APPENDIX

FOMC BRIEFING
DEBBIE DANKER

7/6/93

Thank you, Mr. Chairman. In response to the Committee's request earlier this year, the staff has prepared and circulated a series of memoranda on the recent rapid growth of mutual funds and the implications for financial markets. I will focus my remarks this afternoon on whether this rapid growth, in combination with the surprisingly slow rise in M2 in the last few years, suggests that an expanded definition of money -- to include bond and stock mutual funds -- could provide a useful guide for monetary policy.

The breakdown in the relationships between M2 and income, and between M2 and the long-run price level, have left us at least temporarily bereft of an aggegate that is widely accepted as useful -- either as a guide for policymakers or for communicating the stance of monetary policy to the public.

One source of the weakness in M2 apparently has been portfolio shifts into bond and stock mutual funds. There are several signs that mutual fund shares have become closer substitutes for M2 balances: Besides anecdotal reports and the correlation of the massive inflows to funds with weak M2 growth, mutual funds have become increasingly accessible to depositors, with many banks now actively promoting bond and stock funds as alternatives to their own deposit products.

An expanded definition of money therefore could be supported on grounds much the same as those used a decade ago when the Federal Reserve deemphasized M1 in favor of M2: As portfolio shifts have become more important determinants of the aggregate's behavior, attention has turned to a still-broader aggregate that internalizes those shifts.

The mutual-fund-augmented aggregate that we examined we called M2+. It is defined as the current M2 plus the market value of household holdings of bond and stock mutual funds, less IRA/Keogh accounts. Note that this definition includes accrued capital gains and losses on the funds. While the capital gains component induces considerable variability in M2+, raising the aggregate's volatility somewhat above that of M2, logic seems to dictate that it be included, in part to rule out negative values for the mutual fund components.

Besides measuring the aggregate's volatility, the staff ran a series of other tests on M2+ to see whether it met two key criteria for a useful monetary aggregate: that is, that it have a stable relationship to the ultimate goal of policy and that it be reasonably controllable by the central bank. It is safe to say that the results were mixed.

In M2+'s favor is its better performance in the last several years; it has tracked predicted values reasonably closely and has produced more stable and reasonable velocity behavior than has M2. For example, through May, M2 had risen at an annual rate of just six-tenths of a percent this year, while M2+ had increased at a 4-1/4 percent pace -- considerably closer to the growth of nominal income. Arguments for beginning to use M2+ more in policy could point to this evidence as suggesting that, with the spreading availability of bond and stock funds, M2+ has been giving a more accurate picture of the thrust of monetary policy over the last couple of years, and that there is little indication that this process will be reversed.

On the other side of the coin are concerns about the potential unreliability of the aggregate. The data on this aggregate are currently of questionable quality, a satisfying theoretical basis for it is lacking, and its better behavior has occurred during just one-half of an interest-rate cycle, with bond and stock prices moving mainly upward. The stability of the estimated demand relationship for M2+ is rather tenuous, and the aggregate's controllability, that is, the effect of a change in the funds rate on the aggregate, is subject to particular uncertainty, because of the erratic link between short-term rates and the prices of stocks and bonds. The shorter sample period for estimating M2+ equations and the innovations and growth of the mutual fund industry throughout the period add to concerns about the usefulness of the estimated equations -- at a minimum suggesting that confidence intervals around forecasts should be very wide.

It is possible that -- with further work, data improvements, and additional experience with mutual fund growth -- this aggregate, or one like it, will provide us with a reliable guide for policy. But at present, the staff believes M2+ is best characterized as "experimental."

The staff would appreciate receiving the FOMC's views on the best course for us to follow going forward. In this regard, I would present three options: 1. Should we do essentially nothing new, that is, continue to monitor and report on flows into mutual funds to assist in interpreting the existing monetary aggregates; 2. Should we commit ~~mo~~re resources on an ongoing basis to improve the data on M2+, expand our understanding of the aggregate and, by making the data available to the public, encourage work by others inside and outside the System; or 3. Is the Committee contemplating setting a range for M2+ in the near term, in which case the staff would step up its work substantially, including reviewing the complications induced by capital gains, both in setting the range initially and in discerning the appropriate policy response to deviations of the aggregate from its range.

NOTES FOR FOMC MEETING

JULY 6-7, 1993

William J. McDonough

The desk intervened on three days since the last meeting and bought a total of $1,067,500,000 through sales of Japanese yen on behalf of the U.S. monetary authorities, evenly divided between the Treasury and the Federal Reserve.

You will recall that on April 27, the Treasury and Federal Reserve bought $400 million in an operation concurrent with policy statements by Secretary Bentsen and Under Secretary Summers that the United States did not have a policy of weakening the dollar exchange rate against the yen. This worked reasonably well and the dollar stayed in a range of 110-112 yen until late May when a combination of confusing official statements, lack of progress on other efforts to reduce the enormous Japanese trade and current account surpluses and probably just the passage of time brought renewed pressure on the dollar and it began to sink again.

Frequent discussions between Treasury officials and Federal Reserve officers in Washington and New York led to the joint view that whatever weakness of the dollar related to fundamental economic factors was exacerbated by the confusion regarding official foreign exchange policy. Seeking to analyze the many comments from Clinton Administration officials and our discussions with the Treasury regarding our relationship with Japan, my interpretation is that the Administration will lean very heavily indeed on the Japanese to secure a serious reduction in the Japanese trade surplus and prefers that it be done by a combination of macro- and micro-policy changes and not exclusively, or even mainly, through a stronger yen. The market has a tendency to think that the Japanese really won't do much macro- or micro-adjusting, leaving only the exchange rate, combined with a certain disinclination to believe U.S. official statements that a stronger yen/weaker dollar is not in fact a policy goal. In this situation, we were concerned that the dollar weakness against the yen could spread to dollar weakness against the European currencies and to domestic U.S. financial markets. Consequently, we decided to intervene, as Chairman Greenspan put it, to "show we cared". But we did not want to intervene so aggressively as to give the impression that we were trying to reverse the trend, something which we were convinced we would not be able to do. In short, we were trying to avoid a weakening of the dollar against the yen becoming disorderly and dangerous to other markets. This is obviously a rather complex message, but I think we got the message through.

On May 27, the Desk bought $200 million for the U.S. authorities at an average rate of 107.97 yen; the next day we bought $492.5 million at an average rate of 107.4 yen; and on June 8, we bought $375 million at an average rate of 106.32 yen.
Thus, the three operations were at gradually weakening rates for

the dollar. On all three days, we managed the operations jointly for the U.S. authorities and for the Bank of Japan

At this point, we decided that we had made our point and decided not to intervene further, even though the dollar continued to weaken, reaching the low of 104.8 yen on June 15 following the report of another mammoth Japanese monthly trade surplus.

On June 18, the Miyazawa government lost a confidence vote in the Diet and called for lower-house elections on July 18. The dollar rose to about 112 yen. Since then, economic fundamentals and lack of progress on negotiations in economic areas combined to bring the dollar back down to a range of about 107 to 109 yen. There seems to be a fairly solid technical floor at about 105 yen and many Japanese exporters and other market participants with very large appetites to sell dollars when it approaches about 110 yen.

For the Federal Reserve System Account, the operations I described for both May 28 and June 8 exceed the limit of $150 million on changes on any day in a single currency. Both transactions were appropriately approved in advance by the Foreign Currency Subcommittee of the FOMC. The Subcommittee also approved a change in the $600 million limit on System account holdings of foreign currencies between meetings; in the event that approval did not need to be used, since the total intermeeting change reached $533.75 million.

The dollar was quite firm against the German mark and other European currencies, rising by 4% against the mark. The German mark now has a tone of underlying weakness because of very real concerns regarding both structural and cyclical weakness in the German economy. A number of European countries now have short-term interest rates lower than those of Germany. The Bundesbank is becoming increasingly concerned about the weakness in the economy and took advantage of somewhat better, i.e. lower, monetary growth and inflation data to lower official interest rates at their meeting last Thursday. The Bundesbank officer who informed us of the action made it clear that they were not moved to do so by the advice of either the French Economics Minister or our President.

Because of the perceived weakness of Germany and the view that changes in interest rate differentials will favor the dollar over the rest of this year, most market participants, especially the more speculative funds, are quite firmly of the view that the dollar will strengthen against the European currencies in months ahead.

Mr. Chairman, we will need a motion to approve the foreign exchange interventions I have described.

Notes for FOMC Meeting
7/6-7/93
Joan E. Lovett

Desk operations continued to seek reserve conditions associated with Federal funds remaining in the area of 3 percent. The borrowing allowance was raised in several steps by $100 million to keep pace with seasonal use and ended at a level of $200 million.

Reserve needs were substantial throughout the period amid higher currency, Treasury balances, and required reserves. Corporate taxes at mid-June came in about $5 billion higher than projected, but we were already forecasting high quarter-end Treasury balances, so we did not have to play a lot of catch-up ball. These balances were just shy of record levels, closing the quarter at $60 billion, $28 billion of which was at the Fed. This left us a rather large hole to fill on that day, and we began to do so ahead of time. Nonetheless, we ended up a little shy of where we wanted to be as propositions for our RPs were somewhat skimpy in relation to our needs. Thus, for the first time during the interval, we got some adjustment borrowing-- $1.4 billion versus an average of $14 million for the period otherwise.

With reserve needs expected to be substantial over the intermeeting period and beyond, we made relatively heavy use of outright operations, using $7 1/2 billion of the $8 billion intermeeting leeway. Bills were purchased in the market in early June--a record $5 billion--and about $2 1/2 billion was purchased throughout the period directly from foreign correspondents. At the mid-year mark, our portfolio was about $15 1/2 billion higher than its year-end level, with the increase just about evenly divided between bills and coupons.

The remainder of the period saw frequent rounds of RPs of assorted types and maturities including some for fixed terms. Anticipating collateral needs for the period incorporating the quarter-end, we also preannounced one of our repo operations. The funds rate was pretty close to 3 percent except for the quarter-end and surrounding days and averaged 3.04 percent for the period as a whole.

The Treasury market generally remained in the broad trading range that has prevailed for a number of months. Yields initially were at the upper end of that range and gradually moved down to the low end. In recent days, they have been probing a bit below the old lows. The long bond is down about 35 basis points, hovering around 6.65 percent, a post-1977 low. Declines in the short-end were more modest, so the yield curve is flatter by about 20 basis points. The market gains were often more grudging than enthusiastic, as convictions of many market participants were not particularly deepseated. In part, this was because getting a consistent read in the economy was difficult.

A Fed firming move was priced into the market early in the period, as anxieties over poor price numbers were reinforced by reports of the Committee's bias in its May directive. You know of the reports of that meeting. The manner of these reports caused considerably dismay among market participants and provided the background against which everything was measured thereafter. With the May price data showing a more favorable picture and subsequent data on the real economy more lackluster than anticipated, an imminent move by the Fed was priced back out. The question remaining was whether the market would break out to a new lower trading range--with the bond yield moving down to 6-1/2 percent--or whether the long-end already reflected too optimistic an outlook.

Trading flows did not seem to reflect heavy bets in either direction. Demand for defeasance purposes continued strong as municipal refunding activity remained heavy. This and a hiatus in coupon supply lent technical support to a market that otherwise was range-trading oriented. The low yield scenario rested on a more benign outlook for prices, and many see modest real growth as supporting this outcome. Others are somewhat skeptical. While lowering their expectations for second quarter growth, they anticipate a pickup over the balance of the year that will more likely tilt inflation up than down. Modest fiscal drag continues to be expected from the Administration's budget reduction proposals, but uneasiness remains about the overall contours of the program as it moves through Congress.

As for the Fed, while many participants think the Fed stands ready to move toward less accommodation as soon as conditions warrant, current market thinking places the timing of such a move months away.

Michael J. Prell
July 6, 1993

FOMC CHART SHOW PRESENTATION -- INTRODUCTION

The first chart is intended to provide an update on the second-quarter activity picture, now that we have the June labor market report. The most important feature of that report from our viewpoint was the drop in production-worker hours--the upper left panel--which retraced most of the May jump. But this decline still left the quarterly average--represented by the dot--4 percent above the first-quarter level, at an annual rate. Unfortunately, there doesn't seem to be any other evidence of such strength in activity.

The manufacturing indicators have been soft of late, and Friday's labor report points to a perceptible decline in June output. The quarterly average increase looks to be less than 2 percent, at an annual rate.

On the spending side, as well, the numbers just don't seem to be adding up to a big quarter. Real consumer spending posted a good gain through May, but we've had to assume either some upward revisions or an appreciable June increase to get our 3-1/4 percent quarterly estimate. Rising motor vehicle sales and the moderate improvement in capital goods shipments--shown at the right--point to a substantial increase in equipment spending. In the end, though, to get even to the 2-1/2 percent GDP number in the Greenbook, we've had to assume an appreciable accumulation of nonauto inventories, something that may be plausible but that is certainly not yet apparent in the data.

Let me set aside history, however, and move on to the outlook for coming quarters. Chart 2 sketches out our forecast through 1994. As indicated in the top chart, we basically are expecting output to fluctuate around the 2-1/2 percent growth track we've seen on average over the past year and a half. Given the weakness early this year, however, this implies a gain of only 2 percent over the four quarters of 1993, shown at the right. We have 1994 growth at 2.6 percent. Domestic demand--the red line--paces the advance, as net exports continue to decline. We expect the overall CPI to rise about 3.3 percent this year and 3.1 percent next year, with the core rate of inflation trending gradually lower. Although we anticipate that employment will increase about 1-3/4 million per year, joblessness is projected to slip only to 6.8 percent by late 1994.

The basic logic underpinning our forecast of just a moderate advance in activity is that the stimulus flowing from the assumed monetary policy is only a little greater than the drags coming from other sources, the most prominent being fiscal consolidation. As I'm sure you can well appreciate, this is a tough call to make. The next chart addresses some of the financial features of the forecast.

The top panel offers some rough estimates of the path of real interest rates on 3-month and 10-year Treasuries; obviously, one can argue about the proxies I have used for inflation expectations in translating nominal to real rates. Be that as it may, our assumption of little, if any, rise in the federal funds rate suggests that real short-term rates in general will remain close to zero--a low level, outside of recessions, by the standards of the past three decades. On the other hand, despite our projection of another 30 to 40 basis point decline in nominal bond yields, the real 10-year rate is not expected to change much--running at something like 2 percent, neither very high nor very low by prior expansion standards. A concern has been expressed in recent Committee discussions that this constellation of rates--particularly the short end--is quite stimulative, and potentially destabilizing. Rightly or wrongly, our forecast embodies a view that, at least for a while longer, very low real short rates may well be needed to counter the drags on aggregate demand to which I referred a minute ago.

Indeed, our view that the financial conditions are conducive to growth hinges in part on the signs of a slackening of the unusual "head winds" that have been present for some time now. As is illustrated in the middle panels, banks have made considerable progress in repairing their capital positions, and this is now being reflected in a shift in their lending attitudes. While they aren't throwing caution to the winds, they seem to be looking harder for sensible lending opportunities. Corresponding processes of balance sheet repair have been under way among other financial intermediaries as well, paving the way for some easing in their credit supply postures. Meanwhile, as indicated in the bottom panels, there are signs of lessening stress in the finances of corporations and of households; they are now in a better position to borrow. But, while all of this amounts to an easing of the financial impediments to growth, it doesn't suggest the existence of a loose financial environment--one in which appreciably higher real rates might be needed to hold demand in check.

The upper panel of the next chart reviews the fiscal policy assumptions underlying our forecast. In brief, we are anticipating that, somehow, a compromise will be reached between the House and Senate bills. We've built into our forecast an income tax hike along the lines of the Senate bill, which applies a blended rate to 1993 incomes--with payment due next April. We've also assumed that an energy tax will be implemented this fall, one that is somewhat larger and broader-based than the Senate's. In total, the package implies a $37 billion deficit reduction in fiscal '94, relative to what would be dictated by OBRA spending ceilings. Of this, $33 billion would be accomplished through taxes.

The middle panel graphs the staff's measure of the fiscal stimulus flowing from discretionary budget actions. By this gauge, policy has been on the restrictive side for several years now and will remain so. One may question whether this captures the overall thrust coming from the federal budget, because there has been a substantial endogenous growth of entitlement outlays--especially medical--unrelated to cyclical developments. But in the next year or so, policy should be restrictive even on a more comprehensive basis.

A particularly important facet of the current fiscal restraint is the decline in federal purchases of goods and services, reflecting deep cuts in defense spending. This is shown by the red line in the bottom left panel. But restraint is also the name of the game in the state and local sector, where many governmental units are still engaged in trimming outlays or raising taxes. Although we see an improvement in their financial posture over coming quarters, we think this will be compatible with only a mild upswing in state and local purchases, the black line. As a result, total government purchases, tabulated at the right, are expected to do no better than level out next year.

Ted will now discuss the prospects for the external sector and the implications for domestic activity.

E.M.Truman
July 6, 1993

FOMC Chart Show Presentation -- International Developments

Chart 5 summarizes developments over the first half of 1993 in international financial markets. As is illustrated in the top panel, the foreign exchange value of the dollar in terms of other G-10 currencies currently is a touch above the average since the Louvre meeting in February 1987. On balance over the first six months of this year, the dollar appreciated modestly and by about 15 percent since its low of last August.

As is shown in the middle-left panel, what has been unusual about the past six months is that the dollar has appreciated by varying amounts against European currencies while depreciating substantially against the yen. Broadly speaking, the dollar's appreciation against European currencies has been associated with weakness in European economic activity and actual and anticipated cuts in interest rates in Europe, and the dollar's depreciation against the yen has been associated with high-profile concerns expressed about Japanese external surpluses. In our forecast, we are expecting that the former factors will continue to dominate, and the dollar on balance will drift higher.

The middle-right and lower panels present recent developments in interest rates. Since December, three-month interest rates have declined substantially in Germany, and we are assuming that they will drop about an additional 300 basis points over the next twelve months. Short-term rates have declined moderately in Japan, and we are assuming that there will be a further modest downward adjustment this year. U.S. short rates have been little changed this year, after allowance for year-end effects late last year. As a consequence, as shown in the lower left panel, the spread between foreign interest rates on average and U.S. rates, which had widened in 1991 and 1992, has narrowed this year, and it is projected to narrow further.

Ten-year rates in Germany have declined more than in Japan but less than U.S. rates. On balance, after some ups and downs, the differential between foreign long-term rates on average and U.S. rates has been essentially unchanged since December. However, over the forecast period, we expect some narrowing of that differential as well.

The next chart presents data on industrial production and consumer prices in the major foreign industrial countries. This familiar chart provides a somewhat more optimistic picture than five months ago. In Canada, recovery finally appears to be reasonably well established, while inflation remains quiescent. In the United Kingdom, economic activity also has picked up, and inflation continues to decline.

In western Germany, inflation probably has begun to slow, and the sharp declines in IP may have come to an end, but other indicators such as orders, retail sales, consumer confidence, inventories, and production plans point toward continued declines in economic activity extending through 1993.

IP in France has rebounded somewhat from its low point around the turn of this year, and consumer price inflation remains subdued; with the decline in French interest rates since the April election, we are expecting a modest turnaround in economic activity in the second half of this year. The picture in Italy is similar, except for the pickup in inflation associated with the lira's devaluation, but even that has been relatively mild.

Finally, in Japan recent IP data can be read along with some other information as suggesting that the economy has bottomed out. However, data on orders, housing starts, new car registrations, and the ratio of job offers to available applicants point to a sluggish economy at best. Inflation remains low.

Chart 7 summarizes our overall foreign outlook. The top-left panel shows that aggregate foreign growth -- the red bars -- has increased so far in 1993 and is projected to exceed U.S. growth by a small margin this year and by a slightly larger margin next year. The data in the box at the right and depicted by the black bars in the middle-left panel show that the pickup in aggregate foreign growth this year and next comes primarily from the foreign G-6 countries, as the Canadian and U.K. recoveries took hold in the first half, as negative figures recorded for the continental European countries in the first half of this year turn less negative or mildly positive in the second half, and as growth accelerates next year in these countries and in Japan.

The main source of the European recovery is lower interest rates. In Japan, interest rates are quite low, and fiscal measures already announced are expected to provide an added boost to economic activity as they are implemented. However, for the G-6 countries as a group, growth is not expected to be sufficient to narrow the gap between potential and actual output; indeed, in most countries already large gaps are expected to increase.

Meanwhile, growth in the developing countries -- the blue bars in the middle-left panel and the box at the right -- is expected to be sustained in the 4-1/2 to 5 percent range. Growth has slowed in Mexico this year under the influence of tighter fiscal and monetary policies, and only a moderate acceleration is projected for 1994 even with our assumption that NAFTA will pass. On the other hand, growth is projected to remain rapid in the Asian NIEs and, especially, in China -- in the latter country we are projecting that the authorities will have some success in damping growth, but will not overdo it.

Turning to inflation, the bottom panels, the average rate of increase of consumer prices in the major foreign industrial countries is projected to subside to less than two percent in 1994 while U.S. inflation remains at a bit more than three percent. The main reason for the better performance abroad is their continuing large output gaps.

Against the background of only a moderate pickup in growth abroad and a higher dollar, Chart 8 considers U.S. exports. As shown in the box at the upper left, total U.S.

exports rose only three percent in current dollars in the first four months of 1993 compared with the same period in 1992. While there was an increase in exports to Canada, and to a lesser extent to the United Kingdom, shipments declined to Japan and the other industrial countries that largely remained in recession. With respect to the rest of the world, the expansion of exports to Mexico slowed in line with the slowing of Mexican growth, while Asia was our most rapidly expanding market -- with double-digit increases in exports to Hong Kong, Taiwan, Singapore and China.

The box at the right provides information on growth in various categories of our exports. In the context of overall growth of 4 percent in real terms, computers have led the way followed by other machinery and automotive products -- the last largely to Canada and Mexico. Meanwhile, exports of industrial supplies have declined, reflecting the overall weakness in the world economy, and aircraft exports have fallen significantly, reflecting a slowing of deliveries on orders placed in the heady days of the late 1980s.

As is shown in the middle panels, nonagricultural exports excluding computers declined in the first quarter of this year after a bulge in the fourth quarter of last year. While we expect that moderate expansion resumed in the second quarter, it was probably not enough to offset the decline earlier in the year. However, over the second half of this year these exports are projected to rise by about 4-1/2 percent as growth increases abroad. Their growth is expected to slow somewhat next year, despite the further rise in foreign demand, because of the influence of the higher dollar.

Meanwhile, computer exports -- lower left -- are projected to decline in nominal terms this year but to continue to increase at a double-digit pace in terms of 1987 dollars. These exports dropped off sharply in the first quarter following a bulge in the fourth quarter of last year. The bulge appears to have been largely associated with a temporary relaxation in Brazilian restrictions on computer imports; the slowing in overall growth appears to have been associated with the weak economic activity abroad; aside from Brazil, declines were largely in shipments to Europe, especially Germany, and Japan. Thus, with the recovery in economic activity in 1994, we are projecting an acceleration of exports of computers.

Agricultural exports -- lower right -- are expected to continue to be depressed this year in price and quantity in light of a generally good outlook for harvests around the world and weak aggregate demand. Wet weather in the Middle West is a downside risk to our quantity forecast as well as an upside risk to our price forecast. Next year, moderate increases are projected for prices and shipments.

Turning to imports, the box at the top left of the next chart shows that the growth over the past year has come primarily in imports from Canada, the United Kingdom, Japan, Mexico and Asia -- increases in imports from China and Singapore have been particularly large. As shown in the box at the right, substantial real increases have been recorded in such categories as oil imports, computers, and automotive products, with Canada and Mexico accounting for the bulk of the increase in the last category.

The lower four panels of the chart present information on import penetration ratios. On the whole, they do not suggest an economy that is losing competitiveness. With respect to capital goods excluding computers -- middle left, red line -- the increase in the share of imports in PDE expenditures has come to a halt over the past year or so. The rise in the import share of total PDE -- the black line -- has been due entirely to a shift in the composition of PDE toward computers in which imports have a higher weight, averaging about 75 percent in gross terms over the past eight quarters.

For consumer goods -- middle right -- the rise in the total penetration ratio in recent years has been associated primarily with imports of nondurable goods, especially apparel and footwear, largely from China. In the automotive sector -- bottom left -- the share of imports in domestic absorption has been on a downtrend over the past several years.

For industrial supplies other than oil -- bottom right, black line -- there has been a gradual upward trend in recent years in the import share of domestic absorption, but it has not been particularly pronounced over the past year. The longer-term trend in the share of oil imports in domestic absorption is difficult to detect because of the influence of the Gulf War and recession on production and consumption; the rise over the past five quarters may be more indicative of the underlying situation.

Our outlook for imports is presented in Chart 10. The upper-left panel shows, first, the disparate trends in prices of U.S. imports of manufactured products from various sources over the past two years. The strong yen has produced a rise in prices of imports from Japan -- the heavy black line. Until last fall, prices of imports from the EC -- the blue line -- were also rising. With the sharp devaluations of currencies dropping out of the ERM last fall and the milder depreciations since then of currencies still in the ERM, prices of imports from the EC have declined substantially. Because of the generally weak Canadian dollar as well as low inflation in Canada, prices of imports of manufactures from that country -- the thin black line -- have been on a slight downward trend. The red line shows the recent moderate overall trend in import prices and the projected continuation in this trend over the forecast period at about a two percent annual rate.

The quantity of U.S. non-oil imports excluding computers -- the red line in the upper-right panel -- rose briskly in the fourth quarter of last year and the first quarter of this year. With the continuation of strong imports in April, the increase in the second quarter also is expected to have been close to the first-quarter pace. However, we believe that there was a lull in imports later in the second quarter associated with an inventory correction that will carry over into the third quarter; this should bring non-oil imports better into line with trends in domestic expenditures. The modest subsequent acceleration in U.S. growth, combined with the effects of the higher dollar, should produce a pickup in these imports later this year and in 1994.

The middle panels present our outlook for computer imports and the balance of trade in computers. We are projecting that the quantity of computer imports -- left panel, red bars -- will continue to expand at rates in excess of 25 percent a year this year and next. As I noted a few minutes ago, exports of computers slowed in the first half of 1993 and are projected to accelerate only at the end of this year and in 1994. Therefore, the balance of trade in computers -- the box at the right -- will continue to deteriorate this year, with a slowing of the deterioration next year.

The bottom panels consider oil imports. Oil prices -- left panel -- have weakened a bit recently because of Kuwait's refusal to accept OPEC restraints on the growth of its production this quarter. However, rising demand in the latter part of this year and next should help to push U.S. import prices back toward 18 dollars per barrel -- which translates into $20.50 for the <u>spot</u> price of West Texas Intermediate. The quantity of U.S. oil imports, as is shown in the box at the right, should move up this year and next in line with the longer-term trend toward lower U.S. production and higher U.S. consumption, and the value should move up as well with the trend toward higher prices.

The final international chart summarizes the staff's outlook for the external sector of the U.S. economy. As is shown by the red bars in the upper panel, real imports of goods and services are estimated to have risen at a substantially faster pace in the first half of this year than real exports of goods and services. As I have discussed, we believe that special factors have affected both imports and exports. Some of those factors are expected to be reversed in the second half of this year, producing more even growth. Next year, however, the higher dollar, among other factors, contributes to somewhat more rapid growth of imports than of exports.

The lower panel provides a summary in terms of the components of the current account balance -- line 1. Changes in that balance are dominated by changes in the balance on goods -- line 2. The balance on services (line 3) is projected to continue to trend up. Net investment income (line 4) declined in the first half of 1993 in large part because of recovery of payments on foreign direct investment in the United States, but it is expected to change little over the forecast period. Overall, real net exports of goods and services (line 5) should level off in the second half of this year but resume their decline in 1994.

Mike Prell will now complete our presentation.

Michael J. Prell
July 6, 1993

FOMC CHART SHOW PRESENTATION -- ECONOMIC OUTLOOK

Chart 12 summarizes the projection of household spending. We are expecting a moderate expansion of consumer demand, with what strength there is centered in durables. In particular, looking at the size and age of the auto stock, we think that there is room for a significant further increase in motor vehicle sales.

A boost to confidence about future employment and income prospects perhaps could unleash another burst of spending, but such sentiment certainly wasn't evidenced in the latest Michigan survey, released last Friday. As you can see in the middle left panel, there was only the slightest uptick in the "expected" component of the sentiment index, which had been trending lower since the turn of the year.

While we are projecting that consumer spending will grow faster than disposable income over the projection period, this is to a degree an artifact of the national income accounts treatment of taxes. As shown at the right, if personal income tax payments are converted from a cash to a liabilities basis, the personal saving rate in our forecast is seen to wobble around the recent level, rather than declining appreciably from 1993 to 1994. This is an appropriate adjustment to make to the extent that you believe that consumers--particularly the wealthier ones who will be affected by the income tax hikes--are forward-looking. Indeed, it may be that consumers more generally have been made more hesitant by fears of future tax burdens; that certainly appears to be the view of many in the retail industry.

A lack of confidence is also said to be weighing on the housing market, where activity has been trending upward, but not very decisively. Housing starts in April and May were only about 4 percent above the average pace of 1992--a meager improvement, given the dimensions of the decline in mortgage rates. Among other things, it would appear that first-time buyers' problems in mustering downpayments--and the limited equity of many potential move-up buyers whose current homes have depreciated--have been restraining demand for single-family homes. That said, we do expect that the reduction in the cash-flow burden of home ownership, plotted at the right, will continue to raise demand over coming quarters. On the supply side, although bankers don't appear to have opened the taps with regard to loans for big speculative projects--and builders are being asked to commit some equity--construction credit is not reported to be the problem it was said to be a year ago.

Chart 13 shifts the focus to business spending. As may be seen in the top panel, business fixed investment has been a significant driver in the economic expansion to date, and we expect this to continue to be the case. Nonresidential construction appears to be bottoming out, and we are predicting a moderate overall increase in the period ahead, despite the continuing weakness in the office sector. However, we have projected a slowing in the pace of advance in equipment spending--the red line--from the heady pace of the past year, owing to the leveling off in the rate of output growth and in corporate cash flows.

As you can see in the middle left panel, for nonfinancial corporations, capital expenditures are expected once again to exceed internal cash flows in the coming year, although by just a modest margin. However, driven importantly by the falling price of computers, there will be a continuing cost incentive--portrayed at the right--to invest in labor-saving capital; indeed, to the extent that businesses anticipate that governmental policies will raise future labor costs. direct or indirect. the incentive may be even greater than is captured by this calculation.

As regards inventories. our guess is that the recent softening in orders and production is symptomatic of a correction of some overhang. As Ted suggested. a drop-off in imports likely also will play a role in this adjustment. But. as the bottom left panel indicates. there is no sign that inventory-sales ratios in general have reached particularly troubling levels. and we are expecting that. after a drop-off in the current quarter. inventory accumulation will be a minor factor in GDP growth. As you can see at the right. the level of inventory investment in 1994 is projected to be about the same as in 1993.

Let me turn now from the outlook for real activity to the outlook for prices. Clearly. a key question that must be answered is why. against a backdrop of 7 percent unemployment. inflation seemingly has picked up this year. The next two charts present a number of suspects. Owing to the limits of time. I can't address any of these fully. but I'll try to give you a quick reading on how we think each stacks up.

First. we must ask whether there really has been a pickup in inflation. or whether it's all mismeasurement. The top left panel shows the average intra-year variation in core CPI inflation since 1989. and as you can see. it has been considerable. More sophisticated statistical methods indicate that there is significant residual seasonality in the seasonally adjusted index. This might provide a basis for arguing that there really hasn't been any meaningful acceleration of prices. And one might go a step further and argue that all of the measurement problems people talk about suggest that we should never read the published indexes very closely. But, as the right panel is intended to convey, there seems to be a fairly compelling consistency across a wide range of wage and price indexes that indicates that the downtrend in inflation--measured on a four-quarter moving average basis--has flattened out, and this alone is enough to raise some questions about what has been going on, given the slack in the economy.

One possible answer is that the effective slack in the system is not so great as the unemployment rate suggests. I don't think the real issue is whether the unemployment rate per se is understated; indeed, the tendency has been to argue that the weakness of the participation rate, the rise in part-time work, and the growth of self-employment all suggest a greater degree of slack actually exists.

Be that as it may, there has been a lot of restructuring and downsizing in various sectors of the economy, and some workers have been displaced by new technologies. The middle left panel provides at least a hint of this phenomenon, in that a relatively large percentage of people who have lost their jobs in recent years have had no expectation of being recalled. But we must go a step further and assess whether there are greater problems than in the past matching up workers and jobs, perhaps because of geographic or skill mismatches.

We believe that there is something to this line of reasoning: As you may recall, we reported to you some months ago that our analysis of the defense build-down suggested that one might want to tack onto the NAIRU a couple of tenths for the displacement of workers from this sector. But the evidence more generally is pretty thin and, in some instances, seemingly quite contrary. For example, the chart at the right shows that a vacancy rate created using the Conference Board's help-wanted index is quite low relative to previous times when unemployment was at the current level; presumably, if there was a major mismatching problem, you'd see a lot of jobs going unfilled relative to the number of people seeking work. I think we have a long way to go in our research before we can offer a definitive assessment of the structural unemployment issue, but at this point we would conclude that the search for an inflation villain should not stop here.

This brings me to the third question, which is whether, even if there is plenty of labor, industrial capacity might be tighter than it appears. The recent upward revision of our capacity utilization index, shown at the lower left, perhaps underscores the uncertainty of measurement in this area. The chart at the right provides a little comfort in this regard, however. The National Purchasing Managers' index of vendor delivery performance may be viewed as an independent gauge of capacity constraints. If things were truly tight, deliveries would slow; the NAPM index doesn't appear to be telling a different story from the capacity utilization measure.

Turning to the next chart, the next suspect on my list is protection. To the extent that barriers have been raised to imports, we may have created opportunities for domestic producers to raise their prices. I don't think there is any evidence that this has been a broad source of <u>increased</u> price pressure this year, but there is at least one area in which it surely has played a role, namely the steel market. It is more than coincidence that the steps taken by producers to curb competition from imports have been accompanied by a sharp increase in the price of steel relative to other industrial metals, shown in the upper left panel. Now, even on extreme assumptions about the speed and extent of the pass-through to final product prices, the increase in the cost of steel doesn't look like a big factor in this year's inflation story. But every bit hurts, and developments in the steel market might have affected expectations on a broader front, among other things as a signal of Administration trade policies and their potential effects.

Item 5 also relates to government policies. I've loosely dubbed it "mandates," but I have in mind the vast array of laws, regulations, and court decisions that have added to costs of production. The effects here are difficult to measure. If only to give you something to look at, I've charted the costs of workers' compensation, a program that employers have been complaining bitterly about in recent years. As you can see from the red line, workers' comp costs have been rising rapidly, but less so than a few years ago, according to these data drawn from the Employment Cost Indexes; and the bars show that they have accounted for only a couple of tenths of a percent of the increase in labor costs per hour. I have no doubt that the cost of mandates has been rising, but it is not clear that the total costs have accelerated recently in such a way as to explain the stalling out of disinflation.

My own judgment is that the next factor, so-called "speed" effects, are a more promising explanation. The middle-left chart, taken from last Friday's Board briefing, illustrates the correlation between the change in the unemployment rate and the change in the inflation rate. We have noted repeatedly in our presentations to the Committee the possibility that fast growth, even while unemployment was still high, might embolden firms to raise their prices. Near the end of the year, about the time many firms probably were finalizing their plans for 1993, sales and capacity utilization were moving up sharply and there was a sudden upshift in expectations for future activity; this may well have triggered a wave of price increases. If this model is correct, we should experience some deceleration of prices in the wake of the subdued performance of the economy in the first half. This thought has played a role in our forecast.

Last, but maybe not least, is the possible role of inflation expectations. No one would deny that expectations can be important, but it isn't easy to gauge them or their role in any given period. The panel at the right shows that the available survey evidence on recent changes in price expectations does not present a consistent picture. Only the Michigan survey of consumers indicates an appreciable increase over the past year. That doesn't mean it should be dismissed, however: this index has performed as well or better than other measures over the years as a predictor of actual inflation. I would say that the anecdotal evidence on expectations is mixed, while the behavior of bond yields this year has not suggested a jump in inflation expectations. All told, the role of inflation expectations--other than what is implicit in the speed effect story I told--is far from clear in the present case. Going forward, however, in putting together our forecast, the indications that inflation expectations have not been coming down in step with inflation over the past couple of years did cause us to be conservative in predicting how much disinflation we can expect in the near term.

Which brings me to "The Bottom Line." We have concluded that, with the temperate growth and high unemployment we are projecting, inflation will come down a bit over the coming year. We expect that wage increases will remain moderate and that unit labor cost pressures will be subdued. The projected disinflation is somewhat less than most of our econometric models would predict--as was the case even with our prior forecasts--and we think it thus strikes a reasonable balance against the risks that sticky expectations or other factors I've discussed could prove more troublesome than we've gauged.

The last chart is a summary of the forecasts you've submitted. I'd offer just a few quick comments. First, if the staff is close on our second-quarter projections, the central tendency numbers for 1993 imply roughly 3 to 4 percent real GDP growth and 2-1/2 to 3 percent inflation over the second half. Second, the Administration has been hinting publicly that their revised forecast, which is unlikely to be released prior to the Humphrey-Hawkins hearings, will show GDP growth of 2-1/2 percent or a little less. And finally, the Blue Chip forecast for this month won't be out 'til the end of the week, but Bob Eggert has told me, on a confidential basis, that the numbers for 1993 GDP have been coming in lower than a month ago; I think this means that the Blue Chip consensus may be in the lower part of the central tendency range.

Mr. Chairman: That concludes our presentation.

STRICTLY CONFIDENTIAL (FR) CLASS I-FOMC

Material for

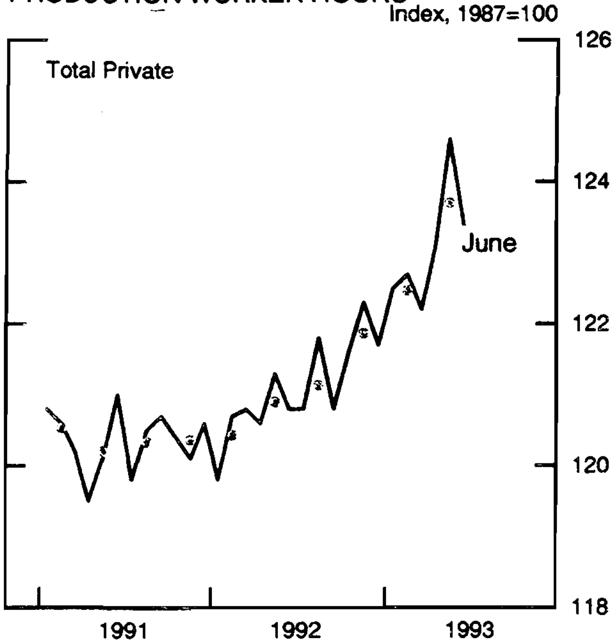
Staff Presentation to the Federal Open Market Committee

July 6, 1993

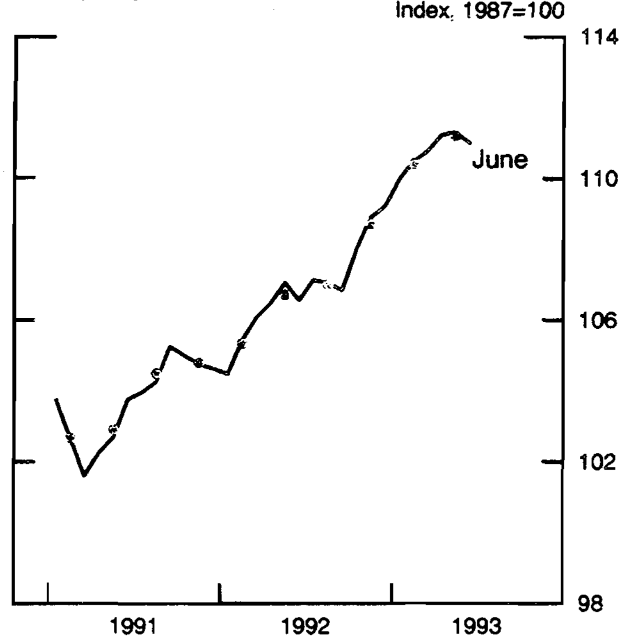
Chart 1

Second Quarter Activity Indicators

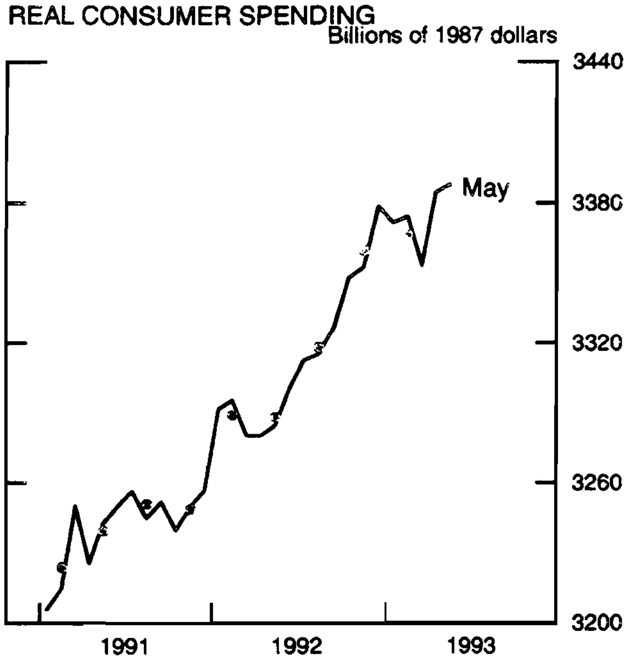
PRODUCTION WORKER HOURS



MANUFACTURING PRODUCTION



REAL CONSUMER SPENDING



REAL SHIPMENTS OF NON-DEFENSE CAPITAL GOODS EX AIRCRAFT

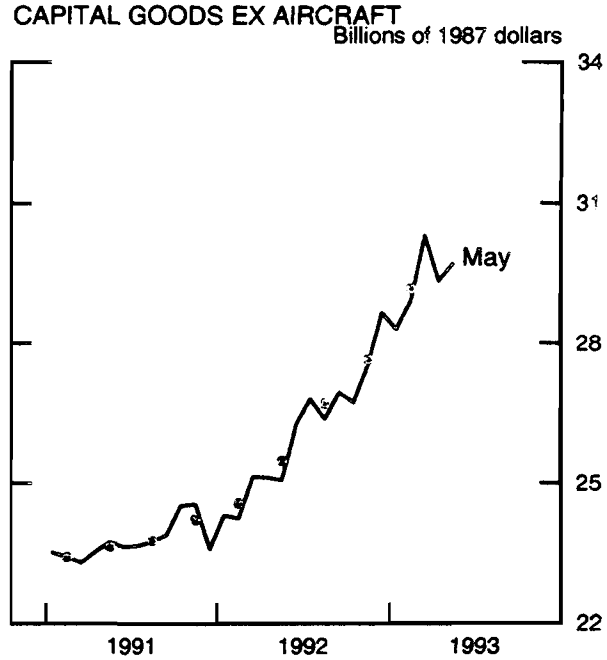
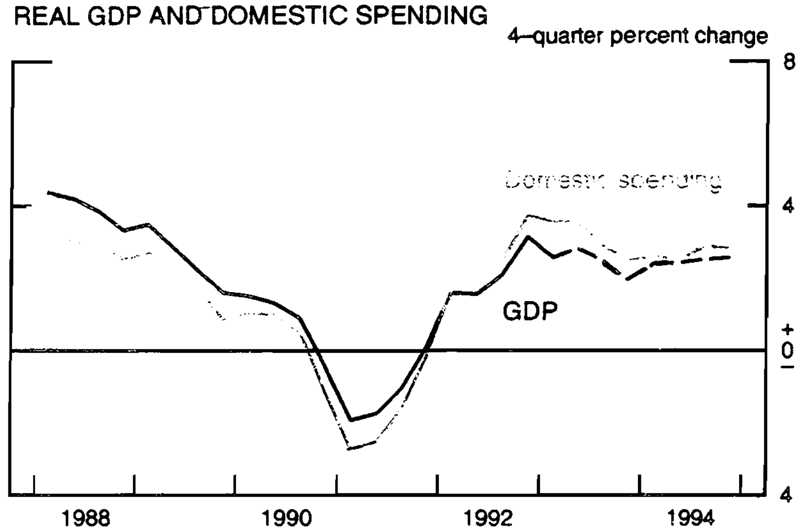


Chart 2

Summary of Staff Forecast

REAL GDP AND DOMESTIC SPENDING

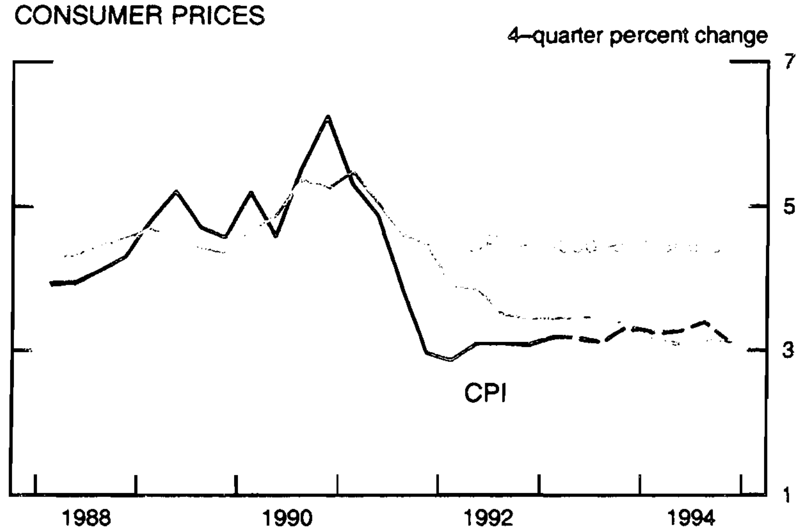


OUTPUT AND SPENDING

Percent change, Q4 to Q4

	GDP	Domestic spending
1990	−.5	−1.2
1991	.1	−.2
1992	3.1	3.7
1993	2.0	2.5
1994	2.6	2.9

CONSUMER PRICES



INFLATION

Percent change, Q4 to Q4

	CPI	Ex food & energy
1990	6.2	5.2
1991	3.0	4.5
1992	3.1	3.4
1993	3.3	3.3
1994	3.1	3.1

CIVILIAN UNEMPLOYMENT RATE

UNEMPLOYMENT RATE

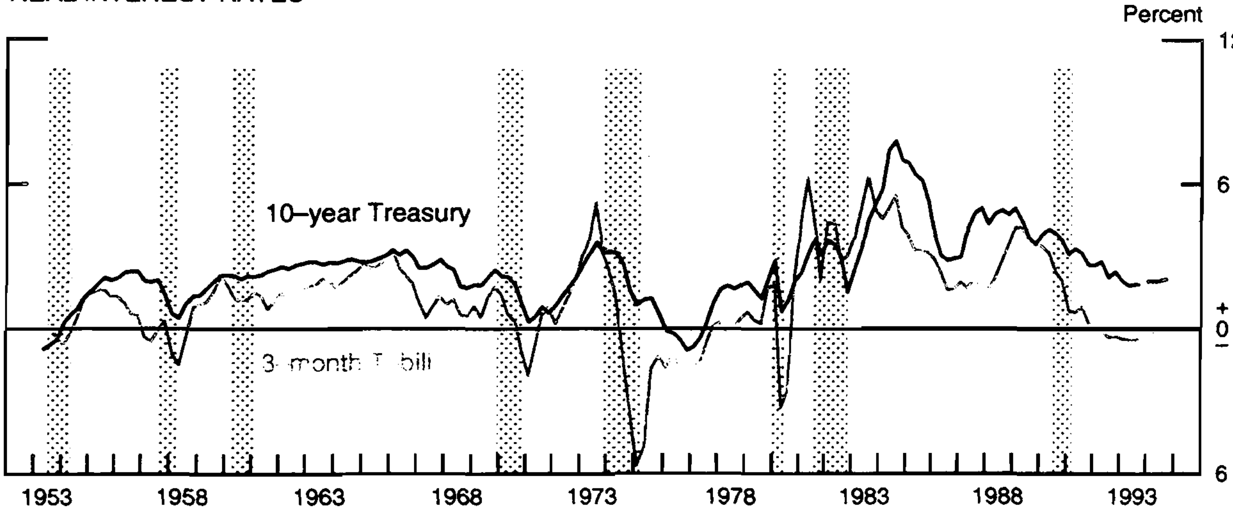
Level, Q4

1990	6.0
1991	7.0
1992	7.3
1993	6.9
1994	6.8

Chart 3

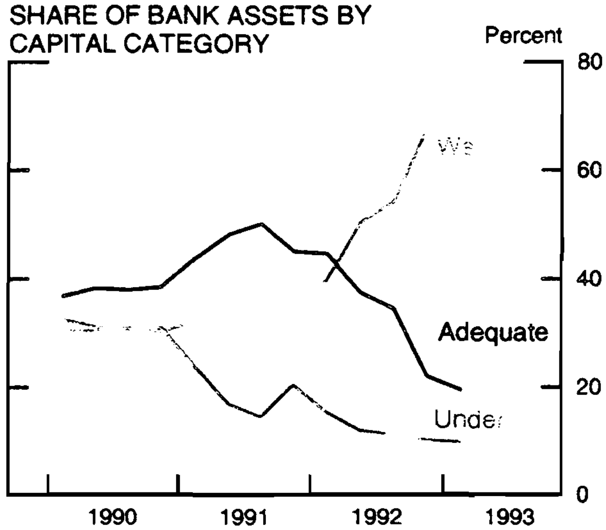
Financial Environment

REAL INTEREST RATES*

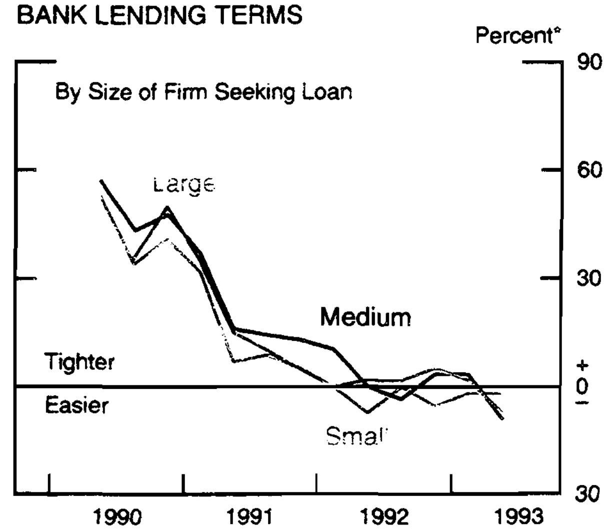


*Nominal rate minus percent change in core CPI over prior year for bill and over prior 3 years for 10–year Treasury.

SHARE OF BANK ASSETS BY CAPITAL CATEGORY

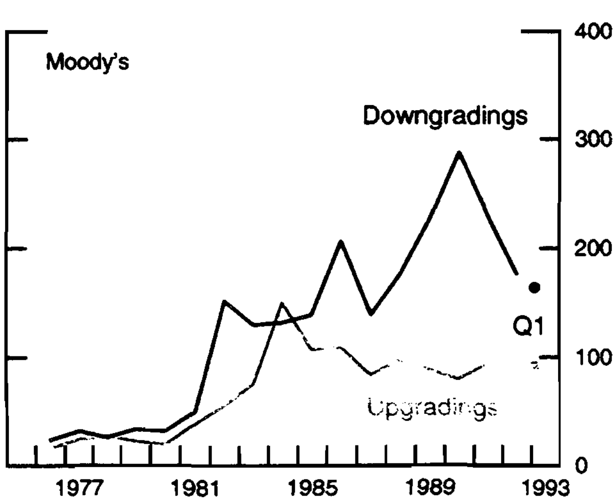


BANK LENDING TERMS

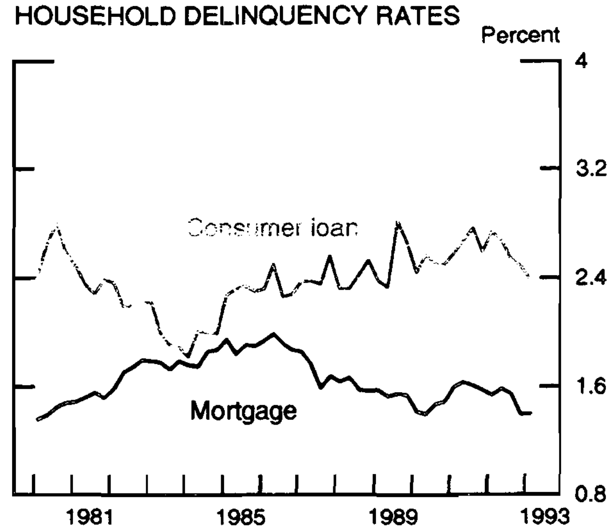


*Net percentage reporting tighter standards and terms.

RATING CHANGES ON NONFINANCIAL BONDS



HOUSEHOLD DELINQUENCY RATES



Consumer – ABA – 30 or more days.
Mortgage – MBA – 60 or more days.

Chart 4

Government Sector

KEY FISCAL POLICY ASSUMPTIONS

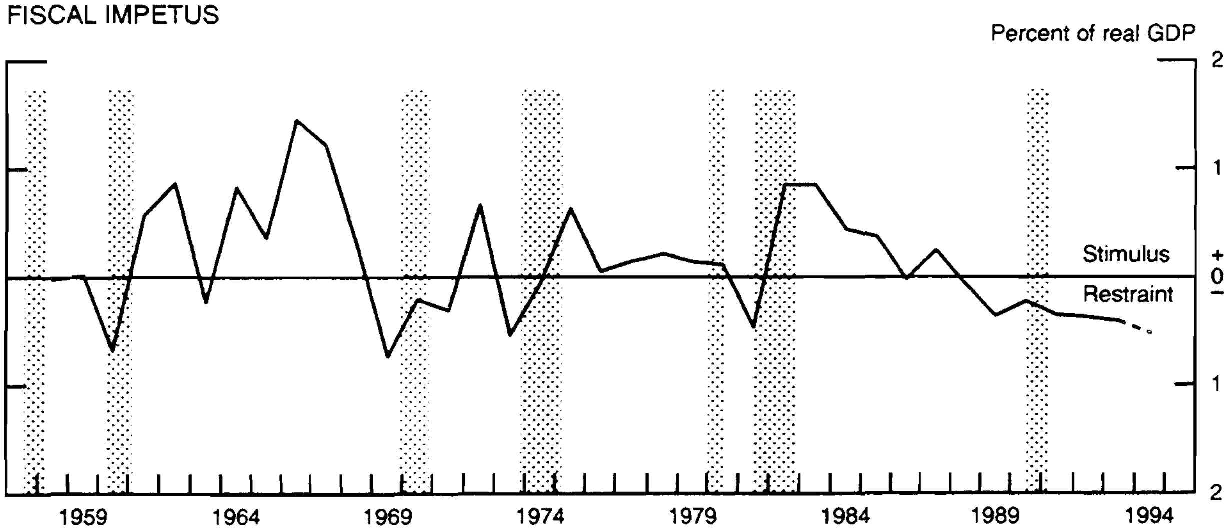
Compromise reached this summer between House and Senate bills.

Income tax provisions similar to Senate, with half of rate increase taking effect in 1993.

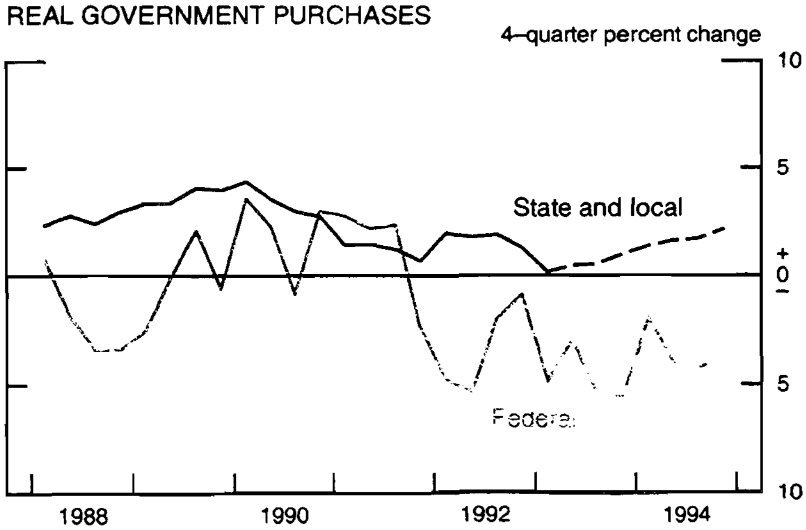
Energy tax a broadened, somewhat larger version of Senate's transportation fuel levy, starting this fall.

Total deficit reduction FY 1994 is $37 billion, of which $33 billion is taxes.

FISCAL IMPETUS



REAL GOVERNMENT PURCHASES



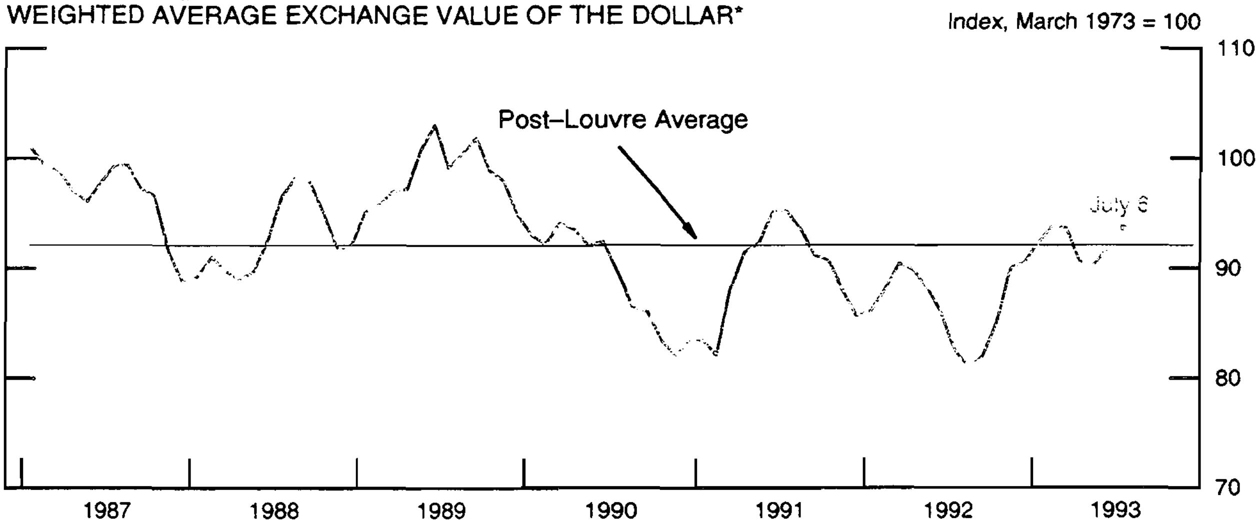
TOTAL REAL PURCHASES

Percent change, Q4 to Q4

1990	2.8
1991	−.6
1992	.4
1993	−1.6
1994	−.2

Chart 5

WEIGHTED AVERAGE EXCHANGE VALUE OF THE DOLLAR*



* Multilateral trade–weighted average in terms of other G–10 currencies.

DOLLAR EXCHANGE RATES

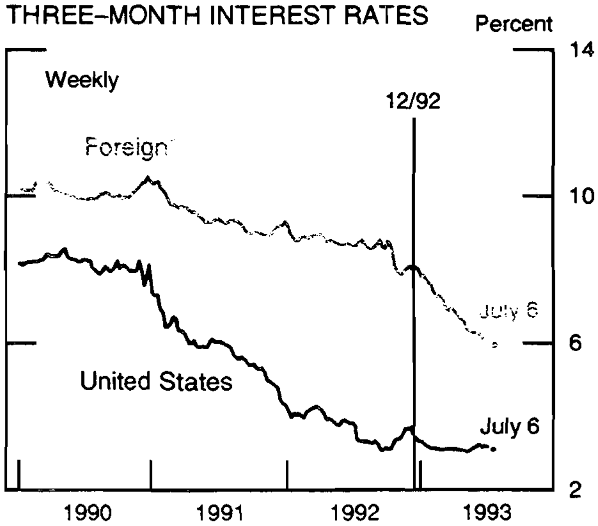
	Percent change 12/92 to 7/6/93
Italian lira	9
Deutschemark	7
Swiss franc	6
Pound sterling	3
Canadian dollar	1
Yen	-13
G-10 Average	**3**

INTEREST RATES

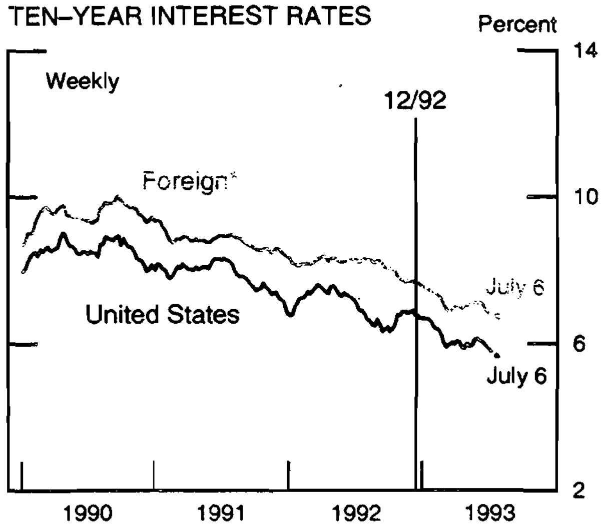
Percent

	Level 7/6/93	Change 12/92 to 7/6/93
Three-month		
Germany	7.30	-1.63
Japan	3.22	-0.54
United States	3.12	-0.36
Ten-year		
Germany	6.70	-0.61
Japan	4.47	-0.23
United States	5.71	-1.06

THREE–MONTH INTEREST RATES



TEN–YEAR INTEREST RATES



* Multilateral trade–weighted average for foreign G–10 countries.

Chart 6

Foreign Industrial Production and Consumer Prices

Excluding food and energy prices, 3–month moving averages

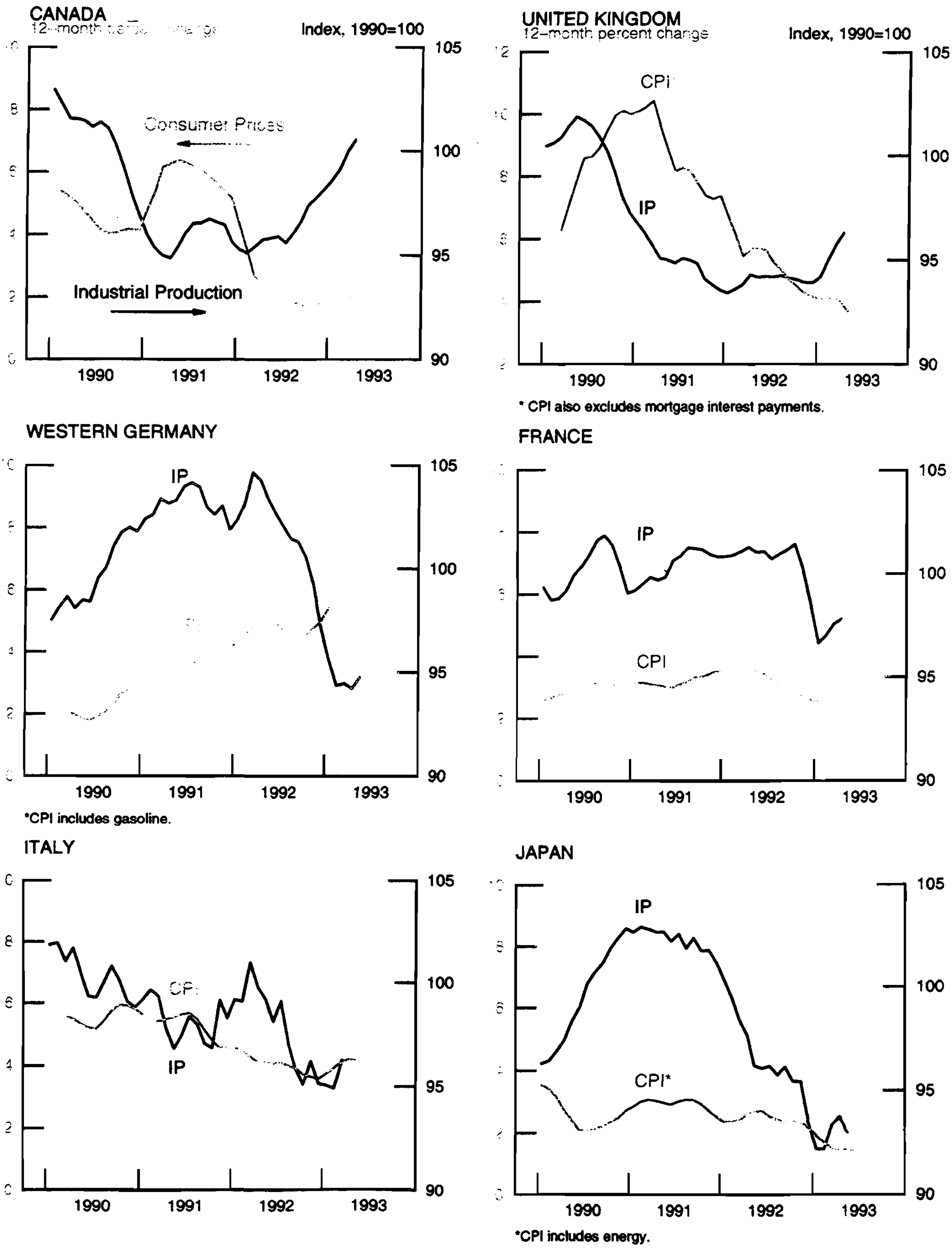
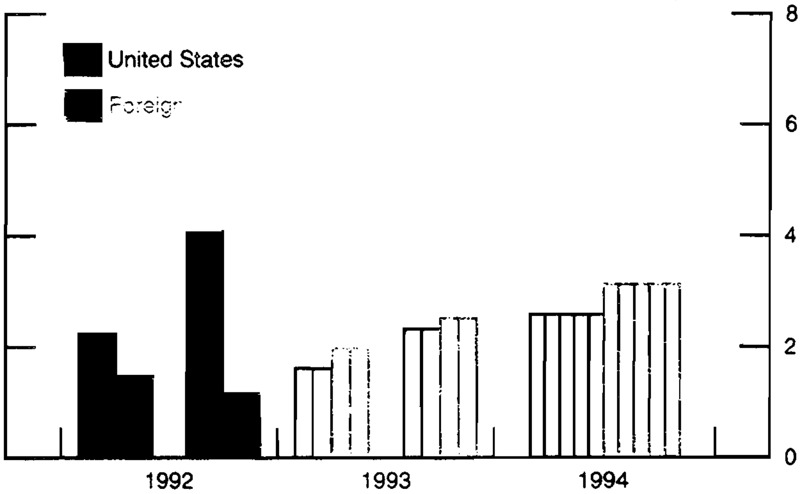


Chart 7

Foreign Outlook

REAL GDP: U.S. AND FOREIGN*

Percent change, SAAR



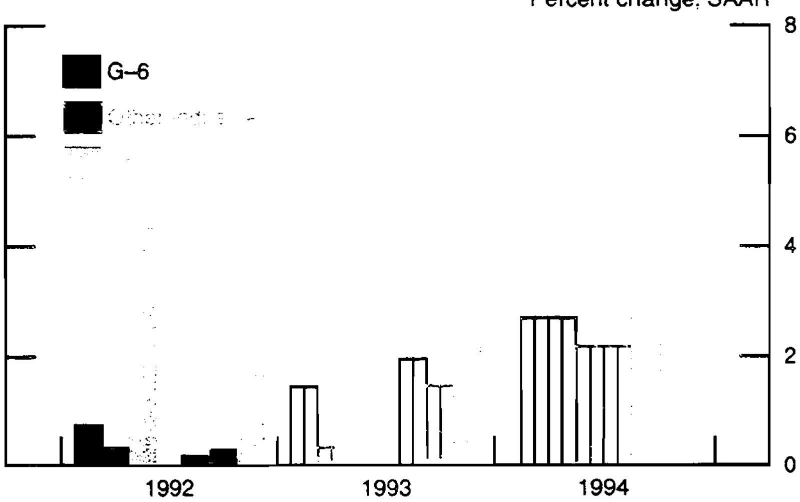
GDP: GROUP OF SIX

Percent change, SAAR

	1993 H1	1993 H2	1994
Japan	1.4	1.4	2.7
Canada	3.2	3.0	3.2
U.K.	1.5	2.3	2.5
Germany	-4.7	-1.1	1.6
France	-1.3	0.5	2.0
Italy	-0.5	1.3	1.7
G-6	**1.4**	**2.0**	**2.7**

FOREIGN REAL GDP*

Percent change, SAAR



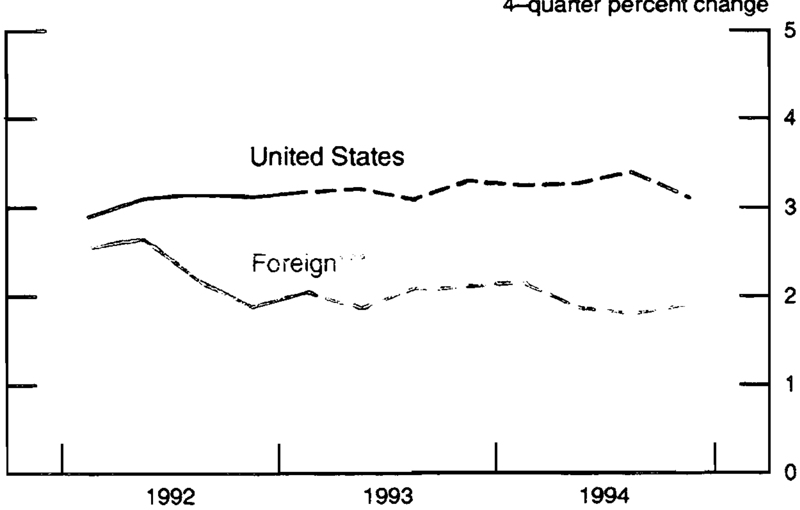
GDP: DEVELOPING COUNTRIES

Percent change, annual

	1992	1993	1994
Mexico	2.6	2.0	2.5
NIEs**	5.6	5.7	6.3
China	12.8	11.0	10.5
Total	**4.6**	**4.6**	**4.9**

CONSUMER PRICES: G-7 COUNTRIES

4-quarter percent change



CONSUMER PRICES

Percent change, Q4 to Q4

	1992	1993	1994
Germany	3.7	3.6	2.4
France	1.8	2.6	1.9
U.K.****	3.7	3.0	4.0
Japan	0.9	1.2	1.2
Canada	1.8	2.0	1.7
U.S.	3.1	3.3	3.1

*G-6 countries, 16 other industrial and 9 developing countries, U.S. nonagricultural export weights.
**Hong Kong, Singapore, South Korea, and Taiwan, U.S. nonagricultural export weights.
***G-6 countries, U.S. non-oil import weights.
****Excludes mortgage interest payments.

Chart 8

Exports

DESTINATION

Percent, current dollars	1992 Share*	1993** Growth
1. Total	100	3
2. Canada	21	8
3. United Kingdom	5	4
4. Japan	11	-2
5. Other Industrial	24	-8
6. Mexico	9	5
7. Other Latin America	8	6
8. Asia	20	10
9. All Other	2	2

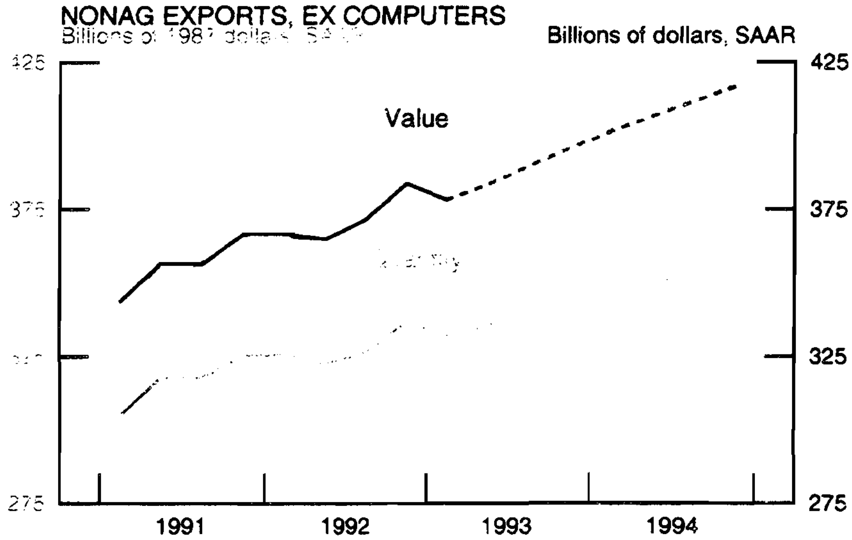
* Total U.S. exports were $440 billion in 1992.
** Jan-Apr 1992 to Jan-Apr 1993.

CATEGORY

Percent, 1987 dollars	1992 Share*	1993** Growth
1. Total	100	4
2. Agricultural	10	0
3. Nonagricultural	90	5
4. Computers	12	23
5. Machinery ex Comp.	23	9
6. Automotive Products	10	16
7. Consumer Goods	10	5
8. Industrial Supplies	22	-2
9. Aircraft & Parts	8	-20
10. Other	5	-5
Memo: Nonag. ex Comp.	78	2

* Total U.S. exports were $413 billion 1987$ in 1992.
** Jan-Apr 1992 to Jan-Apr 1993.

NONAG EXPORTS, EX COMPUTERS

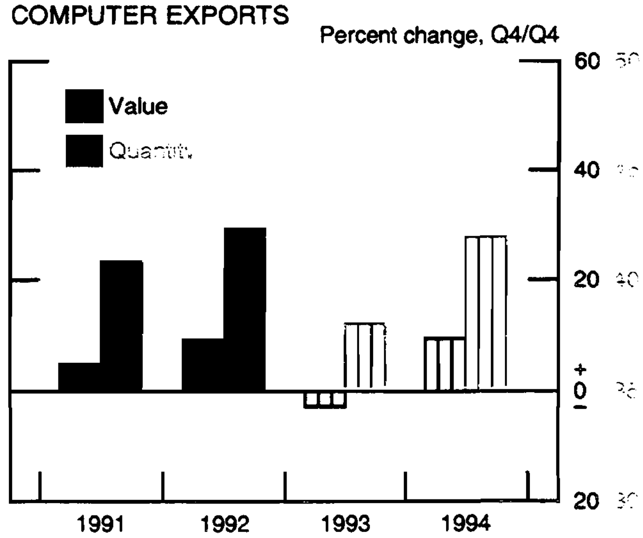


GROWTH

Real Nonag Exports ex Computers
Percent change, SAAR

1991	6.4
1992 H1	-1.9
1992 H2	9.1
1993 H1	-0.6
1993 H2	4.6
1994	3.4

COMPUTER EXPORTS



AGRICULTURAL EXPORTS

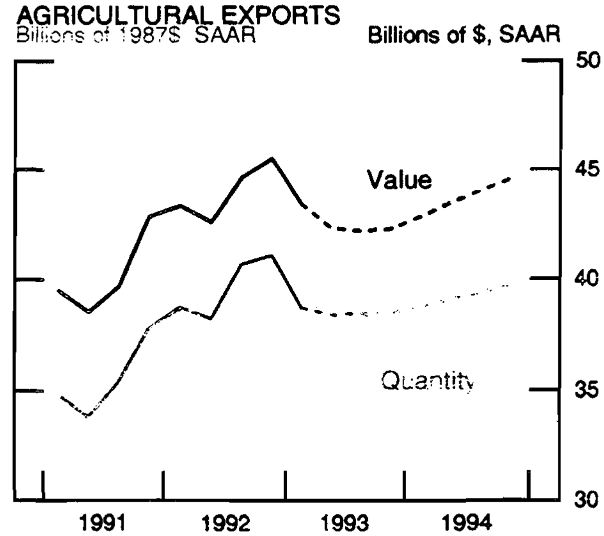


Chart 9

Imports

ORIGIN

Percent, current dollars	1992 Share*	1993** Growth
1. Total	100	10
2. Canada	19	13
3. United Kingdom	4	11
4. Japan	18	10
5. Other Industrial	18	3
6. Mexico	7	15
7. Other Latin America	6	6
8. Asia	26	12
9. All Other	3	3

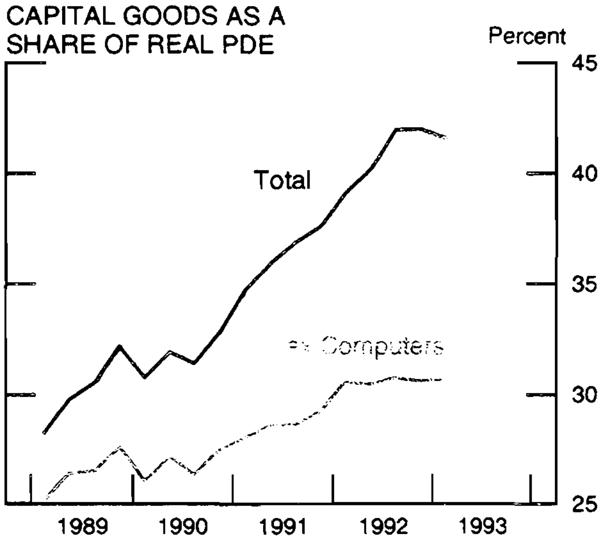
* Total U.S. imports were $536 billion in 1992.
** Jan–Apr 1992 to Jan–Apr 1993.

CATEGORY

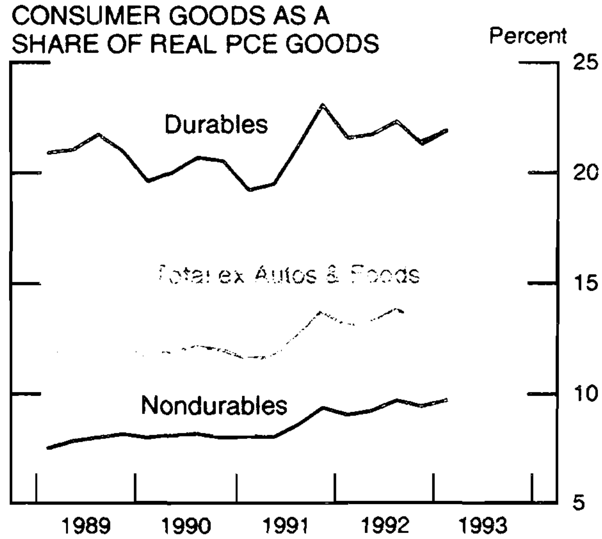
Percent, 1987 dollars	1992 Share*	1993** Growth
1. Total	100	13
2. Oil	10	14
3. Non-oil	90	13
4. Computers	12	49
5. Cap. Goods ex Comp.	18	9
6. Consumer Goods	21	9
7. Automotive Products	15	13
8. Industrial Supplies	14	7
9. Food & Other	11	0
Memo: Non-oil ex Comp.	79	9

* Total U.S. imports were $507 billion 1987$ in 1992.
** Jan–Apr 1992 to Jan–Apr 1993.

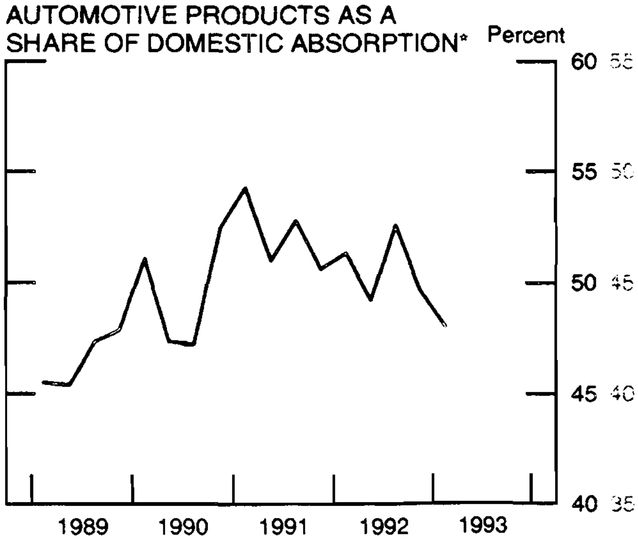
CAPITAL GOODS AS A SHARE OF REAL PDE



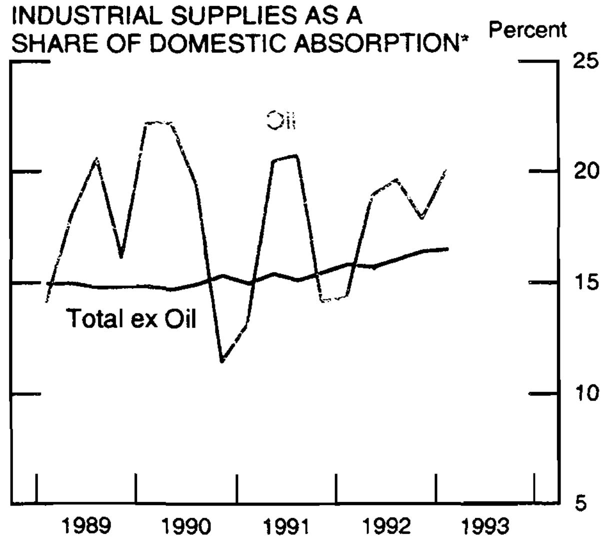
CONSUMER GOODS AS A SHARE OF REAL PCE GOODS



AUTOMOTIVE PRODUCTS AS A SHARE OF DOMESTIC ABSORPTION*



INDUSTRIAL SUPPLIES AS A SHARE OF DOMESTIC ABSORPTION*

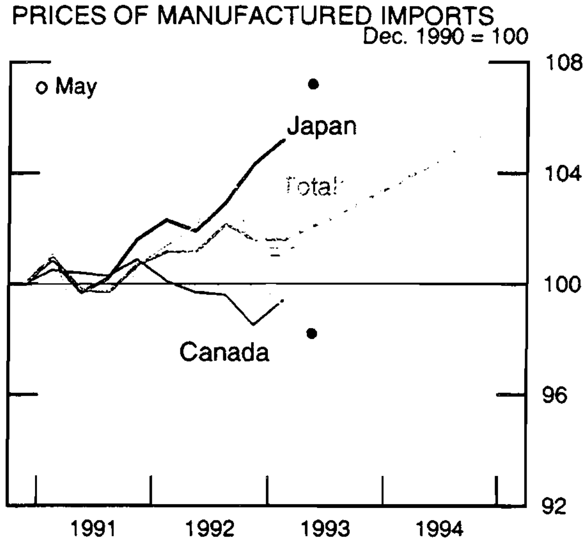


* Real gross value of output + imports – exports.

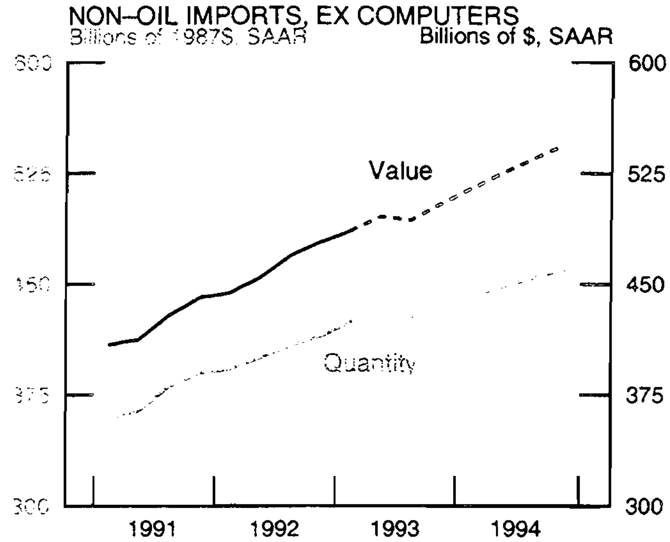
Chart 10

Imports

PRICES OF MANUFACTURED IMPORTS

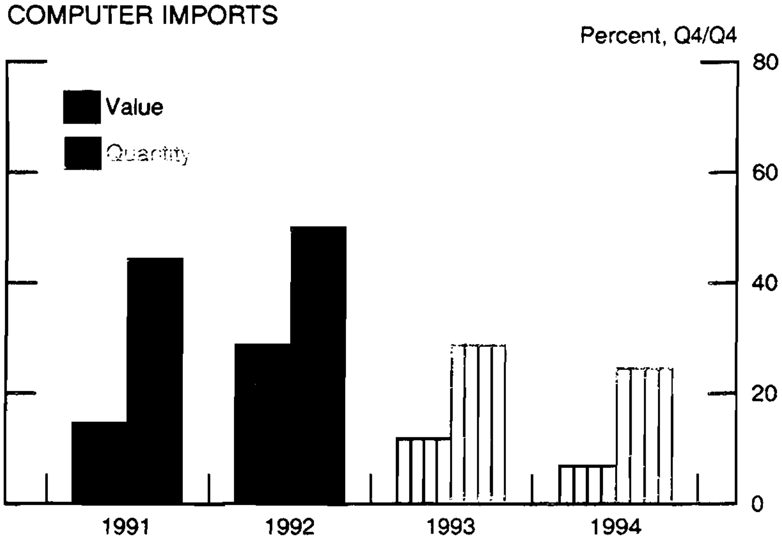


NON-OIL IMPORTS, EX COMPUTERS



* Projection based on non-oil ex computer fixed-weight price index.

COMPUTER IMPORTS

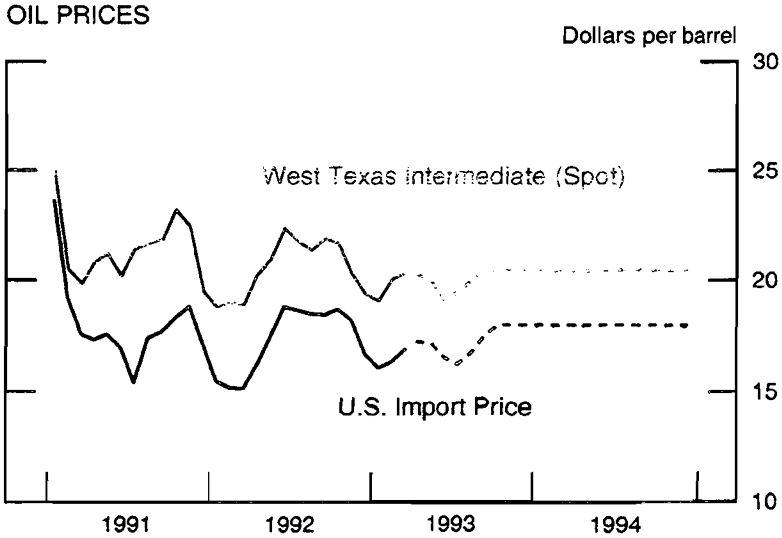


COMPUTER TRADE BALANCE

Billions of 1987 dollars

1991	0
1992	-10
1993	-23
1994	-29

OIL PRICES



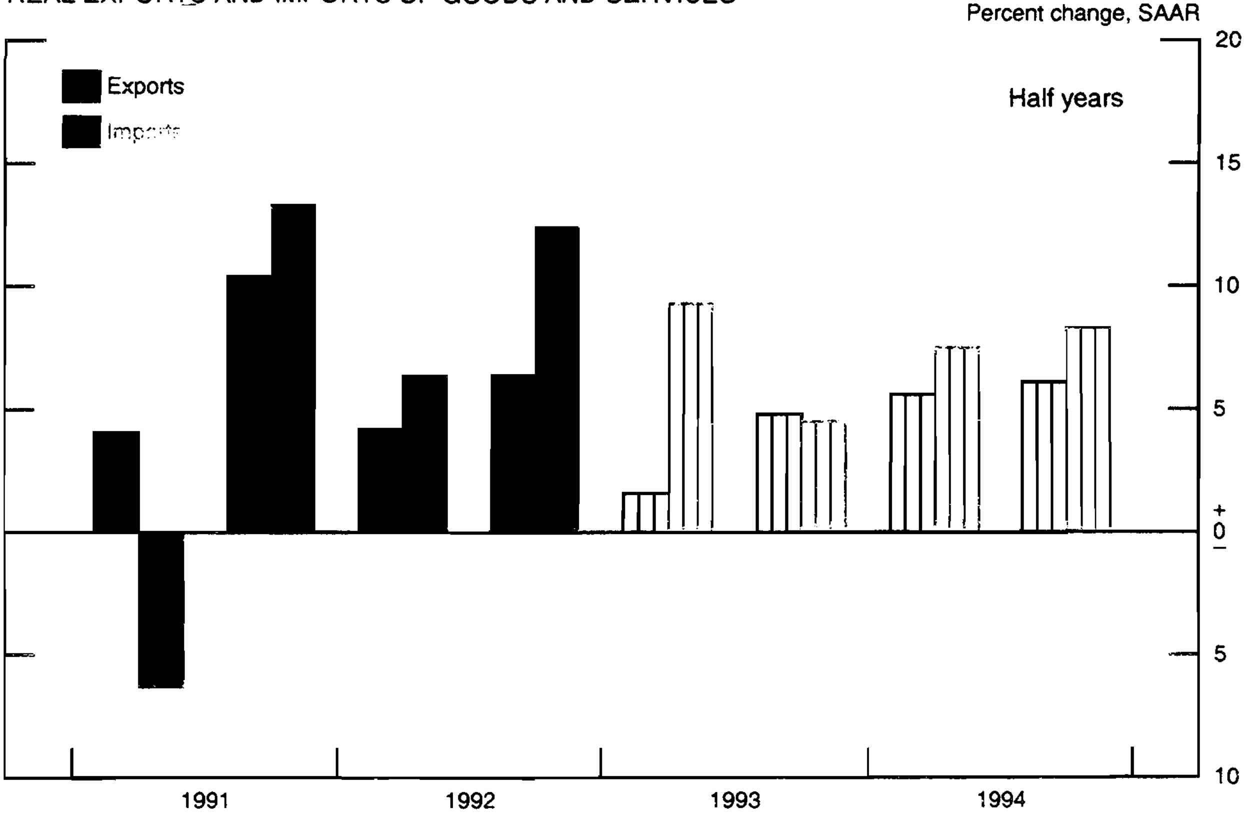
OIL IMPORTS

	Quantity (mbd)	Value (bil.$)
1991	7.9	52
1992	8.1	52
1993	8.8	55
1994	9.1	60

Chart 11

Summary for the External Sector

REAL EXPORTS AND IMPORTS OF GOODS AND SERVICES



EXTERNAL BALANCE

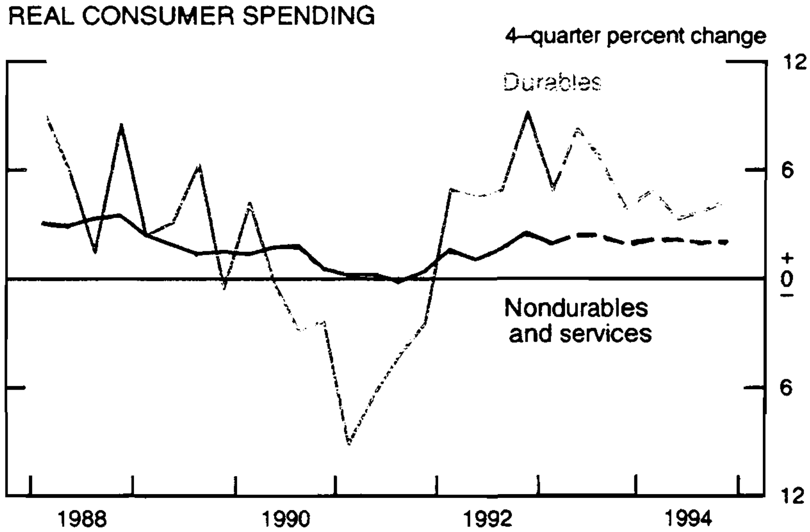
Billions of dollars, SAAR

	1992	1993H1	1993H2	1994
1. Current account balance	–66	–94	–97	–108
2. Goods	–96	–122	–124	–140
3. Services	56	59	61	66
4. Investment income	6	1	–1	–1
5. Real net exports of goods and services, NIPA, 1987$	–42	–75	–76	–89

Chart 12

Household Sector

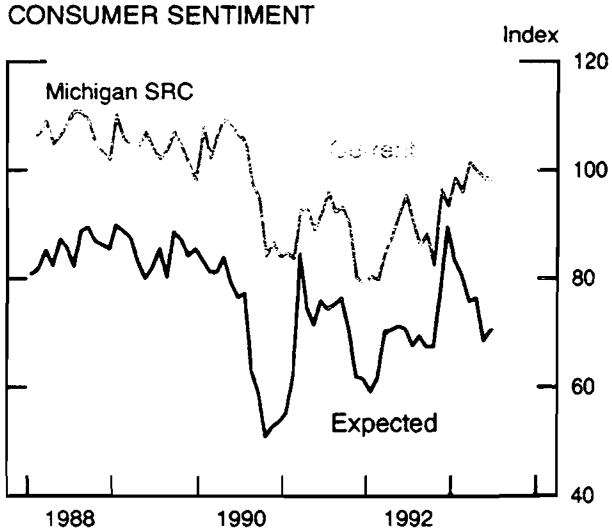
REAL CONSUMER SPENDING



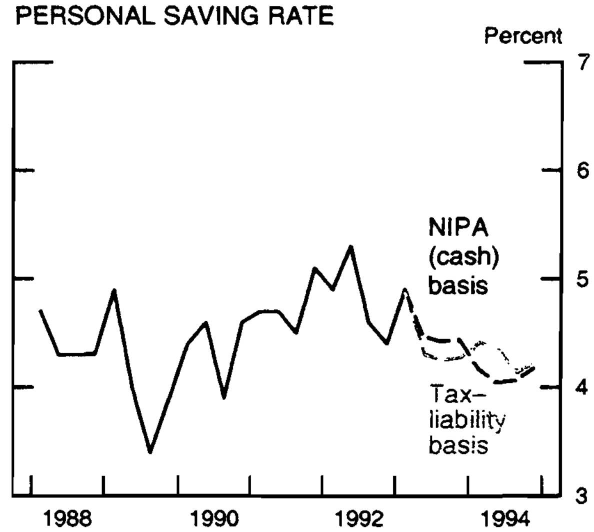
TOTAL REAL PCE

Percent change, Q4 to Q4	
1990	.2
1991	.0
1992	3.4
1993	2.2
1994	2.3

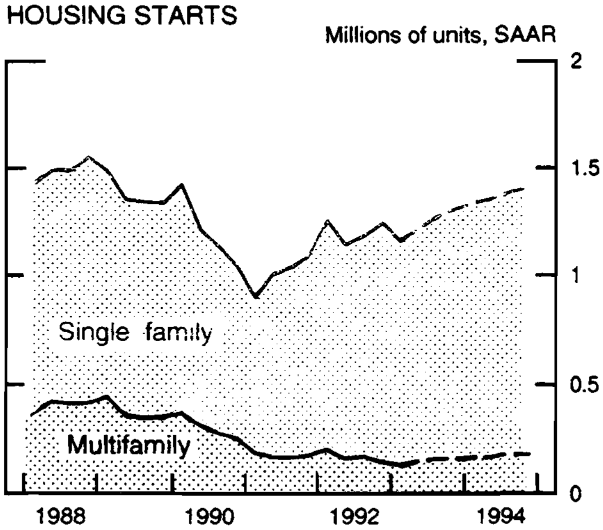
CONSUMER SENTIMENT



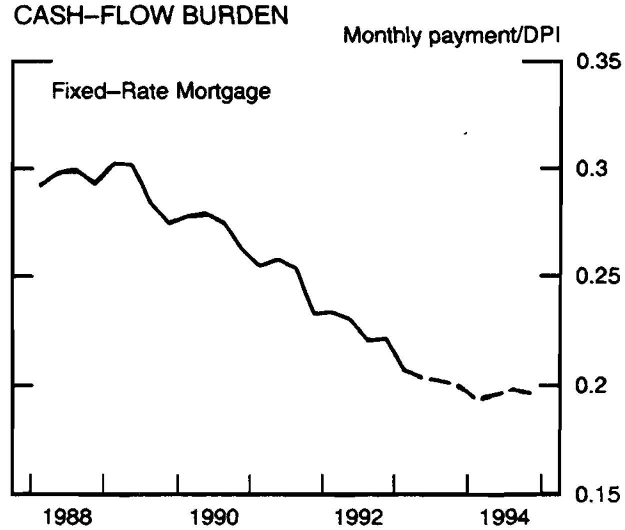
PERSONAL SAVING RATE



HOUSING STARTS

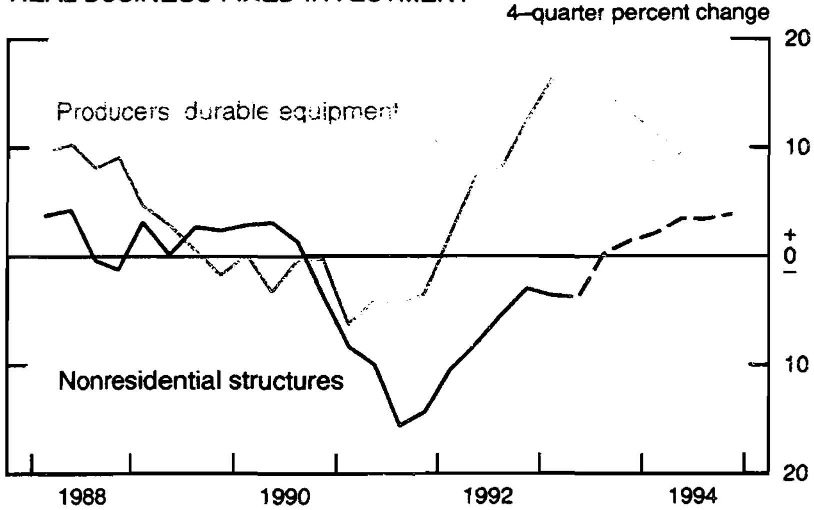


CASH-FLOW BURDEN



Business Spending

REAL BUSINESS FIXED INVESTMENT

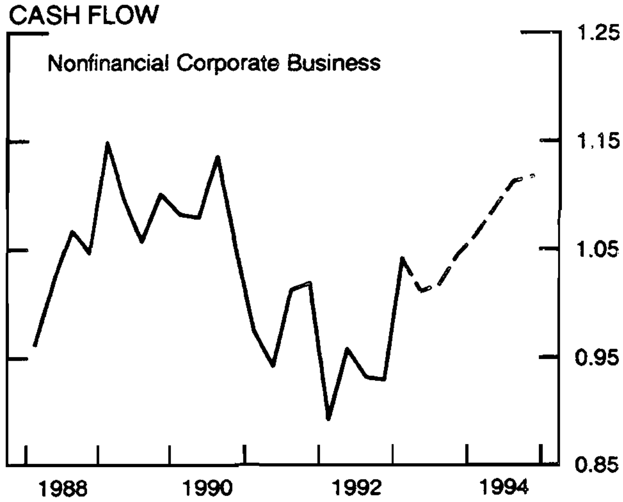


TOTAL REAL BFI

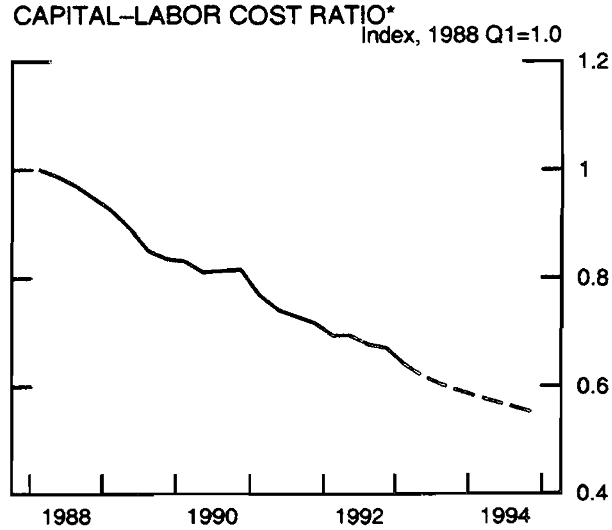
Percent change, Q4 to Q4

1990	–1.4
1991	–7.0
1992	7.9
1993	10.2
1994	8.3

RATIO OF CAPITAL SPENDING TO CASH FLOW

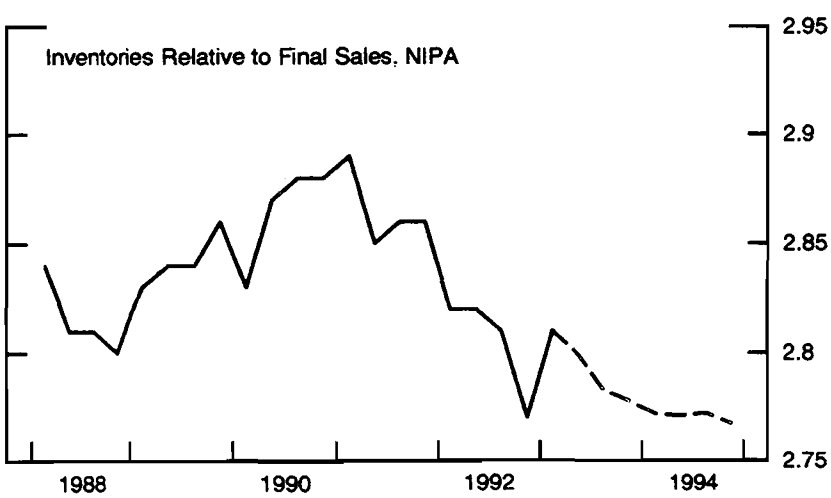


CAPITAL–LABOR COST RATIO*



*Ratio of user cost of capital to compensation rate.

REAL INVENTORY–SALES RATIO



REAL INVENTORY INVESTMENT

Billions of 1987 dollars

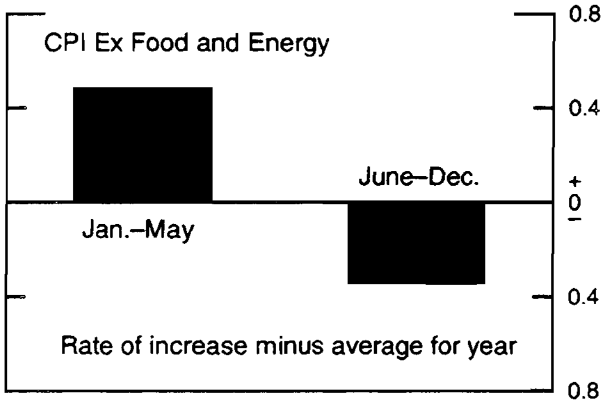
1990	6.2
1991	–9.4
1992	5.0
1993	22.5
1994	23.5

Chart 14

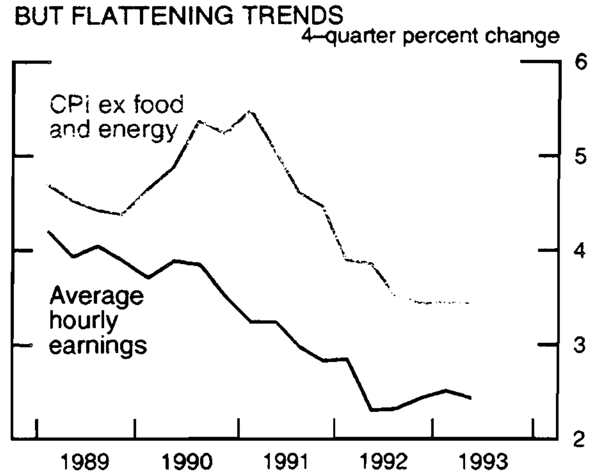
Why Has Inflation Picked Up, With Unemployment at 7 Percent?

1. MEASUREMENT PROBLEMS

SEASONAL PATTERNS – 1989–1992

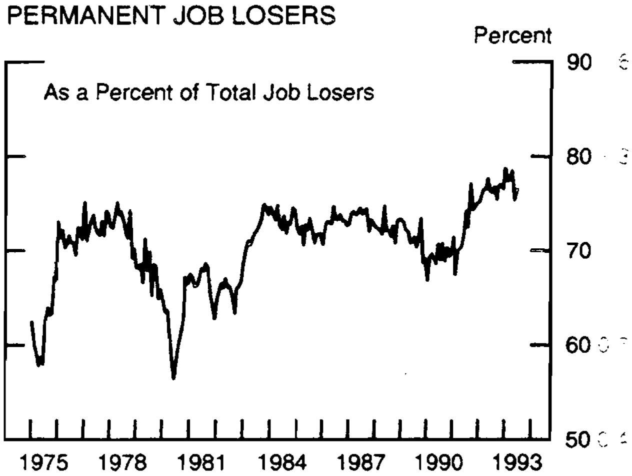


BUT FLATTENING TRENDS

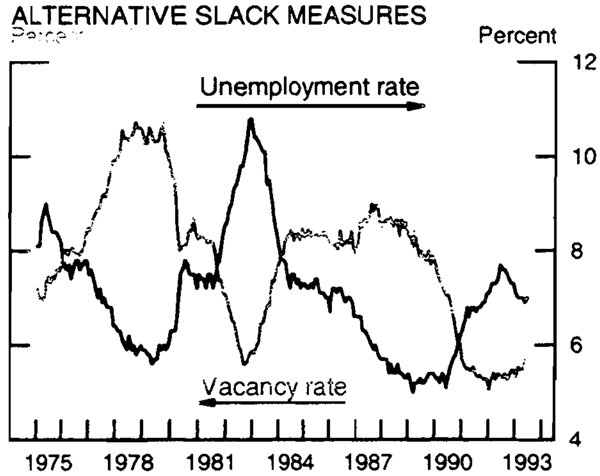


2. STRUCTURAL UNEMPLOYMENT AND LABOR MARKET SLACK

PERMANENT JOB LOSERS

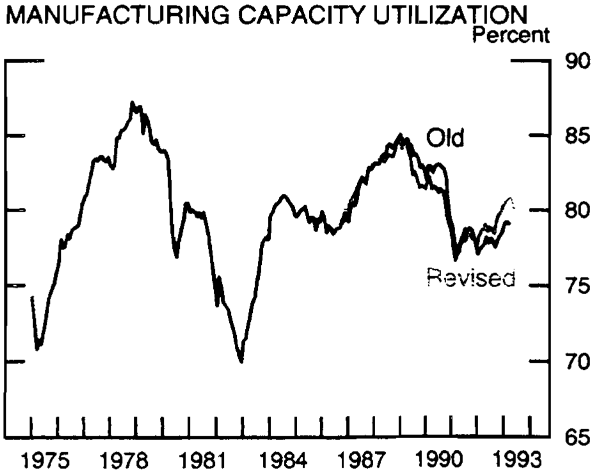


ALTERNATIVE SLACK MEASURES

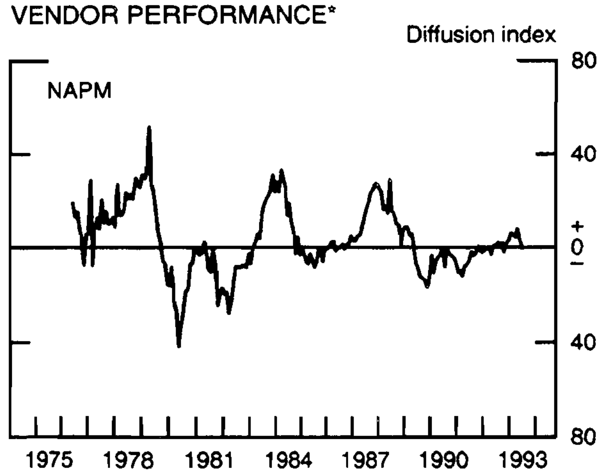


3. INDUSTRIAL CAPACITY TIGHTNESS

MANUFACTURING CAPACITY UTILIZATION



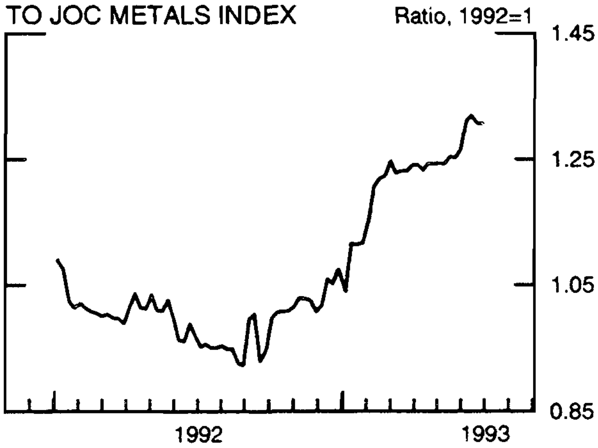
VENDOR PERFORMANCE*



*Slower minus faster deliveries.

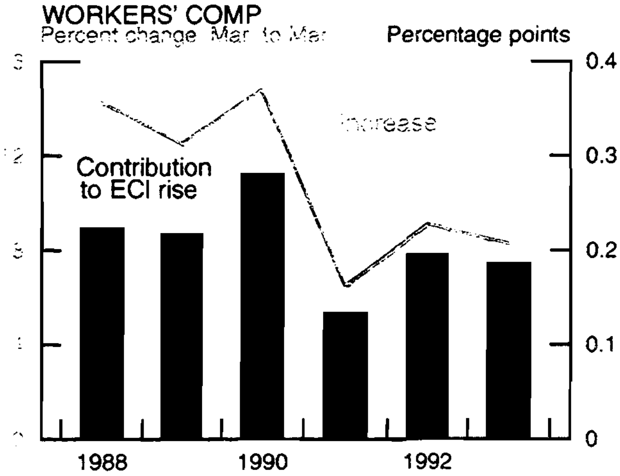
4. PROTECTION

STEEL SCRAP PRICE RELATIVE TO JOC METALS INDEX



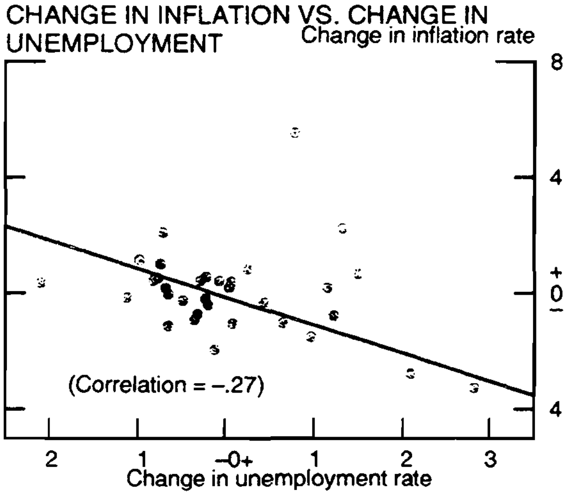
5. MANDATES

WORKERS' COMP



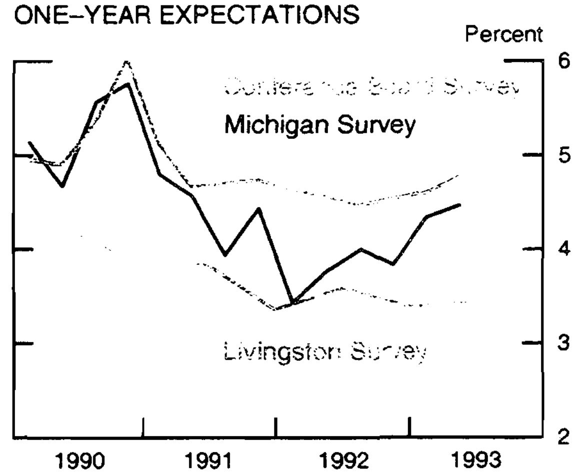
6. "SPEED" EFFECTS

CHANGE IN INFLATION VS. CHANGE IN UNEMPLOYMENT



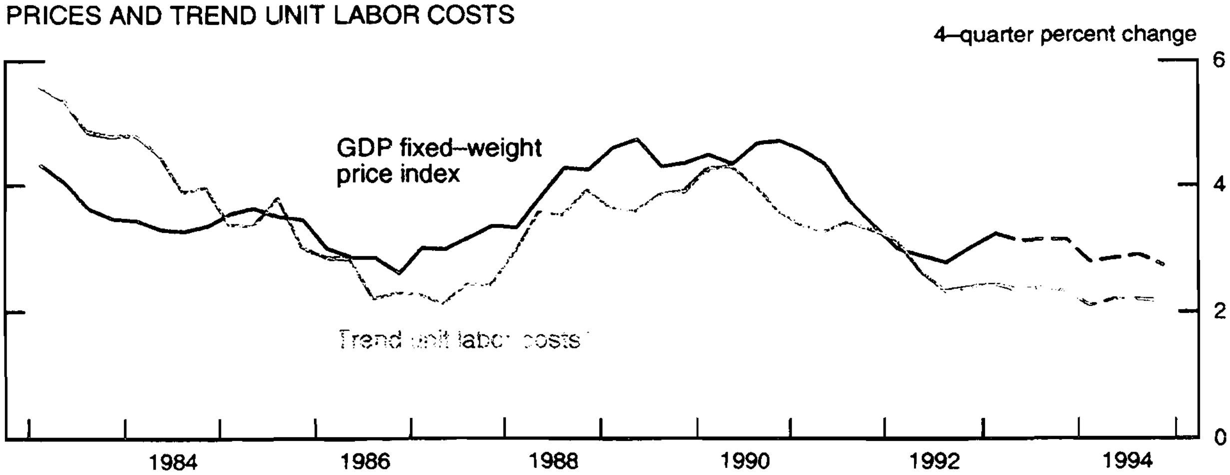
7. INFLATION EXPECTATIONS

ONE-YEAR EXPECTATIONS



THE BOTTOM LINE

PRICES AND TREND UNIT LABOR COSTS



* ECI–Comp per hour relative to trend productivity.

ECONOMIC PROJECTIONS FOR 1993

	FOMC Range	FOMC Central Tendency	Staff
	Percent change, Q4 to Q4		
Nominal GDP	$4^3/_4$ to $6^1/_4$	5 to $5^3/_4$	4.8
previous estimate	$5^1/_4$ to $6^1/_4$	$5^1/_2$ to 6	5.4
Real GDP	2 to $3^1/_2$	$2^1/_4$ to $2^3/_4$	2.0
previous estimate	$2^1/_2$ to 4	3 to $3^1/_4$	2.8
CPI	3 to $3^1/_2$	3 to $3^1/_4$	3.3
previous estimate	$2^1/_2$ to 3	$2^1/_2$ to $2^3/_4$	2.6
	Average level, Q4, percent		
Unemployment rate	$6^1/_2$ to 7	$6^3/_4$	6.9
previous estimate	$6^1/_2$ to 7	$6^3/_4$ to 7	7.0

ECONOMIC PROJECTIONS FOR 1994

	FOMC Range	FOMC Central Tendency	Staff
	Percent change, Q4 to Q4		
Nominal GDP	$4^1/_2$ to $6^3/_4$	5 to $6^1/_2$	5.0
Real GDP	2 to $3^1/_4$	$2^1/_2$ to $3^1/_4$	2.6
CPI	2 to $4^1/_4$	3 to $3^1/_2$	3.1
	Average level, Q4, percent		
Unemployment rate	$6^1/_4$ to 7	$6^1/_2$ to $6^3/_4$	6.8

NOTE: Central tendencies constructed by dropping top and bottom three from distribution, and rounding to nearest quarter percent.

July 7, 1993

Long-run Ranges
Donald L. Kohn

As background for consideration of the semi-annual report to Congress, the bluebook on page 8 shows simulation results for three longer-term strategies for monetary policy. The point here is not to home in on specific estimates for particular outcomes in specific years, but rather to illustrate, very broadly, the possible paths the economy and prices could trace out over the medium term in response to alternative emphases in the implementation of monetary policy. The three strategies include a baseline case--strategy one--that extends the greenbook forecast and gives weight to reducing both unemployment and inflation over coming years. Under strategy two, the FOMC is assumed to place somewhat greater emphasis on achieving price stability--being willing to give up some progress in reducing unemployment for a time. Strategy three shows results for policy that tilts toward reducing unemployment more rapidly, risking no further progress or even some retrogression on the inflation front. The different strategies cannot be matched up neatly with alternative annual ranges for money growth, but the results illustrate underlying economic relationships the FOMC may want to have mind as it thinks about its medium-term approach to policy and how that approach is best described to the public.

The results associated with different strategies are greatly influenced by the starting point, and one important aspect of the economy at present is its relative proximity to reasonable approximations of both full employment and price stability. Consequently, according to the model, moderate changes in the funds rate one way or the other can get you to the vicinity of one or the other goal over the next few years, and the middle course of the baseline case is able to achieve only modest reductions in inflation and unemployment simultaneously. The consequences of the starting point show up most clearly in the easier strategy. A one percentage point reduction in the funds rate may need to begin being reversed fairly quickly to limit overheating, even with the moderately restrictive underlying thrust to fiscal policy assumed under all the strategies.

Even in the baseline case, short-term rates have to rise before the end of next year, reflecting the underlying assumption that short-term real rates are now at unsustainably low levels. However, that rise, which continues through 1998, is not reflected in real long-term rates. Long-term rates are seen as still at fairly high levels, given the assumed fiscal policy. A prolonged rise in real short-term rates without a sympathetic response in real long-term rates would be unusual--but so too would be the extended period of fiscal restraint used in the simulations.

As the economy moves up, inflation gains come a little harder than they did in 1991 and 1992. The simulations incorporate a fairly standard sacrifice ratio to calibrate medium-term inflation/output trade offs, but it is higher than that experienced when unemployment was both high and rising. As a consequence, even with no allowance for the effects of possible taxes or added regulation on costs and prices, significant gains on price stability under the tighter alternative require delaying appreciable reductions in the unemployment rate until late in the simulation period.

Reflecting both a damped sensitivity of M2 to short-term market rates and lags in the effect of changes in interest rates on output, the M2 paths under the three policy scenarios are very little different in the first few years. In addition, overall demand for M2 assets is assumed to remain quite damped for a time, and the forces holding back M2 growth to be abating slowly.

This analysis is reflected in our projections for growth in money and credit in 1993 and 1994, which are shown in the table on page 11 of the bluebook. We expect continued sizable increases in the velocities of M2 and M3, even with the relatively small movements in interest rates underlying the Greenbook forecast. The reasons for this are familiar: Demands for bank credit are expected to be subdued as long-term securities markets remain attractive alternatives for borrowers seeking to strengthen balance sheets; although banks seem to be becoming more willing lenders, the changes are incremental, their securities portfolios are swollen, and we do not expect them to bid aggressively for funds; finally, with the yield curve remaining fairly steep for some time and mutual fund sales spreading to more depository offices, shifts from M2 balances should continue--in effect financing business and household balance sheet strengthening.

We do anticipate that these forces will ebb gradually. Financial conditions for borrowers and lenders are improving, reducing the impetus to balance sheet restructuring; the yield curve, while steep, is flattening a little in the forecast horizon; and over time asset portfolios of money holders will become adjusted to the yield curve and easier access to mutual funds.

Putting all this together, along with some adjustments for special factors, we project M2 growth of one percent this year and 2 percent in 1994 to accompany Greenbook GDP projections. M3 is seen as unchanged this year and increasing only one percent next year. The projections for 1993 are a little below those given in February, despite the fact that both aggregates are about where they were expected to be at that time. Some of this downward revision reflects the slower growth of nominal GDP now projected by the staff for the year. Another portion of the revision owes to the anticipated depressing effect of some special factors, including a lower level of mortgage prepayments by the end of the year. The debt of nonfinancial sectors is projected to increase 5 percent in both years, in line with the growth in nominal GDP and a little below the February projection; within the debt total, a tapering off of Federal debt growth offsets some pickup in private borrowing.

There are risks on both sides of these forecasts. As noted, we do have some moderation in the forces pushing up velocities. Shifts of M2 demand relative to the old standard models diminish, though they are still occurring. Partly as a consequence, the rate of velocity increase slows slightly in 1993 relative to 1992 and moderates further in 1994 for both M2 and M3. On the other hand, we do not have them abating as rapidly as they seemed to be in the second quarter. We have discounted the sudden pick up in bank credit and money growth as being partly attributable to special factors, as well as to the noise inherent in any economic series.

You might want to adjust our projections to the appreciably stronger nominal GDP you are projecting relative to the staff. We wouldn't expect GDP along your steeper path to have much effect on money growth this year--perhaps a quarter point on M2. But, with your GDP and assuming the staff interest rates for next year, we would add maybe 3/4 of a percentage point or even more to our projection of M2 growth, with some smaller spillover into M3 and an equal or larger increment to debt growth to finance the additional spending.

Thus, even with your GDP, we believe the odds on hitting the current money ranges in 1993 are fairly small, and we would have debt growth in the lower portion of its current range. Retaining the current money ranges for this year thus would seem to require either sizable easing in reserve conditions fairly soon, or a declaration that we didn't intend to hit the money ranges absent unexpected developments in velocity. An appreciable weakening in the upward trend in velocity would indeed be a surprise, given the persistence and strength of forces that seem to be damping M2 demand. In fact, judgmental velocity predictions have not been that far off over the past year or so, though a one percentage point miss would not be large even by these standards.

Reducing the ranges would seem to give a more accurate picture of the growth in money likely to be associated with the economic outcomes expected by the Committee. Persistently falling below the ranges may erode public confidence in the Fed's ability to project economic and financial variables and can have costs in the political arena as well, though, to be sure, reducing the ranges has also drawn flak. Consequently, on page 14 we presented two lower sets of ranges as alternatives to the existing ranges for 1993. Deep reductions, as in alternative III, come closest to centering the ranges around likely money and credit growth. This alternative allows for even slower growth in money in the second half of the year than the first, and so might be especially desirable if the Committee wanted to stress its determination to contain any emerging inflation pressures. But the

Committee may not want to signal that it would possibly accept financial conditions consistent with the low ends of the Alternative III ranges, which include no M2 growth and a decline in M3. One percent M2 growth and a small drop in M3 in the first half of 1993 have been associated with downward revisions in the Committee's expectations for nominal GDP this year. The Committee may view the lower nominal GDP now predicted as acceptable and even desirable in the context of concerns about price pressures. But at the same time you might want to be on record as being ready to resist any significant further weakening tendencies. Alternative II, by retaining the one percent lower limit to the M2 range and zero for the bottom of the M2 range would seem to send that signal more clearly.

For 1994, the staff has proposed the same three alternatives. As noted, FOMC nominal GDP might be associated with M2 growth of 2-3/4 percent or so. Thus, assuming this nominal GDP was considered a desirable outcome, and that it could be attained with about the staff interest rate outlook, the 2 percent lower end of the alternative I range for M2 looks tenable, though a bit on the high side. The M2 consistent with your forecast would be about centered on a 1 to 5 percent range, as in alternative II. And M3 likely would be in the lower half of the alternative II range, but not at the lower end. Lower ranges in both years might provide a counterweight in terms of public perception to the lack of a downward tilt in the Committee's inflation forecast. Especially if the ranges for 1993 were reduced, adopting higher ranges for 1994 would seem to conflict with the Committee's anti-inflation message. Adopting even lower ranges, as in alternative III, for 1994, however might be seen as underscoring that message. An M2 range of 0 to 4 percent for 1994, as an alternative

III, would be better centered on the staff forecast, as would the ranges for M3 and debt. If that forecast were considered a desirable outcome, this alternative could be attractive. Depending on how it was explained, it could emphasize the magnitude of velocity shifts and the FOMC's desire to re-establish a downward trend to inflation.

Reducing the ranges a full percentage point, as under alternative II, or by even more, as in alternative III, either this year or next, would diverge from the Committee's long time policy of small gradual reductions in the ranges to emphasize progress toward price stability. It may be that, given velocity shifts and complex money-interest rate relationships, the ranges can no longer be adjusted in small, incremental, and reasonably predictable steps to implement or communicate this long-run objective.

July 7, 1993

Short-run policy
Donald L. Kohn

As many of you remarked yesterday, there are no easy answers for monetary policy when faced with a more adverse near-term price/output trade off. With both staff and FOMC revising their forecasts in the direction of more inflation and less growth, it is clear that some shock is thought to have occurred, and to be of more than transient duration. It seems to me that one factor keying your reaction to this development ought to be your judgment as to whether the adverse inflation news results from one-time price level increases or are a part of a more persistent process in which given levels of slack in the economy are now associated with less downward pressure in inflation rates. I have nothing new to add to Mike's presentation in this regard. Presumably the former would require less of a policy response than the latter, especially if your goal was reducing inflation rather than holding a predetermined price level. Still, the dichotomy is not stark, since price level changes--actual or expected--can feed through to inflation expectations and hence to more persistent inflation, though in the absence of fundamental changes in underlying relationships those expectations should eventually fade.

At your last meeting, your concerns apparently were about the possibility of more persistent higher inflation, perhaps operating through expectations. With incoming data presumably alleviating some of the most intense concerns about a near-term ratcheting up of inflation and inflation expectations, the question facing the Committee at this meeting would seem to center more around the symmetry or asymmetry of the directive, rather than immediate policy action. In one sense, of course, this decision may prove to have mainly symbolic import, since tightening--or easing--could be undertaken from either directive, and since an asymmetry does not necessarily imply a policy move. But, the directive, even if not public, could color the tone of the upcoming report and testimony. And, on a more substantive note, it does indicate the kind of response the Committee contemplates to incoming data.

Retention of an asymmetrical directive toward tightening suggests some predilection to react reasonably promptly to adverse price news, with less weight on real-side information, perhaps unless such information indicated an appreciably weaker trajectory for the economy than anticipated. Such a predilection might arise from the view that short-term rates were now at levels likely ultimately to promote higher inflation, that in current circumstances the next policy action probably needed to be toward the tightening side, and further that the System was in danger of "falling behind the curve" in this regard. Evidence in the data that inflation was in fact ticking up would tend to confirm these concerns. Such an uptick, if it persisted, might be considered a threat to the long-run sustainability of the economic expansion.

In terms of the "optics" of asymmetry, retaining such a directive suggests a consistency in outlook and purpose over time, given only one month's better price data since the last meeting and mixed information on the real side. Viewed against the Committee's own projections of little progress in reducing inflation, such a tilt might be seen as a bit of a counterweight in terms of credibility and price stability--at least the Committee had given notice that it would not tolerate persisting higher inflation. And, relative to the real side of the economy, a tilt would seem more comfortable with the Committee's projections of somewhat stronger growth over the next six quarters than with the staff forecast.

A symmetrical directive would not rule out the possibility or even the likelihood that the next move would be to raise rates, but it would suggest that such an increase was not anticipated in the immediate future. A shift in the tilt of the directive after only one meeting would be unusual, but not unprecedented. It would seem to connote that the information received since the last meeting had quieted inflation concerns, so that a prompt response to an outsized increase in a price index was not as important. Such information might be seen as having included, in addition to the price data themselves, data suggesting softer aggregate demand and better prospects for fiscal restraint. These indicators might be read as pointing to fundamentals in terms of resource utilization that were inconsistent with rising price pressures over time. In these circumstances, higher inflation and inflation expectations could be seen as less likely to persist. While some commodity prices have risen, the downward movement of bond yields, and perhaps the simultaneous upward movement of the dollar, do not indicate increases in longer-term inflation concerns.

Finally, Mr. Chairman, as I pointed out in the discussion of long-term ranges, the staff has discounted to an extent the recent strength in money and credit. We see fairly subdued money growth going forward--on the order of 1 percent M2 and 1/4 percent M3 growth over the next three months--as consistent with greenbook GDP under the flat interest rate assumptions of alternative B. As a consequence we have suggested that the last sentence in the directive refer to Committee expectations of modest money growth over the third quarter.