APPENDIX

Notes for FOMC Meeting

June 30, 1992

William J. McDonough

There was no intervention in the foreign exchange markets by the Foreign Exchange desk on behalf of either the Federal Reserve or the Treasury since the Committee's last meeting.

The dollar has declined steadily because of four major factors:

1) Interest rate differentials
2) Apparent G-7 official preference for a stronger yen
3) Questions about the strength of the U.S. economic recovery, and
4) Overseas reaction to the presidential campaign.

Using one-month Euro-deposit yields as the standard of comparison, there is now a positive spread of 594 basis points in favor of holding German marks and 88 basis points for holders of Japanese yen, as compared with dollars. Obviously, the interest rate differential story is much more dramatic in the case of the DM, but I believe that the differential with the yen is also important. These differentials not only encourage investors to prefer foreign currency holdings, but make it very expensive for FX market participants to hold long dollar positions, especially against the DM and other European currencies. Furthermore, German officials have been quite vocal in stating that they are not likely to reduce interest rates during 1992, whereas the market suspects a further easing by the Federal Reserve. This seems to be particularly the case in Europe, and we believe is the most important force behind the strength of the DM against the dollar in recent days.

Therefore, on top of large interest rate differentials already existing, there is at least the possibility of further widening.

Wide interest rate differentials can be overlooked by the market if there is a general anticipation of strengthening of the currency with lower interest rates. But this is not the case for the dollar. There are very few dollar bulls out there, but rather a growing bearish conviction, based at least in part on the statements from officials in the United States, Europe and especially Japan that a stronger yen is the goal of G-7 policy. The Bank of Japan has not been leaving the strengthening of the yen to market forces, but has been intervening quite heavily, especially in the form of pushing the dollar down when market forces, even briefly, push it up. Then the BOJ continues to intervene at increasingly lower levels of the dollar to push it down even further. This is an unusually agressive method of intervention.

The upcoming G-7 summit presents an opportunity for a decision in favor of multilateral official action to support what has been until now unilateral Japanese action to bring about a stronger yen and a weaker dollar. The market anticipates such a decision.

Regarding the economic recovery, the view that FX market participants seem to hold appears to be very close to that of the Federal Reserve staff, but part of the bullish tone of the dollar earlier this year came from a view that the recovery would be stronger. This self-induced disappointment and the reality of quite a lot of uncertainty in U.S. equity markets combine to stifle capital flows into the U.S.

Lastly, and most difficult to either evaluate or measure, but I believe necessary to mention, is widely-shared confusion overseas regarding the presidential campaign. The common starting point for foreigners is that President Bush is very popular outside this country, so people abroad can't figure out why the public opinion polls are so negative. They don't know Governor Clinton well. All they seem to hear about is Mr. Ross Perot, about whom by and large they have no opinion at all. Perot's candidacy scares foreigners not necessarily because of the man, but because it creates uncertainty about the political direction, if not stability, of the country that they have looked to for political leadership and guidance for over half a century. People in this country may think that our leadership position has evaporated; people abroad know that there is no substitute.

This political uncertainty on top of the three economic weights on the dollar I have discussed gives the dollar a very heavy feel. We are back at the levels of early January, but with a very big difference. At that time, the mood was shifting from neutral to positive. Now it is negative, with a definite trend to get more negative. Then the market thought that any official intervention would be to strengthen the dollar; now it anticipates official action to weaken it. Technically, that is the kind of market in which the dollar could take off if there should be an upside surprise such as very bullish economic news or what would be viewed as positive political developments. On the other side, any push downward either from market forces or from official action could have a substantial weakening effect on the dollar exchange rate.

At the last meeting, I reported on the large long dollar speculative position held by the Central Bank of Malaysia. The Bank Negara has become somewhat more circumspect and, we believe, has reduced its position at least somewhat at a good-sized loss and with an even bigger loss in whatever part of the position may remain. There is a new head of the banking department who visited me in New York and we had a rather polite, but direct, conversation on their activity. Probably inspired mainly by the loss they were experiencing, he seemed very aware of both the dangers and questionable appropriateness of what they had been doing and we may see less of Bank Negara at least for a while. In fact, market reports suggest that Negara has become less active than usual in recent weeks.

You have all been reading about the effect of the negative Danish vote on the Maastrict agreement, so I will not elaborate on it, except to note that it has had strong effects on the European currencies. The DM has strengthened as it once again looks like the safest haven and the exchange risk in the high interest rate currencies has once again become manifest. Senior Bundesbank officials have been highly direct in talking up the strength of the mark within the European currency system. Important losers have been Italy and the United Kingdom. There is growing suspicion about Spain. Italy, with a huge fiscal deficit and a new government with a very small Parliamentary majority, now sees the lira outside the ERM limits in the forward markets, where the rates indicate a fall devaluation. If a lira devaluation is required, there is a question on whether sterling can stay within the wide band, although the British authorities will try to keep it there. European central bankers think that they can hold the present rate structure together, but there are clear signs of strain.

At the last meeting, I discussed with the Committee the request from the Bundesbank that we engage in another off-market sale of DM10 billion from the reserves of the U.S. monetary authorities. Because of pre-summit and other time pressures, Treasury has not yet given us their view on the transaction or on the ongoing sale of interest from our foreign currency holdings. I will inform the Committee when we receive Treasury's reply.

Notes for Joan E. Lovett
FOMC Meeting
6/30 - 7/1/92

The Desk sought to hold reserve conditions unchanged throughout the period since the May 19th meeting, consistent with Federal funds continuing to trade around 3 3/4 percent. The borrowing allowance was raised by $125 million to $225 million to keep pace with springtime increases in the seasonal component.

A seasonal buildup in reserve needs was the prominent feature of Desk operations during the period. Much of the need was met with two outright purchases in the market, one for $3.2 billion of bills and the other for $3.5 billion of coupon issues. Another $1.4 billion of securities was purchased directly from foreign accounts, bringing the total addition to the portfolio to $8.1 billion. Small redemptions of maturing agency issues kept the net increase in the portfolio a hair below $8 billion so that the additional leeway requested at the last meeting was not used. Nonetheless, it was useful to have for the flexibility it provided in doing the second market operation and in case estimated reserve needs had been slightly higher.

The balance of reserve needs was met with temporary injections--either System or customer-related RPs. These were generally timed to match trading conditions in the funds market. Banks continued to appear anxious to avoid a buildup of excess reserves, and large banks really seemed more comfortable holding reserve deficiencies until late in the maintenance periods. We took account of this preference in shaping reserve operations. Indeed, a small amount of reserves was drained on one occasion when money market ease developed even though reserves were below path.

Following the experience with taxes in April, we made arrangements with the Treasury for a higher target Fed balance following major tax dates. These arrangements were put into effect with the June corporate tax date and will be used going forward as well. The higher balance is a temporary measure to help cope with the very variable flows into the Treasury's Fed account that accompany large tax dates. In any event, the balance ended up exceeding forecasts considerably but should be returning to normal this week.

On average, Federal funds were close to the expected 3 3/4 percent area, coming in at 3.76 percent for the full period through yesterday. Today's quarter-end is eliciting very muted rate pressure with early trading at 3 3/4 and 3 7/8 percent.

Market yields on Treasury issues backed up in the days following the May meeting, first on the absence of an expected easing move and then on news reports that a symmetric directive had been adopted at the meeting. The removal of a policy-tilt toward ease--for the first time since last summer--caused some choppy trading as participants worked to sort out the implications for the future. Subsequent reports on the economy were uneven, however, and money supply data were mostly weak. These reports served to revive expectations that a further easing step was possible, though comments by an array of Fed officials suggested that such a move was not imminent.

In the bill area, rates ended the period pretty much unchanged on a net basis. Sporadic anticipation of "flight-to-quality" demand followed bouts of weakness on global equity markets but had little lasting impact. The Treasury raised only a small amount of net new cash here as regular bill supplies were offset by maturing cash management bills. In yesterday's regular 3- and 6-month bill auction, average issuing rates of 3.59 and 3.66 percent, respectively, compare with rates of 3.61 and 3.71 percent just before the last meeting.

Yields on short- and intermediate-term Treasury coupon issues declined a net 15 to 35 basis points while long-term rates were essentially unchanged. The Treasury raised $21 1/2 billion of new cash through 2- and 5-year note sales during the period. Demand for these maturities was pretty robust and this was the area where the rate declines were most pronounced. Declines in long-term yields were limited by underlying concerns about future inflation prospects amid continuing budget woes and political uncertainty.

As to the current state of market thinking, until very recently most participants felt that the Committee's preference was to keep policy unchanged, and that it probably would be able to do so. Over the last week or so, though, a case for another

25 basis-point ease in the funds rate has been building in the market. Weak spots in economic data, should they continue, are seen as making an unchanged policy stance harder to defend at a time when persistent weakness in money growth also has to be explained. In light of recent calls for lower rates by the Administration, many market participants think the Fed may feel constrained not to ease unless the case for such action in the economic and monetary data is very clear. In this regard, the employment report for June due later this week is considered a critical indicator by the market and one that will weigh on the Fed's thinking. A weak report is widely seen as a spur to ease. The long end of the market probably would not back up if an easing were seen to be justified by the data, but chances for significant yield declines are seen to be limited.

Two brief comments about our primary dealer arrangements are in order. Following the last meeting, on May 20, a civil settlement between the Government and Salomon Brothers was announced arising from the firm's Treasury auction irregularities. The $290 million settlement agreement covers government fines and private damage claims and settles the case against the firm without criminal charges. As part of the Salomon resolution, the Federal Reserve Bank of New York announced that it was temporarily suspending its trading relationship with the firm, while retaining the designation as a primary dealer. The two-month trading suspension will end on

August 3, 1992. At that time, the Treasury will reinstate the firm's ability to bid in auctions on behalf of customers, a prerogative suspended at the time of the revelations last August.

On another front, the Bank added Eastbridge Capital Inc. to the list of primary dealers on June 18th. Eastbridge is a subsidiary of Nippon Credit Bank. The addition brings the number of primary dealers to 39 and the number of Japanese-owned firms to 9.

Michael J. Prell
June 30, 1992

FOMC CHART SHOW PRESENTATION -- INTRODUCTION

It has been my habit to conclude chartshow presentations by unveiling the summary of the forecasts you've submitted. This time, I'm going to eliminate any suspense and start with that summary, which appears in chart 1, along with the corresponding staff projections. There would appear to be broad agreement that the most likely outcome is sustained expansion at a pace sufficient to produce a gradual decline in unemployment, with inflation running in the neighborhood of 3 percent next year.

I'm sure we'd all agree, though, that the fairly tight bunching of the forecasts does not signal the absence of uncertainty. Nor does it likely mean that we've all started from the same assumptions or traveled the same analytical road in getting to this common destination.

The next chart lists the assumptions that have shaped the staff projection.

For monetary policy, we've assumed that the federal funds rate remains close to the current 3-3/4 percent. Our analysis of prospective credit supply and demand conditions in turn leads us to expect that such a funds rate would be consistent with some decline in long-term rates: we're thinking in terms of a 30-year Treasury yield in the vicinity of 7-1/4 percent by early next year.

A still larger decline in bond yields certainly would seem possible--indeed, an econometric model that says long rates follow short-term rates with a lag has proven remarkably reliable in the past. With a flat funds rate, that model would point to a much larger bond rate decline over the coming year or so. In contrast, however, the markets and private economists appear to be anticipating that the current wide spread between long and short rates will be narrowed by a substantial increase in short rates.

By implication, the markets are saying that the stable funds rate assumed in the staff forecast is potentially quite inflationary. Our long rate forecast in essence says that the bond market is overestimating the underlying strength of aggregate demand, and that it will rally somewhat as it discovers that the Fed does not have to tighten soon in order to keep aggregate demand under control. That said, I would reiterate a point made in the Bluebook, namely that the funds rate currently is lower in real terms than one would expect to prevail over the longer run, so that some firming of short rates could be necessary by 1994 to hold the ensuing expansion to disinflationary proportions.

Another factor conditioning our projections is our anticipation that the unusual credit supply constraints that have been afflicting the economy will diminish, but only gradually. If anything, we've become a little less sanguine in this regard, as we have become more conscious of the impediments FDICIA may place in the path of a revival of more normal depository lending.

On the fiscal front, the presidential and congressional elections introduce some additional uncertainties; as you know, we've assumed no significant changes in budget policy, partly on the thought that--if there are any major shifts--they are likely to affect mainly developments very late in, or beyond, the projection horizon. (This, of course, overlooks possible anticipatory effects in financial markets.)

With regard to two occasionally troublesome exogenous forces, we assume that there will be no significant supply shocks from the agricultural or petroleum sectors.

And finally, we anticipate that the dollar's exchange value against other G-10 currencies will not change materially over the projection period.

On that point, I'd like to turn the floor over to Ted, to develop more fully our view of the external sector.

E.M. Truman
June 30, 1992

Chart Show Presentation -- International Developments

Starting with the foreign exchange value of the dollar, Chart 3 illustrates that on a price-adjusted basis (the red line in the top panel) the dollar has returned toward the low end of the broad range that has prevailed for the past five years. So far this year, the dollar's value is essentially unchanged on balance. However, as shown in both the top panel for the G-10 average and in the middle-left panel in terms of the mark and the yen, the dollar has traversed about a 10 percent range since last December. These movements have been loosely related to fluctuations in long-term interest rate differentials -- the black line in the top panel and the lower-right panel. On balance, as can be seen in the middle-right panel, the net movement in the major long-term interest rates since December has been modest.

The Committee has already heard from Bill McDonough most of the reasons for the dollar's recent weakness, and I do not have much to add. Suffice it to say that for the forecast we are projecting that the dollar will be essentially unchanged from its recent, relatively low level. This forecast we believe is a reasonable midpoint in a wide band of uncertainty and ignorance, say, plus or minus 15 percent for the next 12 months. The low end of such a range would bring the dollar into new terrain, possibly involving additional financial risks.

We do not anticipate that movements in interest rates will be a major factor influencing the dollar over the forecast period. Although we have built into our forecast a downward adjustment in Japanese rates relatively soon and one in German and associated European rates over a somewhat longer time horizon, the adjustments in short rates are expected to be small, on the order of 50 basis points, and those in long rates even smaller.

While the dollar is always a wild card in the outlook, we usually have more confidence in our forecasts of economic activity abroad and their implications for U.S. exports. Unfortunately, over the past year or so, trends in foreign growth have been more difficult than normal to discern. Consequently, my next two charts consider in more than the usual detail what now appears to be a mixed foreign outlook.

Chart 4 provides information on trends in industrial production and consumer price inflation for each of the major foreign industrial countries.

In Japan, upper left, industrial production has declined, overall economic activity has been only a little better than stagnant, and imbalances remain in the real and financial sectors. Although overall employment generally has been well maintained, and labor force participation continues to increase, both helping to support consumption, the only really positive indicator has been housing starts, which seem to be responding to the substantial decline in long and short interest rates in Japan over the past 12 months. Meanwhile, consumer price inflation has been relatively calm. As you are aware, stimulative fiscal action is under active discussion in Japan; we have built into our forecast a supplemental budget on the order of yen 5 trillion, as well as an easing in short-term interest rates.

While the expansion of the West German economy -- top right panel -- appears to be slowing, consumer price inflation remains a major concern because the economy continues to operate near its potential. Activity in the first quarter was positively affected, in fact as well as in the statistics, by special factors that have been reversed in the second quarter. In general, indicators of economic activity do not suggest much near-term strength, but they do not suggest weakness either. Year-over-year inflation rates will decline after mid-year when special tax effects wash out; the issue is by how much.

In the rest of continental Europe, represented in the middle panel by France and Italy, a moderate acceleration of economic activity appears to be underway. France has been aided by its improving competitive position within Europe and the strength of demand from Germany. Italy as usual has its political and budgetary problems, but consumer confidence and auto sales have picked up in the second quarter.

The economies in the bottom panel have been in recession -- the United Kingdom -- or near recession -- Canada. In the United Kingdom, retail sales, manufacturing output, and construction orders point to an upturn in the second quarter with a further acceleration in economic activity a possibility in the second half of the year. In Canada, data on employment, orders and shipments suggest that an acceleration of activity may have occurred in the second quarter; however, the overall recovery is expected to be moderate at best.

The next chart summarizes our outlook for economic activity abroad. The march of the red bars in the top panel indicates our basic conviction that the pace of growth in the economies of our trading partners will continue on an upward trend over the next six quarters. From a low of 1-3/4 percent in 1991, the average growth rate in foreign countries is projected to move above 3-1/2 percent in 1993; this would be the highest rate since 1988.

As can be seen from the box at the right and in the black bars in the middle panel, much of the acceleration is expected to come from the G-6 major industrial countries. This acceleration is propelled by the easier stance of monetary policies in some countries, the Japanese fiscal stimulus, the waning of balance-sheet problems, and the passage of time.

Growth in the G-6 countries also helps to pull up the other industrial countries -- the red bars in the middle panel. We do not see much change in growth in the developing countries as a group -- the blue bars and the box at the right. Although we are projecting a small pickup in Mexican growth this year and next, it is significantly less than in our previous forecast. The Mexican authorities are determined to reach single-digit inflation rates and are also concerned about bottlenecks in their economy; as a consequence, monetary and fiscal policies have been tightened somewhat.

As is shown in the bottom panel, we expect consumer price inflation in the major foreign industrial countries to follow the same general contour as U.S. inflation and for a similar reason -- persistent slack in most of them. However, in contrast with our U.S. outlook, growth generally is projected to fall short of estimated growth in potential output, suggesting increasing downward pressures on prices and costs.

In thinking about the implications of the foreign outlook for U.S. nonagricultural exports, it is sometimes useful to consider the destination of our exports in terms of potential sources of demand. The top panel of Chart 6 presents some relevant information. As can be seen in the second column, on average in 1991, almost 65 percent of our nonagricultural exports went to the two groups of industrial countries, with 15 percent going to Latin America and most of the rest going to Asia, excluding Japan but including the Middle East. However, the last two columns show that the growth of our exports last year was skewed toward Latin America and Asia, which together accounted for more than 70 percent of the increase. This disproportionality is something that we believe will not be sustained because it rested, in part, on a surge in investment spending in Latin America and rebuilding activity after the Gulf War. Indeed, in the first quarter of 1992, our exports to developing countries edged off while those to industrial countries increased by enough to keep the total essentially unchanged from the fourth-quarter rate.

The bottom panel summarizes our outlook for real nonagricultural exports, excluding computers, (the red bars) along side our outlook for foreign growth (the black bars). We are projecting that foreign economic growth next year will be above that in the first half of 1990. However, we do not expect the growth of exports to recover commensurately because of the absence of the special factors, including gains in price competitiveness, that boosted exports in 1990 and 1991. The widening gap between the two sets of bars in 1993 does reflect, in part, the influence of the low average level for the dollar underlying this forecast.

We are projecting essentially no increase in agricultural exports over the next six quarters; we will do well to sustain the recent high level of exports that has been partly associated with increased grain shipments to Russia and the other republics of the former Soviet Union.

Turning to imports and Chart 7, we think the basic story is somewhat simpler. As can be seen in the top panel, after the gyrations introduced by the recession and swings in inventory behavior last year and the first part of this year, we are projecting that real non-oil imports, excluding computers, (the red bars) will expand at an annual rate of a bit more than six percent over the next three half years, even as U.S. real GDP (the black bars) accelerates slightly. In this case, the projected low level of the dollar is expected to contribute to narrowing the gap between the two bars.

Oil prices are an area of perennial uncertainty in our forecast. However, as Mike indicated, we are assuming that we will have no surprises on this front. As can be seen in the lower left, after the spurt in oil prices this spring and early summer, we are assuming that the average price of imported oil will drop back to $18 per barrel by early next year; the corresponding spot price of West Texas Intermediate will be about $20.50 per barrel. This modest easing in oil prices is largely predicated on an increase in Saudi production during the second half of this year -- why else would they be adding to their capacity -- and on the availability of supply from Iraq next year. Even with this moderate assumption about oil prices, the value of our oil imports is projected to increase -- the box at the right -- because rising demand and declining domestic production combine to boost the quantity of petroleum imports.

My last chart summarizes our outlook for the external sector. Although the message is rather neutral and dull, I hope I have not conveyed the impression that our forecast is risk free. As can been seen in the top panel and the bottom line of the table below, we are projecting for the second half of this year a small negative contribution to overall economic activity from real net exports of goods and services, followed by a tiny negative effect during 1993.

The underlying current account position -- line (1) in the table -- is estimated to have improved during the first half of this year, to deteriorate somewhat during the second half, and to return to about the 1991 level in 1993. Comparing the columns for 1991 and 1993, a considerable deterioration in the goods balance -- line (2) -- is essentially offset by an improvement in net services -- line (3) -- and investment income -- line (4).

Having convinced you that you have nothing to worry about from the rest of the world, I will now pass the oral baton back to Mike, who will set your mind at ease about the real side of the domestic economy.

Michael J. Prell
June 30, 1992

FOMC CHART SHOW PRESENTATION -- DOMESTIC EXPENDITURE FORECAST

Chart 9 is intended to bring you up to date on what some of the key indicators are telling us about the recent performance of the economy. In the upper left corner, you can see that industrial production turned up nicely after January, with the rebound in motor vehicle production being an important element--but not all--of the story. However, while manufacturing surveys--such as the Chicago purchasing managers' report released this morning--still are moderately upbeat, the available evidence suggests some hesitation in output since May, owing in part to an edging off in vehicle assemblies.

The right-hand panel shows initial claims for unemployment insurance. On this four-week moving average basis, the jump reported last Thursday is just barely perceptible--and, until we have more evidence, it seems reasonable to interpret it as another observation falling within the range that has prevailed since April. Recent experience suggests that claims in this range are consistent with only sluggish growth in payrolls, which is what we've anticipated in our forecast.

Last Friday we received the May figure on real consumer spending plotted in the middle left panel. Given the increase that month, another moderate increase in June will yield a second-quarter gain close to the 1 percent (annual rate) we projected in the Greenbook. In that regard, the stronger sales of light vehicles in the first 20 days of June are a promising sign, though we don't know the consumer-business split.

The housing market has followed the same pattern as consumer spending this year, with a big surge early on and a drop-back thereafter. Given the usual lags, the starts figures through May (the black line) provide a pretty solid basis for our projection that single-family building activity will be up for the current quarter. However, yesterday's very weak new home sales number for May raises some questions about the underlying strength of housing demand that I'll return to shortly.

In the business sector, equipment demand appears to be trending upward. But, as the orders and shipments at the lower left show, the pickup is far from spectacular. Moreover, it is highly concentrated in the computer category, where firms are taking advantage of rapidly falling prices to acquire the powerful new technology that is available. Demand for basic industrial equipment has been only so-so thus far.

On the structures side of business investment, contracts have continued to fluctuate violently from month to month, but--as may be seen at the right--the moving average we use to filter out the noise has been moving sideways. Although the revised GDP data show a small increase in real nonresidential construction in the first quarter, our assessment is that we are still edging toward a bottom right now--that in itself being a notable improvement compared to the previous plunge.

To sum up, we have a mixed picture that admits of a considerable range of plausible estimates of second-quarter GDP growth. Two percent still seems a reasonable round number, with the latest figures perhaps suggesting more downside than upside risk. But, perhaps more to the point is the observation that we made in the Greenbook that, while the recovery process appears still to be intact, the economy has yet to exhibit a broad dynamism that makes certain even the grudging acceleration of production and employment that we have forecast for the quarters ahead.

The next few charts provide a brief review of the sectoral highlights of the GDP forecast. The first covers household spending. Real consumption, the top panel, is expected to increase moderately through 1993, roughly in line with disposable income. Spending has been low for some time now for a variety of goods, and the backlog of deferred demand probably is growing. However, we've anticipated what is a mild pickup in big-ticket expenditures by past standards--partly because we think it will take a while longer for consumers to break out of their current mood of caution.

As you can see in the middle left panel, the Conference Board confidence index flattened out in June, and neither it nor the Michigan index is signaling anything like ebullience. Behind this continuing malaise undoubtedly is a concern about labor market conditions. In addition, though, there probably are many people who believe their jobs are secure, but who feel less well off because their expectations about real estate values have been seriously disappointed.

I'm inclined to think these factors are more important than debt burdens per se, but certainly there are signs that consumers are more reluctant than usual to borrow to make purchases. The good news on this score is that, through a combination of installment debt reduction and the effects of lower interest rates, the ratio of debt servicing obligations to income--shown at the right--has turned down, and it should drop considerably further over the coming year if things turn out anything like we are expecting.

Interest rates obviously are especially important for the housing market. The burst in activity earlier this year, visible in the bottom left panel, owed at least in part to the fact that 30-year mortgages were briefly available at fixed rates in the vicinity of 8-1/4 percent. Rates backed up all the way to 9 percent by March--and this may have been a significant element in the spring slackening in sales. Now rates are once again approaching the January lows, and we'll have to see whether this stirs potential homebuyers to action. As you can see at the right, given our interest rate forecast, our expectations of modest increases in nominal home prices, and our projection of moderate income growth, home affordability is going to continue improving in the coming quarters; consequently, while the incentive to invest in the largest possible house may no longer be there, it is our expectation that unit starts will be moving up toward the trend requirements of a growing population.

Chart 11 looks at business spending. We're forecasting a fairly steady 5 to 6 percent growth rate for real fixed investment over the next six quarters. Outlays for equipment--the black shading--are projected to pace the advance, but a bottoming out in nonresidential construction is expected, partly on the basis of the trend in contracts that I noted earlier.

The financial backdrop for business spending decisions has improved considerably over the past few quarters. As you can see in the middle left panel, the profits of nonfinancial corporations have turned upward smartly, with improved efficiency augmenting the effects of declining interest payments. Moreover, many firms have been able to exploit favorable market conditions to repair some of the balance sheet damage of the 1980s. As the righthand panel shows, we expect that debt growth will pick up to moderate proportions later this year and next, as a gap emerges between expenditures and internal funds; however, the projected level and composition of borrowing is such as to permit an extension of the recent favorable trends in corporate liquidity.

One element in the weakness of credit growth has been the tight rein businesses have kept on their inventories. The bottom left panel shows that businesses succeeded early this year in correcting the inventory imbalance that emerged in the latter half of 1991. Our forecast of inventory investment, tabulated at the right, points to a gradual movement toward a moderate rate of accumulation--but, as you can see by looking back to the left, such stock increases will be in the context of the ongoing efforts of firms to reduce their inventory-sales ratios.

That leaves the government sector, the subject of chart 12. At the federal level, the story remains one of contraction in real purchases, reflecting the cutback of defense spending. The middle panel shows that this decline will only help to flatten out the unified deficit as a percent of GDP over the coming year; the picture is a little more favorable for the national income accounts concept--the red line--because that strips out the adverse effect of RTC and other expenses related to deposit insurance. Anyway you slice it, though, the message is still that, while in terms of discretionary tax and spending actions fiscal policy remains mildly restrictive, the federal government will be issuing a lot of debt and absorbing a lot of saving.

In the state and local sector, real purchases posted a surprising 4 percent, annual rate, increase in the first quarter, on the strength of a surge in construction spending. Some analysts have suggested that this reflected an acceleration of activity because of favorable weather; there might be something to this, but in any event we doubt that the higher level can be sustained. We expect the first-quarter bulge in purchases to be largely offset over the remainder of the year before the progress toward more sustainable budget positions indicated at the right permits a modest upturn in spending next year.

To sum up the domestic demand picture briefly, we believe that a gradual acceleration in aggregate demand is likely. We thought that a year ago, too, so one might ask what has changed. Obviously, nominal interest rates are lower now, and we expect that bond and mortgage rates will ease further. Credit supply conditions probably were still tightening a year ago but now seem likely to ease a bit. Households and businesses have gone some way in strengthening their balance sheets, and both have been experiencing better income results of late. The drag from declining nonresidential construction appears to be diminishing, and states and localities as a group have made some progress toward correcting their budgetary imbalances. These factors obviously do not guarantee the greater vitality of the economic upturn, but they appear to us to tip the scales in that direction. At the same time, the danger of a run-away expansion seems rather remote right now, and thus the chances of achieving significant further progress toward price stability look good.

Dave Stockton will now conclude the presentation by discussing our inflation forecast.

David J. Stockton
June 30, 1992

FOMC CHART SHOW PRESENTATION -- INFLATION OUTLOOK

The upper panel of your next chart displays the staff projection of consumer price inflation. The overall CPI--the black line--is expected to pick up to a 3-1/2 percent pace this year, before dropping back to around a 3 percent rate in 1993. This pattern masks our view that core inflation is headed lower over the forecast period. The CPI excluding food and energy--the red line--is projected to move down from its current pace of a bit below 4 percent to about 3 percent by the end of 1993.

As we've noted, prices for energy and food are not major stories in our forecast. We expect retail energy prices--the middle left panel--to be boosted by the recent increase in world oil prices, after the steep declines of last year. This turnaround more than accounts for the projected pick-up in the total CPI this year. In 1993, we anticipate that these prices will rise at roughly the same rate as overall inflation. Consumer food prices--the middle right panel--slowed sharply last year from the pace of the preceding five years and are expected to run a bit below overall inflation throughout the projection period.

As has been the case for some time now, a key element in our inflation projection is a further easing of labor cost pressures--displayed in the lower left panel. Trend unit labor costs, which abstract from cyclical swings in productivity that experience suggests normally have only minor effects on price setting, are expected to slow steadily through next year.

As we have noted at previous meetings, the staff inflation projection lies near the lower end of the range of private forecasts, particularly for 1993. The Blue Chip survey--shown in the lower right panel--shows an upward tilt to inflation and by somewhat more than we can attribute to their lower expected unemployment rate. I will focus the remainder of my remarks on providing a more detailed explanation of our inflation projection and address some of the concerns that others have raised about the prospects for further disinflation.

Foremost, in our view, among the reasons to expect a further drop in inflation is the level of slack that is projected to prevail in the economy over the next year and a half. The upper panel of your next chart is a scatter plot relating the change in the inflation rate (the vertical axis) to an unemployment rate (the horizontal axis) that has been adjusted to hold constant over time the age-sex composition of the labor force. I have also plotted a simple regression line that relates these two variables.

To be sure, this plot is a gross simplification of a more fully articulated model of inflation, and it clearly admits of a rather wide range of possibilities at any given unemployment rate. Nevertheless, the regression suggests that, on average, adjusted unemployment rates exceeding 5-3/4 percent have been associated with declining inflation, and for every percentage point gap between the adjusted unemployment rate and 5-3/4 percent, inflation has slowed by a bit more than 1/2 percentage point per year. These results are roughly similar to those derived from our more elaborate models.

We expect the unemployment rate to decline gradually from its current level of 7-1/2 percent to around 6-3/4 percent by the end of 1993. In the past thirty years, inflation has never increased when the unemployment rate averaged in this range. Our projection, shown by the boxed red points, is in general accordance with this historical experience.

Questions have been raised about whether the unemployment rate is understating the actual amount of slack in the labor market. As you know, we were surprised by the sharp declines in labor force participation that occurred in 1990 and 1991. As one indication of this shortfall, weak conditions in labor markets led our models to forecast a small sag in labor force participation--the red dashed line in the lower left panel--but not the actual sharp decline that occurred through the end of last year. To the extent that these people were exiting the labor force because of perceptions of poor job opportunities, the unemployment rate may have understated the degree to which resources potentially were available to meet increased demand.

However, since last December, the labor force has expanded rapidly. Over that period, employment moved up and perceptions of job availability, as measured by the Conference Board survey, appear to have improved somewhat. Sorting out underlying trends from cyclical movements remains difficult at present, but with the participation rate back to levels broadly consistent with historical relationships, the odds have diminished that the unemployment rate is significantly understating slack. As you can see at the right, looking ahead, we are expecting only modest gains in both the labor force and employment.

It has sometimes been suggested that reductions of inflation are accomplished in recessions and that, once a recovery is under way with enough vigor to reduce the unemployment rate, disinflation will come to a halt. The upper panel of your next chart presents the facts concerning this point. It is true that the sharpest breaks in inflation generally have occurred in downturns. But as the shaded areas in the panel highlight, there have been numerous occasions when both the inflation rate slowed and the unemployment rate declined.

That said, there is evidence that the pace of the expansion, as well as the level of slack, influences inflation--sometimes referred to as a "speed effect." While one would hardly associate the word "speed" with the recovery that we are projecting, declining unemployment rates and rising capacity utilization do work against disinflation over the next year and a half, though, in our view, not by enough to stall the process. Speed effects tend to show through more clearly in price setting at the earlier stages of processing. In the middle left panel, I have plotted the change in the inflation rate for intermediate materials prices against the change, rather than the level, of manufacturing capacity utilization. The regression line indicates that increasing capacity utilization rates are typically associated with accelerating prices for intermediate materials. As shown in the right panel, with capacity utilization moving up in our projection, we are expecting some modest firming of intermediate materials prices.

The lower panel displays the markup of prices over actual unit labor costs. The pickup in the growth of aggregate demand and the corresponding tightening of resource utilization is one factor allowing firms to boost their markups over unit labor costs, which are held down by above-trend growth in productivity between now and the end of 1993. In our projection, the markup increases to a level above its historical average, allowing a pronounced improvement in profitability even in our projected environment of disinflation.

Beyond the concerns associated with an economic recovery, other reasons have been cited for expecting little or no further reduction in inflation. One often mentioned argument suggests that monetary policy has a weak or nonexistent effect on service prices. As seen in the upper panel of your next chart, this view has little empirical basis. To be sure, service prices tend to increase more than goods prices--on average, by two percentage points per year. However, service price inflation--the red line--exhibits much the same pattern as goods price inflation--the black line--rising and falling in response to the same general macroeconomic forces. As seen in the right panel, in the current episode, service prices slowed earlier and by a greater amount than commodities prices, mainly reflecting the deceleration of rents. By the end of 1993, we project that both commodities and service prices will have slowed substantially from their recent highs.

Questions also might be raised about our compensation projection. Is our forecast of 3-1/2 percent growth in 1993 in nominal compensation per hour--including fringe benefits--implausibly low, requiring a significant break from prevailing norms? The truth is we just don't know. But with unemployment remaining relatively high and prices decelerating, we expect compensation per hour to slow, much as it did in the mid 1980s under similar circumstances. However, because medical care benefits are likely to continue to rise rapidly, we are expecting less slowing in hourly compensation than in wages. I should also point out that we had an extended period in the early 1960s when rates of increase in compensation per hour were about as low as we are projecting to occur in 1993. The experience of that period offers little evidence of structural impediments to achieving or maintaining low rates of wage inflation.

A final, and perhaps more serious obstacle to reducing inflation is the adjustment of inflation expectations. One hears divergent views expressed about current and prospective inflation. According to the Michigan survey, plotted in the lower left panel, one-year ahead inflation expectations have averaged 3-3/4 percent over the past three months, marginally above our projection. Moreover, these households do not expect inflation to hold at its current pace; expectations for inflation 5 to 10 years out have been running in the 4-1/2 to 5-1/2 percent range.

In sharp contrast, many manufacturers report that there is no inflation in their industries and that they are not expecting much either. And, indeed, in many cases, they are backed up by the data. As seen in the lower right panel, prices for crude materials are no higher today than they were in early 1988, and prices of intermediate materials and manufactured goods have been virtually stable over the past three years. But even here, expectations may require some downward adjustment. Given the secular declines in the relative prices of materials, these prices may actually need to fall in an environment of significantly lower consumer price inflation.

As we noted in a special presentation to the FOMC a couple of years ago, the costs of disinflation, in terms of output loss, are closely related to the speed with which inflation expectations conform to the intentions of the policy makers. Given the current readings on inflation expectations, there are few indications that future disinflation will be less costly than we have experienced thus far.

With this in mind, some perspective on alternative inflation paths is offered in my final exhibit. I have used our quarterly econometric models to lay out three alternative scenarios as to how inflation and unemployment could evolve over the next five years. I have labeled the first simulation a disinflation scenario. In this case, the Committee is assumed to foster a recovery of sufficient

STRICTLY CONFIDENTIAL (FR) CLASS I-FOMC

Material for

Staff Presentation to the Federal Open Market Committee

June 30, 1992

Chart 1

ECONOMIC PROJECTIONS FOR 1992

	FOMC Range	FOMC Central Tendency	Staff
	Percent change, Q4 to Q4		
Nominal GDP	5 to $6^1/_4$	$5^1/_2$ to 6	5.3
previous estimate	4 to 6	$4^1/_2$ to $5^3/_4$	5.1
Real GDP	2 to $3^1/_4$	$2^1/_2$ to 3	2.5
previous estimate	$1^1/_2$ to $2^3/_4$	$1^3/_4$ to $2^1/_2$	2.1
CPI	3 to $3^1/_2$	3 to $3^1/_2$	3.5
previous estimate	$2^1/_2$ to $3^1/_2$	3 to $3^1/_2$	3.5
	Average level, Q4, percent		
Unemployment rate	$6^7/_8$ to $7^1/_2$	7 to $7^1/_4$	7.2
previous estimate	$6^3/_4$ to $7^1/_4$	$6^3/_4$ to 7	7.2

ECONOMIC PROJECTIONS FOR 1993

	FOMC Range	FOMC Central Tendency	Staff
	Percent change, Q4 to Q4		
Nominal GDP	$4^1/_2$ to 7	$5^1/_2$ to 6	5.8
Real GDP	$2^1/_2$ to $3^1/_2$	$2^3/_4$ to 3	3.0
CPI	$2^1/_2$ to 4	$2^3/_4$ to $3^1/_4$	3.1
	Average level, Q4, percent		
Unemployment rate	$6^1/_2$ to 7	$6^1/_2$ to 7	6.7

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

Chart 2

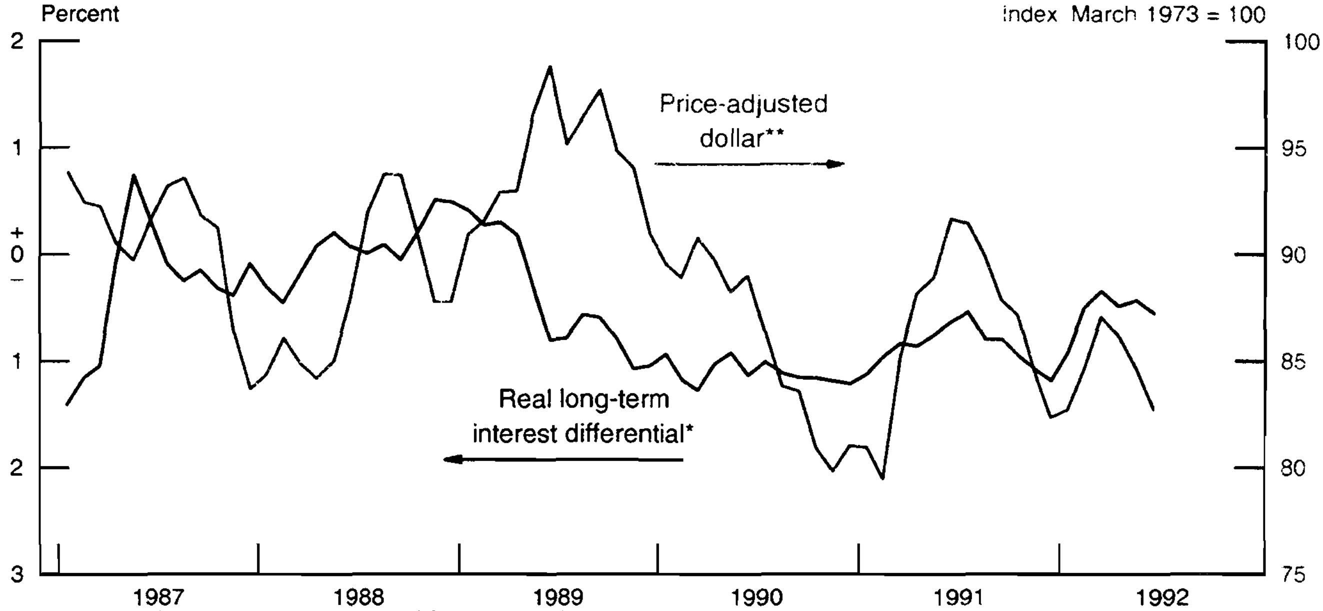
KEY FACTORS IN THE STAFF FORECAST

- Federal funds rate remains near $3^3/_4$ percent.
- Long–term rates decline some by early 1993.
- Credit supply constraints diminish—but only gradually.
- No major changes in fiscal policy.
- No supply shocks.
- Dollar remains near recent level.

Chart 3

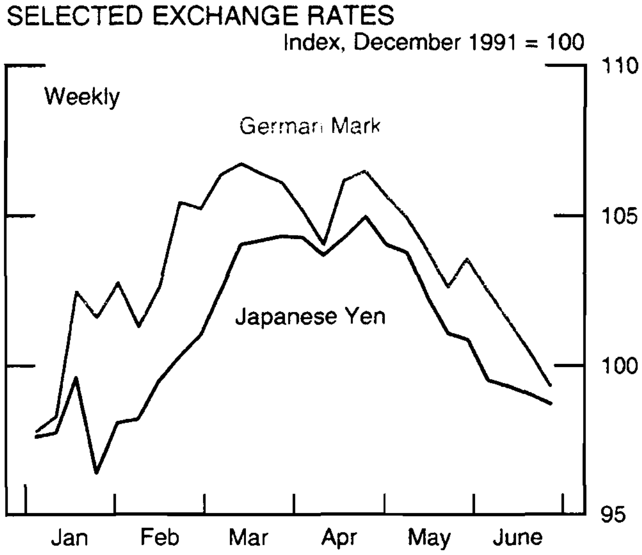
Exchange and Interest Rates

THE DOLLAR AND THE INTEREST DIFFERENTIAL



* Difference between rates on long-term U.S. government bonds and a weighted average foreign G-10 long-term government or public authority bond rates, adjusted for expected inflation.
** Weighted average against foreign-G10 countries, adjusted by relative prices

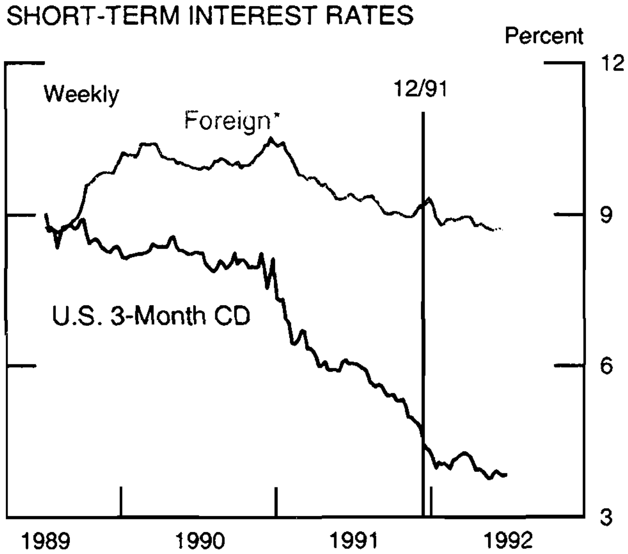
SELECTED EXCHANGE RATES



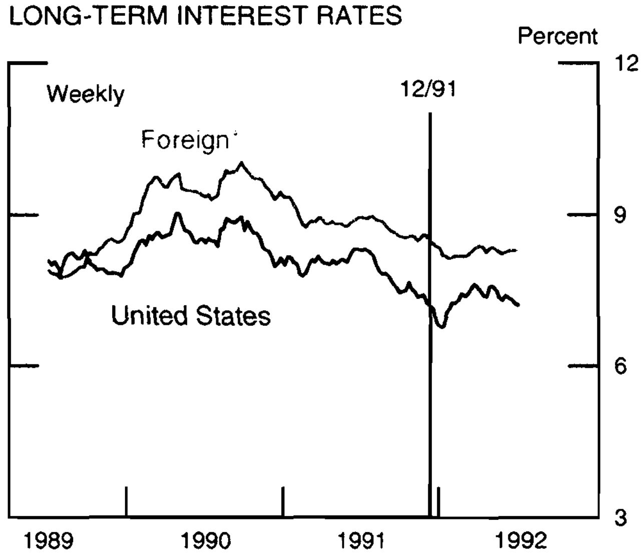
Nominal Interest Rates
Percent

	Level 6/29/92	Change 12/91 to 6/29/92
Three-month		
Germany	9.70	0.22
Japan	4.48	-1.54
United States	3.82	-0.65
Long-term		
Germany	8.05	-0.16
Japan	5.42	-0.30
United States	7.12	0.03

SHORT-TERM INTEREST RATES



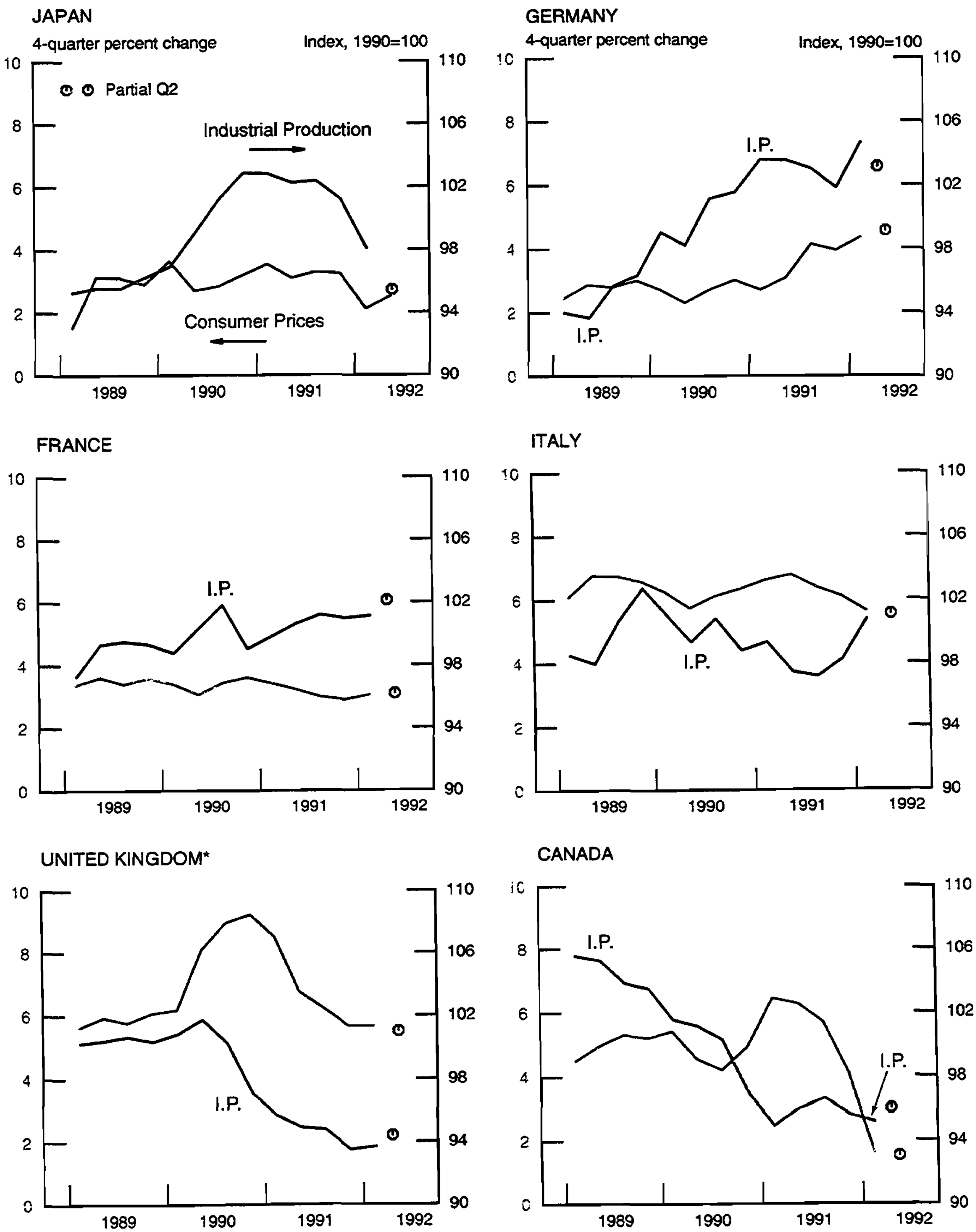
LONG-TERM INTEREST RATES



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

Chart 4

Industrial Production and Consumer Prices

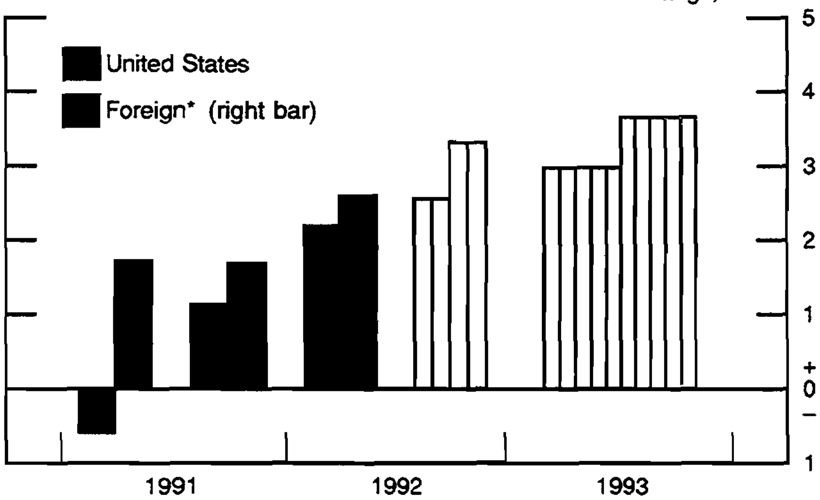


* CPI excluding mortgage interest payments.

Chart 5

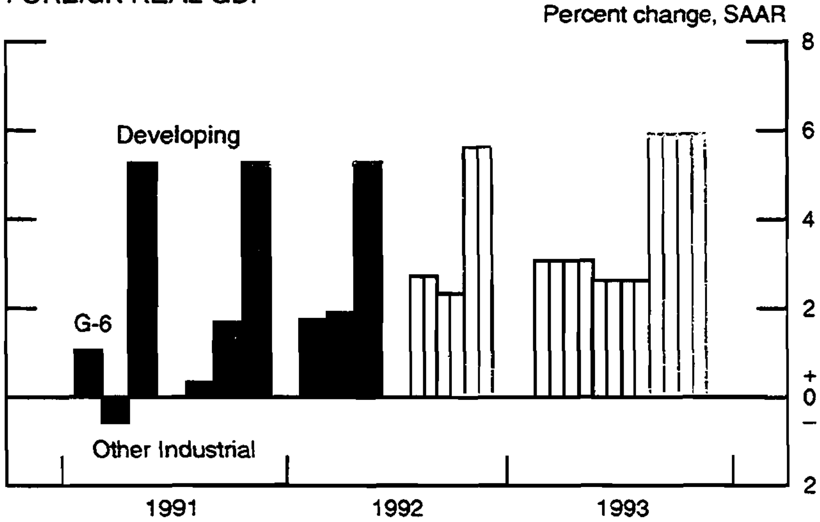
Foreign Outlook

REAL GDP: U.S. AND FOREIGN*



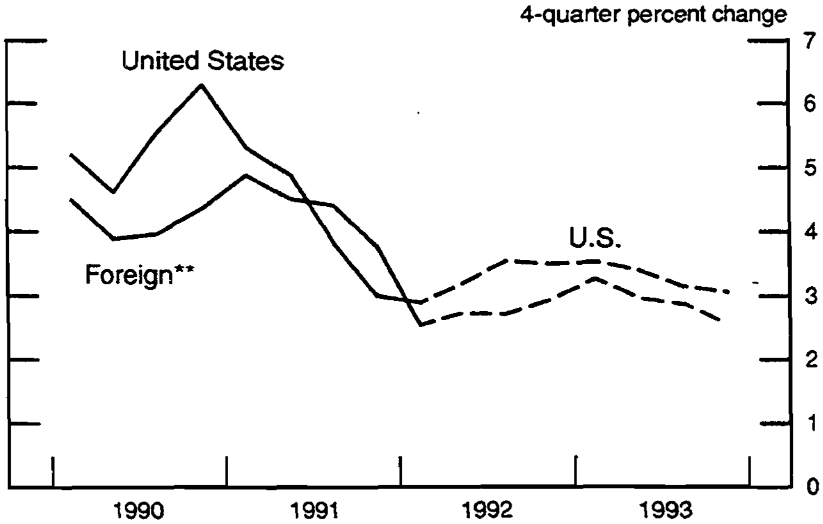
Foreign GDP Percent change, SAAR	1992 H1	1992 H2	1993
Japan	2.3	1.4	2.9
Germany	2.3	3.0	2.6
Canada	1.8	3.2	3.5
G-6	**1.8**	**2.7**	**3.1**

FOREIGN REAL GDP*



GDP Developing Countries Percent change	1991	1992	1993
Mexico	3.6	3.8	4.3
Taiwan	7.3	7.5	7.8
Korea	8.4	8.0	8.3
Singapore	6.7	6.0	7.0
Hong Kong	3.9	5.0	6.0

CONSUMER PRICES: G-7 COUNTRIES



Consumer Prices Percent change, Q4 to Q4	1992	1993
Germany	3.3	3.4
France	2.8	2.8
U.K.	3.9	3.5
Japan	2.4	1.9
Canada	3.0	2.6
U.S.	3.5	3.1

* G-6 countries, 16 other industrial, and 8 developing countries, U.S. nonagricultural export weights.

** G-6 countries, U.S. non-oil import weights.

Chart 6

Exports

U.S. NONAGRICULTURAL EXPORTS

	1991 Shares Value bil.$	1991 Shares Percent	1991 Growth percent	Share of 1990-91 increase percent
G-6 Countries	182	49	3	18
Other Industrial	55	15	3	6
Latin America	58	15	17	31
Asia	73	19	18	41
Other	9	2	16	4
Total	**376**	**100**	**8**	**100**

REAL NONAGRICULTURAL NON-COMPUTER EXPORTS

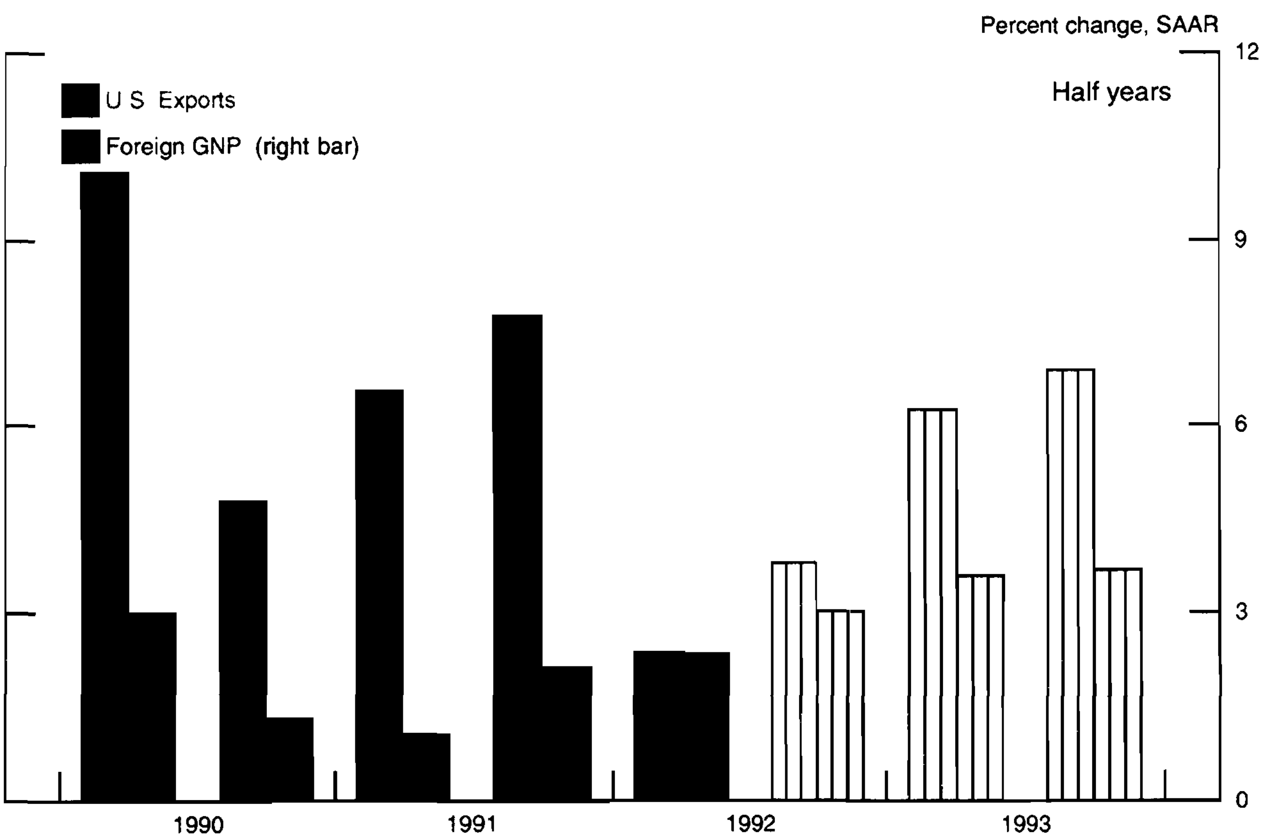
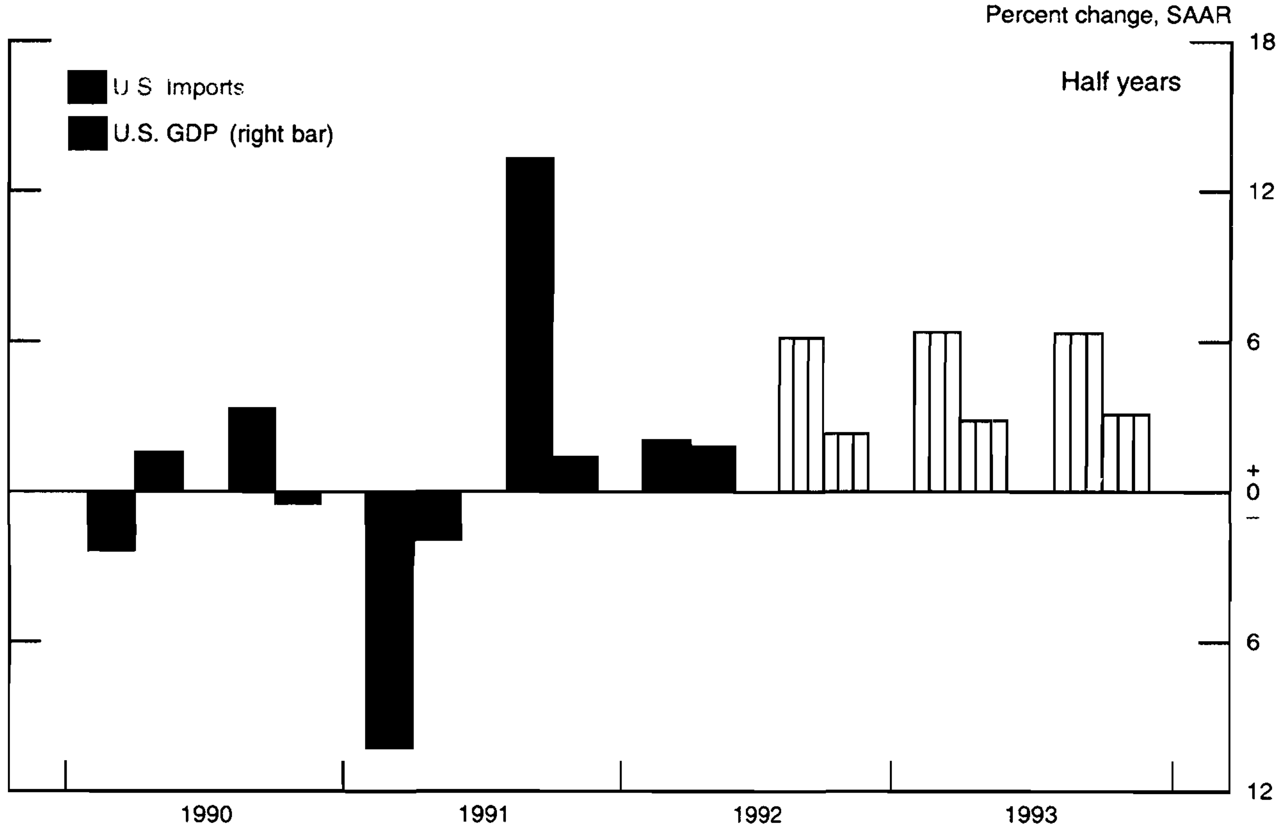


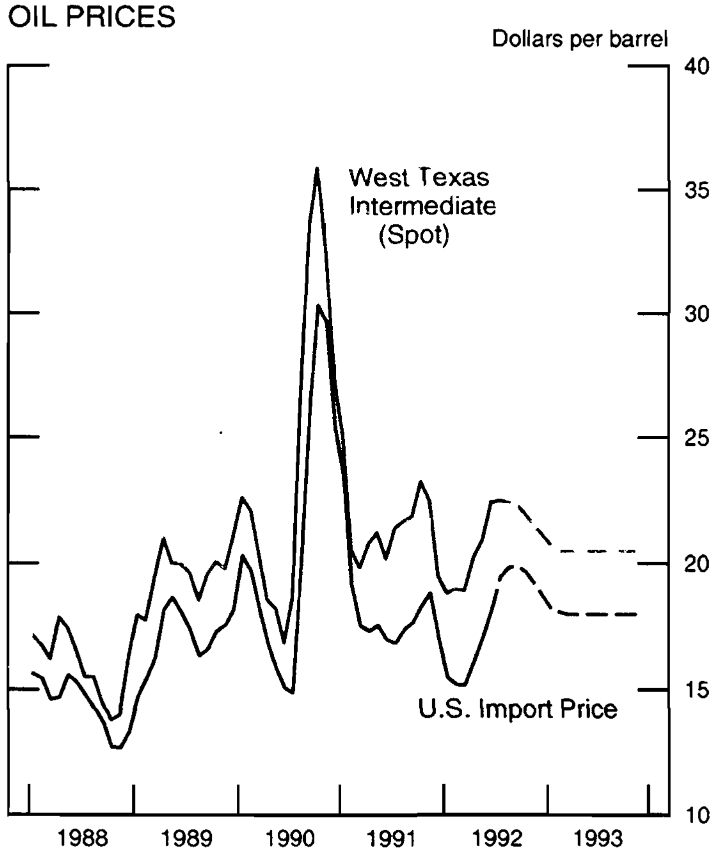
Chart 7

Imports

REAL NON-OIL NON-COMPUTER IMPORTS



OIL PRICES



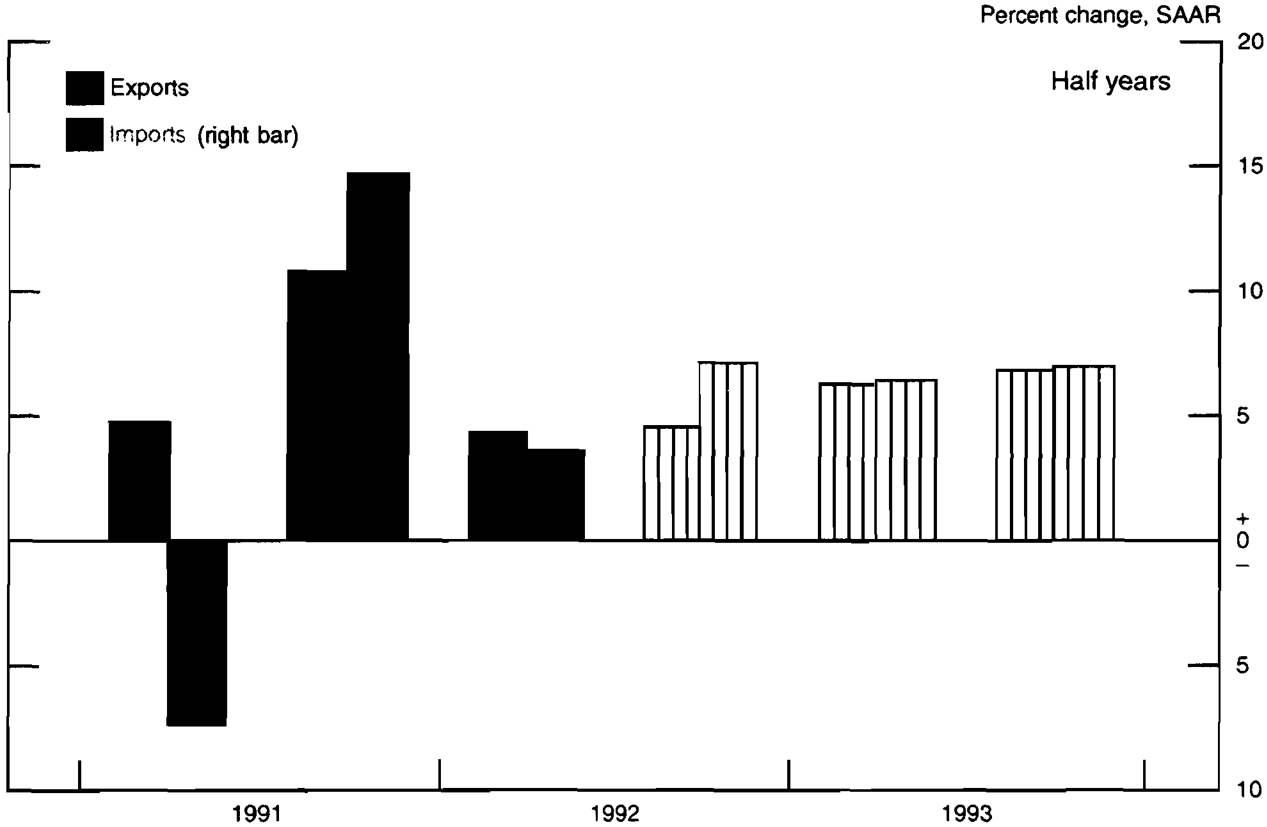
OIL IMPORTS

	MBD	Value (bil. $)
1988	7.6	40
1989	8.2	51
1990	8.3	62
1991	7.7	51
1992	8.2	54
1993	9.0	59

Chart 8

External Sector

REAL EXPORTS AND IMPORTS OF GOODS AND SERVICES



EXTERNAL BALANCES

		Annual, current dollars (except as noted)			
		1991	1992H1	1992H2	1993
1.	Current Account Balance*	– 41	– 31	– 48	– 42
2.	Goods	– 73	– 78	– 100	– 105
3.	Services	45	58	63	71
4.	Investment Income	16	18	19	22
5.	GDP Real Goods and Services, net (Q2 or Q4,1987 dollars)	– 21	– 29	– 33	– 35

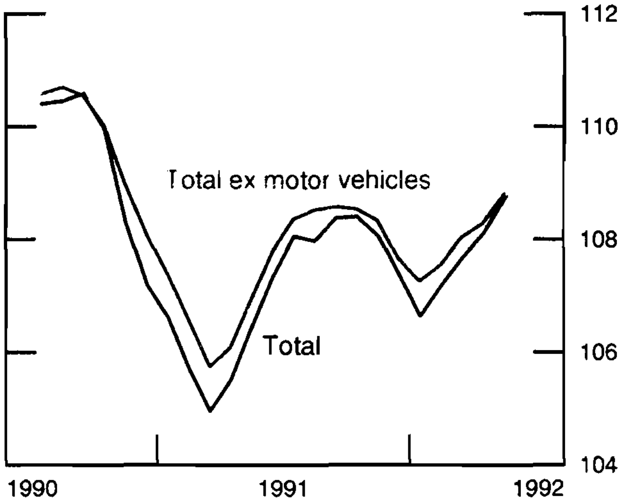
* Excluding special grants largely related to Desert Shield/Storm

Chart 9

Recent Indicators

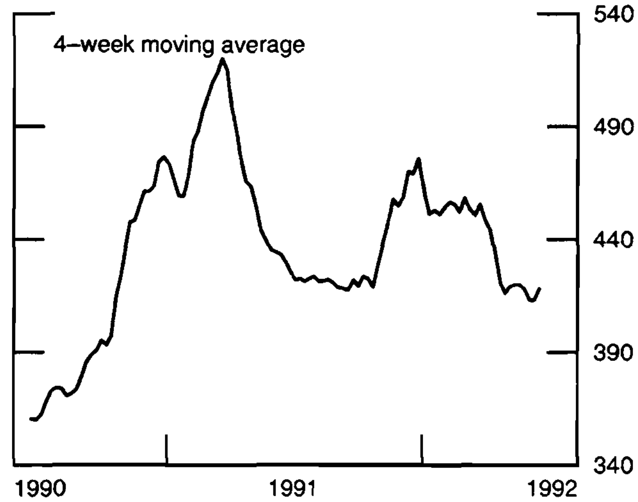
INDUSTRIAL PRODUCTION

Index, 1987=100



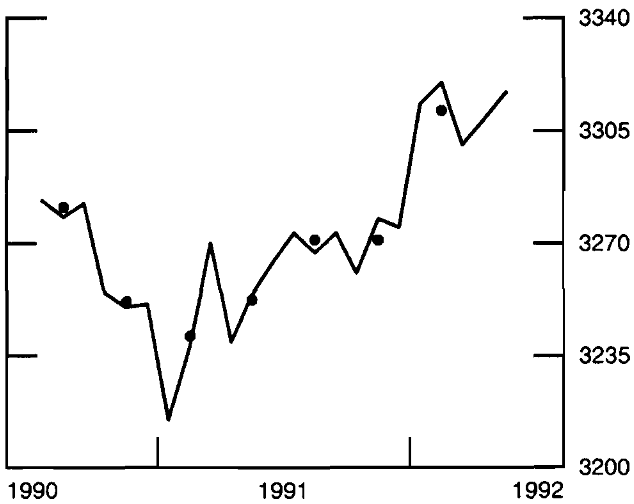
INITIAL CLAIMS

Thousands, SAAR



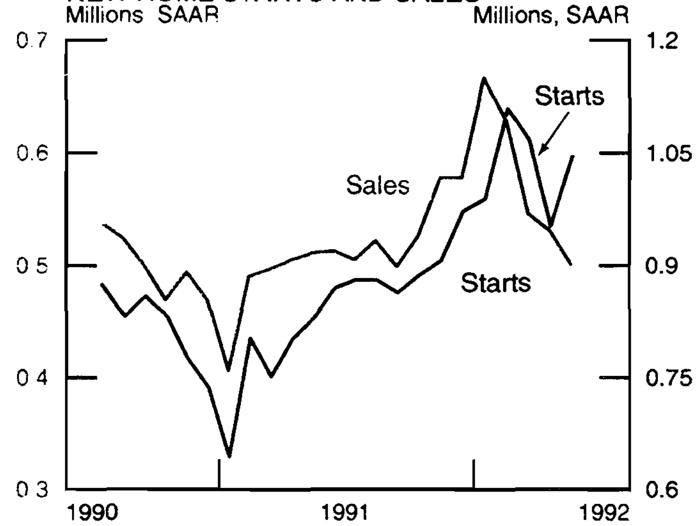
REAL PCE

Billions of 1987 dollars



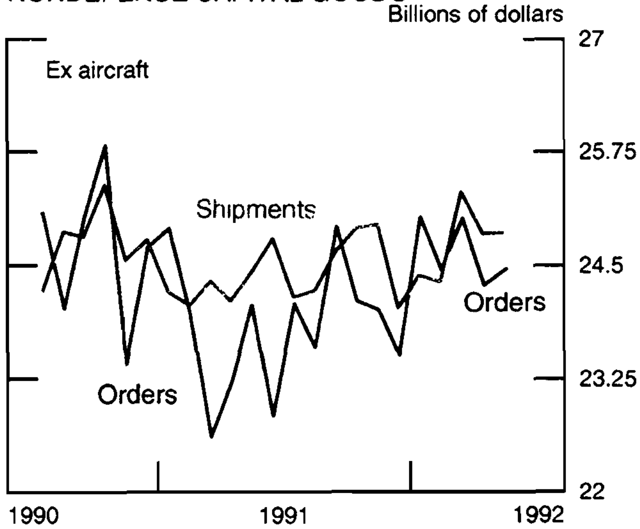
NEW HOME STARTS AND SALES

Millions, SAAR / Millions, SAAR



NONDEFENSE CAPITAL GOODS

Billions of dollars



NONRESIDENTIAL CONSTRUCTION CONTRACTS

Index, 1982=1.0

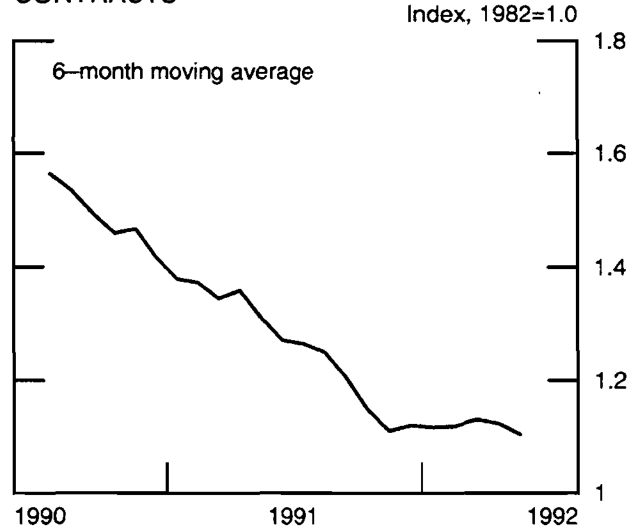
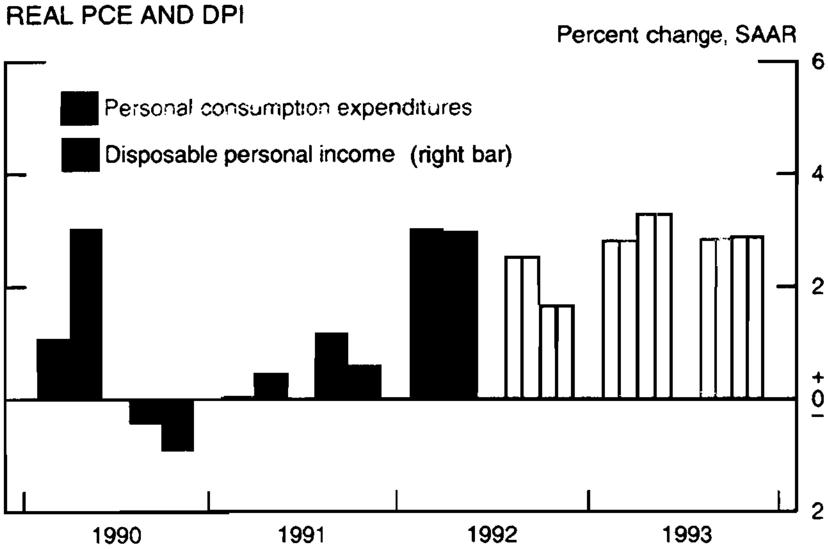


Chart 10

Household Spending

REAL PCE AND DPI

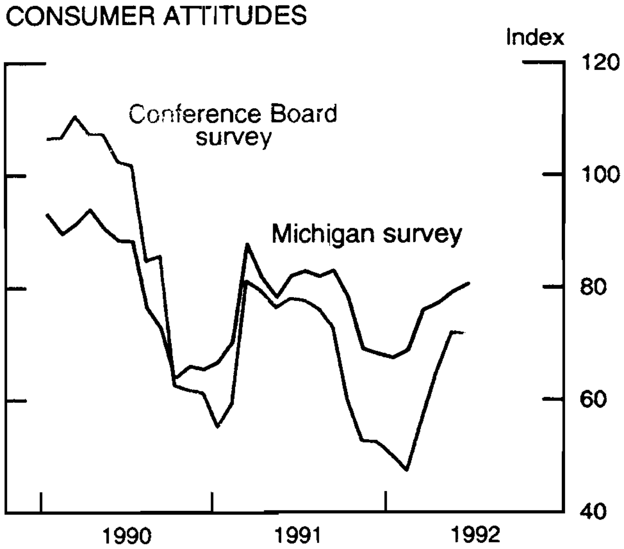


PERSONAL SAVING RATE

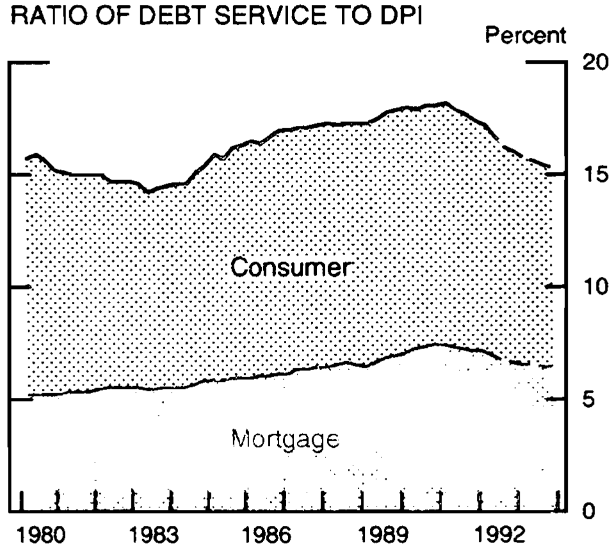
Percent

1989		**4.4**
1990		**5.1**
1991	**H1**	**5.3**
	H2	**5.1**
1992	**H1**	**5.1**
	H2	**4.9**
1993	**H1**	**5.1**
	H2	**5.1**

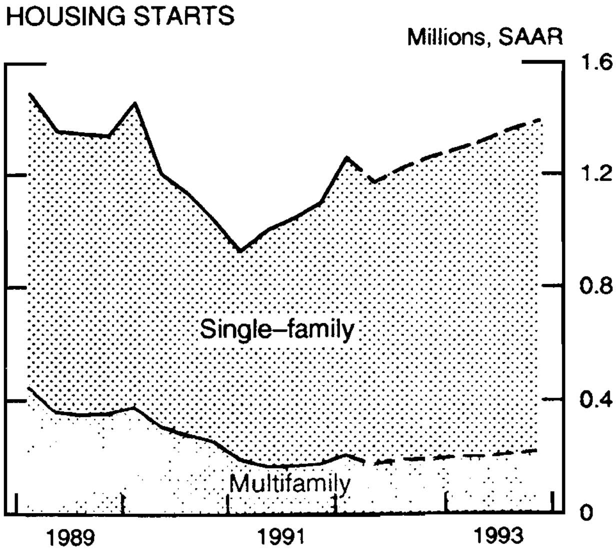
CONSUMER ATTITUDES



RATIO OF DEBT SERVICE TO DPI



HOUSING STARTS



HOUSE AFFORDABILITY

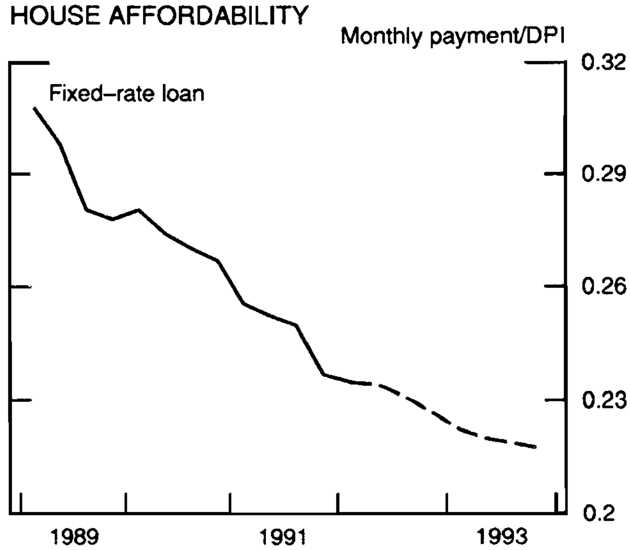
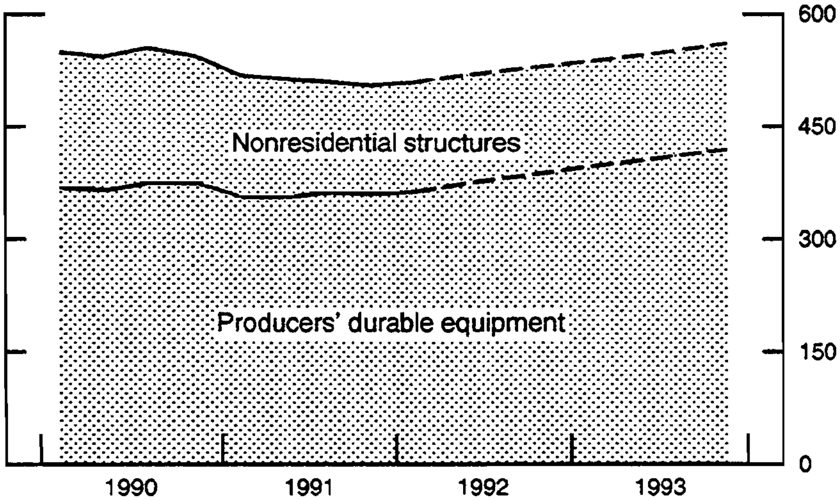


Chart 11

Business Spending

REAL BUSINESS FIXED INVESTMENT

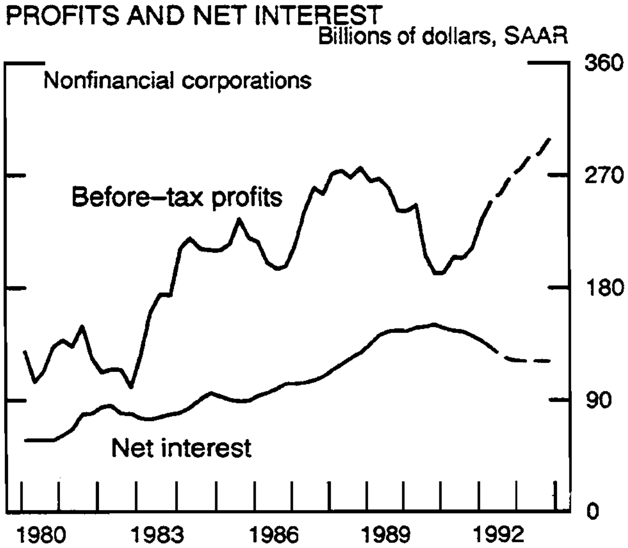


TOTAL BFI

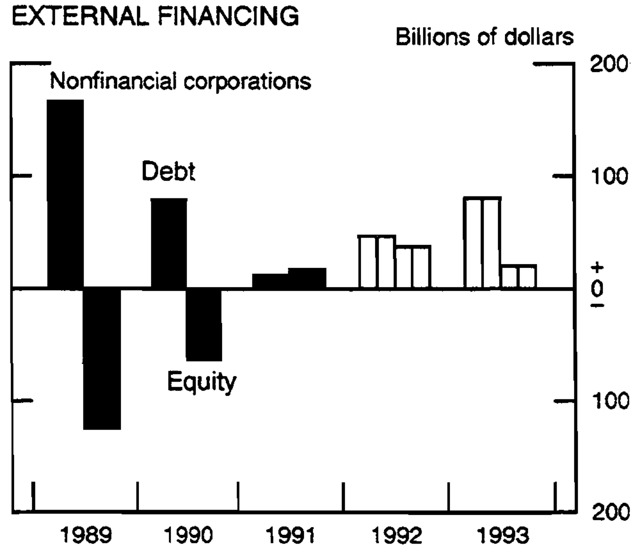
Percent change, SAAR

1992	Q1	3.1
	Q2	6.4
	Q3	5.9
	Q4	5.4
1993	H1	5.4
	H2	5.9

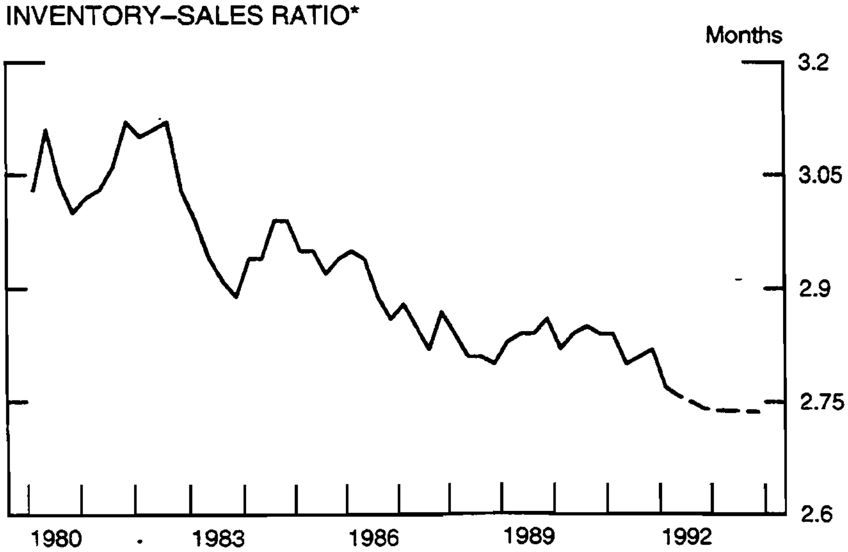
PROFITS AND NET INTEREST



EXTERNAL FINANCING



INVENTORY-SALES RATIO*



*Business inventories relative to business final sales, constant dollars.

BUSINESS INVENTORY INVESTMENT

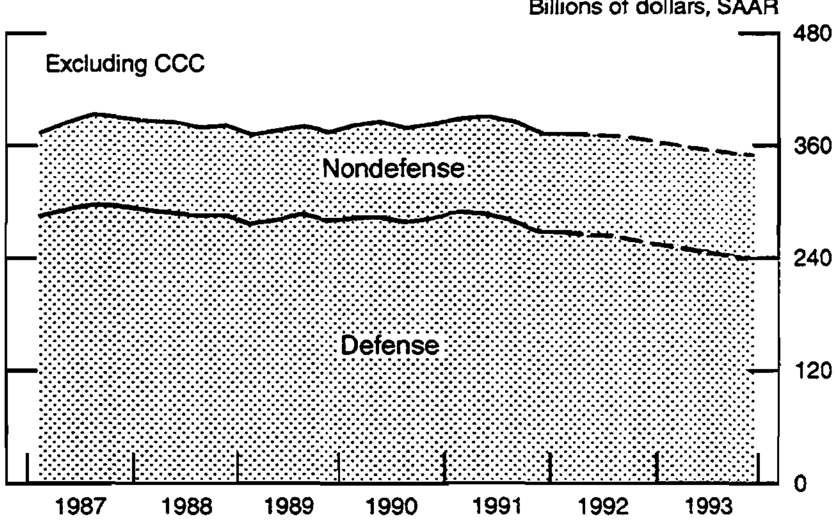
$1987 billions, SAAR

1992	Q1	-16.6
	Q2	1.4
	Q3	8.2
	Q4	13.2
1993	H1	23.2
	H2	31.4

Chart 12

Government Sector

REAL FEDERAL PURCHASES

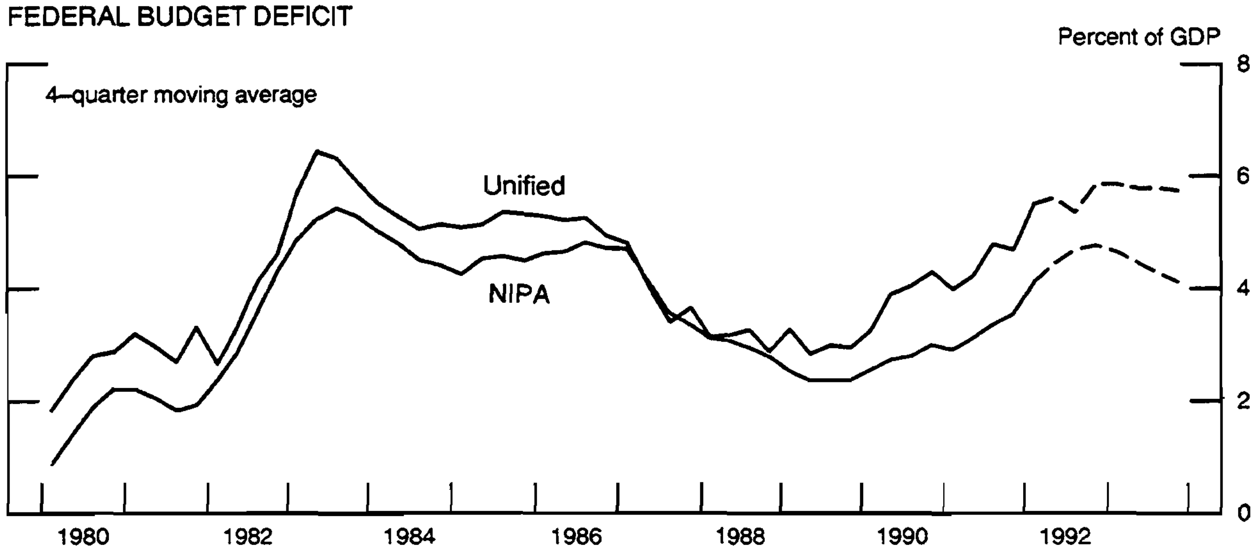


REAL TOTAL FEDERAL PURCHASES EX CCC

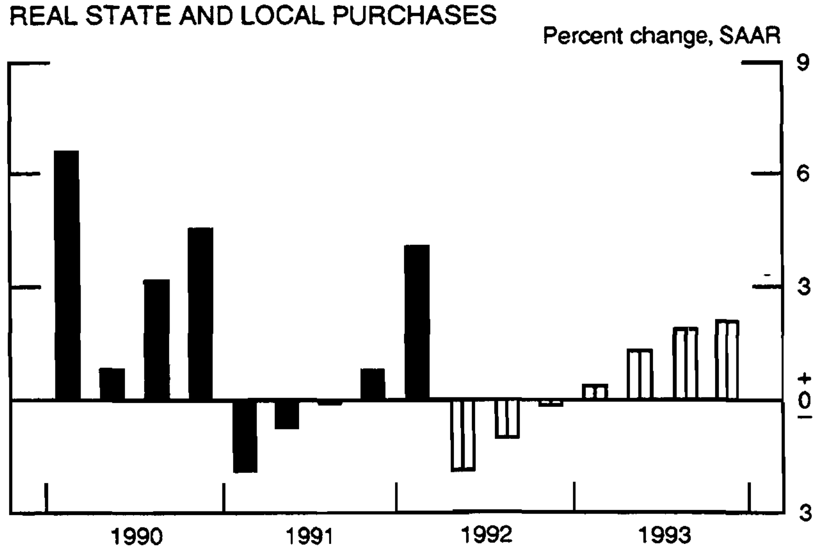
Q4 to Q4 percent change

1987	5.5
1988	-2.2
1989	-1.9
1990	2.4
1991	-2.7
1992	-2.1
1993	-4.1

FEDERAL BUDGET DEFICIT



REAL STATE AND LOCAL PURCHASES



BUDGET DEFICIT

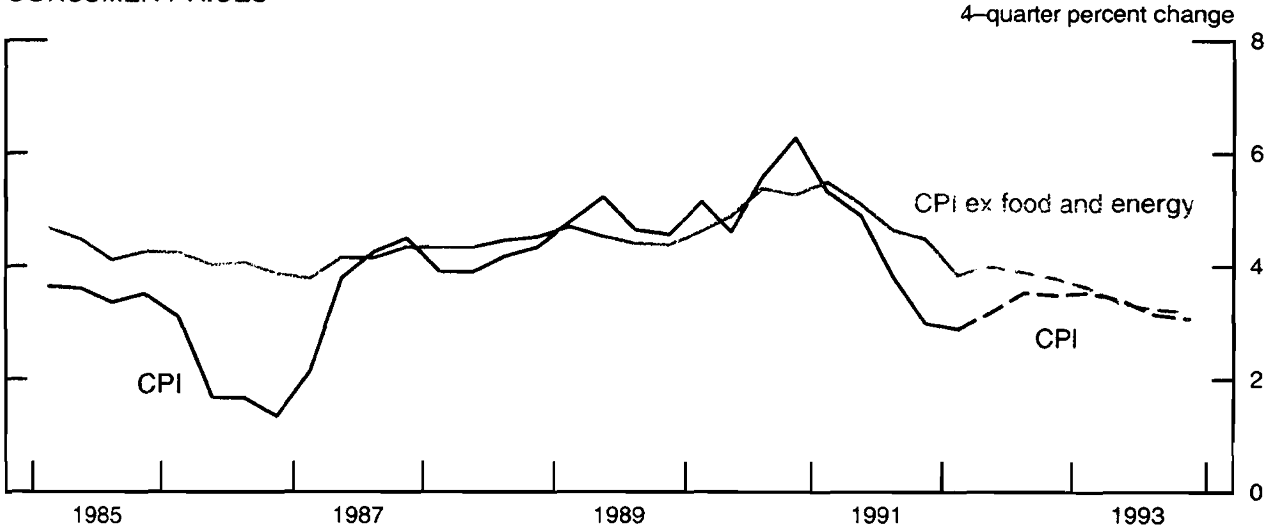
Operating and capital accounts
$Billions, SAAR

1990		38.1
1991		35.3
1992	H1	23.6
	H2	13.6
1993	H1	8.3
	H2	4.7

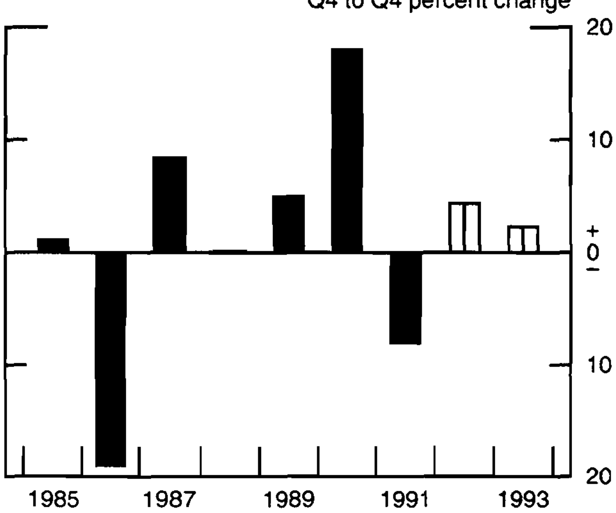
Chart 13

Price Inflation

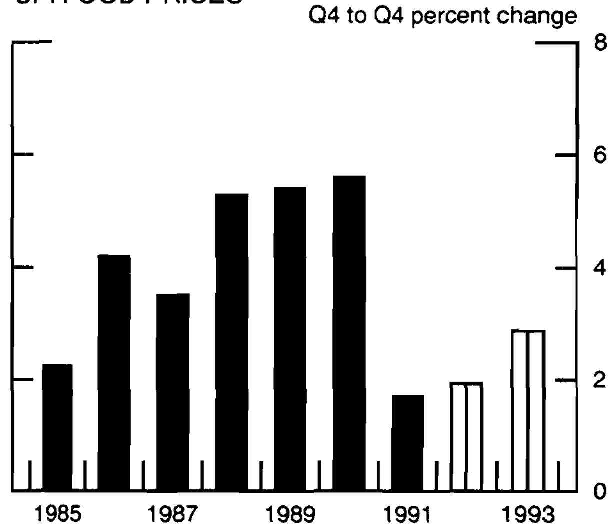
CONSUMER PRICES



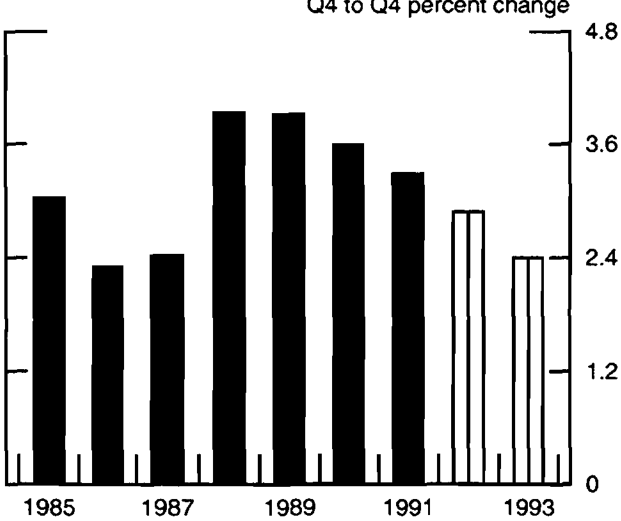
CPI ENERGY PRICES



CPI FOOD PRICES



TREND UNIT LABOR COSTS*



*Ratio of ECI private compensation/hour to trend productivity.

BLUE CHIP INDICATORS

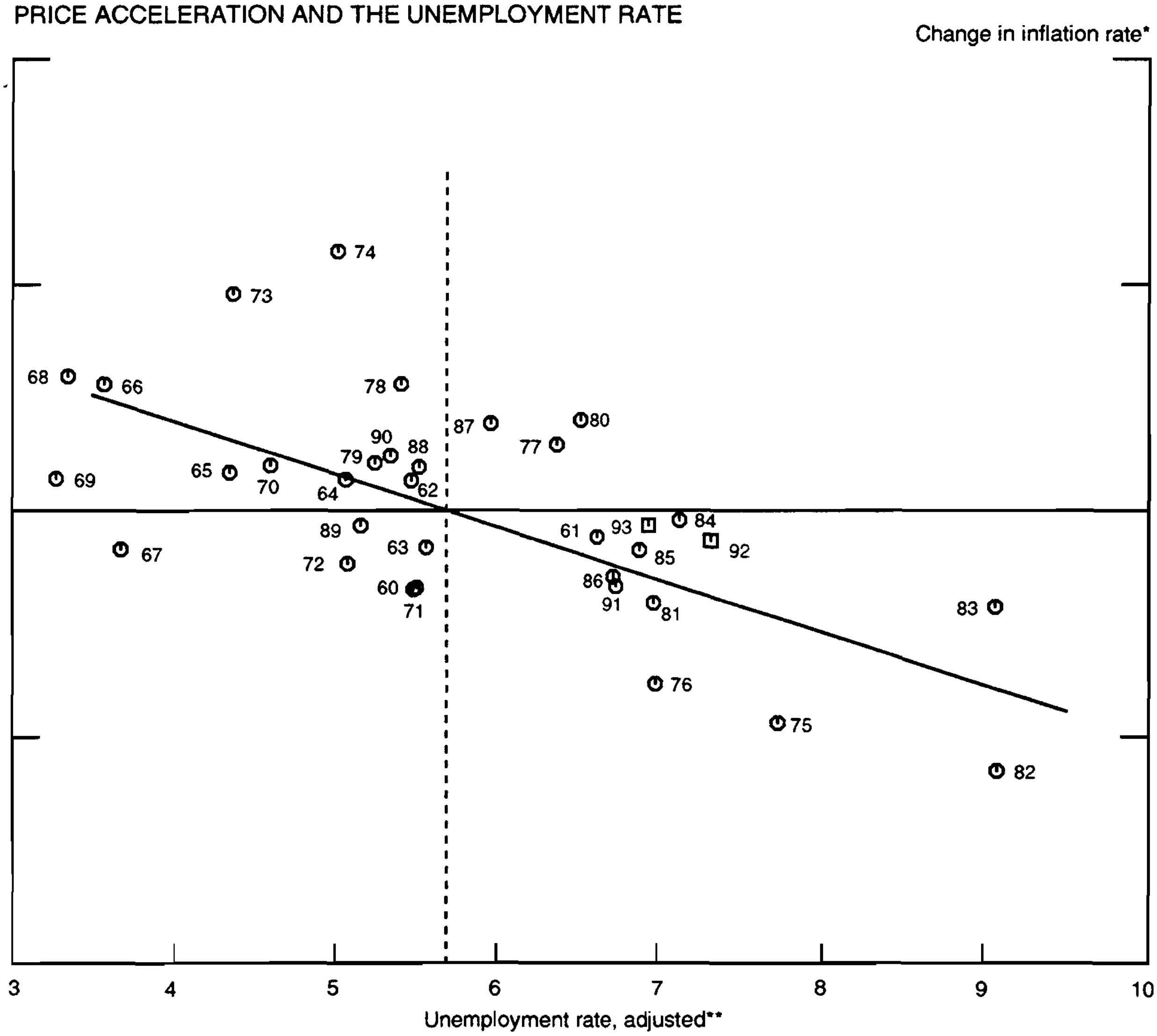
	CPI[1]	Unemployment[2]
1992		
Blue Chip	3.3	6.9
(Staff)	(3.5)	(7.2)
1993		
Blue Chip	3.6	6.4
(Staff)	(3.1)	(6.7)

1. Q4 to Q4, percent change.
2. Q4 average, percent.

Chart 14

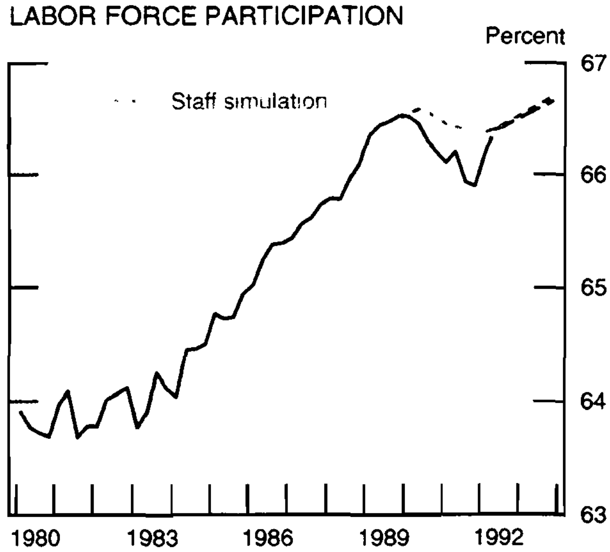
Slack and Inflation

PRICE ACCELERATION AND THE UNEMPLOYMENT RATE



*Change in inflation as measured by GDP prices, Q4 to Q4
**Demographically fixed-weighted unemployment rate, annual average, 1991 weights.

LABOR FORCE PARTICIPATION



LABOR FORCE AND EMPLOYMENT*

Percent change, SAAR

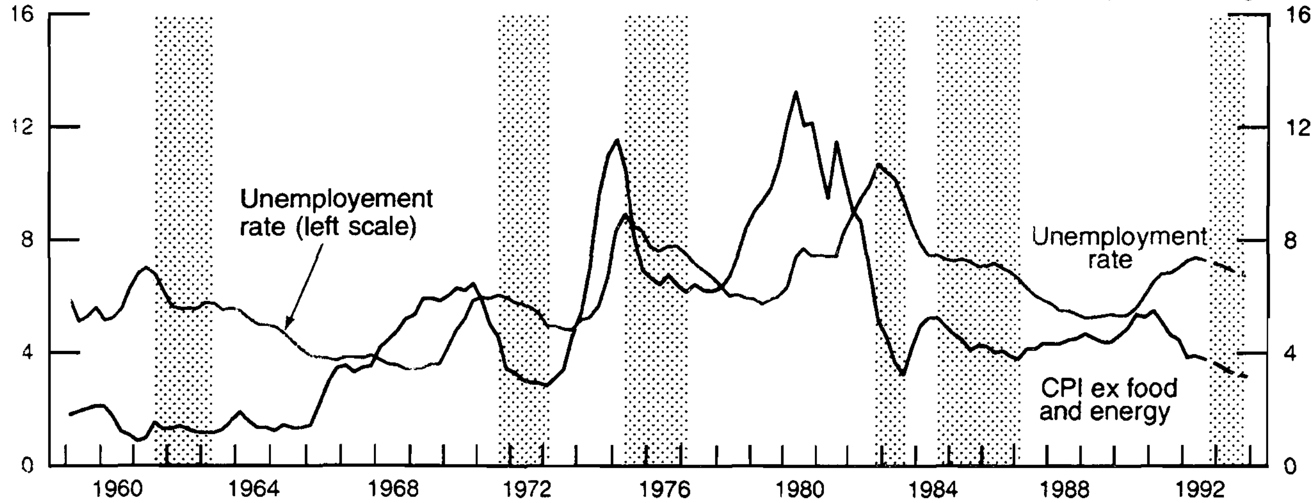
	Labor Force	Employment
1983 - 89	1.7	2.5
1990	.4	-.2
1991	.5	-.6
1992 H1	2.5	1.6
H2	1.1	1.5
1993	1.1	1.7

*Household Survey.

Chart 15

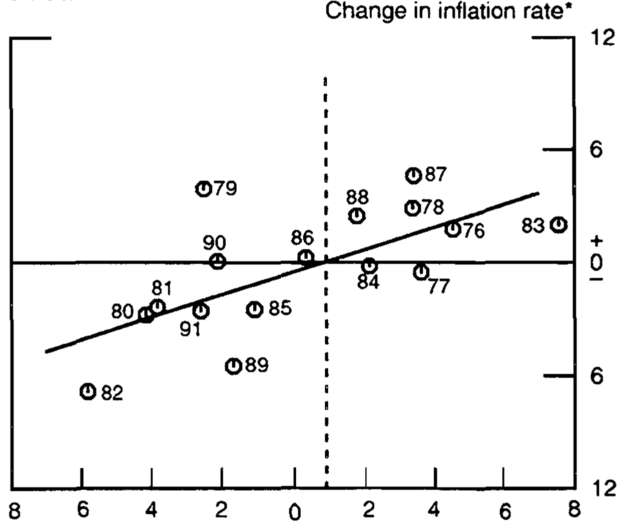
Inflation in Recovery

CPI EXCLUDING FOOD AND ENERGY



Note: Shading indicates periods when both unemployment and inflation were declining.

PPI INTERMEDIATE EX FOOD AND ENERGY



Change in manufacturing capacity utilization (Q4/Q4)

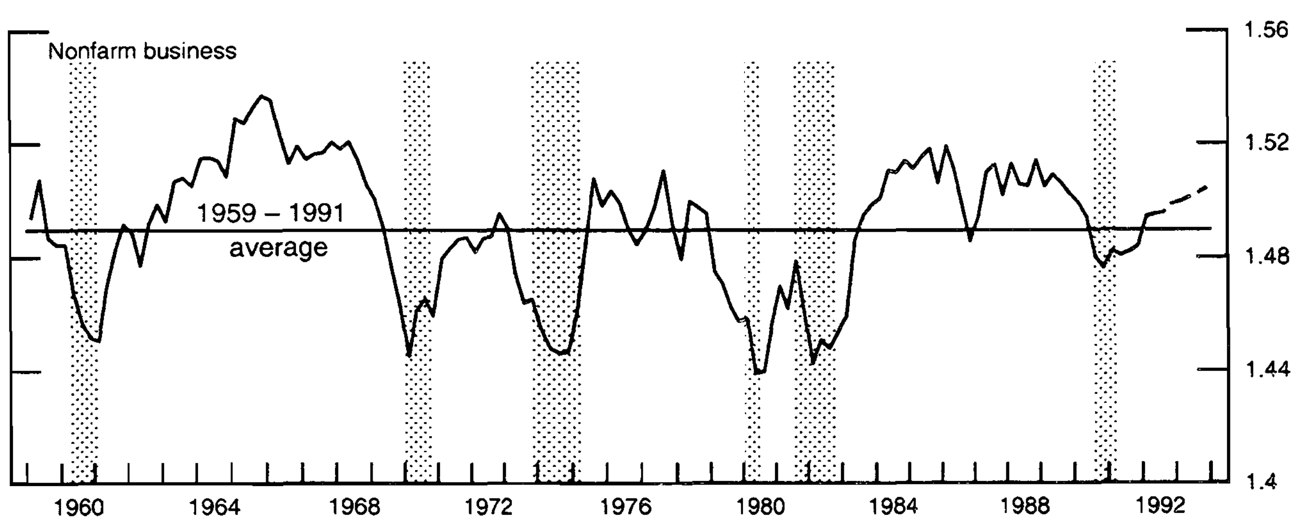
*Inflation measured Q4 to Q4.

CAPACITY UTILIZATION AND PRICES

	Manufacturing Capacity Utilization[1]	PPI Intermediate ex food and energy[2]
1990	80.8	1.7
1991	78.2	–.8
1992	78.9	1.3
1993	79.8	1.9

1. Q4 level, percent.
2. Q4 to Q4, percent change.

PRICE MARKUP*

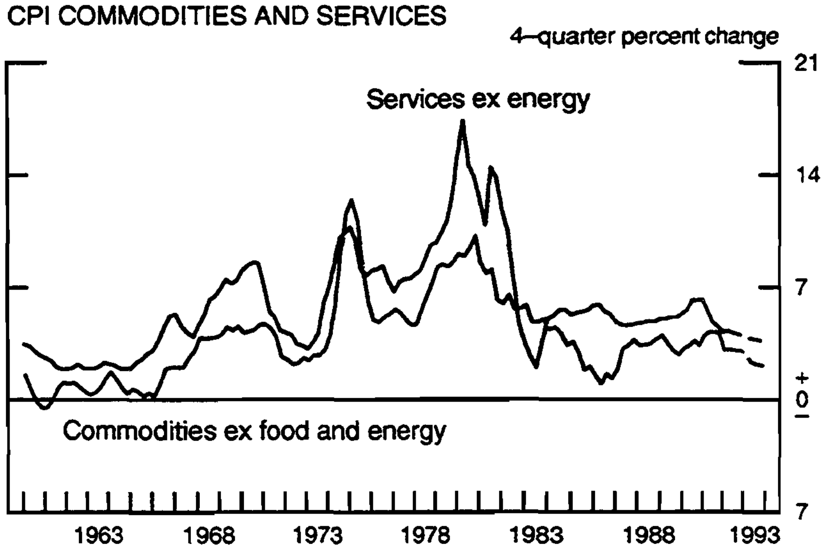


*Ratio of nonfarm business output price deflator to unit labor costs.

Chart 16

Possible Impediments to Disinflation

CPI COMMODITIES AND SERVICES

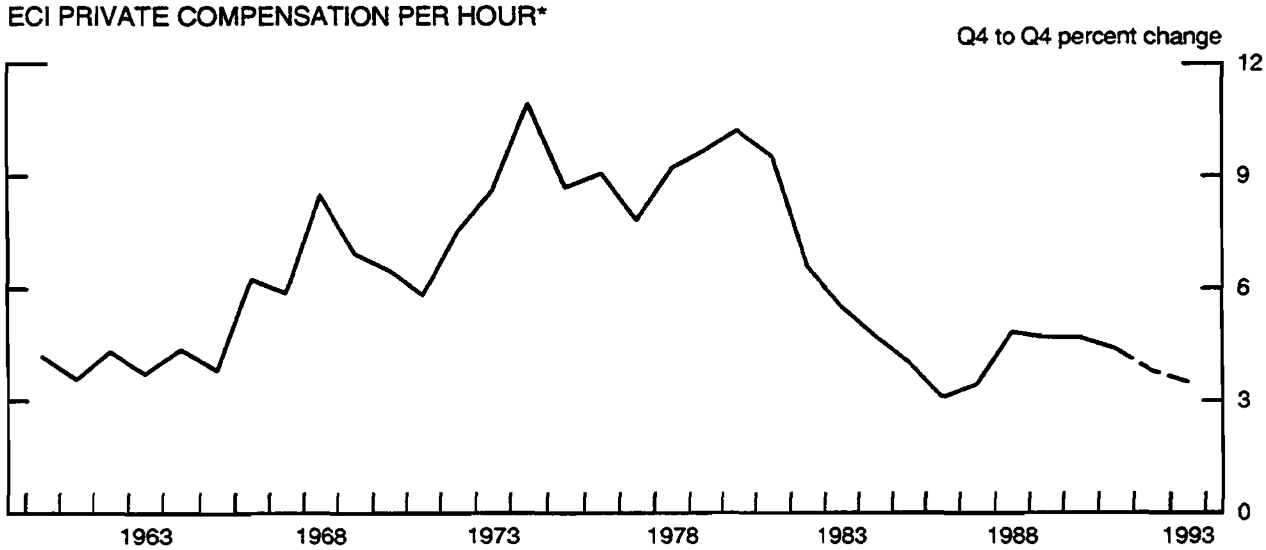


CPI EX FOOD AND ENERGY

Q4 to Q4 percent change

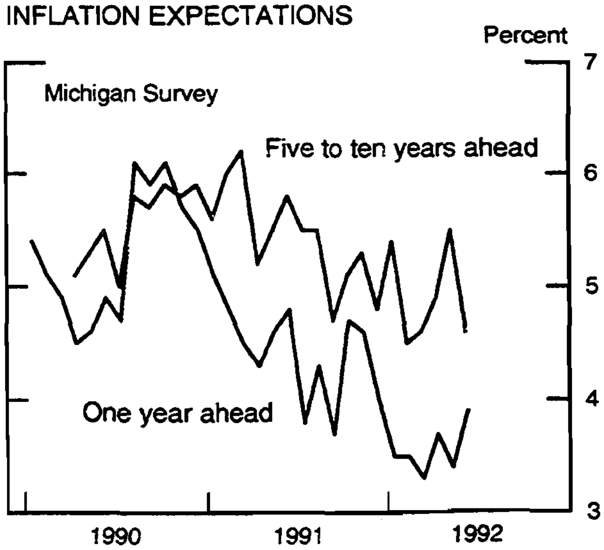
	Commodities	Services
1990	3.4	6.2
1991	4.2	4.6
1992	3.0	4.0
1993	2.1	3.7

ECI PRIVATE COMPENSATION PER HOUR*



*Prior to 1980, BLS nonfarm business compensation per hour.

INFLATION EXPECTATIONS



CRUDE AND INTERMEDIATE PPI

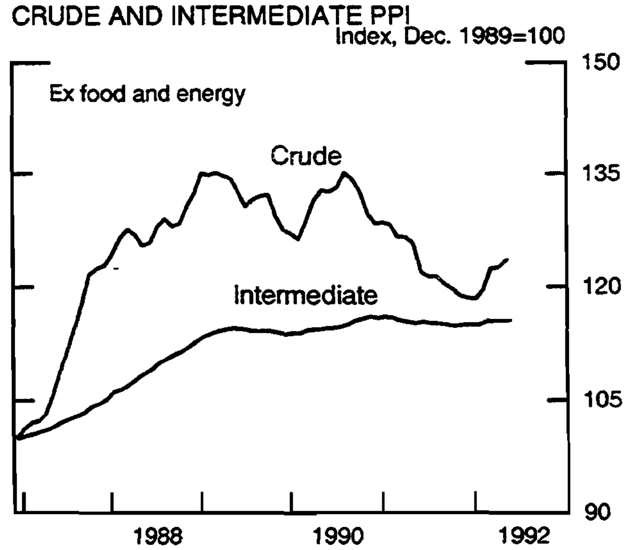
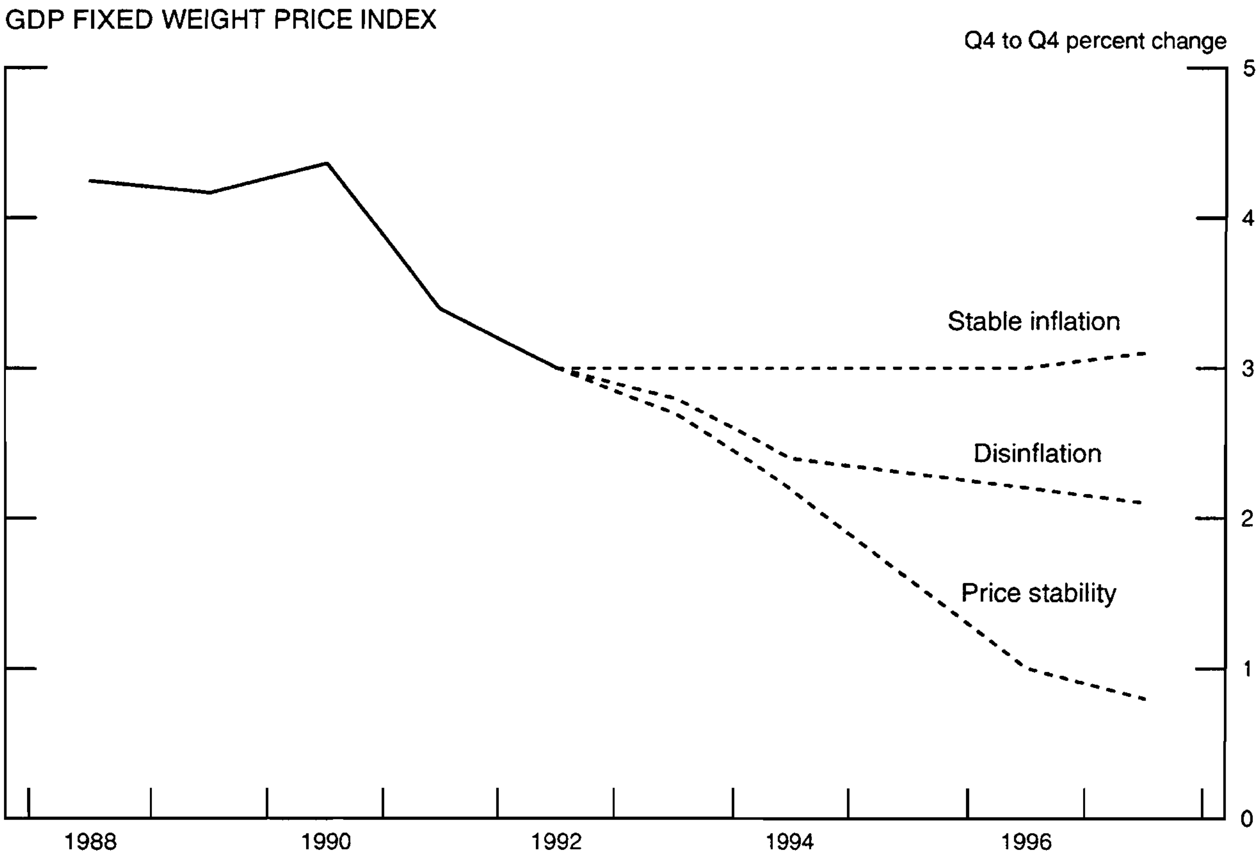


Chart 17

Alternative Scenarios



ALTERNATIVE SCENARIOS

Q4 to Q4 percent change

	1992	1993	1994	1995	1996	1997
Case 1: Disinflation						
GDP price index	2.9	2.8	2.4	2.3	2.2	2.1
Unemployment (Q4)	7.2	6.7	6.2	6.0	6.0	6.0
Real GDP	2.5	3.0	3.1	2.3	2.0	2.1
Case 2: Price stability by 1997						
GDP price index	2.9	2.7	2.2	1.6	1.0	.8
Unemployment (Q4)	7.2	6.8	6.7	6.8	6.7	6.2
Real GDP	2.5	2.6	2.2	1.9	2.3	3.4
Case 3: Stable inflation						
GDP price index	3.0	3.0	3.0	3.0	3.0	3.1
Unemployment (Q4)	7.1	6.3	5.8	5.7	5.7	5.7
Real GDP	2.7	3.6	3.0	2.1	2.0	2.1

June 30, 1992

Long-run targets
Donald L. Kohn

The unusual behavior of demands for broad money measures and their velocities complicates the choice of targets for these aggregates and raises questions about the weight to be placed on them in policy.

The FOMC has treated the monetary aggregates as information variables--not as ultimate objectives for policy or as direct channels of central bank influence on the economy. The aggregates encapsulate the interaction of policy actions in reserve markets and demands driven broadly by spending and income. Their movements can convey something about the current state of the economy or even its future, since adjustments of financial asset portfolios in response to changing economic and financial conditions tend to be made more rapidly than adjustments of purchases of goods and services. But the relationship between money and income has never been very tight in the short- and intermediate-term, and may be getting even looser as savers face a growing array of choices at lower transactions costs.

In these circumstances the FOMC has varied the federal funds rate to achieve its objectives for the economy or inflation, and it has adjusted that rate in large measure in response to incoming information about how the trends in activity and prices are evolving. But it has also recognized the problems posed by lags in the effects of its policy moves and of the difficulties inherent in finding the appropriate level of the short-term nominal rate. In this process, the aggregates have been used as warning signs; tendencies for money to grow very rapidly or very slowly, or to deviate substantially from expectations, have occasioned somewhat more intense examination of whether the funds rate was positioned correctly. In the past, the rate has not necessarily been adjusted sufficiently to hit the annual target ranges. Both narrow and broad money growth ended outside annual ranges on a number of occasions in the late 1970s and early 1980s, and as recently as 1987, M2 finished the year below its range. The Humphrey-Hawkins Act requires only that the Federal Reserve "set forth objectives and plans ... with respect to the ranges of growth or diminution of the monetary and credit aggregates". The Act explicitly notes that the Federal Reserve is not required to achieve its objectives for money and credit if it determines that they cannot or should not be achieved because of "changing conditions," provided an explanation of the reasons for the deviation are subsequently given.

The "changing conditions" currently facing the Committee involve a major restructuring of the depository system. Bad loans and the reactions of regulators, markets, and the Congress to them, have led to widening intermediation spreads, a marked reduction in the willingness of institutions to supply deposits to the public, and a shrinkage of credit flowing through depository institutions. In these circumstances it is not surprising that the relationship of the liabilities of these institutions, which account for the vast bulk of the broad monetary aggregates, to borrowing and spending would change, within the business cycle and possibly over longer time spans as well. Ordinarily, disruption and uncertainty in the relationship among interest rates, income and money demand would be reason for ignoring unusual money movements, and generally reducing the weight of the aggregates in policy decisions. However, it seems evident that the relationship of nominal interest rates to spending also has been disrupted over the same period. It is possible that the weakness in money was symptomatic of deeper distress in the financial system, the so-called "credit crunch", which spilled over to spending. The interest rates we normally use to gauge policy were not good indexes of the effective cost and availability of credit to borrowers. Weak money has not fed through to weak income percentage point for percentage point, especially in 1992, but the behavior of money seemingly has still conveyed some information, though distinguishing signal from noise has been very difficult.

The staff has had to pay particularly close attention to the implications of shifting intermediation patterns and changes in money demand in forecasting money growth rates likely to be associated with Greenbook outcomes for nominal income at assumed market interest rates. As is evident, we were surprised by the weakness of broad money and strength in velocity in the first half of the year. While we haven't carried forward the extreme results of the second quarter, we have revised down our estimate of the growth in M2 and M3 for 1992 to 2 percent and 1/4 percent, respectively, below the lower ends of their current ranges; for 1993, we are projecting only a small strengthening of money growth--to 2-1/2 percent for M2 and 1/2 percent for M3. The downward revision relative to earlier this year is reflected in stronger velocity. The forces affecting M2 for some time seem to have intensified; while some of these forces also affect spending, in our judgment this will be less the case in 1992 and 1993 than in previous years.

The principal factor behind the projection of continuing increases in velocity is declining deposit offering rates. Some of these decreases arise from restrictions under FDICIA, along with limitations on brokered deposits that will have the same sort of effect on deposit flows. But even absent FDICIA we would expect continuing significant decreases in rates on liquid deposits; although these rates have fallen substantially, they have considerable distance to go to catch up to the declines in short-term rates of the last year or so. Last year, falling deposit rates apparently about offset the decreases in market rates occurring at the same time, leaving opportunity costs little changed, at least when taking account of all the factors identified in the memo sent to the Committee. This year, it would appear that measured along all dimensions, including relative to longer-term market rates, opportunity costs may even have increased, and the continued adjustment of deposit rates should extend that trend. Thus, M2 holders will continue to confront incentives to shift cash flows to loan repayments, capital market investments, and other alternatives, resulting in an increase in velocity.

Why won't these shifts be symptomatic this year, as they were last, of problems that could feed back on spending? For one, we do not expect credit restraint to intensify, and it may abate a little over the forecast horizon. Banks already have about stopped tightening most loan terms on most types of credit, and seem to be a bit more vigorous in seeking to make some kinds of loans. Given their holdings of Treasury, agency and mortgage-backed securities, they could make substantial loans without expanding balance sheets greatly. Risk-based capital to accommodate such a shift has become considerably more abundant, owing to greater profitability and equity issuance. Borrowers are in better shape, opening up more options to finance spending. Finally, interest rates, real and nominal, are lower than they were in the last few years, with narrowing spreads of private over Treasury rates suggesting improved credit availability for those with access to open markets. On balance we project M2 velocity to increase about 3 percent both in 1992 and 1993; such increases, even over eight quarters, are not unprecedented, but they are unusual and have occurred previously in environments of rising market interest rates.

With borrowers continuing to restructure balance sheets by tilting credit demands toward capital markets and with pressures on banks to restrain asset growth persisting, we anticipate only modest increases in bank credit over the next 18 months. Moreover, we are projecting the resumption of RTC activity in 1993, damping thrift assets. As a consequence, M3 should follow its recent course of little, if any, growth over the forecast horizon. Because some of the depressing effects on M3 arise from the rechannelling of credit flows away from depositories, total debt growth is not anticipated to be correspondingly weak. Still, at 2-3/4 percent in 1992 and 4 percent in 1993, nonfederal debt is expected to expand below the pace of spending as households and business continue to be cautious in taking on debt obligations. The continuing heavy demands of the federal sector are projected to boost debt growth in 1992 to 5 percent, within the current range, and to 5-3/4 percent next year.

The outlook for very sluggish growth of money and credit, together with the high degree of uncertainty with which the projected behavior of the aggregates is related to spending and income, pose challenges to the Committee in specifying its ranges for this year and next. The bluebook gave two alternatives for each year--the current 1992 ranges, or ranges a full percentage point lower. Clearly there are other possibilities that might be considered, including larger or smaller decreases and widening the ranges by reducing the lower end of one or more ranges. To keep my discussion within (barely) tolerable bounds, I will confine my comments to the two bluebook alternatives. I will also cover each year separately, though some strategies might link the two decisions.

For 1992, reducing the current ranges would seem to align them better with expected monetary expansion for the year. In this regard, it is important to note that the Committee's nominal GDP forecast coming into this meeting averages a half point above that of the staff. Although such a difference wouldn't be expected to show through point for point in M2 over a half year, it does suggest that the Committee, more than the staff, could legitimately claim that it expected M2 growth around the lower end of the existing range, even with the staff assumption about velocity. Nonetheless, velocity has turned out much stronger than expected and is likely to continue to increase. Reducing the range would be explained on those grounds, and not by any desire or expectation of lower nominal income expansion than anticipated earlier this year; in fact, the Committee members are forecasting more rapid nominal GDP growth for 1992 now than they did in February. The reduced range would allow some room for M2 growth below even 2 percent if velocity turned out to be stronger than projected, without triggering expectations and pressures for a policy reaction.

The stronger GDP expected by the Committee is unlikely to show through much to M3, since pressures on depositories and borrowers are likely to result in additional spending being financed disproportionately in open credit markets. Thus, M3 probably would fall short of its range, even with nominal GDP projected by the FOMC. There is less need to adjust the debt range, especially with the Committee's outlook. Debt is now around the lower end of its range and would be expected to end the year within it, though in the lower half, and the shortfall relative to projections in February owes partly to the absence of RTC funding. Adjusting money but not debt ranges might emphasize that the rationale arises from intermediation patterns, not expectations or desires for lower borrowing or spending than was expected in February. Adjusting ranges for the current year at mid-year is rare, but not unprecedented. M1 ranges were adjusted, rebased, or even dropped three times between 1983 and 1986, and the M3 range was lowered in mid-1990.

Leaving the ranges for 1992 unchanged would be justified if the Committee thought M2 within the range was consistent with its objectives for nominal spending. Such an expectation might reflect anticipations that velocity would not rise as rapidly as the staff was projecting so that money growth below the range would suggest shortfalls in spending, as well as desires for stronger spending than in the staff forecast. Retaining the current range would imply that the Committee was prepared to give serious consideration to taking action to spur money growth if weakness relative to the range persisted. Policy actions would not be required if other information clearly indicated that spending was proceeding along a satisfactory course, but there would be a presumption of continuing attention to the implications of the shortfall. Another rationale for maintaining the current ranges is that in light of uncertainties about relationships of money growth to the economy, the Committee felt that it was unable to reset the range with any confidence, especially since a new range might carry with it some presumption of an attempt to achieve it. If this latter reasoning was used, the Committee could explain to Congress its reasons for placing less weight on the aggregates and their ranges.

With regard to 1993, twice in the last three years the Committee has simply carried over the current year's ranges into the following year on a provisional basis. Such decisions rested importantly on uncertainties about the economic situation likely to be facing the Committee around year-end, and on the uncertainties about the relationships of money to the Committee's objectives. In this regard, carrying the 2-1/2 to 6-1/2 percent range for M2 into 1993 might be justified even if the Committee decided to reduce the 1992 ranges. On substantive grounds, retaining the current 1992 ranges for 1993 might be seen as emphasizing the Committee's desire to ensure sufficient room in its ranges to move against any incipient weakening of the economy, even if the recent unusual weakness in money demand began to unwind.

Lower ranges for 1993 would be more likely to encompass expected money growth that year, given what we now think we know. The Committee's nominal GDP for 1993 is about the same as the staff's. Absent a rebound in money demand or a surge in depository credit, money is not likely to grow comfortably up in the current 1992 ranges in 1993, and for M3, especially, could well fall short. A reduction of the ranges also would signal the Committee's intentions to lean against any incipient re-emergence of inflation as the recovery took hold and resumption of the pattern of downward adjustments would emphasize the longer-run objective of price stability. Indeed, a full percentage point reduction in the range would bring the midpoint of the M2 range close to the level consistent with price stability over time, assuming normal secular velocity behavior.

July 1, 1992

Short-run Policy Options
Donald L. Kohn

Various members yesterday gave the reasons I had written down for why the Committee might want to choose one or the other course for the coming intermeeting period, so I won't repeat them. I do have a few other background points, though, to bring to the attention of the Committee as it decides on short-run policy.

First, we have some new information this morning on the money supply. The new information suggests a further weakening in money growth in June--with all the downward revisions in the M1 category. Subject to further refinement over the next day, we now would expect to be projecting declines of about 3-1/2 percent at an annual rate in all three aggregates in June, 2 percentage points below the bluebook for M1 and half a percent lower for the broader aggregates. We have no new explanations for the extraordinary behavior of money in June, or for the latest weakness relative to expectations, most of which has been in NOW accounts. Bank credit remains sluggish in June, and NOW account and other deposit rates have continued to adjust downward, but there has not been a sudden, major, heightening of such adjustments. Moreover, while sizable growth in total stock and bond mutual funds has persisted through May, we have no information to suggest that these gains have picked up. Looking forward, we continue to anticipate that the projected expansion in nominal spending can be supported with comparable increases in M1 and lower growth of M2. Even so, continued declines in the aggregates, at least until we can identify and assess portfolio shifts involved, might be read as raising questions about concurrent strength of demand for goods and services or about whether financial conditions were compatible with the kind of expansion going forward embodied in the staff forecast.

Second, as Joan Lovett discussed, the market does have a significant probability of near-term easing built into the structure of short-term rates. This expectation seems to be built partly on interpretation of recent data as suggesting a lack of strong momentum in the economic expansion, and partly on an assessment that the Federal Reserve has put important priority on assuring an expansion sufficiently vigorous to reduce the unemployment rate. In this context, the reaction in markets to any easing we undertake would depend very much on how the market interpreted it with respect to the economy and our objectives.

An easing that was seen as a measured response to a significant risk that the economic expansion could be running out of steam, and in the context of weak money, would be unlikely to adversely affect inflation expectations or interfere with building central bank credibility over time.

In such a situation, bond yields would be lower in nominal as well as real terms, at least for some time, than they would be if we didn't ease. The dollar would decline, but, without a heightening of inflation concerns, the odds on a "run" from dollar assets with adverse consequences for bonds and equities in the U.S. would be reduced, though not eliminated.

In these circumstances, an easing would be likely to help the economy, at least a little, whatever the source of its malaise. As we saw earlier this year, lower rates would bolster housing, among other sectors, and the lower prime and market rates would aid borrowers with cash flow constraints and encourage spending. The drop in the dollar would shift demands here and abroad toward U.S. products. If the Committee were of the view that the current situation was one in which the chances of a significant slowing in the economy were in fact fairly high, it could opt to ease at the meeting.

An adverse reaction to an easing is possible if it were seen as buying expansion insurance without good reason to question the staying power of that expansion. In this circumstance, easing would reinforce market suspicion about our longer-run objectives, now embodied in the steep yield curve. The staff forecast, of course, has a moderate expansion at unchanged federal funds rates. The declines of the last few months in the dollar and interest rates help to support such an outlook. The current slowing in the expansion, if that indeed is occurring, might be in part a reaction to the back-up in rates in the first quarter, and the more realistic view by market participants of the outlook currently reflected in interest and exchange rates should reinforce the economic expansion later this year. However, if the expansion turns out actually to be accelerating, an easing, even if it was accompanied at this time by steady or lower long-term rates, would tend to produce higher inflation expectations and long-term rates not far down the road than unchanged policy. Certainly, any revisions to expectations that long-term inflation might come down from the 4-5 percent area could be postponed for some time. If the Committee were of the view that reasonable expansion was highly likely, and it wished to emphasize its determination to keeping the downward tilt to inflation, then alternative B, symmetrical might be appropriate. The lack of action could cause rates to back up--both long- and short-term, but long-term rates could be lower several months from now even as the economy expanded along a moderate path and inflation remained damped.

If, however, the Committee, while convinced that moderate expansion were the most likely outcome, were also concerned that risks now were skewed more to the down side than at the last meeting, owing to the tone of incoming data or the weakening in money and credit, then it could adopt an asymmetrical directive toward ease.

Finally, Mr. Chairman, we added a possible sentence to the operating paragraph of the directive for Committee consideration if, given the current degree of uncertainty about monetary relationships, it wished to reduce the weight on money growth in guiding intermeeting adjustments in reserve conditions.