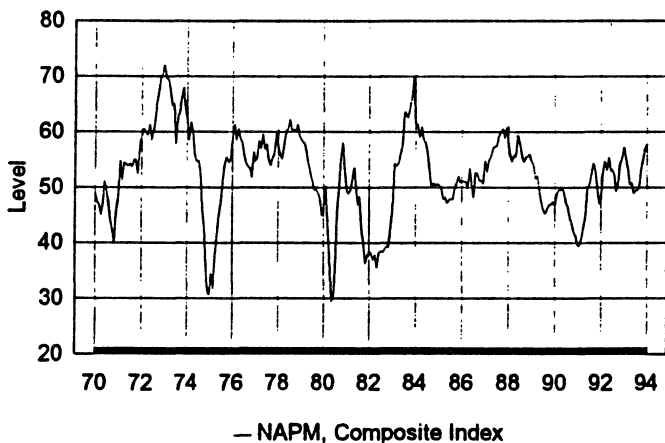
Industrial Production



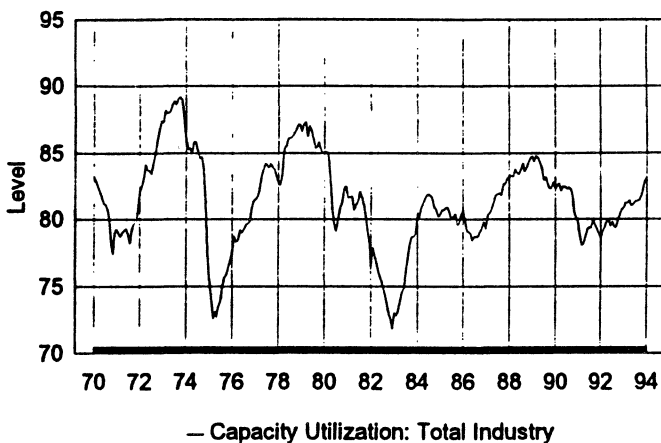
Industrial Production: Durable & Non-Durables



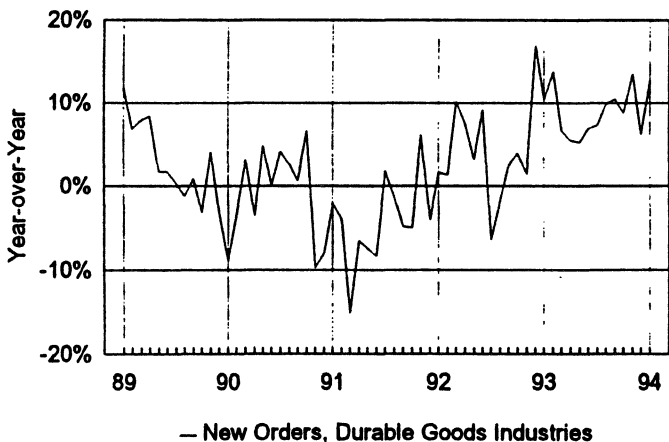
NAPM - Composite Index



Capacity Utilization



Durable Goods Orders



Productivity

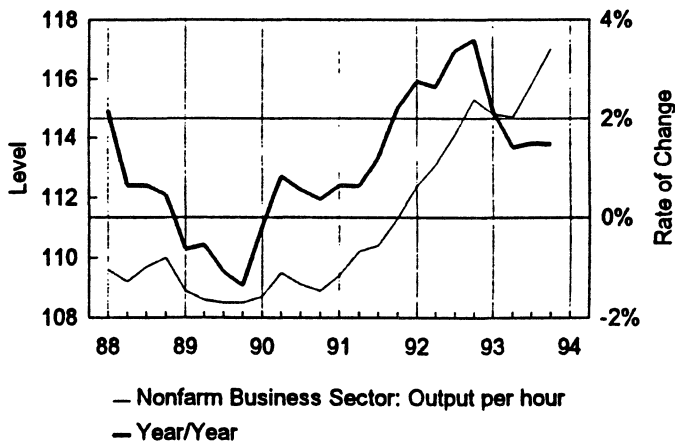
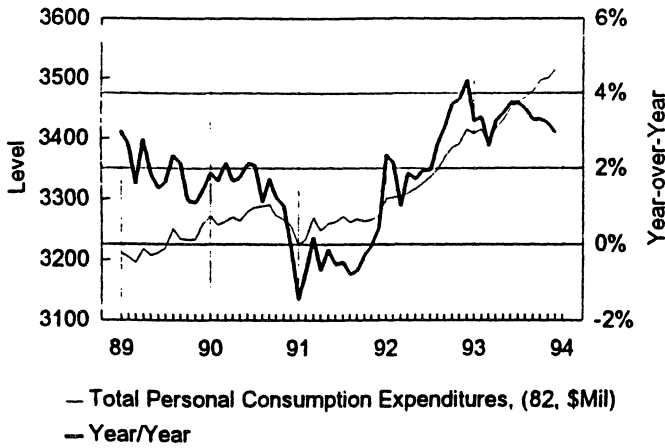


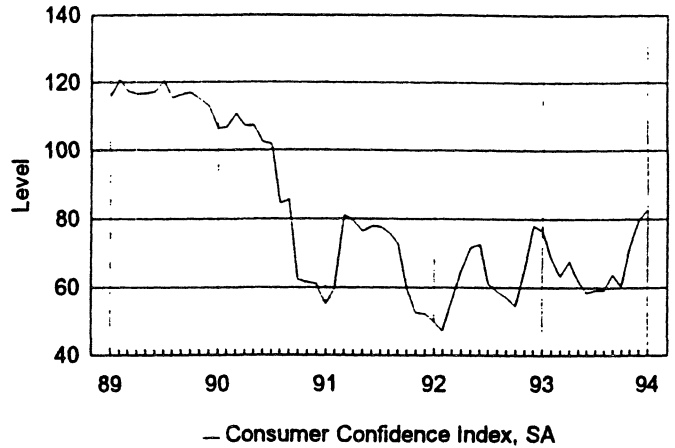
Chart 4

Selected Indicators: Consumption

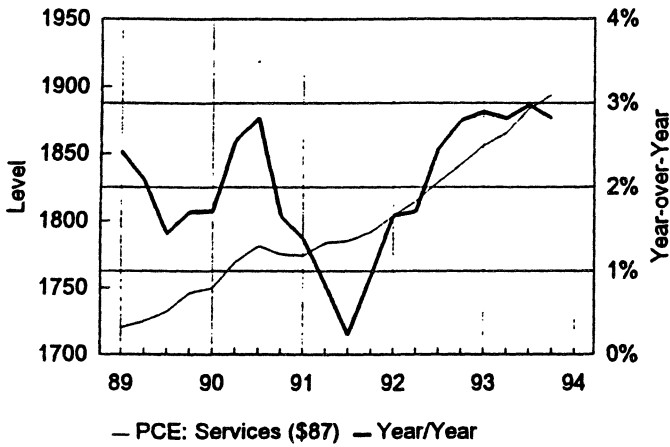
Real Consumption



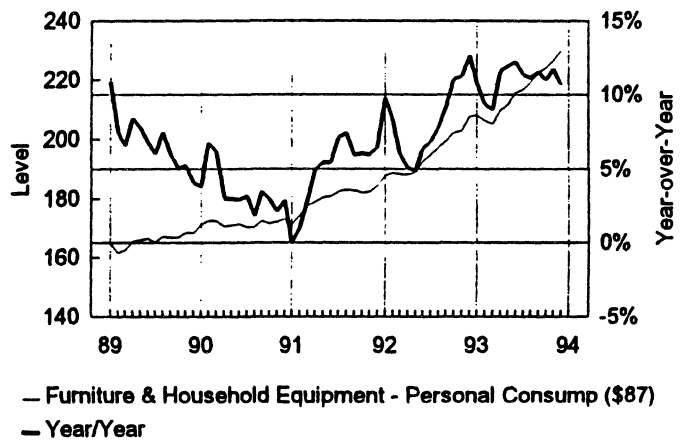
Consumer Confidence Index



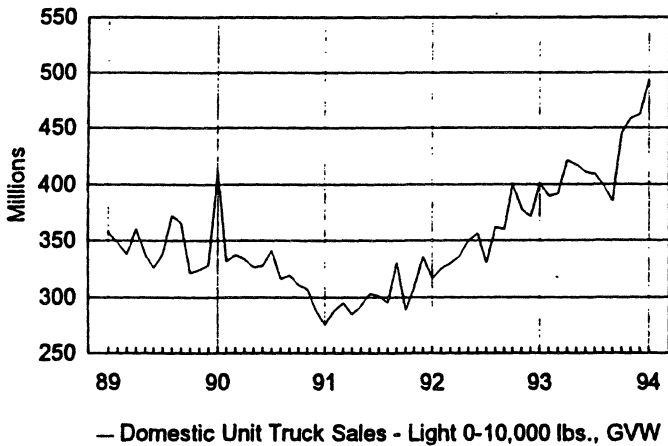
Real Personal Consumption Expenditures: Services



Real Consumption of Furniture & Household Equipment



Light Truck Sales



Retail Auto Sales

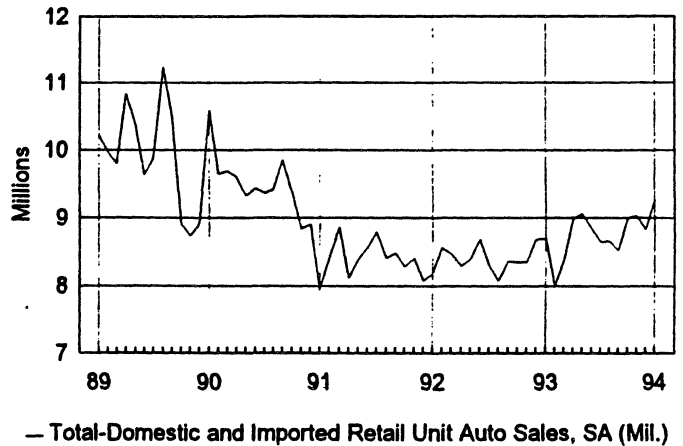


Chart 5
Compensation, Productivity and Unit Labor Costs

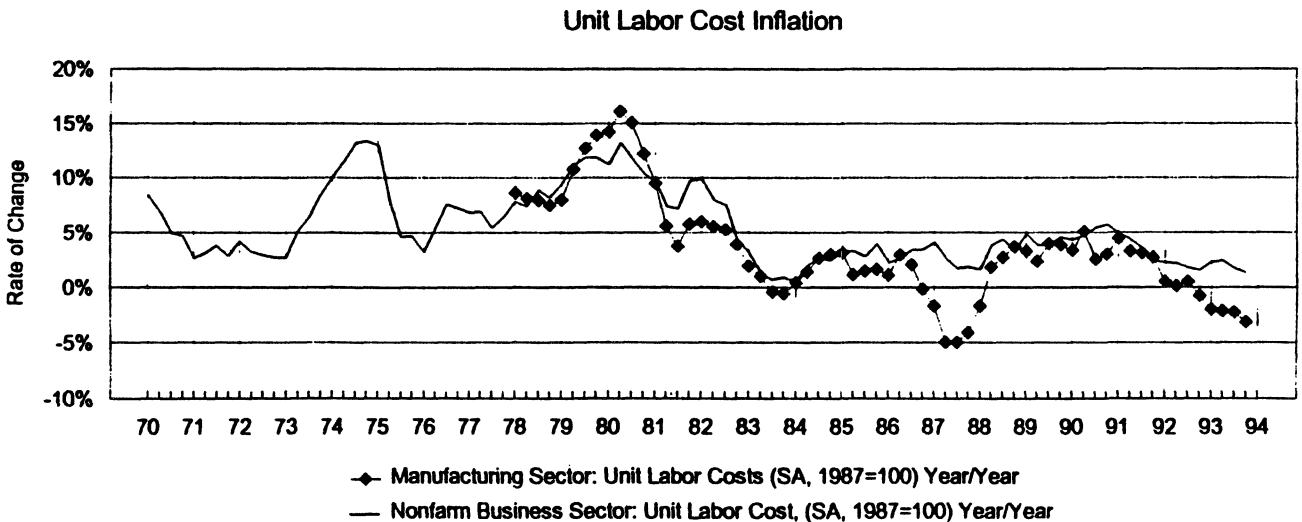
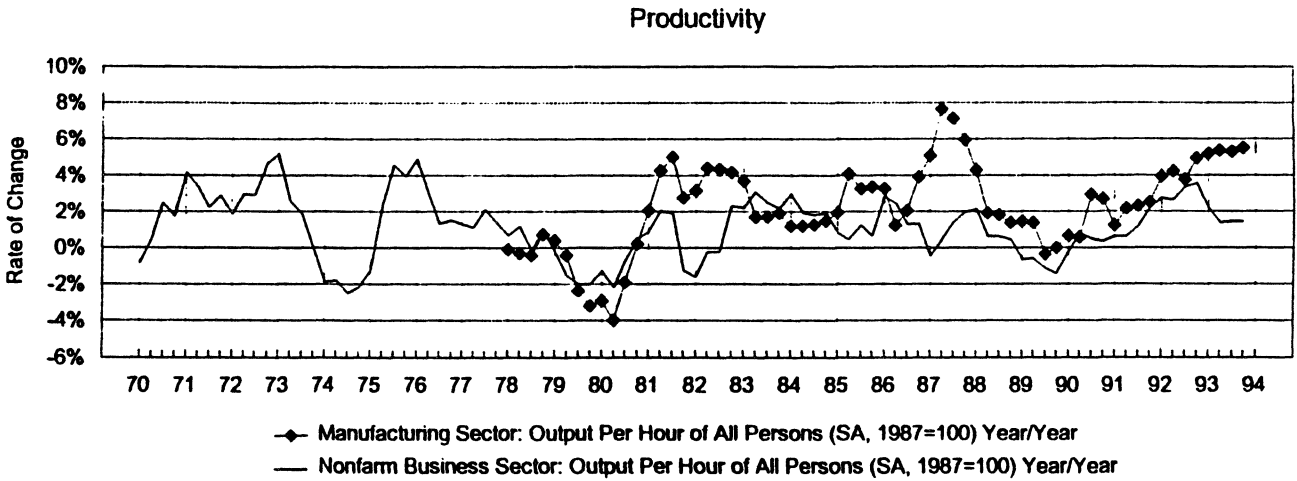
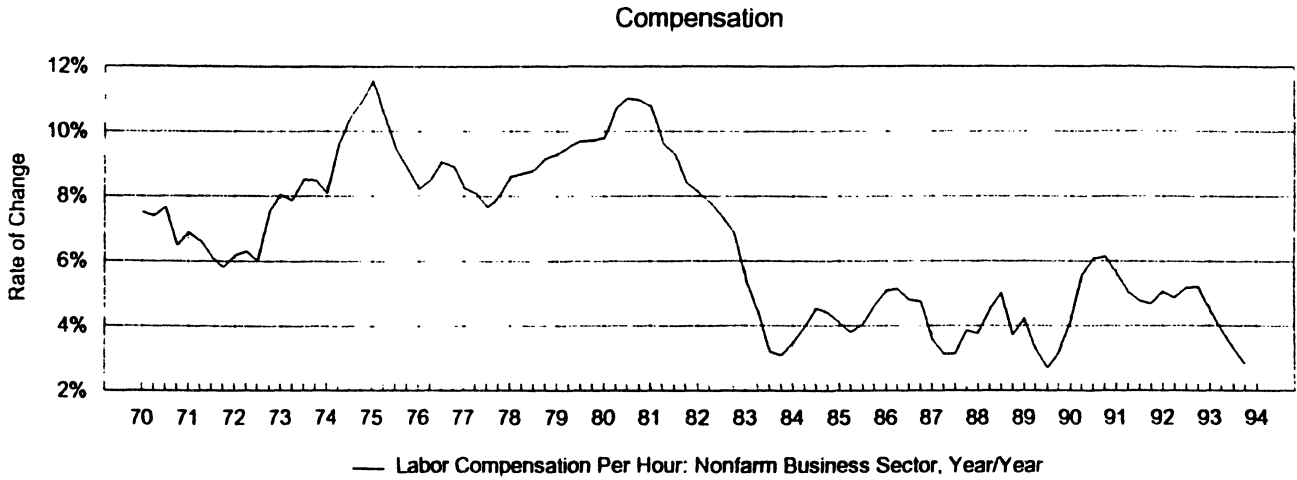
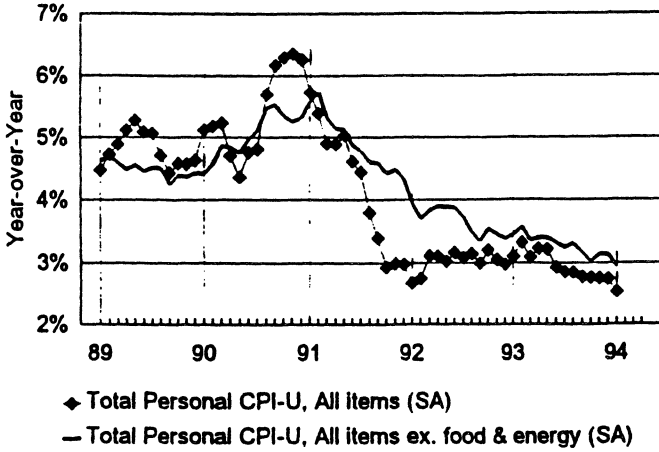


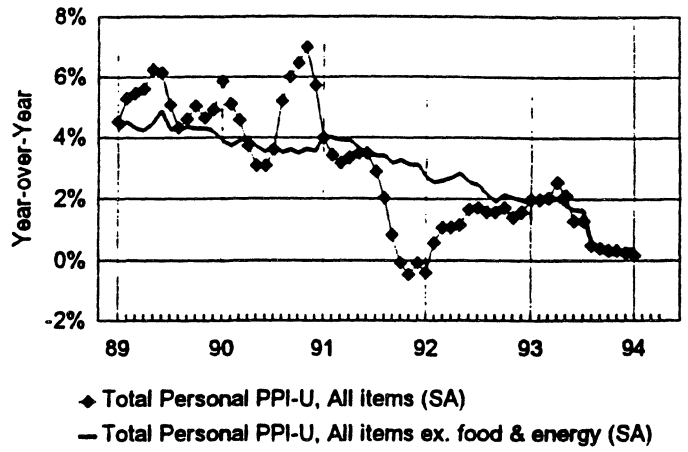
Chart 6

Selected Indicators of Inflation

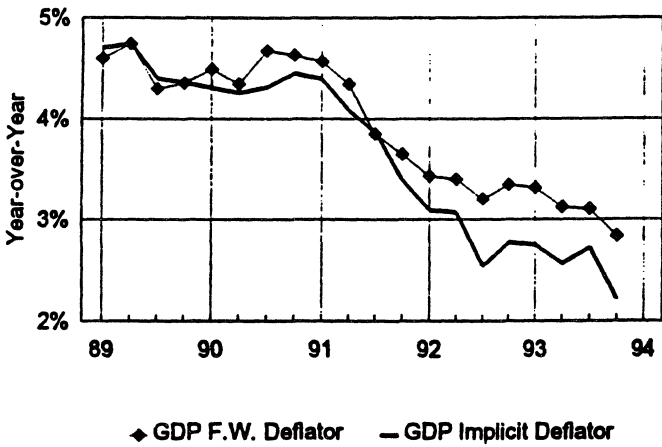
Consumer Price Index



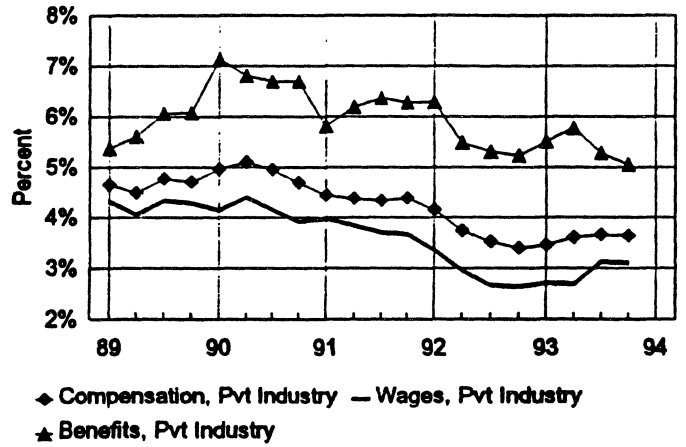
Producer Price Index



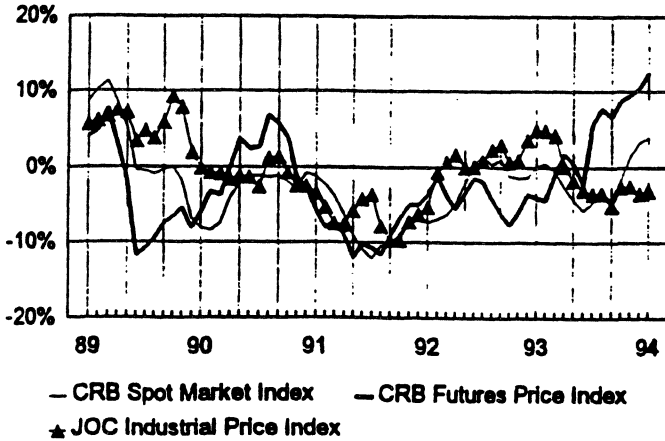
GDP Deflators



Employment Costs



Commodity Prices



NAPM: Survey of Prices

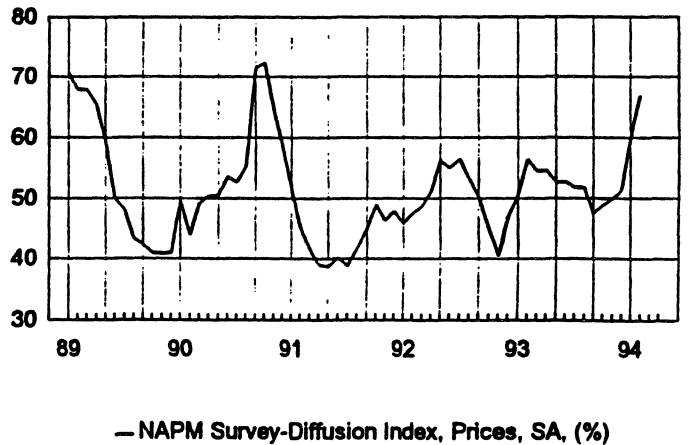


Table 1
Federal Reserve Objectives and Monetary Policy

I. Selected Economic Variables (Percent Change):

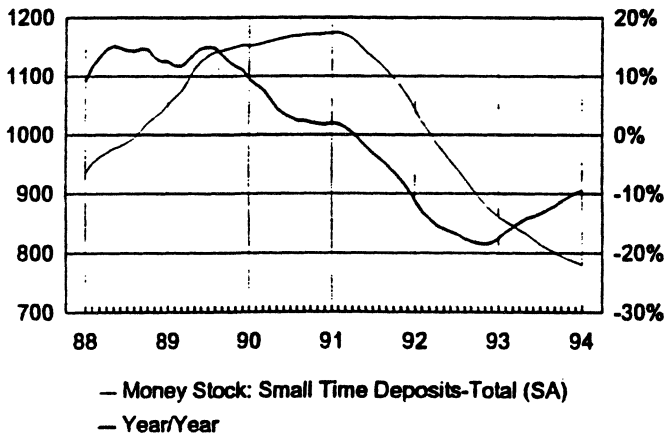
	Central Tendency Forecast Q4:93 to Q4:94	Actual Performance
Real GDP	3 - 3.25	2.8; 5.9% in 4th Qtr 1993
Inflation (CPI)	about 3%	2.4; 2.9 ex. Food & Energy
Nominal GDP	5.5 - 6	5.1; quarterly pattern in 1993: 4.4%, 4.3%, 4.4%, 7.4%
Unemployment Rate, 4th Qtr. Avg.	6.5 - 6.75	6.7

II. Selected Monetary Aggregates

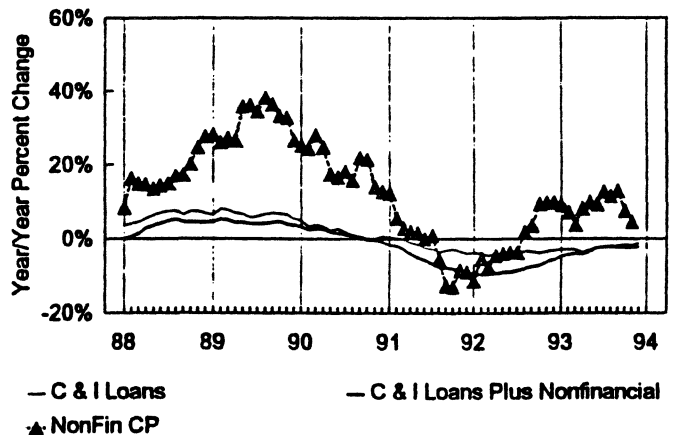
	Monetary Growth Targets		Annualized Percent Change	
	Q4:92 to Q4:93	Q4:93 to Q4:94	Last 6 Months	Year-over-Year
Bank Reserves	(not Targeted)		8.5	10.8
M1	(not Targeted)		9.0	9.7
M2	1-5	1-5	2.0	2.5
M3	0-4	0-4	2.2	2.3

Source: Board of Governors of the Federal Reserve System, Monetary Policy Report to the Congress, February 22, 1994.

Small Time Deposits



Loans Outstanding



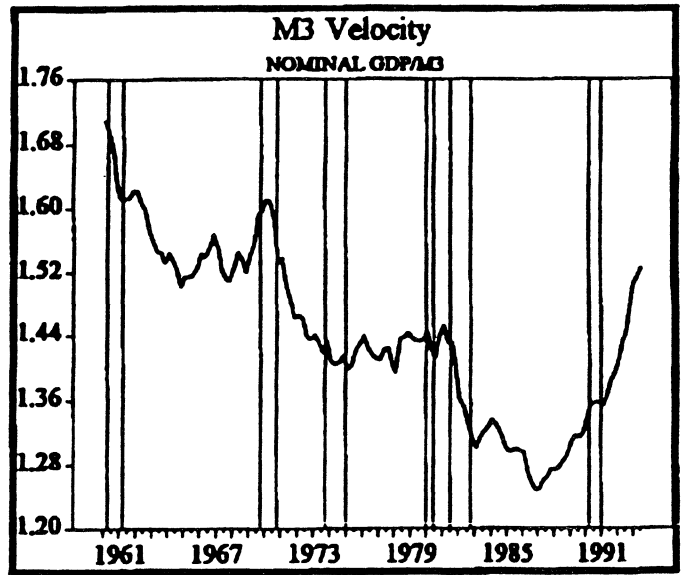
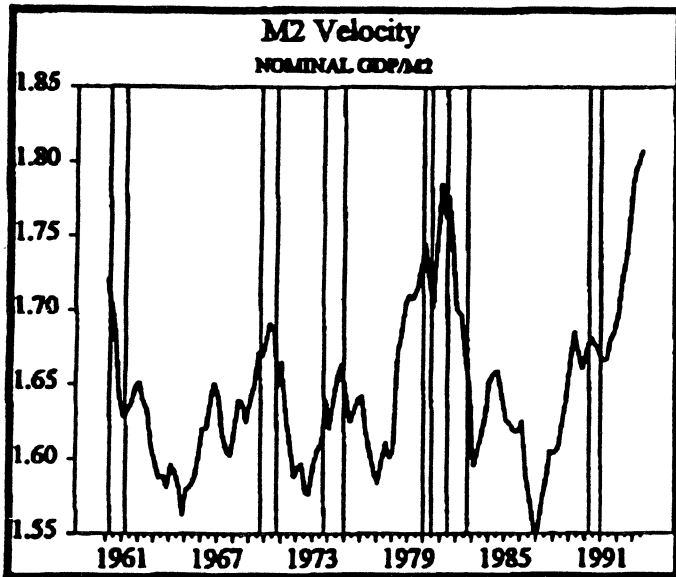
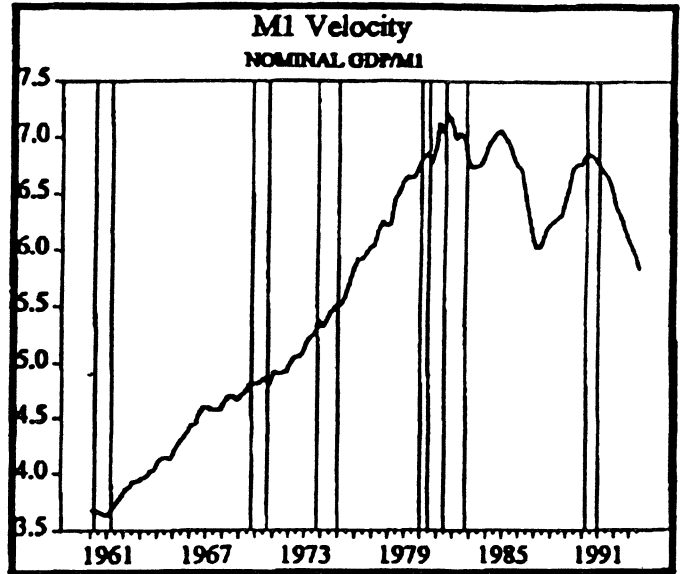
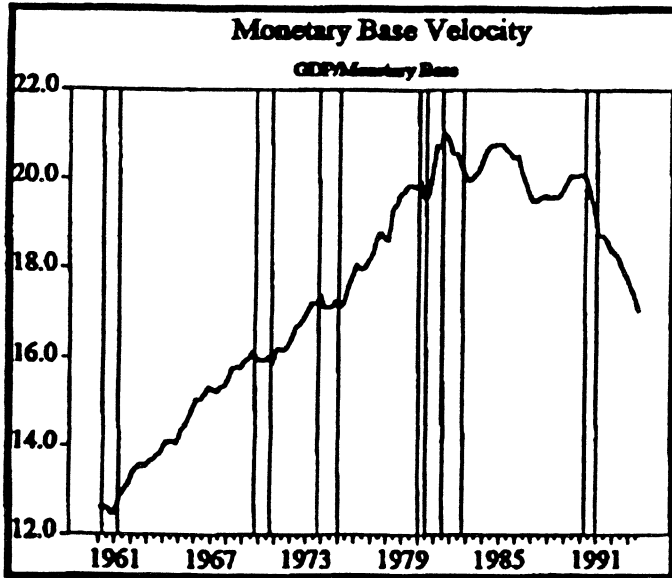
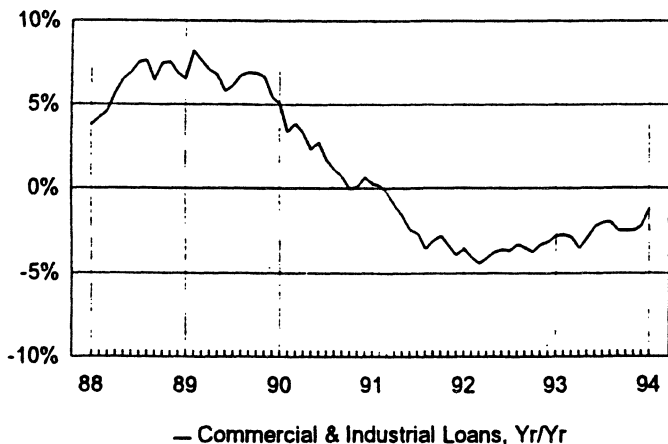


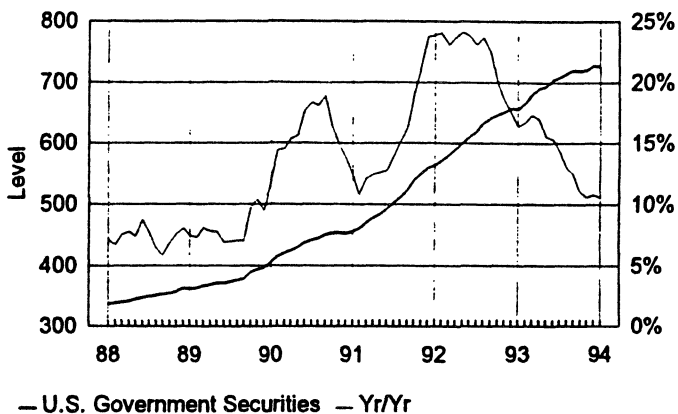
Chart 7

Bank Credit Conditions

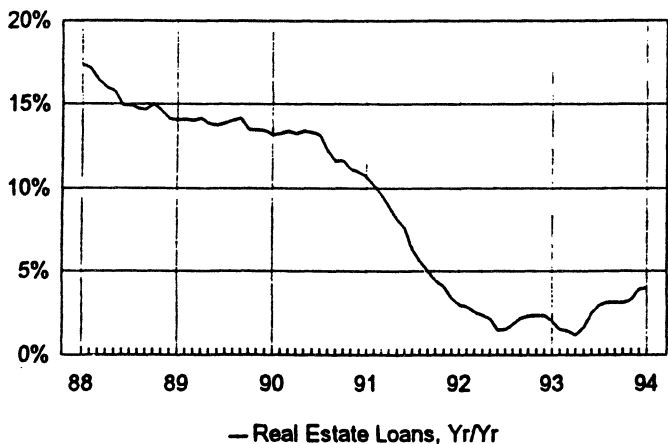
Commercial & Industrial Loans



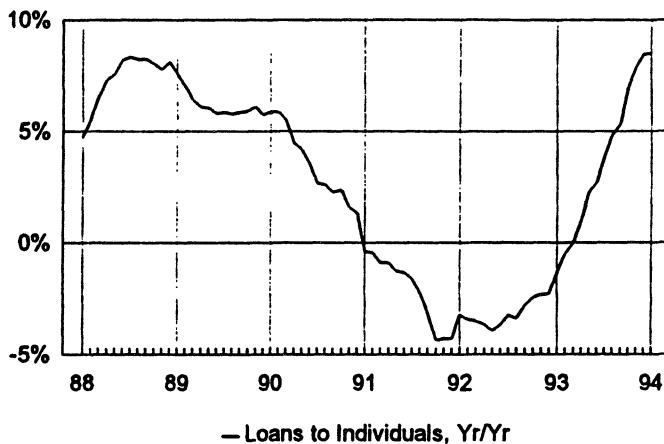
U.S. Government Securities held at Commercial Banks



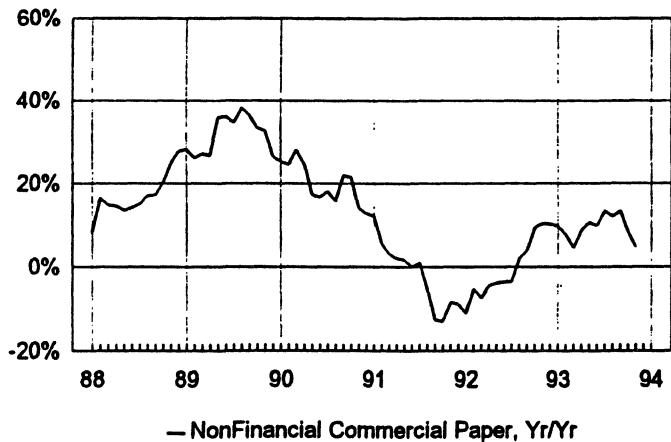
Real Estate Loans



Loans to Individuals



NonFinancial Commercial Paper



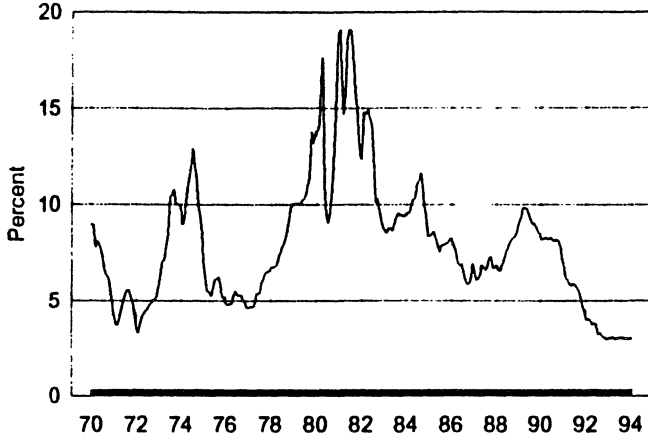
Federal Reserve Evaluation of Assets of Domestic Banks by Capital Category

Category	Year-end			September
	1990	1991	1992	1993
Well capitalized	30.4	34.4	67.8	73.3
Adequately capitalized	38.5	45.1	21.8	17.8
Undercapitalized	31.1	20.5	10.3	8.9

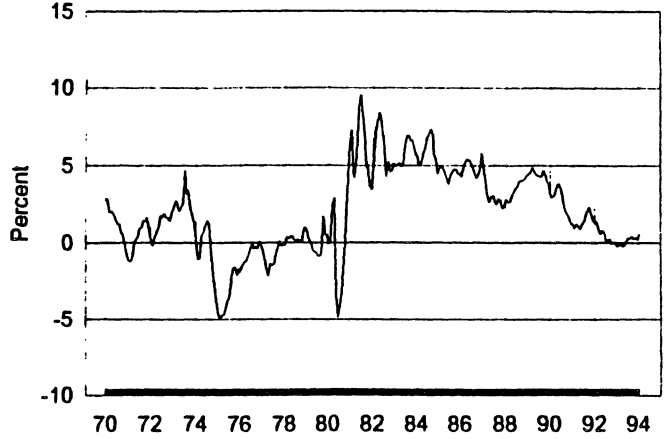
Source: Board of Governors of Federal Reserve System, Monetary Policy Report to the Congress, February 22, 1994

Chart 8 Selected Interest Rates

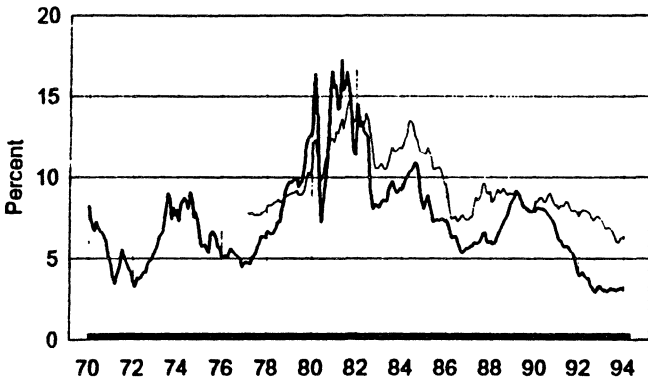
Federal Funds Rate



Inflation Adjusted Federal Funds Rate

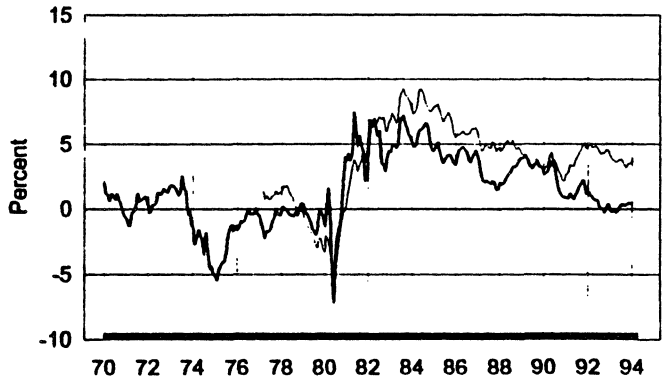


Treasury Yields



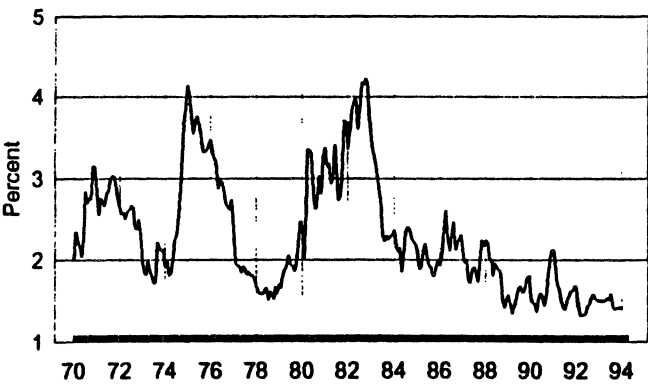
— 3 Month Bill — 30 Year Bond

Inflation-Adjusted Treasury Yields



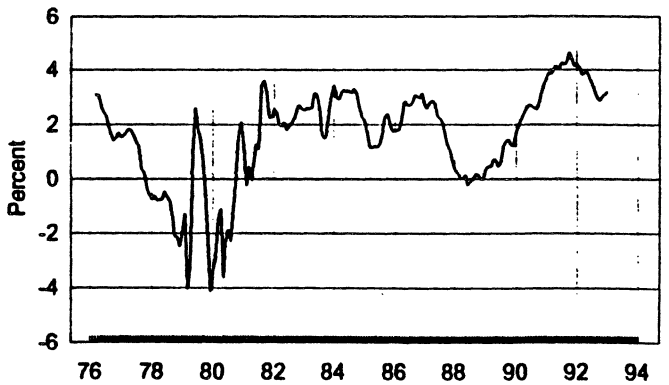
— 3 Month Bill — 30 Year Bond

Corporate Spread over Treasuries



— Moody's Baa Corporate - Treasury Composite Yield

Treasury Yield Spreads



— Spread: 30 Year T Bond - 3 Month T Bill

TRADE DEFICITS WITH JAPAN

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W.E. Simon Graduate School of Business Administration
University of Rochester

For the past six months the Clinton Administration has been engaged in a steadily increasing war of words with the Japanese to pressure them to take concrete actions to reduce their "chronic" trade surplus with the U.S. by committing to quantitative targets for U.S. goods sold in Japanese markets. This pressure was, in part, triggered by the finding last summer that Japan did not achieve its previously agreed to numerical targets on the market share of U.S. imports of microchips to Japan in 1992. Combined with a steadily deteriorating current account balance with Japan, this has led the Administration to raise substantially the risks of a serious trade confrontation with the Japanese in which we all would become the losers. Moreover, the threat, veiled or not, of sanctions imposes costs on consumers and are unlikely to generate significant results. Markets are disrupted, and uncertainty is increased.

Unfortunately the Administration seems intent on form over substance. The bilateral trade balance with any particular country should not be of major concern to the U.S. any more than an individual's "chronic" imbalance with their local grocery store. Moreover, even successful attempts to pry open a few selected segments of the Japanese domestic market to foreign producers are unlikely to have a substantial impact on the balance of trade. The recent variation in our trade position has much more to do with our own consumption-savings choices and the relative performance of the U.S. economy over the past nine years.

The first chart displays the quarterly dollar volume of imports from and exports to Japan since 1985. These figures include both merchandise trade flows and service flows. It is a mistake to consistently focus on the merchandise trade balance just because it is produced monthly. The predominate share of U.S. economic activity is in services and so our trade discussions should always be on the basis of the current account. From 1985 through 1990 U.S. exports rose by 2.5 times, from almost \$33 billion in 1985 to over \$82 billion in 1990. Over the same period imports grew by just 46 percent from \$78 billion in 1985 to almost \$115 billion in 1990. This remarkable export growth relative to imports substantially reduced our bilateral deficit with Japan. Since 1990,

however, U.S. exports to Japan appear to have stagnated while imports have continued to rise resulting in a current account deficit with Japan that is about the same (in nominal dollars) as it was in 1986.

This pattern of current account imbalances is not unique to our trade with Japan, but mimics the overall U.S. trade flows. The second chart shows our current account balance with Japan along with the overall balance. As can be seen, our trading with the rest of the world excluding Japan has followed a similar pattern but with even more dramatic swings. Our balance on current account has deteriorated from a deficit of just over \$8 billion in 1991 (an unusually small number due to payments made in 1991 by foreign governments to finance the Gulf War) to a number that is likely to exceed \$107 billion in 1993. Of that nearly \$100 billion swing, Japan accounts for less than \$30 billion. Thus our current trade deficit with Japan is not something that is unique to Japan and so it is unlikely to be attributable to their peculiar efforts to restrict our goods.

A primary reason for our declining trade deficit from 1986 through 1990 and for the increasing deficit since 1991 is the economic performance of the U.S. relative to our trading partners. Slow economic growth in the U.S. from 1986 through 1990 dampened our demand for imports relative to our exports. This is most apparent in the case of Japan. In Chart 3 the current account balance with Japan since 1985 is plotted along with the ratio of the U.S. industrial production index to the industrial production index in Japan. As can be seen, the U.S. grew more slowly than Japan from early 1987 until early 1991. Over that same period our trade deficit with Japan steadily declined. On the other hand, as the U.S. has recovered from recession, we have grown at a significantly faster rate than Japan. As a consequence, our demand for imports has expanded more than Japan's demand for U.S. goods and services resulting in a widening trade deficit. Until Japan recovers from current economic slump, it is unlikely that this situation will change. Chart 4 shows that this same pattern is apparent for the overall current account balance and the output of the U.S. relative to the countries of the OECD who constitute our major trading partners.

Contributing to the current account deficit is the continued strengthening of U.S. industries' competitive position and our improving domestic economy. These factors make the U.S. a particularly attractive place to invest. Given that the Japanese have a significantly higher domestic savings rate, their investments will naturally flow to those most promising opportunities, including the U.S. The flip side of our current account deficit is thus our surplus on the capital account. A potential danger of focusing too intently on reducing the trade deficit is that even if successful we may, as a consequence, find ourselves strapped for much needed capital if our savings patterns don't change.

What would be in the U.S. best interest is to have Japan recover from their recession as soon as possible. This would strengthen the demand for U.S. goods and services in Japan. In order to achieve such a recovery, the Japanese must continue along the path of economic and political reform—deregulating their markets and distribution networks. Setting numerical targets for U.S. import penetration merely invites bureaucratic regulation and interference with no assurances of sustained success.

There are numerous reasons why threats of sanctions such as the so-called Super 301 guidelines are unlikely to work. First, history shows that sanctions usually are answered by retaliatory tariffs. This clearly harms both countries with consumers paying the heaviest toll. It is rare that the cost to U.S. consumers of higher prices and less choice is mentioned in discussions to impose tariffs or duties on imports.

Second, even when successful in prying open selected markets the effects are small, benefiting a few companies, and are unlikely to improve the trade balance. Opening the Japanese market to American cigarettes in 1987 resulted in increased market share of U.S. cigarette producers in Japan but dramatically curtailed the export of U.S. leaf tobacco to Japanese cigarette manufacturers. Getting Japan to liberalize its import restrictions on beef resulted in an increased sale of American beef in Japan but also cut into U.S. exports of grain to Japan as that was the primary source of feed for Japanese beef. Thus even if all Japanese markets were open it does not mean that our bilateral trade balance would improve.

In a recent *Wall Street Journal* editorial, chairperson of the President's Council of Economic Advisors, Laura Tyson, argued that a reduction in Japan's multilateral trade surplus of \$50 billion could result in as many as 100,000 to 300,000 new jobs in the U.S. Even if this were an accurate assessment it is equivalent to little more than a couple of months of job growth in our economy. Last year alone U.S. employment rose by over 2.5 million. Put another way, the unemployment rate would be lowered between one and two tenths of a percentage point.

Third, sanctions seem unlikely to generate the incentives necessary for the Japanese government to fight the domestic political pressure for protection. Why do we think it is any more likely or reasonable to expect the Japanese government to be successful in eliminating their protection of rice farmers than we have been in eliminating our protection of honey producers, sugar producers and other agricultural interests? This is one reason why retaliatory sanctions are often the most frequent response to higher tariffs. Thus whatever "concessions" are agreed to are unlikely to generate significant changes in our trade balance.

U.S. TRADE WITH JAPAN

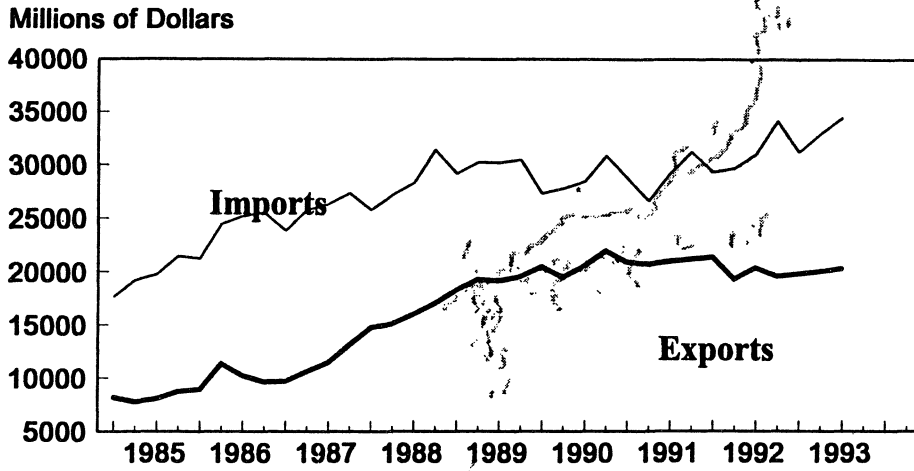


Chart 1

TOTAL U.S. CURRENT ACCOUNT BALANCE AND BALANCE WITH JAPAN

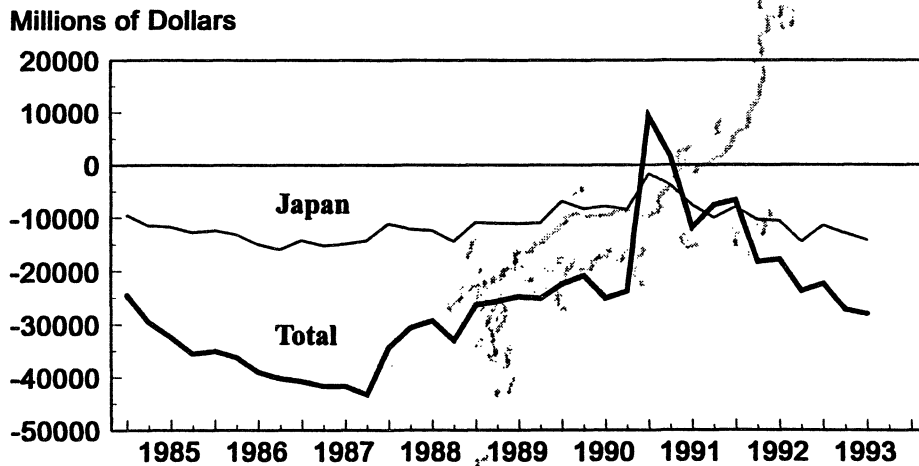


Chart 2

U.S. CURRENT ACCOUNT BALANCE WITH JAPAN AND RELATIVE OUTPUT

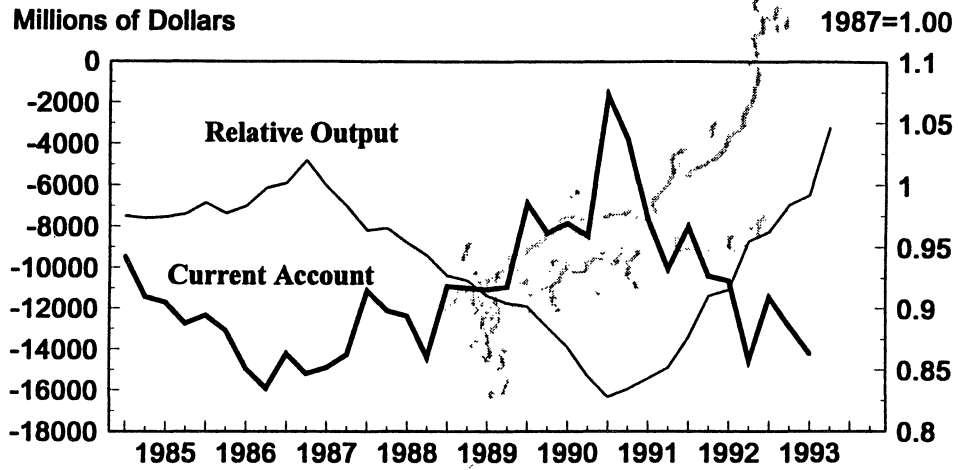


Chart 3

U.S. CURRENT ACCOUNT BALANCE AND RELATIVE OUTPUT WITH OECD

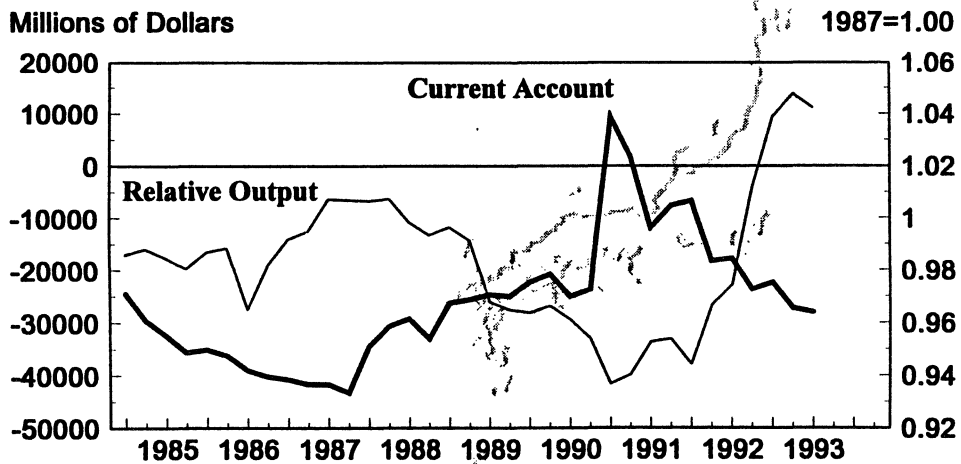


Chart 4

March 6-7, 1994

UNDERSTANDING THE MONETARY AGGREGATES TODAY

William POOLE*
Brown University

Figure 1 shows three measures of money growth since 1989. Two of these measures, M1 and M2, are taken directly from official Federal Reserve statistics. The third, MZM, consists of all balances bearing no interest-rate risk and immediately available at par without penalty. My measure of MZM is M2 plus institution-only money market mutual funds less small time certificates.¹ Over the twelve months ending January 1994, M1 growth was 9.3 percent. This rate, though down from the rate of over 13 percent in 1992, is much higher than is consistent with low inflation. M2 growth is now running at about 2 percent and MZM at about 5 percent. The gap between M2 and M1 growth mostly reflects the behavior of small time deposits, which have been declining in absolute level since early 1991.

Journalists, policy analysts, and policymakers today show little interest in data such as those in Figure 1. They have increasingly argued that the monetary aggregates are of little or no significance for monetary policy under today's conditions. They point to the variability of the income velocity of money after 1980, and the near zero correlation between any measure of money and nominal GDP. They argue that monetary regularities have broken down and that money growth is of no value to policymakers in today's world.

Although monetary behavior in the private economy has been subject to change because of regulation and deregulation, and because people have been adjusting to an environment of lower inflation, the most important monetary regularity that "broke down" after 1982 was the longstanding procyclical behavior of monetary *policy*. Failure to understand the role of changed monetary policy risks repeating old policy mistakes that gave rise to observed monetary regularities before 1982. Sustained high money growth will once again—perhaps this year—create much higher growth of nominal GDP, and much of this higher growth will appear in the form of higher inflation. My purpose in this paper is to provide a brief explanation of why policymakers should not ignore money growth despite experience since 1982.

Before 1980, M1 and M2 displayed similar cyclical patterns, although M1 had a somewhat more pronounced cyclical amplitude. For almost every business cycle, both money growth and interest rates rose during the early and middle parts of the cyclical expansion. Toward the end of

each expansion, money growth declines, and a few months later interest rates reach a peak, within a month or two the cycle peaks. Money growth typically declines into the cyclical contraction, and then begins to rise once again. The cycle trough follows within a few months. Interest rates turn up within a month or two of the cycle trough. In Figure 2, the business cycles before 1980 display this typical pattern.

The typical cyclical pattern of money growth and interest rates changed after 1982, as can be seen clearly in Figure 2. After 1982, large gyrations in money growth and interest rates occurred without a cyclical contraction until the one beginning in July 1990. M1 growth fell in 1984 as interest rates rose; M1 growth rose significantly in 1985 and 1986 as interest rates fell. Except for a few months interruption following the stock market crash in October 1987, interest rates rose from late 1986 to March of 1989 and then fell almost every month before leveling out at about 3 percent in late 1992. For interest rates to start falling and M1 growth to start rising, well over a year before the cycle peak, is unprecedented in U.S. history, back to the first availability of monthly estimates of the money stock in 1907.

The sustained and substantial short-run *inverse* relationship between M1 growth and T-bill rate over the period after 1982 is unprecedented in U.S. history, putting aside the periods dominated by world wars and the Great Depression.² The typical pattern before 1982, allowing for the lag of interest rates behind money growth, was a positive relationship reflecting the effect of money growth on inflation and interest rates, and the usual cyclical patterns. For monthly data January 1960 through December 1982 the simple correlation between M1 growth and the T-bill rate is 0.53; for the period January 1983 through January 1994, however, the simple correlation is -0.45.

The change in the cyclical behavior of interest rates after 1982 must be attributed primarily to the Federal Reserve. Except for the period from October 1979 to (about) October 1992, the Fed has always conducted policy by adjusting money market interest rates. Policy has sometimes focused on borrowed reserves, sometimes on free reserves, and sometimes on the federal funds rate, but these are minor variations in the basic theme of controlling money market interest rates.

A point little understood in popular discussions of monetary policy is that an implication of optimal policy is that the relationship between money growth and GDP growth *should* disappear. To understand this point, consider the simplifying assumption that the central bank is trying to stabilize growth in nominal GDP. Now suppose we observe a high positive correlation between money growth and nominal GDP. Given that the Federal Reserve could control money growth if it wanted to, the high correlation would mean that the Fed is permitting variable money growth to

destabilize GDP growth. If, on the other hand, the Fed does the best job possible of controlling money growth to stabilize GDP growth, then errors in hitting the GDP target are random and unpredictable—that is, no correlation between money growth and GDP growth remains in the data.

This point seems so counterintuitive, until intuition is altered by studying the matter, that an analogy may help. Consider the driver of a car who has a target speed of 65 miles per hour on the interstate. Suppose the driver kept the accelerator in a fixed position. The amount of gas flowing to the engine would be constant, but the car's speed would fall when going up hill and rise when going down hill. Now suppose the driver (or the car's cruise control) does a perfect job of keeping the car at 65 mph. When going up hill, the driver feeds more gas to the engine, and when going down hill less gas. We observe constant speed and changing amounts of gas flowing to the engine. In both these cases—fixed gas flow with variable speed and variable gas flow with fixed speed—the correlation between the flow of gas to the engine and the car's speed is zero.

Now consider an inattentive driver on a flat stretch of interstate. Sometimes the driver feeds too much gas to the engine and the car's speed rises to 75 mph, and sometimes the driver feeds too little gas to the engine and the car's speed falls to 55 mph. What we observe in the data is a positive correlation between the amount of gas fed to the engine and the speed of the car. The positive correlation reflects the structural relationship between the amount of gas being fed to the engine and the car's speed, all other things (such as the slope of road) being equal. This relationship appears in the data when the driver does a poor job of controlling speed. When the driver does a good job, the correlation disappears.

The interaction of the structure (relationship between gas flow and car speed, other things being equal) and the controller can even lead to apparently strange results. Suppose the car has a small engine and is pulling a heavy trailer. In the mountains, the driver puts the accelerator to the floor when going up hill, but the car falls below 65 mph anyway. Going down hill, the driver lets the car go about 65 mph in anticipation of slowing down on the next uphill section of road. We observe higher gas flow to the engine when the car is going below 65 mph (up hill) and lower gas flow to the engine when the car is going above 65 mph (down hill)—the correlation between gas flow and speed is *negative*.

Clearly, an observed simple correlation between gas flow and car speed may tell us nothing about the structural relationship between gas flow and car speed. To uncover the true relationship, we need controlled experiments, or inattentive driving. Historically, the procyclical relationship between money growth and GDP reflected the Federal Reserve's poor policy management. After 1982, the Fed did a much better job. The Fed broke the old procyclical pattern of money growth.

The extent of the changed cyclical pattern goes well beyond money growth. I've already noted that the peak for the T-bill rate was March 1989, which was 16 months before the cycle peak in July 1990. The yield curve was another apparently reliable indicator in the past; the yield curve is often inverted (short rates above long rates) at the cycle peak. In July 1990, short rates were below long rates, which confused many forecasters and created substantial uncertainty in the fall of 1990 as to whether a contraction was really under way.

The economy today appears to be picking up speed. It is possible that the Fed has been driving skillfully, and that rising interest rates accompanied by much lower growth in the narrow monetary aggregates will be sufficient to keep nominal GDP growing at about the target rate. It is also possible that the Fed has gone over the crest of the hill with too much momentum, which will show up in rising inflation and rising interest rates. My purpose here has not been to speculate on the future, but to emphasize that recent money growth is highly relevant to forecasting inflation. The zero correlation between money growth and nominal GDP after 1982 is not a good reason to ignore money growth. Understanding *why* is the beginning of wisdom on this subject.

NOTES

***I thank Data Resources, Inc. for providing access to its data bank, from which I drew the data for the figures.**

¹I prepared short pieces on MZM for SOMC meetings in September 1991 and March 1992.

²The correlation between monthly data for the commercial paper rate and the 12-month growth rate of the Friedman-Schwartz M2 series was slightly negative for the period May 1908 to December 1960. This outcome is dominated by observations during the two world wars, the sharp recession in 1920-21, and the Great Depression. An examination of a graph of the data suggests that relatively normal subperiods are characterized by a positive correlation, but it would seem to be cooking the book to search too hard to find such periods for the purpose of reporting some positive correlations.

Figure 1

Monetary Aggregates, Jan 1989 - Jan 1994

12-Month Growth Rate

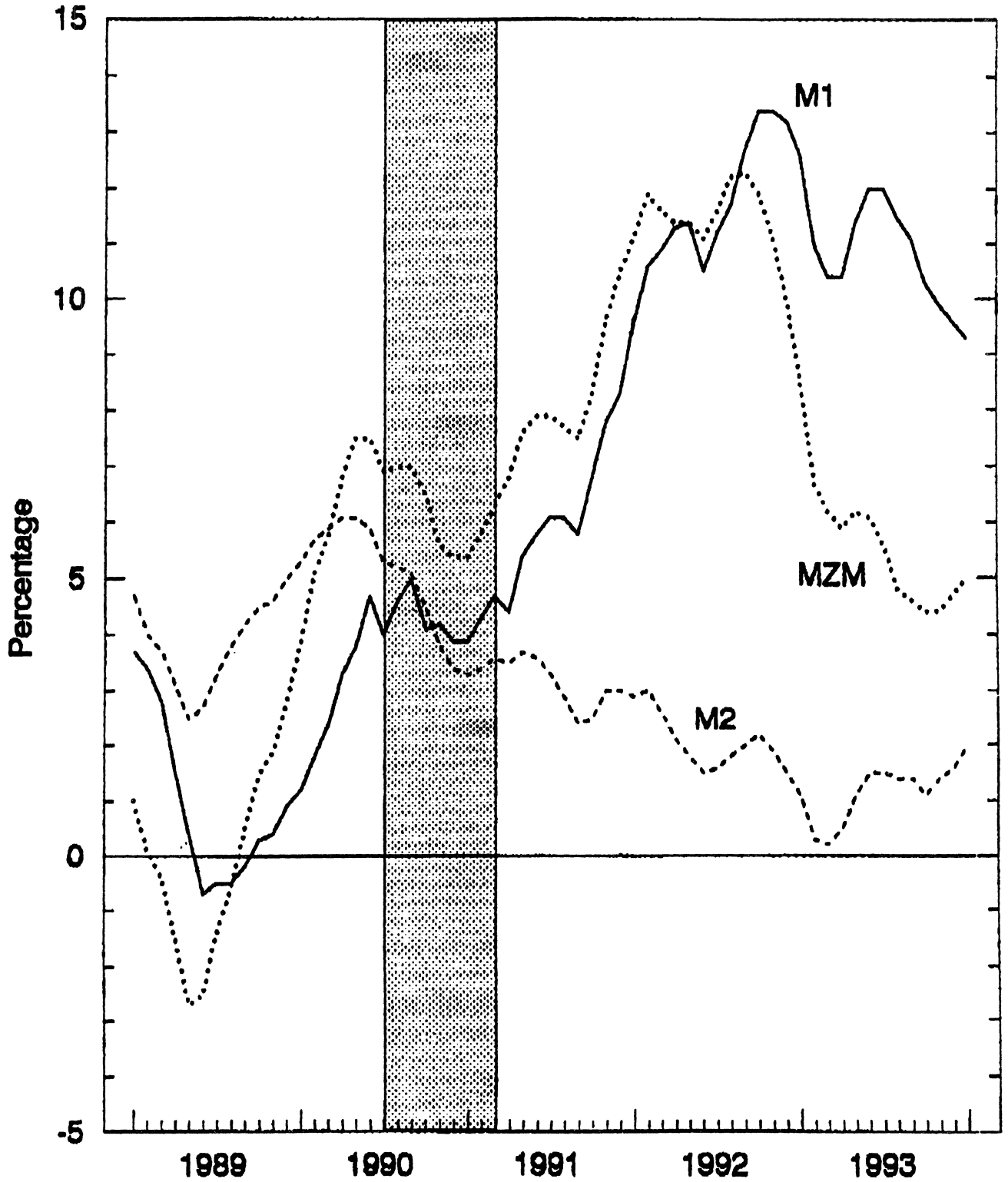
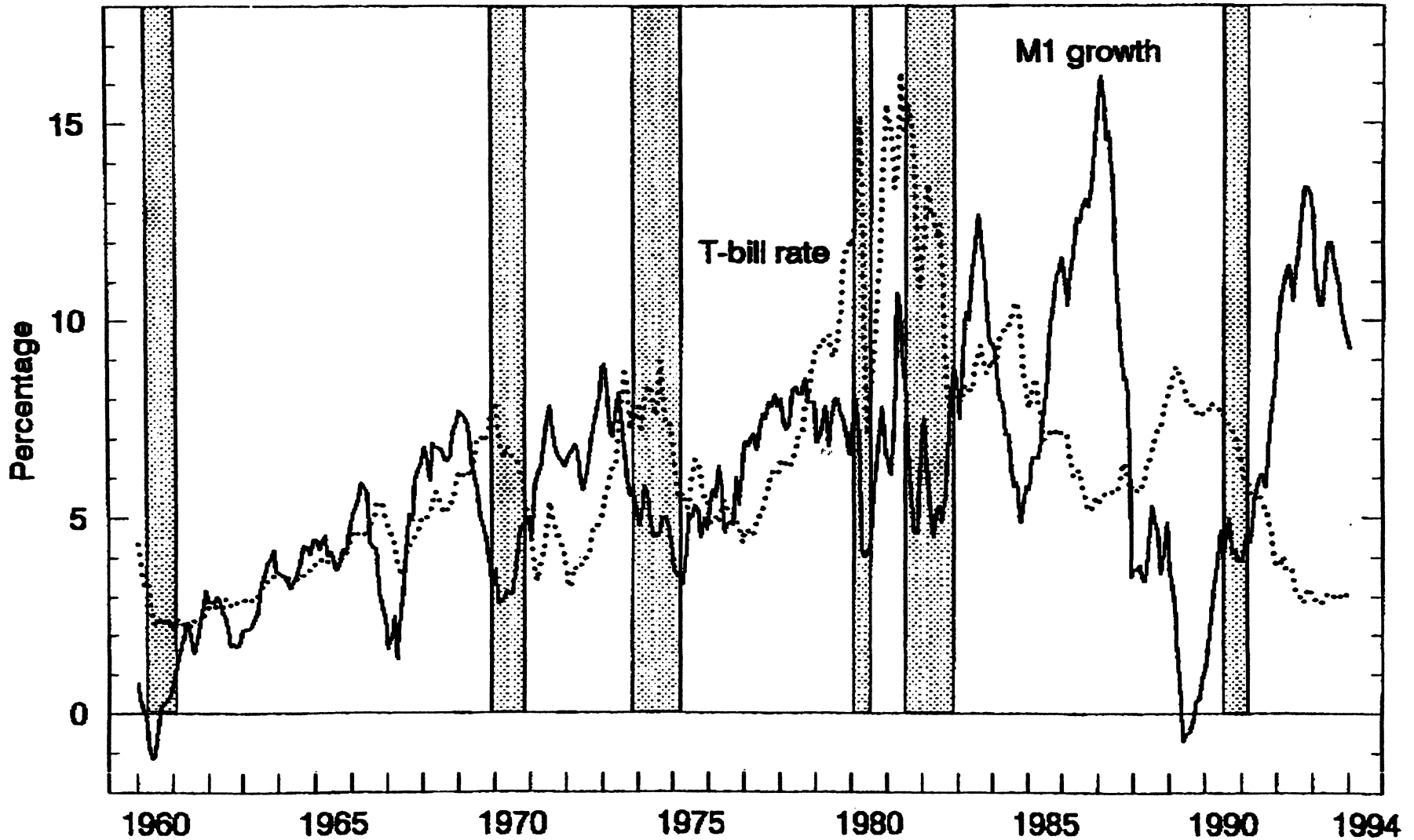


Figure 2

12-Month M1 Growth Rate and T-Bill Rate

January 1960 - January 1994



March 6-7, 1994

PUBLIC DISCLOSURE AND FOMC DELIBERATIONS

Robert H. RASCHE
Michigan State University

Recently the issue of when and how to disclose the policy deliberations of the FOMC has attracted some attention, including testimony of all seven members of the Board of Governors and eleven of the regional Federal Reserve Bank presidents before the Committee on Banking, Finance and Urban Affairs of the House of Representatives on October 19, 1993.¹ Attention is focused on two different questions: 1) should verbatim transcripts or recordings of FOMC meetings be made public and if so with what period of delay, and 2) should the FOMC directive be released relatively quickly after each meeting; in particular before the next meeting of the Committee. A third issue, the public disclosure of a measurable long-run inflation objective has not generated any noticeable interest. The focus of public discussion on the first two issues is unfortunate, since the potential social value of the information in the third type of disclosure undoubtedly far outweighs any potential gain from the first two types of disclosure.

There is considerable agreement in the testimony of the incumbent Governors and Presidents in support of the status quo, namely that a release of the so-called "Minutes of Federal Open Market Committee Meeting" shortly after the subsequent meeting of the committee is adequate public disclosure of the committee deliberations.² The two arguments against more detailed or timely disclosure of information on the Committee deliberations that appear throughout the testimony are 1) that release of verbatim transcripts or recordings would seriously inhibit discussion at the meetings or violate the privacy of individuals, corporations or foreign governments, and 2) immediate disclosure of the directive would significantly increase interest rate volatility without improving the effectiveness of monetary policy.

The arguments against the release of a verbatim record of the proceedings appear sound. Such a record cannot be released immediately, since the transcript would have to be edited to insure that confidentiality of privileged information is respected. The only alternative is to permit the committee to adjourn to executive session to protect such information, which is likely to prove impractical. The argument that the release of an edited verbatim transcript, even with a considerable delay, would inhibit free discussion at the committee meetings also seems sound.

The argument against the delayed release of a detailed summary of the proceedings, such as the "Memorandum of Discussion" that was published with a five year lag before 1976 is problematic. One Reserve Bank president indicated his personal impression that discussion at Committee meetings in recent years is much less formal and more free wheeling than when the "Memorandum of Discussion" was published. The published lists of individuals in attendance at the FOMC meetings during the past year suggests that there is only a very small number of individuals who have served under both regimes. Therefore it is almost impossible to test the hypothesis that publication of detailed summaries inhibits free discussion of policy issues. Changes in the tone and/or substance of the discussions over the past seventeen years can just as easily be attributed to the personalities of the changing participants.

Several presidents noted that the delayed release of detailed summaries of the discussion would be of considerable use to historians and scholars studying the history of monetary policy in the U.S. and indicated that they, therefore, supported the release of such a document. The recommended delays ranged from one to five years. I believe that this position should be strongly endorsed. The format of the old "Memorandum of Discussion" protected any individual member of the Committee from personal embarrassment. It did not protect the Committee from collective embarrassment in the event that they agreed to policy actions which subsequently can be shown to be inappropriate based on the information available at the time of the policy decision. However, such risk exposure is appropriate for the Committee. Without this risk exposure the Committee is not accountable for its policy decisions in any meaningful sense.

The present situation where there is no disclosure of the details of the FOMC deliberations seems analogous to the secrecy that surrounded research into the effects of radiation in the 40s and 50s. In recent weeks we have seen and heard revelations of tragic consequences incurred by unsuspecting victims of radiation experimentation as a result of badly designed policy experiments that were conducted in secret and under the presumption they would remain so forever. The only way to avoid replication of badly designed policy interventions is to permit the public examination of the historic policy record. It is equally important to obtain public disclosure of all of the staff analysis that is prepared for the FOMC deliberations as it is to obtain disclosure of the summary proceedings. Without the supporting analyses, the information set on which the policy decisions are based is obscure, and it is impossible to distinguish the quality of the policy decision from the quality of the input into the decision process.

There appears to be general agreement among the Governors and Presidents that it is impossible to hide any Open Market Policy Actions (that is changes in the Fed funds rate target).³ Several witnesses in the October hearings indicated that financial markets were well informed about any decision to change policy at the latest by 11:30 AM of the day the decision is implemented, and that the information would not be disseminated any more rapidly if the FOMC called a press conference simultaneous with the policy action.⁴ The consistent theme throughout the testimony is that immediate release of the directive precludes the adoption of any contingent policy actions. Chairman Greenspan states: "... say that the central bank phrased its policies in terms of contingency plans—that is if certain economic or financial conditions prevailed, a particular action would be taken. If those decisions were made public, markets would tend to incorporate the changes immediately, preventing the policies from being effectively carried out as planned. ...immediate disclosure would tend to produce increased volatility in financial markets, as market participants reacted not only to actual Federal Reserve actions, but also to possible Federal Reserve actions."⁵ Similar assertions are contained in the statements of Governors Angell, LaWare, Lindsey and Presidents Syron, McDonough, Broaddus, Melzer, Stern, Hoenig, and McTeer. In each case the proposition that immediate release (or release before the next FOMC meeting) of the directive precludes a contingent instruction to the System Accounts Manager is stated as a fact. Yet no empirical evidence or theoretical analysis is invoked in support of this "fact." My reading is that considerable skepticism about such a "fact" is warranted, both on the basis of theoretical models and empirical evidence.

Considerable attention has been focused on the decline in the stock and bond markets coincident with the announced 25 basis point increase in the Funds rate target on Friday, February 4, 1994. The Dow Jones industrial average fell by 96.24 points (2.43 percent) from its close on Thursday, February 3 to the close on Friday, February 4 and long bond yields rose about eight basis points over the same period. It should be noted that the market reaction corresponded with the Fed's announcement that the change in the Funds rate target had occurred. The market did not decline on the previous Monday when Chairman Greenspan indicated in testimony before Congress that a future increase in the funds rate was likely.

It is also inappropriate to attribute any significant effect on financial markets to the public announcement accompanying the change in the funds rate target on February 4. The historical record suggests that a decline of this magnitude, while large, is not highly unusual compared with the behavior of the market at times of unannounced changes in the funds rate target. In a recently published study, Thorbecke and Alami examine the behavior of equity markets between the close

of the market immediately before and immediately after changes in the funds rate target during the period September 1974 through September 1979.⁶ They found that on average a 25 basis point increase in the funds rate target is associated with a 0.3 percent decline in the DJIA. However, the standard error of their regression is quite large.⁷ The ratio of the residual from their regression on February 4, 1994 to the standard error of forecast for that regression is 1.87. On the basis of the Thorbecke/Alami regression, a residual this large can be expected to occur slightly more than 6 percent of the occasions when the funds rate is increased by 25 basis points. Whatever the short-run impact of this change, there is a long-run gain in terms of lower interest rates because of lower inflation.

Contemporary theocratical models of both macroeconomic behavior and financial market pricing emphasize that the behavior of private agents is conditioned on their best forecasts of future contingencies, including contingencies about the time pattern of policy interventions. In these models, contrary to the view expressed by Vice Chairman Mullins: "It is our actions that affect interest rates and the economy, and those actions are made public immediately,"⁸ it is both actions and expectations of future actions that affect interest rates and the economy. With an immediate release of the directive, including possible contingent instructions, the information upon which private agents make their forecasts of future policy interventions is increased beyond that available under the current disclosure policy. In this type of environment the release of additional information which clarifies the probability of contingent outcomes generally has social value. This is summarized quite succinctly in a published article by a member of the research staff of the Board of Governors addressing the question of immediate versus delayed release of the directive:⁹

Suppose, however, that some one in authority (a nontrader) has information of a special condition unknown to the traders. Assume further that this condition, when combined with the traders' own information, implies a set of conditional probabilities which are different from those determining the traders' expected marginal rates of substitution in the initial equilibrium. If markets are not complete or if expectations are not homogeneous, the marginal conditions and consequent set of trades which served to maximize expected utilities in the initial equilibrium will not generally be the same as those maximizing expected utilities based on conditional probabilities. Consequently, there exists another set of potential trades which could make everybody better off in terms of improving their individual conditional expected utilities. Under the appropriate competitive assumptions, assuming that individuals calculate the conditional probabilities correctly and ignoring wealth distribution effects, disclosure of the information and the resultant trading will lead to the appropriate marginal conditions for maximization of the conditional expected utilities. In this sense, we can say that public disclosure of the information will have social value.

In summary, markets can be expected to function better when information about public policy is disclosed than when it is intentionally withheld. This point about the value of public disclosure generally seems to be ignored and made the point that markets can operate more efficiently with more knowledge of FOMC decisions and the rationale behind such decisions.

It should be noted that the established theories of the value of additional information imply that interest rate behavior will be different in a regime of immediate disclosure of the FOMC directive than the patterns under the present regime. Furthermore, it is not guaranteed that observed interest rate variance (volatility) will be reduced by disclosure of the directive, even if the information is of considerable value to market traders. All the theory implies is that the conditional expectation of interest rate variances is reduced by additional disclosure.¹⁰ Therefore, increased interest rate volatility in a regime of public disclosure of the directive, as hypothesized by many of the Governors and Presidents, is not evidence against the social value of immediate disclosure. At worst there is a tradeoff: improved functioning of markets versus higher volatility of market prices.

The hypothesis that public disclosure of the directive precludes the formulation of conditional directives is contrary to historical observations in other areas of economic and social behavior. It is common practice for meteorological services to make conditional forecasts of various phenomenon (hurricanes, tornadoes, tidal waves) that endanger the public. No one, to my knowledge, proposes that the system of "watches" be discontinued because such conditional statements about future events will engender mass panics. To the contrary, most people seem to adjust their behavior in an appropriate fashion to protect themselves from possible harm.

This carries over into the realm of economic behavior. The weather service releases long-range forecasts and short-term warnings about weather conditions and their likely effect on agricultural production. Such announcements have significant effects on trading on commodity futures exchanges. The reactions of prices on these exchanges to such conditional projections is generally regarded as socially valuable.

An additional example, which stands in direct contrast to the delayed release of the FOMC directive, is the treatment of fiscal policy decisions in the U.S. Under our constitutional system, the executive branch makes public proposals to the legislature about changes in tax and expenditure policies. These proposals are then publicly deliberated through the committee process and ultimately voted up or down by the Congress. A budget message or a tax message from the President to the Congress is, in effect, an announcement of a conditional fiscal directive. The public announcement of such fiscal policy directive can and does impact financial markets and other areas of economic activity. The economic stimulus package submitted by the Clinton administration to Congress in

early 1993 is an example of a conditional directive that was not implemented. I am unaware of anyone who seriously proposes that the Constitution be amended to preclude the announcement of any fiscal or expenditure measures until after the President had signed such measures into law. I do not believe the Governors and Presidents who vigorously support the delayed release of the FOMC directive would advocate such a Constitutional amendment to provide fiscal policy deliberations in the environment presently available to the FOMC.

A final example of conditional directives is the requirement that various regulatory agencies such as the EPA and OSHA publish proposed regulations and changes in existing regulations in advance and to solicit public comment on such proposals. In effect this requirement amounts to the preannouncement of regulatory directives. Regulatory changes can seriously impact certain sectors on the economy, and indirectly affect relative prices on financial markets. Yet I know of no serious argument to abolish the public comment requirement on the grounds that the request for public comment may cause changes in the equity prices of certain firms that are subsequently reversed when the regulations as implemented differ from the initial announcement.

In summary, it appears that the argument for serious consequences of an immediate release of the FOMC is difficult to support on either theoretical or empirical grounds. An entirely different question is whether the social benefits that would accrue to immediate release of such information are very large. In the absence of any historical experience with immediate release of the FOMC directive, it is extremely difficult to obtain a precise answer to this question. Research into this question concludes that the benefits are relatively small.¹¹ It is appropriate to interpret these conclusions with caution.

There is, however, a sense in which the social gains to immediate release of the directive are of secondary importance. Market participants probably can forecast the contents of a current directive with considerable accuracy under the present regime. What is difficult, if not impossible, is to produce accurate forecasts of inflation over longer periods of time, say five or ten years. Nothing in the directives or other information that is publicly released by the Federal Reserve facilitates improvement upon such long-run forecasts. It is not clear that either the Federal Reserve or the FOMC presently have a well articulated long-run inflation policy. Rather than spending a lot of resources debating the merits of releasing the directive before the next FOMC meeting, the Governors and Presidents could do much greater public service by debating a well defined long-run inflation policy and articulating to the public the strategy by which this policy will be realized.

NOTES

¹See *Federal Reserve Bulletin*, December 1993, pp. 1107-1127.

²Since the first FOMC meeting in 1993, the public disclosure documents is titled "Minutes of the Federal Open Market Committee Meeting." This document continues the directive to the System Open Market Manager. Prior to this date, the public disclosure document carried the title "Record of Policy Actions of the Federal Open Market Committee." The major substantive revision associated with the change in title appears to be the addition of a complete list of individuals in attendance at the FOMC meeting.

³In 1967 the FOMC began releasing its "Record of Policy Actions" with a 90 day delay (*Federal Reserve Bulletin*, January 1968, p. 72). In early 1975 the delay was reduced to about 45 days and in 1976 the FOMC adopted the current policy of releasing the "Record of Policy Action" (now "Minutes") shortly after the next regularly scheduled FOMC meeting (*Federal Reserve Bulletin*, June 1976, p. 552).

⁴For example Vice Chairman Mullins states: "It is our actions that affect interest rates and the economy, and those actions are made public immediately. Changes in reserve conditions are transparent to the market by 11:30 AM on the day of the change in the open forum of the financial market." (*Federal Reserve Bulletin*, December 1993, p. 1110).

⁵*Federal Reserve Bulletin*, December 1993, pp. 1107-1108.

⁶Thorbecke, W. and Alami, T. "The Effect of Changes in the Federal Funds Rate Target on Stock Prices in the 1970s," *Journal of Business and Economics*, 46, February 1994, pp. 13-20.

⁷Thorbecke and Alami do not publish the standard error of the residuals of their regression. I replicated the regression they report in Table 2 from the data in their Table 1 after obtaining a data correction from W. Thorbecke.

⁸*Federal Reserve Bulletin*, December 1993, p. 1110.

⁹O'Brien, James, M., "Estimating the Information Value of Immediate Disclosure of the FOMC Policy Directive," *Journal of Finance*, 36, December 1981, pp. 1047-1061.

¹⁰*Ibid.*, p. 1050.

¹¹*Ibid.*, pp. 1054-60 and James M. O'Brien, "The Information Value of the FOMC Policy Directive under the New Operating Procedures," *Journal of Money, Credit and Banking*, 16, May 1984, pp. 155-162.