APPENDIX

NOTES FOR FOMC MEETING
July 7, 1987

Sam Y. Cross

In recent weeks, the dollar has firmed and is now trading between 4 and 9 percent above its lows of late April and early May. The dollar's improved performance has continued throughout the period, notwithstanding disturbances that at times buffeted the currency.

Two such episodes occurred since your last meeting, and they prompted us to intervene to buy dollars in our only operations of the period. Both operations were financed equally out of Federal Reserve and Treasury balances. And both involved close cooperation with other central banks.

The first occasion, May 19, was associated with the Citicorp action to increase its loan-loss reserves, when rumors were circulating about problems in the U.S. banking system, and speculative pressures were pushing the dollar down in nervous markets. The Desk entered the market ahead of the Citicorp press conference, purchasing $60 million against marks. Following Citicorp's announcement, we continued to support the dollar, buying a further $73 million against marks in late New York and early Asia/Pacific trading. As trading began in Tokyo, we were joined by the Bank of Japan which purchased a modest amount of dollars against the sale of German marks. Given this support, the dollar stabilized.

On the second occasion, the dollar came under intense selling pressure on June 2 when Chairman Volcker announced that he would not serve a third term. Soon after the announcement, the dollar fell sharply and the Desk intervened to purchase $315

million against marks during that morning. The German Bundesbank and the central banks of France and Italy operated at the same time, intervening both in their own markets and in New York. That afternoon, severe downward pressure on the dollar re-emerged, accompanied by a continuing steep fall in U.S. bond prices. As trading became nervous and choppy and prices gapped downward we reentered the market, buying an additional $95 million against marks as well as $103 million against yen in New York and in early trading in the Far East, for a total U.S. intervention of $513 million that day. After the dollar fell as low as DM 1.78-1/2 against the mark and Y 140-1/2 against the yen in the Far East, and after Treasury bonds had fallen quite sharply, selling pressure on the dollar began to subside. As trading opened in Tokyo, the Bank of Japan intervened to purchase dollars. Market participants seemed to be reassured by the intervention operations conducted by the various central banks. Against this background, there was a strong recovery in U.S. bond prices and the dollar then recovered from its lows.

In the following weeks the dollar seemed to gain added support from the resilience it demonstrated during these two episodes of pressure. An important factor underlying this strength was that market participants had been impressed by the willingness of the Federal Reserve during May to adjust monetary policy to support the dollar, and by the complementary monetary policy adjustments taken in other industrial countries. Also, at the end of May, our announcement that the Desk had bought more than $4 billion during March and April to support the dollar helped reassure the market of the U.S. commitment to the Paris

accord to stabilize exchange rates. Together with the administrative moves of the Japanese Ministry of Finance to discourage speculative dollar sales, these actions underscored the official commitment to stabilize exchange rates.

With the dollar on a firmer footing, foreign investors began to reappear in U.S. markets, attracted by the very favorable interest differentials for dollar-denominated assets that emerged as a result of sharp interest-rate moves both in the U.S. and in other countries during April and early May. Once market professionals sensed that private capital inflows were again financing a significant portion of the U.S. current account deficit, confidence in the near-term outlook for the dollar improved and a greater sense of two-way risk developed in the exchange markets. With the build-up in near-term inflation expectations also moderating, long-term interest differentials favoring the dollar narrowed from the very high levels reached in mid-May.

These interest differentials continue to be strongly favorable to the dollar. Nevertheless, recent experience shows that investors can be quick to respond to a change in perceptions about interest rates and exchange rates. While market participants were impressed that the Federal Reserve was concerned enough about the exchange rate to tighten monetary policy this spring, they remain wary that economic or other factors might limit the Fed's room to maneuver in the future. Moreover, comments by foreign officials indicate that Japan and Germany both face obstacles to further easing of their monetary policy. On trade, recent statistics have given some comfort that

global adjustments are finally occurring, and the risks of a trade war seem to be diminishing. But the long-term view of the currency is uncertain and there is a recognition that we still have a long way to go to restore greater balance to our external position. Therefore, there is still a lot of negative sentiment about the dollar for the longer term, and market professionals understandably are concerned that the process of adjustment might falter or that U.S. officials might again turn to the exchange rate to seek reduction of those imbalances.

Intervention in recent months has been in support of the dollar. But the net amount of dollars purchased by the other central banks from the G-7 and the rest of Europe fell to $5 billion from $28 billion in the previous intermeeting period. With the recent steadier performance of exchange rates, market expectations about central bank intervention have changed somewhat. Many dealers believe that the G-7 agreed at the Venice Summit to exchange rate ranges, implying that intervention would be directed to placing a top as well as a bottom to the dollar, although in the past couple of days, there have been comments from the Japanese suggesting they did not intend to intervene at these levels to stop the dollar's rise. If the dollar should meet tangible resistance on the up-side that seems to result from official action, the sense of two-way risk that now exists in the market may give way to a renewed test on the downside.

NOTES FOR FOMC MEETING
JULY 7-8, 1987

Peter D. Sternlight

Domestic Desk operations since the last meeting of the Committee were directed at maintaining the somewhat greater degree of restraint on reserve positions adopted at that meeting. In effect, this amounted to approximately continuing the degree of pressure actually prevailing in the weeks just prior to the May 19 meeting, as that pressure had tended to exceed what was sought by the Desk. In the background of this past intermeeting period, there was a generally steady and then gradually strengthening dollar, moderating growth or even declines in the monetary aggregates, and an abatement in the signs of price pressures that were a disturbing factor earlier. Business news continued mixed, tending to suggest sluggish-to-moderate growth. In this setting, most interest rates moved lower, reversing part of the sharp run-up in April and early May.

Reserve paths incorporated a $500 million borrowing level, compared with $400 million just before the last meeting. Actual borrowing averaged about $580 million for the three full reserve maintenance periods. The intermeeting average was boosted in part by the nearly $800 million level in the two weeks ended June 3, which largely reflected heavy use of the window over the Memorial Day weekend, perhaps prompted by imminent expectations of a higher discount rate. Federal funds averaged

close to 6-3/4 percent, though recently showing some tendency to drift a little lower as market assessments of the extent of the System's recent firming were moderated.

Compared with the previous intermeeting period, implementation of policy in the latest interval was "a piece of cake." We had to cope with high Treasury balances again after the mid-June tax date, but it was nothing like the experience after the April tax date, when unpredictedly high balances combined with unruly upward revisions in reserve paths to upset our reserve provision efforts time and again. Unlike the previous period, revisions this time tended to lift reserve availability and reduce the nonborrowed reserve path as weaker than expected money growth dampened required reserves. Largely as a result, nonborrowed reserves exceeded their path levels in each maintenance period.

With relatively moderate needs, Desk operations were much smaller in scale than in the previous intermeeting period. The main outright activity was a $2.5 billion purchase of coupon issues in mid-June, essentially to help deal with the reserve impact of rising Treasury balances after the corporate tax date. In choosing to buy coupon issues in preference to bills, the Desk was again influenced, as earlier this year, by the relative scarcity of bills. Up through about mid-June the Desk also bought about $650 million of bills from foreign accounts. In the last several days of the period, however, facing an abundance of reserves in the current maintenance period and prospectively in

the next two periods, the Desk sold about $550 million of bills to foreign accounts. In addition, up until the final several days of the period, outright operations were supplemented with a mixture of System and customer-related repurchase agreements to provide reserves temporarily. There were also two occasions when matched-sale purchase transactions in the market were used to sop up reserves on a short-run basis.

Favored by a stable or strengthening dollar, an abatement of imminent inflation fears, slow money growth, and mixed news on the real economy that suggested sluggish-to-moderate growth, most interest rates declined during the intermeeting period, retracing an appreciable part of the April-May run-up. The markets were jolted on June 2 by the news of Chairman Volcker's near-term departure, but they soon recovered as confidence was regained in the likelihood of continuity of policy under the new Chairman-designate.

Yields on intermediate and long-term Treasury issues fell about 40 to 60 basis points amid indications of some resumption of foreign buying, including Japanese interest. The Treasury raised about $19 billion in the coupon market, chiefly in the quarterly 5- and 7-year issues. The Treasury has trimmed the size of these issues a bit, but they continue to be substantial net new money raisers.

Meantime, they have continued to pay down bills, although to a lesser degree than earlier. Bill paydowns cumulated to more than $7 billion over the period, while rates

declined by about 20 to 60 basis points, with the larger declines in the 6- to 12-month range. The lesser decline for short maturities partly reflected the fact that financing costs, like the Federal funds rate, did not show great change over the interval. Three- and six-month issues were auctioned yesterday at about 5.62 and 5.68 percent, compared with 6.03 and 6.34 percent just before the last meeting.

In addition to the continuing paydowns and investor demands, another shadow over the bill market just now is the possibility that the Treasury may have to pay down one or more entire issues if timely action is not taken on the debt ceiling. The ceiling drops sharply after July 17 and without new action the Treasury could issue no new debt after that date. They are likely to have sufficient cash on hand to pay off one weekly bill issue--in fact probably enough for two issues--the July 23 and 30 maturities--but not enough to repay two-year notes on July 31. With feelings running high in the Congress on what to do about budget restraint, the upcoming debt limit exercise could be quite messy.

In other markets, Federal Agency paper continues to come to market but in some cases at wider spreads over Treasuries than before. This is particularly true of Farm Credit paper where spreads on short issues widened to around a full percentage point compared, say, with 30 to 40 basis points a few months ago. To be sure, a considerable part of the widening spread reflected the scarcity of Treasury bills rather than acute disaffection for

Farm Credit issues. The spread probably would be far wider but for the fact that the financial community is well aware that the Congress is now actively considering measures to support the Farm Credit System. There has also been a modest widening of spreads for Federal Home Loan Bank paper; here, too, the move would undoubtedly be much greater but for the market's awareness that a FSLIC support package is being developed.

In the course of this period, additional information became available regarding the extent of dealer losses in the market downdraft during April and early May. The huge Merrill Lynch loss was unrivaled in size but some other well-established and presumably sophisticated firms also incurred painful losses. Even so, it appeared that the losses hit in places where they could be withstood. It remains to be seen what sort of lessons may have been learned about trading today's complex instruments, but at least there seems to be a continued willingness to participate in broad market-making activity, including new Treasury auctions.

As to the state of current market sentiment, the predominant feeling seems to be that the recent trading range could well continue for some time, with no clear majority seeming to favor a breakout toward the higher or lower rate side. Some participants feel the greater likelihood is that the recent highs in yields will be tested again as the year progresses, given some probable strengthening of inflation as the impact of a lower dollar works its way through the economy. Others are more

inclined to expect a further working down of rates given the recently steadier or stronger dollar, and the likelihood of only moderate growth in the economy. That's what makes markets.

Michael J. Prell
July 7, 1987

Overview of the Staff Forecast

The first chart summarizes the principal assumptions that underlie the staff's forecast. There have been a few changes since our February presentation. On the financial side, despite the recent rally, interest rates — particularly long-term rates — are higher than we anticipated they would be at this point. It seems to us likely that the inflation concerns and downward pressures on the dollar that led to the spring run-up in rates will remain a recurrent feature of the economic scene. Consequently, we are looking for rates to trend upward, with bond yields next year averaging above their recent highs. In an environment of rising rates, we would expect the velocity of M2 to increase, so that M2 growth might average about 5 percent at an annual rate; consistent behavior of M3 probably would be growth in the vicinity of 7 percent.

On the fiscal side, the assumption about policy action for fiscal 1988 is the same as in February — that is, some combination of spending cuts, asset sales, and "revenue enhancements" that amount to roughly $25 billion.

Given the assumed economic policies here and abroad, and our view of what it ultimately will take to achieve an adjustment of our external position that is acceptable to both policymakers and market participants, we have built into our forecast a further depreciation of the dollar averaging somewhat under 10 percent at an annual rate. And finally, we have assumed that the price of imported oil will not change significantly between now and the end of 1988.

The next chart provides some additional information on the federal budget picture. For fiscal 1987, we are projecting a deficit of about $170 billion. This marked reduction from the preceding year reflects a combination of purposeful action on the legislative front plus some favorable surprises, most notably the big influx of tax revenues from capital gains realized before

the end of last year. Unfortunately, that surge in revenues is unlikely to repeat itself: indeed, it may have drawn off some potential future revenues. In addition, business firms seem to have found enough ways to limit their liabilities that gains in corporate tax revenues under the new tax code may fall short of expectations. These influences, along with the higher interest rates we are now projecting, put our forecast of the fiscal '88 budget deficit very close to that for this year.

This fiscal outlook clearly is much less favorable than is anticipated in the budget resolution passed recently by the Congress. The resolution puts the deficit at the Gramm-Rudman target of $108 billion. To achieve that, the Congress has proposed a $37 billion package of deficit-reduction measures, and based its budget estimates on the OMB's economic and technical assumptions, which are considerably more favorable than those of the Congressional Budget Office, let alone ours. As you know, the $37 billion figure includes $19 billion of unspecified tax increases, which are to be assembled in one reconciliation bill with certain outlay cuts; if that bill is rejected, it is hard to say what the ultimate legislative outcome might be. The deficit reduction package we have assumed is roughly in line with what was accomplished last year on the FY 87 budget.

The bottom panel attempts to give some idea of the underlying thrust of fiscal policy, of which the high employment budget is a traditional measure. The year-to-year movements are being distorted by the one-time capital gains revenues and other factors; however, the basic sense of a swing toward restraint after 1986 has been preserved.

Chart 3 summarizes the major features of the staff forecast in terms of the items that the Board normally reports to the Congress. Real GNP is

expected to rise 3 percent over the four quarters of 1987 and then 2-1/4 percent next year. As you can see, domestic spending — GNP minus net exports — should rise appreciably less than domestic output, in contrast to the pattern earlier in this economic expansion when the terms of trade were moving in our favor. The deflator for GNP is projected to increase 3-1/2 percent this year and 3-3/4 percent in 1988; these figures are considerably below what we are forecasting for consumer prices, which are more directly affected by rising import prices. And, finally, we are projecting an essentially stable unemployment rate at about 6-1/4 percent.

As you know, the jobless rate fell last month to 6.1 percent, which was below what we had built into our forecast. Because of the relatively early time during the month in which the household survey was taken, it may not have picked up fully the influx of students into the labor force. Thus, we would not be surprised to see some bounceback in the next month or two. In our thinking, 6.1 percent unemployment does not have significantly different implications for wage and price pressures than 6.3 percent, but a more serious question is raised by the magnitude of the decline in joblessness since last fall. That decline has occurred in the face of GNP growth on a par with what we are projecting for coming quarters. Should such a relationship persist, counter to our expectation, it would imply a lower trend growth of productivity and distinctly more inflationary labor market conditions.

Looking further at the recent economic data, chart 4 lays out some of the indicators that have led us to estimate second-quarter GNP growth at about 2-1/4 percent. The June labor market report showed a second month of comparatively sluggish growth in payroll employment, but the average monthly increase for the quarter of about 150,000 is quite consistent with our output

forecast. Manufacturing employment has been inching upward, and our reading of the payroll data and other available information suggests that industrial production probably rose another couple of tenths of a percent in June.

The recent gains in overall industrial activity have been achieved despite cutbacks in auto assemblies. Those cutbacks constituted a direct drag on real GNP growth of around 1-1/2 percentage points in the second quarter. As the middle left panel indicates, sales of domestic cars remained unimpressive through June, and we expect that lower auto output will slice a little off GNP growth in the current quarter as well. In this regard, I should mention that we have not built into our forecast any disruption from an auto strike.

Consumer spending on items other than motor vehicles has been lackluster as well, as shown at the right, but combining this with a somewhat higher average level of motor vehicle sales than earlier in the year, we think there was a moderate increase in total consumer outlays in the second quarter.

With the upturn in interest rates after March, both total housing starts and sales of new homes declined through May; thus, residential construction probably contributed a small negative to real GNP last quarter. Business fixed investment appears to have snapped back, however, after the tax-related plunge at the beginning of the year. Shipments of nondefense capital goods have risen above the first-quarter level, and equipment outlays also were boosted by higher car and truck sales. Outlays on structures may have been up a tad, judging by the construction figures in the chart and the reported pickup in oil drilling.

The available pieces of the domestic spending picture don't add up to what we see for second-quarter production. Our guess is that the gap was in large part filled by a further significant gain in net exports. On that note, let me turn things over to Ted for a discussion of international developments.

F.M.Truman
July 7, 1987

FOMC Chart Show -- International Developments

The upper panel in Chart 5 presents a familiar picture of the weighted-average foreign exchange value of the dollar against the currencies of other G-10 countries in real (or price-adjusted) terms and the differential in real long-term interest rates between the United States and those countries.

Our revised assumptions about the future course of monetary policy here and abroad coupled with the recent behavior of the differential between U.S. and foreign real long-term interest rates--the red line--have led us to alter our projection for the dollar. As you can see on the chart, the interest rate differential continued to decline through most of last year and early this year, but it has since turned up again. We are assuming that it will widen by a further 100 basis points or so over the forecast horizon.

The black line on the chart shows the value of the dollar adjusted for movements in consumer prices here and abroad. On this measure, the dollar has declined almost 40 percent since its peak in February of 1985 and by about 7 percent over the past six months. As Mike indicated, we are projecting that the dollar will continue to depreciate over the forecast period, but more slowly--at an annual rate of somewhat less than 10 percent. Because consumer prices are expected to be rising more in the United States than on average abroad over the forecast period,

the rate of depreciation of the dollar in real (or price-adjusted) terms would be around 7-1/2 percent at an annual rate, this would be slower than the rate of depreciation over the past two years. Meanwhile, we expect the dollar to depreciate at about half that rate in real terms on average against the currencies of our major trading partners in Asia and Latin America--somewhat faster than over the past two years.

As can be seen in the lower panel of the chart, the improvement in U.S. price competitiveness to date has essentially halted the deterioration of the U.S. current account balance. Our projection calls for the deficit to shrink from about 3-1/2 percent of GNP currently to about 2-1/2 percent of GNP by the fourth quarter of 1988.

Turning to the next chart, progress against inflation both here and abroad has been arrested. The turnaround in petroleum prices since a year ago is one element common to these trends. As can be seen in the upper left-hand panel, wholesale prices in the United States--the black line--have been rising relative to a year ago. Because of the offsetting influence of currency appreciation, wholesale prices in the major foreign industrial countries--the red line--are still declining on a year-over-year basis, but to a lesser extent.

Not all the price pressures this year have come from the oil market. The right-hand panel shows that the broad Economist index of commodity prices, which excludes oil, has turned up measured both in dollars--the black line--and even in foreign currencies--the red line.

The lower panel shows our assumption about the U.S. import price of oil and, for reference, the spot price of West Texas Intermediate crude oil. The average price of U.S. imports of crude oil and petroleum products was $16.80 in April. We are assuming that the price will rise slightly further to $17.50 by the fourth quarter of this year and will remain at that level throughout 1988. This assumption is consistent with a scenario in which the OPEC agreement holds and the members of OPEC respond to pressures associated with growing demand by increasing their production rather than by raising prices. However, this is clearly one area of upside risk to our inflation projection.

The top panel on Chart 7 compares our outlooks for consumer price inflation here and abroad. As you can see, over the past three years the rate of increase in consumer prices was slower in the United States than in the major foreign industrial countries; last year, of course we all benefited as consumers from lower petroleum prices. This year we are projecting that U.S. consumer prices will rise at a rate almost 2 percentage points faster than consumer prices on average in the major foreign industrial countries. Next year, with less appreciation of their currencies to offset their underlying rates of inflation, the differential in inflation rates narrows to about 1-1/2 percentage points.

The middle panel presents our outlook for growth in Europe and Japan--a potentially critical determinant of the outlook for our own external accounts. Unfortunately, we continue to see little reason to anticipate substantial help from

this area. We expect both real GNP and real domestic demand to grow less on average this year than last, and growth of domestic demand to slip further next year. This outlook is predicated on implementation of announced policies in the fiscal area and only slightly easier money market conditions on average. In general, the authorities in the major foreign industrial economies are unwilling or unable to offset the drag on their economies arising from external developments.

Largely as a consequence of the slower growth in the industrial world, economic activity in the rest of the world as a whole, shown by the red bars in the bottom panel, has been on a declining trend since 1984. It is expected to be less vigorous than in the United States this year and no more vigorous next year. Thus, in our forecast essentially all the adjustment of the U.S. external sector comes via exchange rates and, to a much lesser extent in 1988, from slower growth of spending in the United States.

The two panels at the top of the next chart summarize the evidence to date on that adjustment process as it has affected U.S. merchandise imports of non-oil products. The left-hand panel shows the acceleration in the prices of imports over the past year in the broad categories of industrial supplies, capital goods, and consumer goods. As is shown in the second column of the right-hand panel, these increases in prices have helped to induce a slowing in the growth of the volumes of our non-oil imports. With the exception of industrial supplies, the slower growth is apparent in all categories of non-oil imports.

The two panels at the bottom of the chart present our forecast for non-oil imports in the aggregate. As is shown in the left-hand panel, we expect the average price of those imports to accelerate to almost a 10 percent annual rate of increase, as the continuing effects of the dollar's depreciation are felt in an environment in which foreign suppliers have to a large extent exhausted the scope for further reductions in profit margins. As is shown by the red line in the right-hand panel, these rapid increases in prices along with somewhat slower growth in underlying demands are expected to produce a slight decline in the volume of non-oil merchandise imports over the next six quarters. Of course, the value of such imports will continue to increase, although more slowly, along with their price.

Turning to U.S. oil imports, the left-hand panel at the top of Chart 9 illustrates the erratic quarterly pattern of these imports in recent years. As shown by the red line, the volume of U.S. imports of petroleum and products was very high in the third quarter of 1986 as prices bottomed out on world markets. We saw a quantity adjustment in the fourth quarter of last year and the first quarter of this year. However, U.S. inventories have been drawn down, and we expect the volume of such imports to resume an upward trend under the influence of declining domestic production and rising consumption needs. With the additional effect of higher prices, the value of U.S. oil imports is projected to reach about $45 billion in the fourth quarter of next year, up about $12 billion from the average in 1986.

On the export side, we do not expect much improvement in the area of agricultural exports--the right-hand panel. Although the volume of such exports has recovered substantially from the lows of last year, and we think there was a temporary blip as a result of increased exports to the U.S.S.R. in the second quarter, the medium-term trend is for only a gradual expansion in volume. The value of U.S. agricultural exports is expected to pick up somewhat more rapidly as prices of feedgrains, soybeans and cotton recover from recent lows.

Given our projection for the other broad categories of our merchandise trade account, we must rely on nonagricultural exports to produce most of the anticipated improvement. As is shown in the lower left-hand panel, over the year ended in the first quarter of this year, there was a smart acceleration in the volume of most categories of nonagricultural exports, compared with the previous four quarters. The most significant increases have been registered in capital goods, especially business machines, and industrial supplies, especially chemicals.

As the red line in the right-hand panel illustrates, we are projecting continued rapid growth in the volume of U.S. nonagricultural exports, largely as a consequence of the lagged effects of the improved U.S. price competitiveness that we have already seen and the further improvement that is built into our forecast. The average price of our non-agricultural exports is expected to increase at an annual rate of more than 4 percent, giving a small extra boost to our projection of the value of those exports.

I should note that there are two important uncertainties in our forecast for the U.S. trade position, aside from the standard uncertainties associated with the future course of underlying determinants. First is the issue of protectionism: we have assumed that enactment of U.S. trade legislation will not produce a sharp break in the trend of our forecast, but we _have_ built into our forecast a presumption that, as a consequence of the rising tide of protectionism around the world in recent years, quantities will be somewhat less responsive to changes in relative prices in the future than they have been in the past. Second, the adjustment in exchange rates that we have had over the past two years has just about reversed the dollar's appreciation over the previous four years. Both were essentially unprecedented. As a consequence, we lack the kind of experience in our historical statistics that one would like to have in constructing forecasts.

With those qualifications, Chart 10 summarizes our projection for U.S. external balances. As Mike has already noted, our forecast for real GNP continues to rely heavily on the turnaround in our real net exports of goods and services, the red line in the top panel. In February the projected turnaround was an analytical presumption; now we have some concrete evidence. We also expect that next year we will begin to see a turnaround in the current account balance measured in current dollars--the black line. But we anticipate that progress on this measure will be slow, and it could well disappoint market participants and/or policymakers.

The table at the bottom of the chart provides a summary of U.S. capital transactions. I would make two points about the data displayed. First, the role of official capital inflows--line 3--is expected to increase compared with last year, but not to the exceptional degree we saw in the first quarter of this year. As the memorandum items at the bottom of the table show, U.S. and G-10 intervention purchases of dollars equalled the U.S. current account deficit--line 8--in the first quarter of this year. However, official capital inflows registered in the U.S. balance of payments statistics for that quarter were less than half the amount of those intervention purchases. Second, we will continue to rely heavily on net private capital inflows--line 2--to finance our current account deficit directly or indirectly.

Mike will now continue our presentation with a review of the domestic economic and financial outlook.

Michael J. Prell
July 7, 1987

Domestic Economic and Financial Outlook

Chart 11 focuses on some of the domestic consequences of the external adjustment Ted has been describing. A close inspection of the upper panel indicates that those manufacturing industries where imports and exports bulk larger than average relative to shipments have begun to show some greater strength this year. The pickup in those sectors has been reflected in the better growth of total industrial production in the past 12 months, which is indicated in the figures at the right.

If that is the good news, the lower panels are the bad. The combination of rising import prices and protectionist measures appears to be leaving a greater mark on domestic inflation than we had anticipated. To be sure, at the consumer level, the acceleration in prices overall in the first half of 1987 was largely a product of the backup in oil prices; this is evident in the panel at the left. But, as may be seen at the right, the remainder of the acceleration in the CPI was attributable to commodities other than food and energy. Within this component, some of the sharpest increases have been among items, such as as apparel, for which we depend heavily on imports.

The available evidence suggests that domestic manufacturers have not been especially aggressive in marking up their prices in response to reduced foreign competition. Nonetheless, the bottom left panel shows the upturn in producer prices of intermediate materials and supplies, on which the pressures from rising dollar costs of basic commodities and high rates of capacity utilization in some industries are manifesting themselves; the latest purchasing managers report, released yesterday, suggested that this upswing may have continued in June.

The broad acceleration in prices has not escaped the attention of the public: as you can see at the right, the Michigan survey of households showed an average one-year inflation expectation in May about a percentage point above the level reported in March; the June figure, received too late for inclusion, was down only two-tenths.

Inflation expectations are of course an important factor in wage behavior. The drop in expected inflation last year undoubtedly contributed to the deceleration in compensation, which is visible in the top left panel of chart 12. We have as yet no comprehensive labor cost data beyond the first quarter, and it may take a while for the recent pickup in price increases and expectations to show through — but we expect that they will start to do so in the second half of the year.

The reduced slack in labor markets is a factor in our thinking about wage pressures. Aggregate unemployment most likely is now in the range of the natural rate and thus can't be expected to exert much, if any, downward force on wage inflation. The top and middle panels highlight some possible pressure points. First, as you can see, the recent trend in employment costs in the service-producing sector has been less favorable than that in the goods-producing sector; the service industries are much more dependent on female workers, and the jobless rate for women over 25 already is below its level in the late 1970s when overall unemployment reached the low for that cycle. On a regional basis, portrayed in the middle panels, compensation increases have not diminished in the past couple of years in the Northeast, where unemployment has been comparatively low. I might note that the chart would look quite similar if the West or Midwest were substituted for the South.

As indicated in the bottom panel, we are projecting only a mild step-up in compensation increases this year. Next year, however, compensation will be boosted about three-tenths of a percent by higher payroll taxes and the faster consumer price increases will be feeding through to wages. We expect, though, that compensation gains will fall short of consumer price increases, cutting into real wage rates.

The result, in our forecast, is a retardation of growth in real labor income and a weakening of consumer spending. The top panel of chart 13 shows that consumption expenditures moved up sharply as a percent of GNP over the past several years — to an historically high level -- and that share is expected to decline appreciably by the end of 1988, in effect making way for a sizable increase in the share of net exports. As may be seen in the middle left panel, a large portion of the spending slowdown is projected to occur in outlays for durable goods, which were extremely strong during the past few years. Overall, real consumer spending, as indicated at the right, is expected to accelerate temporarily in the second half, as car manufacturers step up their efforts to clear out '87 models, but we have an increase of only 1 percent next year. That is in line with projected growth in disposable income and implies a continued low personal saving rate. Barring a substantial reversal of recent gains in household wealth, persistence of a low saving rate would be consistent with past experience, as suggested by the bottom panel.

One element in the anticipated sluggishness of spending on consumer durables is the weakness of home building in our forecast -- shown in the next chart. Although interest rates on fixed-rate mortgages are currently about a 1-1/4 percentage points above the nine-year lows reached in March, and history suggests that the full effects of a rate increase are not felt for several

months, we are not expecting a significant further drop in single-family housing starts in the near term. One consideration, indicated at the middle left, is that monthly payments associated with new fixed-rate loans are still comparatively low relative to income. Moreover, rates on adjustable-rate loans — shown at the right — have risen very little, so that many homebuyers can hold down their initial payment burdens by using ARMs rather than fixed-rate loans; in fact, the proportion of new conventional loans closed with adjustable rates jumped from 22 to 36 percent between early April and early June. As time passes in our projection, however, weak real income growth and rising mortgage rates combine to produce a further erosion of single-family starts. On the multifamily side, the adjustment to high rental vacancy rates and to adverse tax-law changes has been underway for a while; but building activity in this sector is likely to remain subdued, especially in the projected financial environment.

The outlook for income and spending flows points to growth in household sector debt below the pace of the past few years; this may be seen in the table in the bottom panel. The graph at the left points out the compositional change that has occurred in borrowing — away from consumer installment credit and toward mortgage credit. It seems likely that already heavy installment debt burdens would have fostered a reduction in this form of borrowing, but that influence has been augmented by the reduced deductibility of consumer interest expenses and active promotion of home equity lines.

Turning now to the business sector, the top panel of chart 15 shows the projected pattern of fixed investment. As I noted earlier, available indicators point to a bounceback in capital spending in the second quarter. Over the remainder of the forecast period, we expect to see moderate growth in the

equipment category and a generally weak performance by the structures component. As noted in the middle left panel, hints of an upturn have appeared recently in orders for nondefense capital goods; this is true even after one strips away aircraft and parts which tend to have only a loose link to domestic equipment outlays, especially in the shorter run. Moreover, a significant part of the recent improvement in orders has been in computers and office equipment, and because of the low deflator for this group it packs a big wallop in terms of measured <u>real</u> spending. Survey evidence suggests that businesses are still emphasizing modernization and productivity enhancement in their capital spending plans, and this bodes well for equipment outlays.

The data on contracts, at the right, suggest some firmness in construction activity as well in the near term. The rebound in contracts has been attributable entirely to a strong upswing in the institutional category, reflecting a surge in building by private schools. Spending on structures also may be boosted further by gains in oil drilling. However, the overhang of unused office and hotel space and excess utility capacity lead us to predict a small further decline in 1988 for total structures outlays.

As for inventories, the only serious imbalances appear to be in the auto area. The bottom left panel indicates that the stock-to-sales ratio for all other manufacturing and trade maintained a slight downward trend through April. We are looking for continued moderate accumulation in this broad grouping, partially offset in the third quarter by a reduction in auto dealer inventories. After that, stocks are projected to rise in step with sales.

Although the balance sheet posture of many firms looks less than robust, businesses as a group are not expected to face significant financial constraint on their spending. The top panel of the next chart shows that, among nonfinancial corporations, outlays for inventories and fixed capital are projected to exceed

internal funds by only a moderate amount. Borrowing, however, is expected to continue outstripping by a wide margin what is needed to cover the financing gap. As indicated in the middle panels, corporations have been retiring huge volumes of stock in connection with mergers, takeovers, and share buybacks. Despite the disincentives imposed on some types of transactions by tax reform, such activity has been well maintained thus far in 1987 and we have assumed only a gradual tailing off in coming quarters. As far as debt issuance is concerned, the backup in interest rates in May prompted many firms to turn away from the bond markets, but the more recent rate decline has brought a revival in long-term financing. In the projected interest rate environment, bond issuance may well occur in fits and starts as firms pick their spots, and the predominance of long-term over short-term borrowing probably will not be as great as it was in the more hospitable environment of the past couple of years.

My final chart gives a brief overview of the government sector. State and local real purchases rose at a 4 percent annual rate in the first quarter, on the strength of a further surge in construction outlays. We are projecting a slowing to the 2 to 2-1/2 percent range in subsequent quarters, with a deceleration in construction activity. As indicated at the right, the state and local budget position has deteriorated markedly over the past couple of years. The second quarter probably saw a move back to surplus, owing to the windfalls from federal tax reform; however, deficits are likely to be the story for a while thereafter, in light of the economic problems of some locales and the continued use of an accumulated bond proceeds for capital outlays.

At the federal level, the momentum of defense procurement programs is buoying growth of non-CCC outlays this year, but in calendar 1988 cutbacks in defense appropriations are expected to show through in reduced total real purchases. Under our assumptions, however, the federal deficit will not be changing much, and — owing to movements in cash balances — federal borrowing may increase slightly next year, State and local borrowing is expected be comparatively moderate in coming quarters, with advance refunding activity continuing to be discouraged by the higher level of interest rates. All told, total borrowing by the domestic nonfinancial sectors is projected to shrink considerably this year and to increase little in 1988. Translating these figures into percentage changes in the outstanding stock of debt, and measuring on a quarterly average basis, domestic nonfinancial sector debt should decelerate to a 9-1/4 percent increase for 1987 and 8-3/4 percent for 1988. This would represent a considerable narrowing of the gap between debt and GNP growth that has characterized this decade.

Ted will now conclude our presentation.

E.M. Truman
July 7, 1987

FOMC Chart Show -- Conclusion

Chart 18, the last chart in your package, presents the economic forecasts of Board members, Presidents, and the staff. The bottom panel displays the forecasts for 1987 that were presented to Congress in February. The general outlook for 1987 has not changed greatly over the past five months. However, a close examination reveals the hint of more rapid inflation now expected for this year and the surprisingly sharp drop-off of the civilian unemployment rate.

For 1988, the forecasts suggest a further rise in inflation, as measured by the GNP deflator, and a rather broad consensus that growth next year will continue in the range of 2 to 3 percent. I should note that, with the revision in our projection for the dollar, the further depreciation has only a small effect on the staff's forecast for the GNP deflator.

The Administration and CBO have not yet completed their updates on the economic outlook--and may not until next month. We do not anticipate much change to the outlooks that were released earlier in the year--aside from recognizing the lower unemployment rates and, perhaps, boosting the deflator somewhat.

By way of conclusion, I would note that the staff forecast incorporates elements of optimism as well as elements of substantial risk. On the optimistic side, we see the economic expansion continuing into its seventh year, which would be a peacetime record, and we are projecting significant progress in the adjustment of our external accounts despite an unfavorable international economic environment.

However, our forecast also contains clear risks. Several relate to inflation: oil prices, other commodity prices, the dollar, and possible pressures in U.S. labor markets. In essence, our forecast portrays a process of economic adjustment that avoids, at least for the next six quarters, the financial stresses and recession conditions that might normally be the fate of economies with severe external and internal imbalances.

Mr. Chairman, that completes our presentation.

STRICTLY CONFIDENTIAL (FR) CLASS II-FOMC

Materials for

Staff Presentation to the Federal Open Market Committee

July 7, 1987

Principal Assumptions

Monetary Policy

- Interest rates rise appreciably over the projection period.
- M2 grows at around a 5 percent annual rate and M3 at about a 7 percent rate over the next six quarters.

Fiscal Policy

- Deficit-reducing actions of about $25 billion in FY1988.

Other

- Foreign exchange value of the dollar declines at somewhat less than a 10 percent annual rate.
- Little further change in the price of crude oil.

Federal Budget

	FY86 (actual)	FY87 Staff	FY88 Staff	FY88 Congressional Resolution
Outlays	990	1014	1054	1041
Receipts	769	845	886	933
Deficit	221	169	168	108
memo:				
Gramm-Rudman Target	172	144	108	

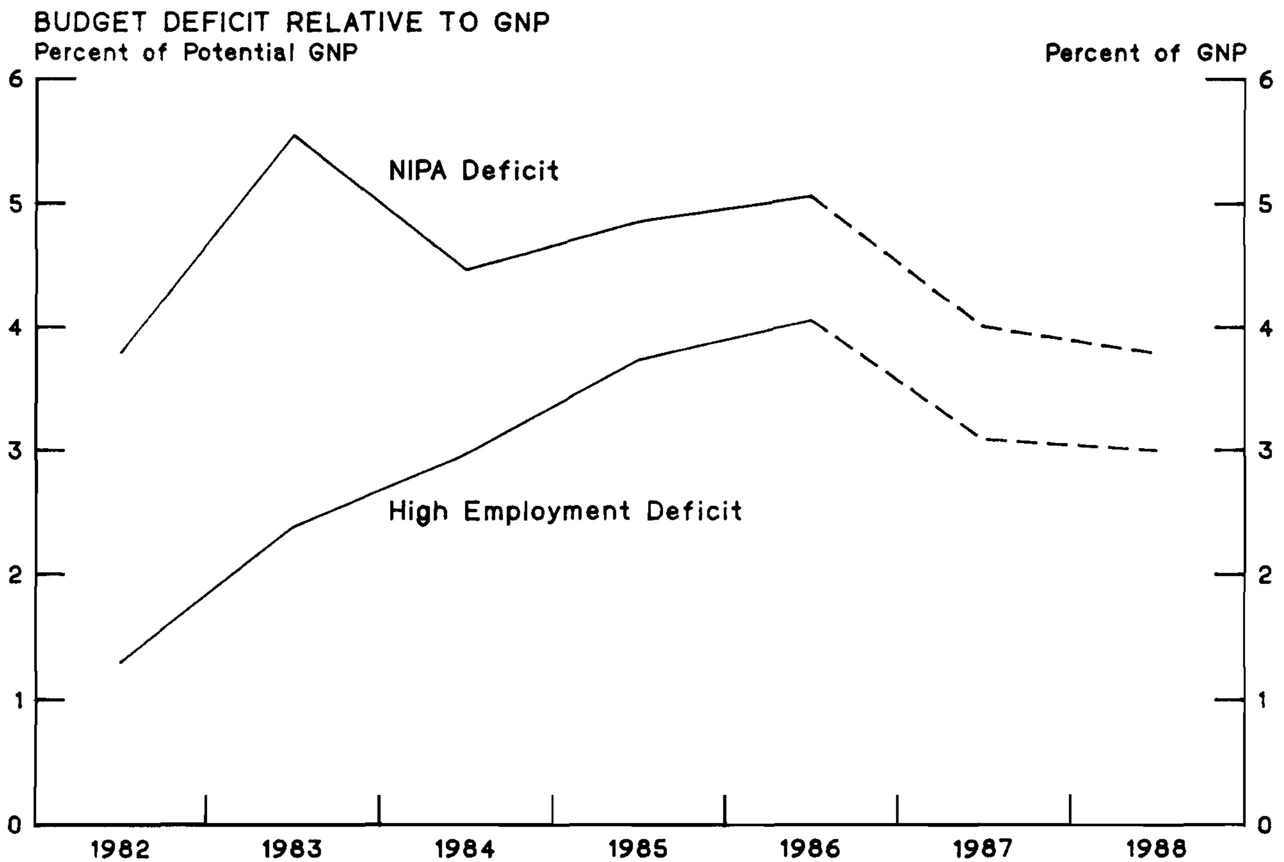
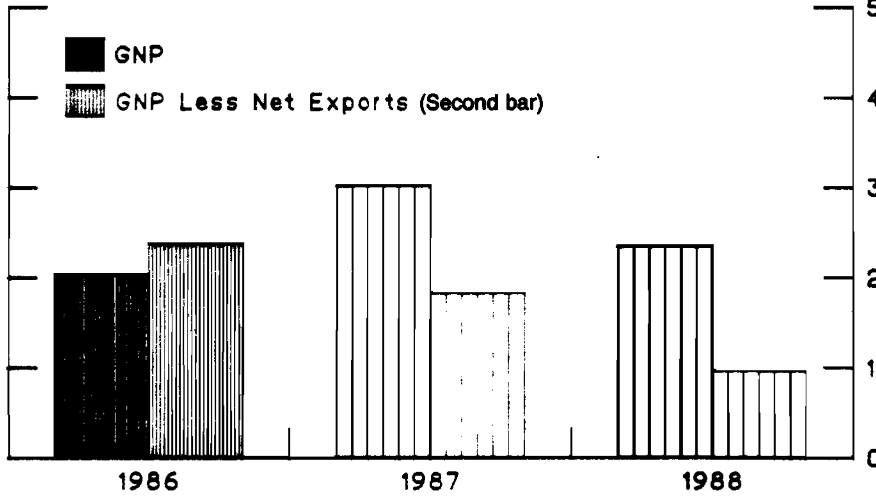


Chart 3

REAL GNP

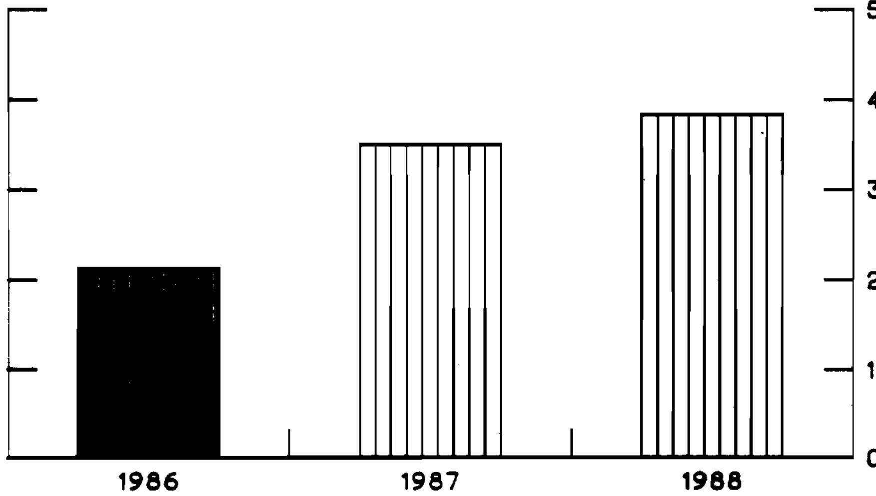
Percent change, Q4 to Q4



	Real GNP	Less Net Exports
1986	2.0	2.4
1987	3.0	1.8
1988	2.3	1.0

GNP DEFLATOR

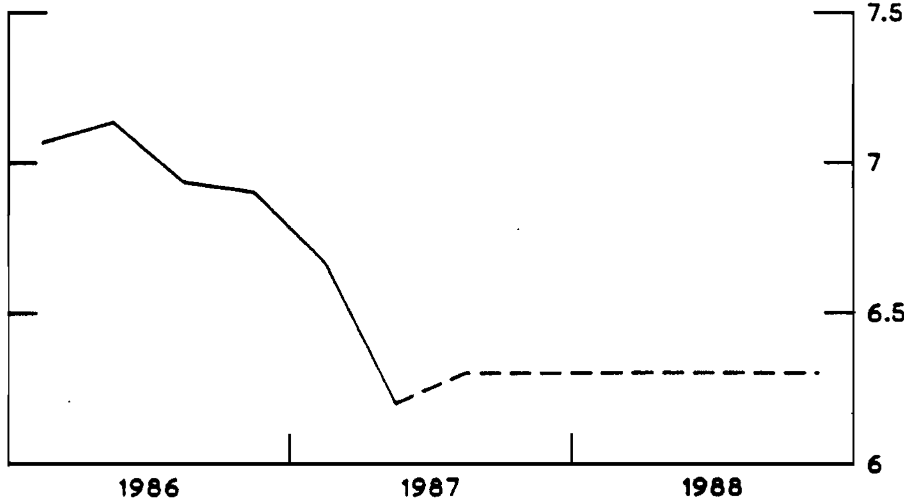
Percent change, Q4 to Q4



1986	2.1
1987	3.5
1988	3.8

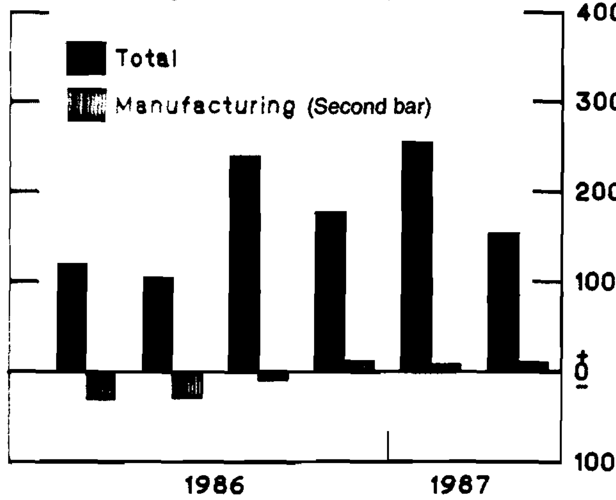
CIVILIAN UNEMPLOYMENT RATE

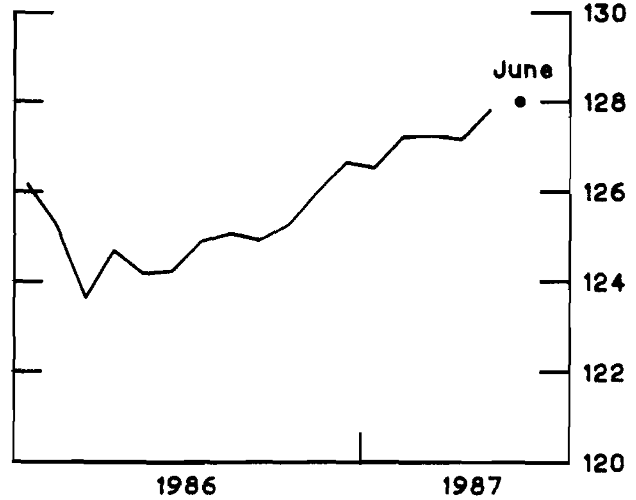
Percent

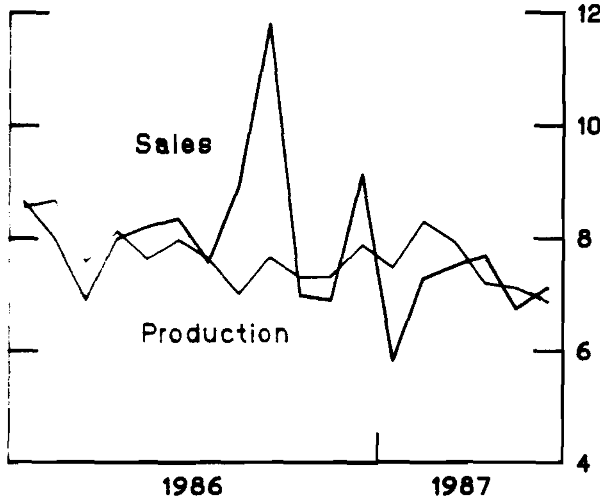


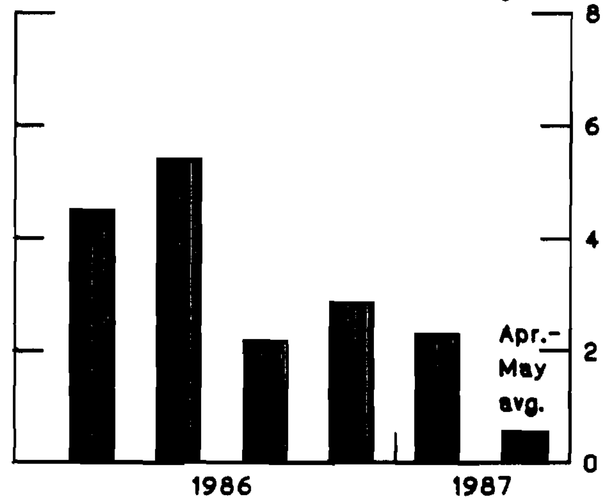
	Q4 Level
1986	6.9
1987	6.3
1988	6.3

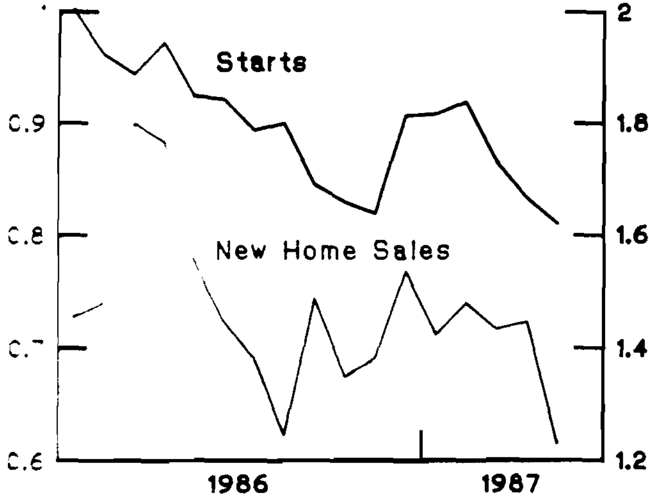
Chart 4

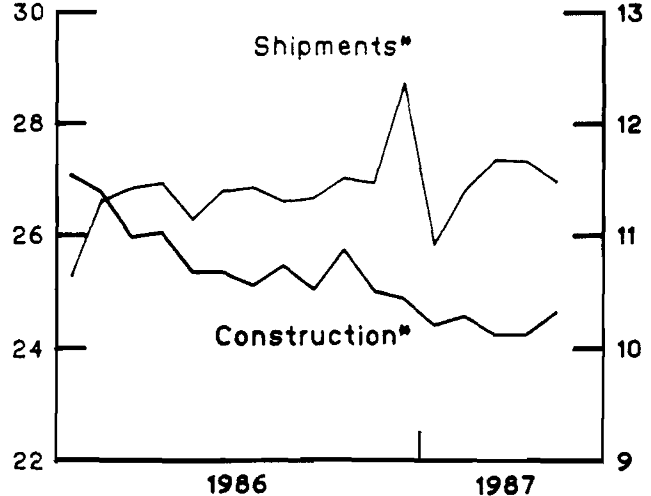






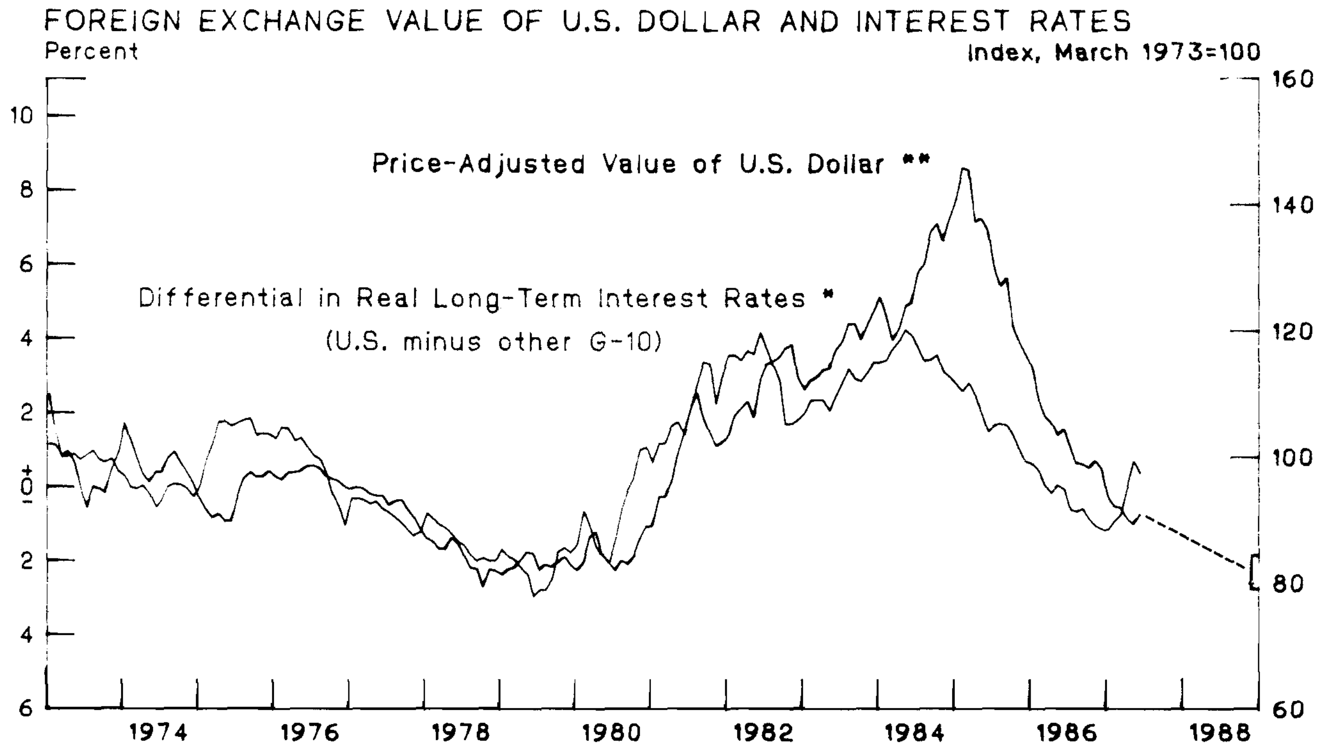


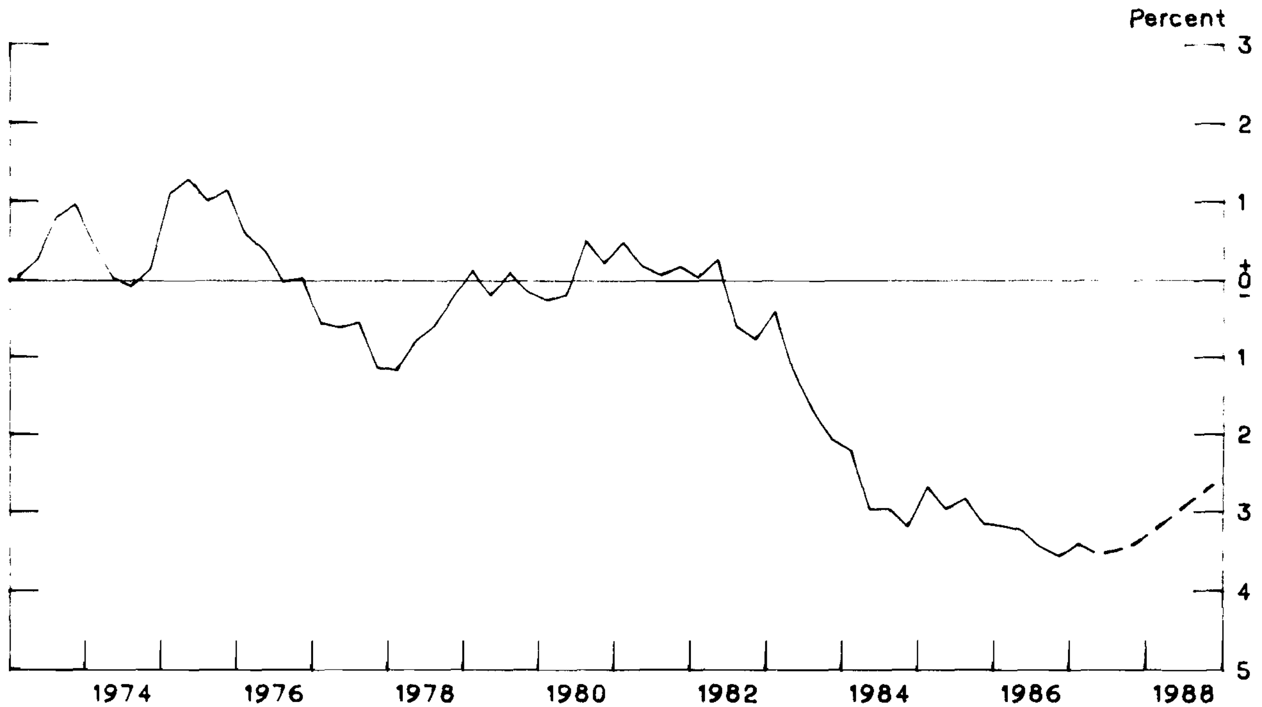




* Shipments of nondefense capital goods.
* Nonresidential construction put in place.

Chart 5

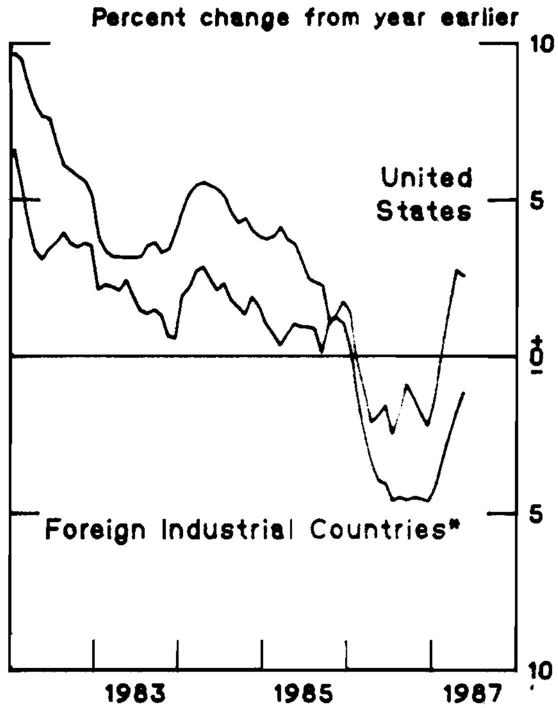


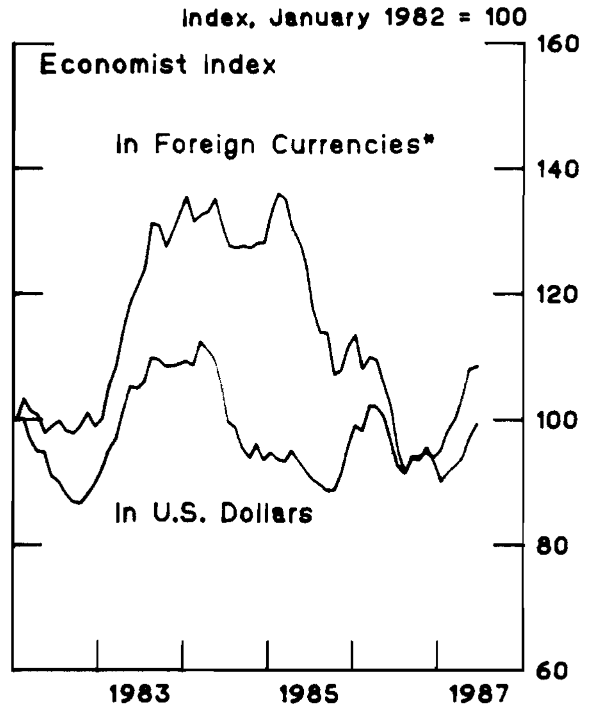


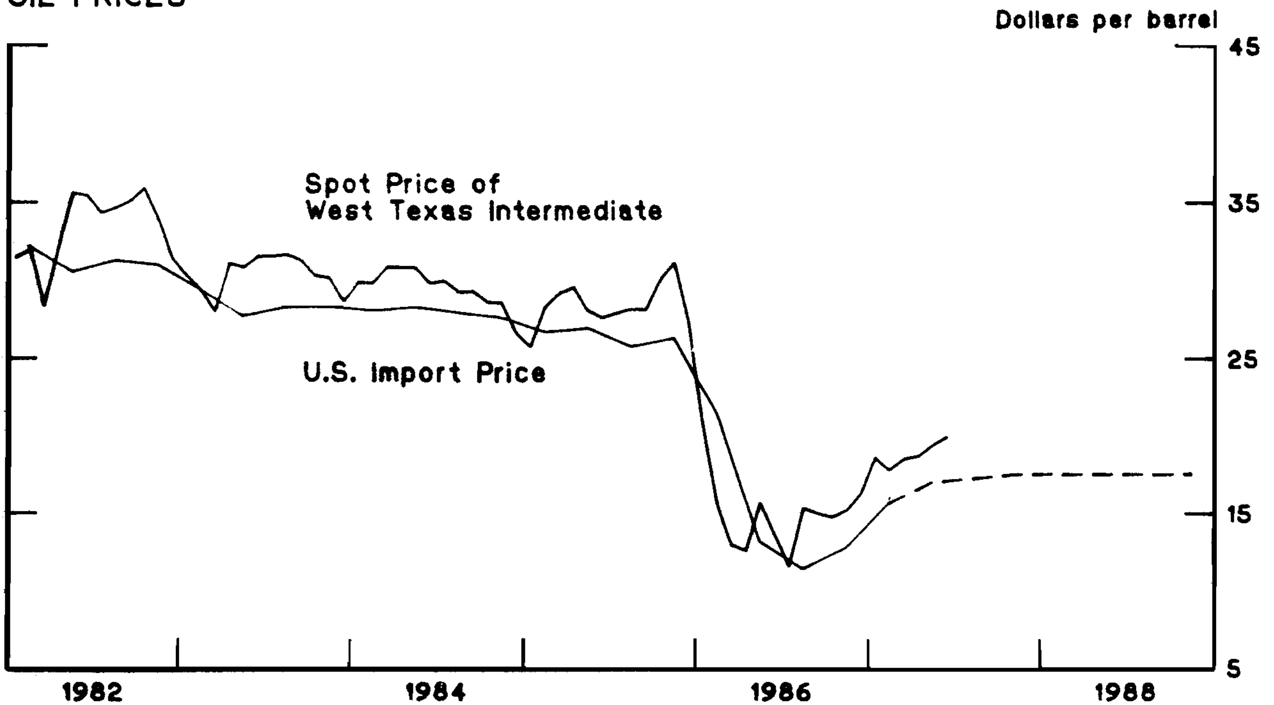
* Real interest rates are calculated using a 36-month centered moving average of inflation rates, using staff forecasts where necessary.

**Weighted average dollar against other G-10 currencies using total 1972-76 average trade adjusted by relative consumer prices.

Chart 6

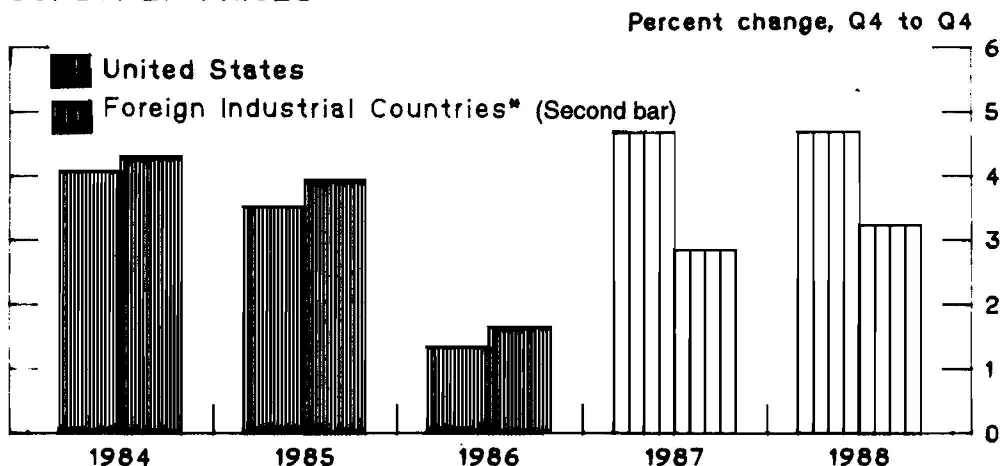


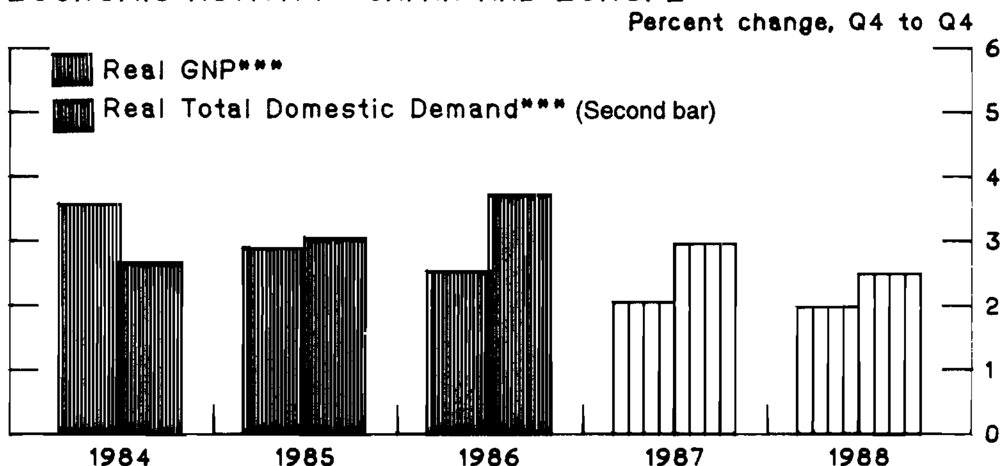


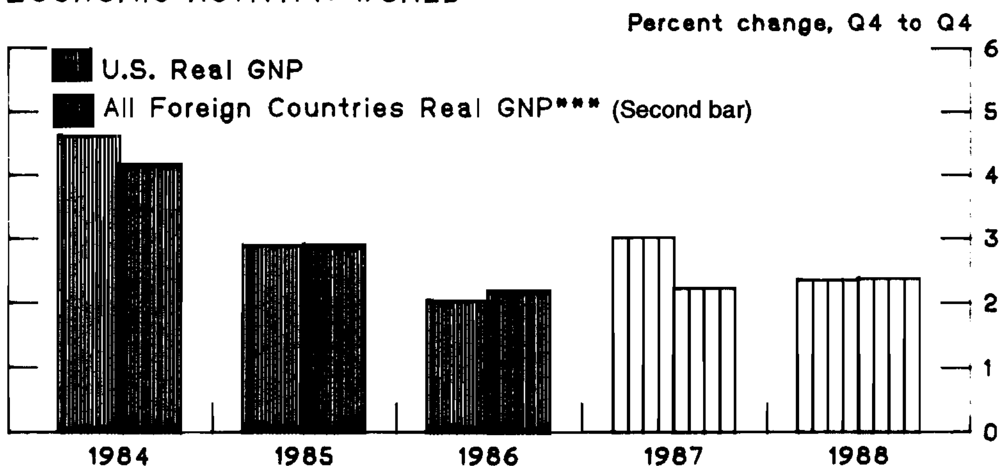


*Weighted average of the six major foreign industrial countries using total 1972-76 average trade.

Chart 7







* Weighted average of the six major foreign industrial countries using total 1972-76 average trade.
** Germany, France, Italy, and the United Kingdom.
***Weighted average using U.S. non-agricultural exports, 1978-83.

Chart 8

Prices of Non-oil Imports*

Percent change

	1986Q1 / 1985Q1	1987Q1 / 1986Q1
1. Food	5	–1
2. Industrial Supplies	–4	1
3. Capital Goods	2	10
4. Automotive	8	8
5. Consumer Goods	3	8
6. Total Non-oil	**2**	**6**

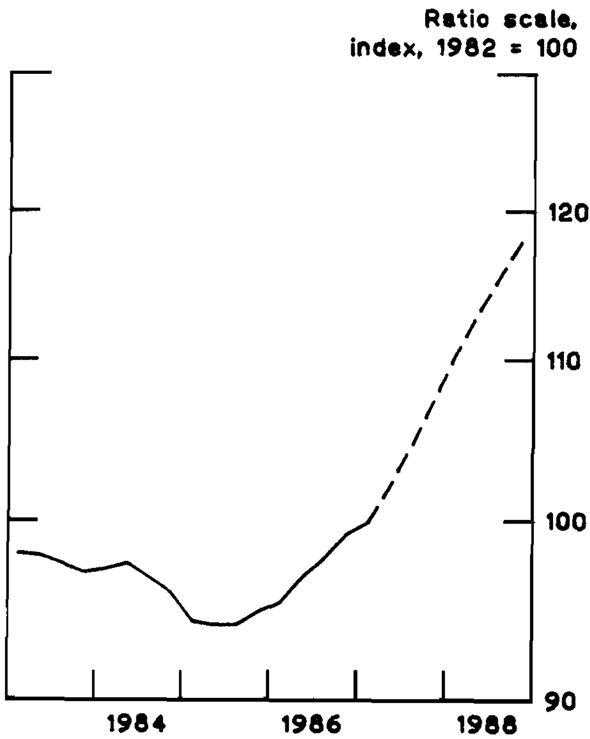
* NIPA fixed-weight indexes

Volumes of Non-oil Imports*

Percent change, annual rate

	1986Q3 / 1985Q3	1987Q1 / 1986Q3
1. Food	10	– 1
2. Industrial Supplies	8	8
3. Capital Goods	24	1
4. Automotive	10	0
5. Consumer Goods	14	6
6. Total Non-oil	**13**	**4**

*Excluding gold



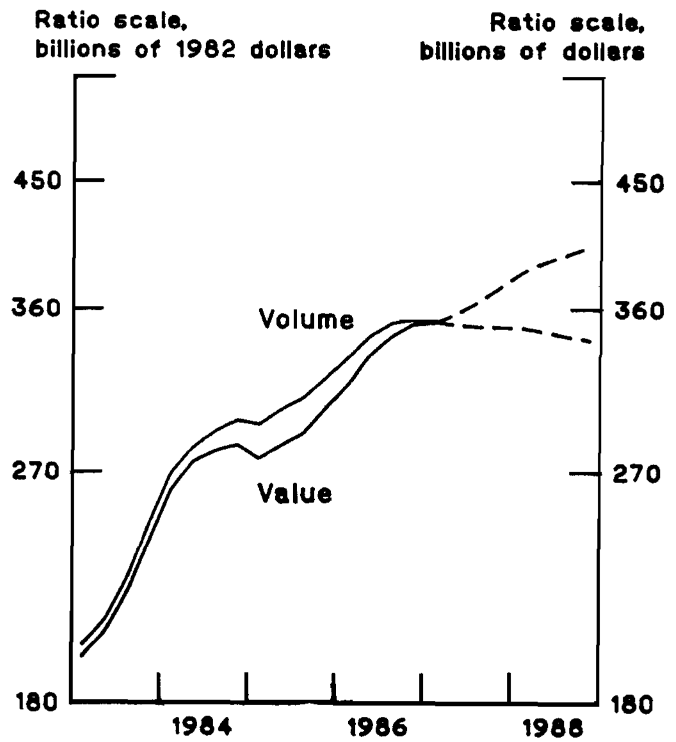
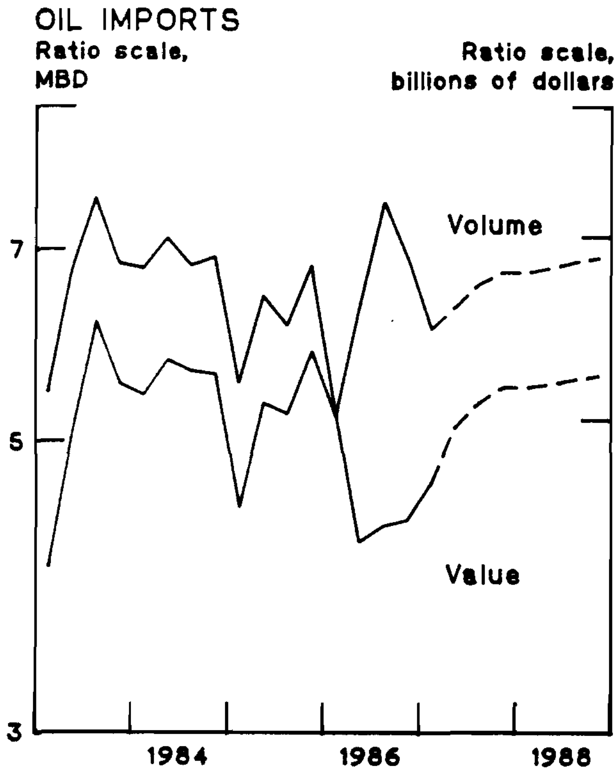
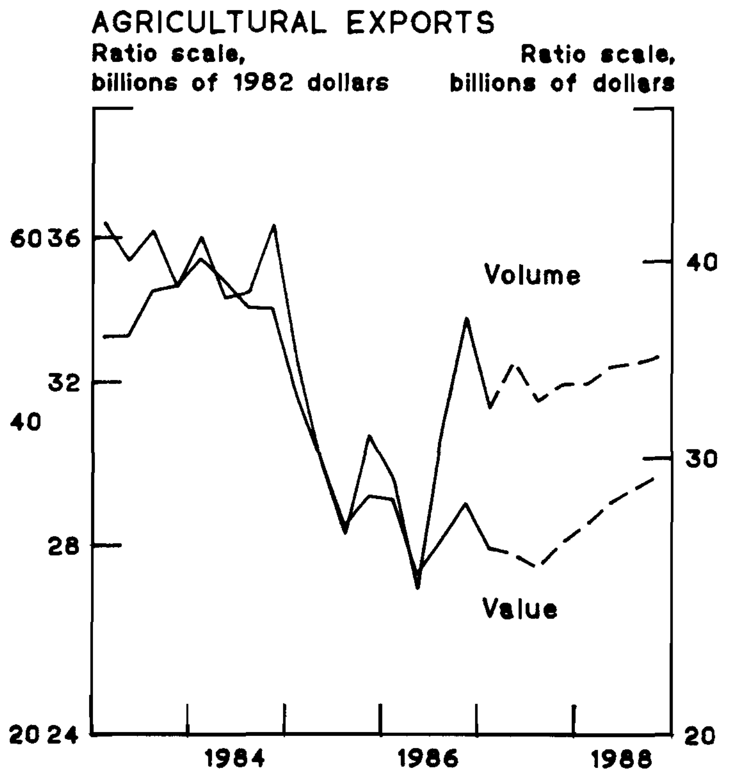


Chart 9





Volumes of Nonagricultural Exports*

Percent change

	1986Q1 / 1985Q1	1987Q1 / 1986Q1
1. Industrial Supplies	–1	9
2. Capital Goods (ex. aircraft)	4	10
3. Automotive	–4	7
4. Consumer Goods	–1	17
5. All Other	13	11
6. Total Nonagricultural	**2**	**10**

* Excluding gold

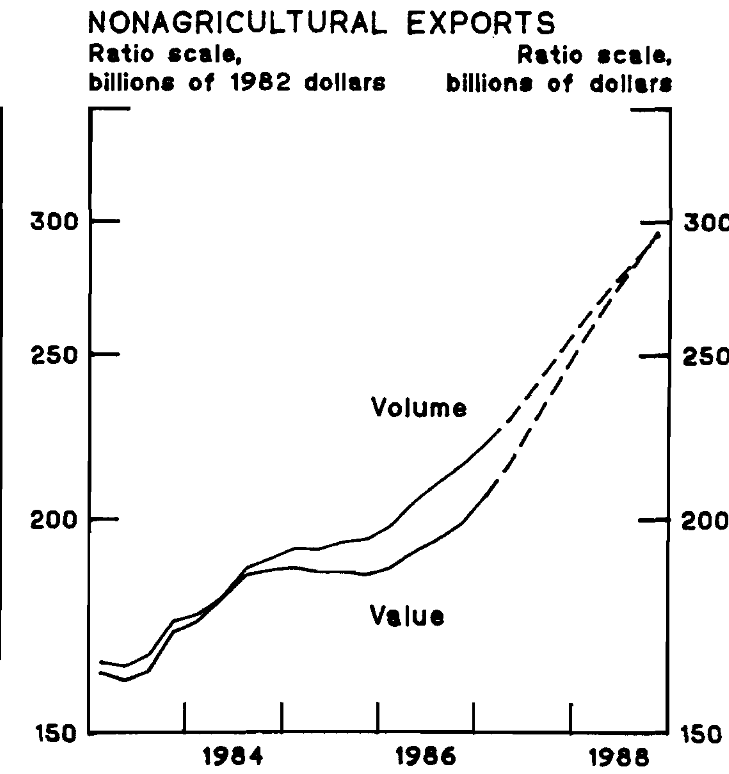
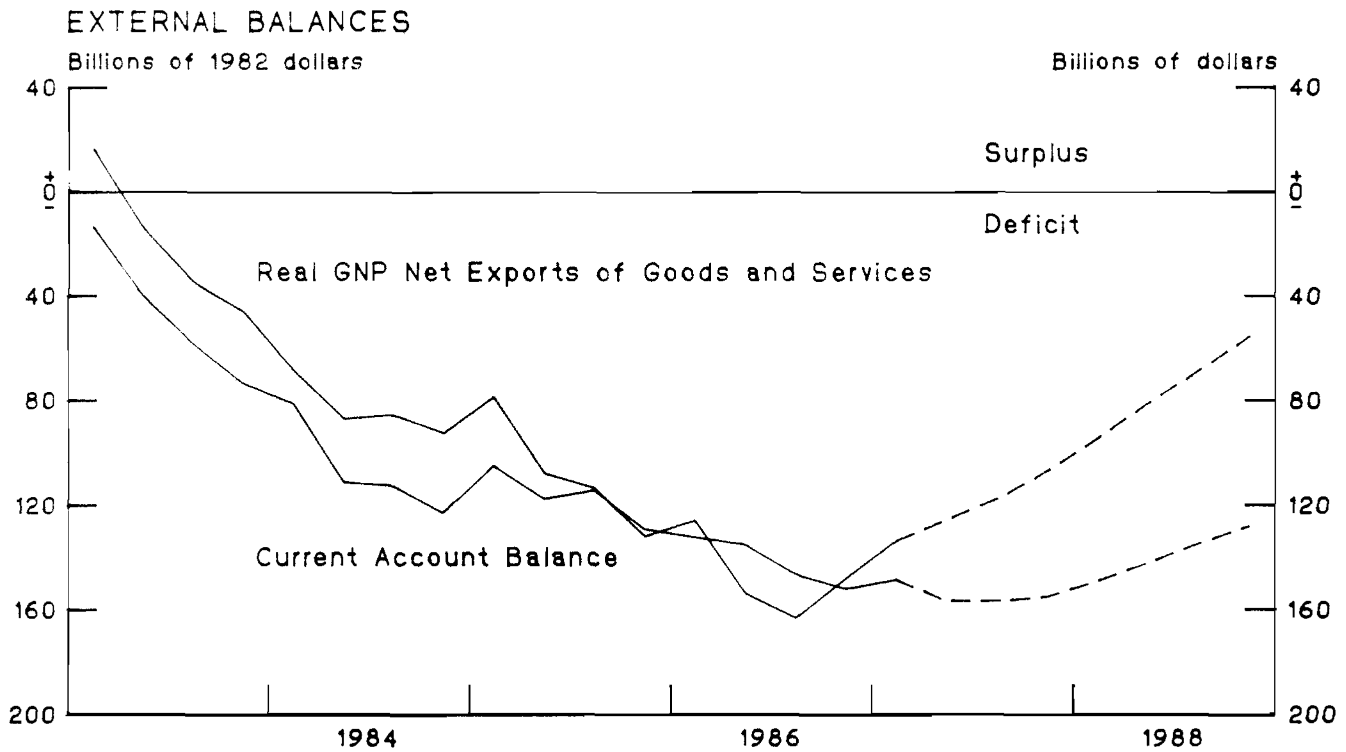


Chart 10



U.S. Capital Transactions

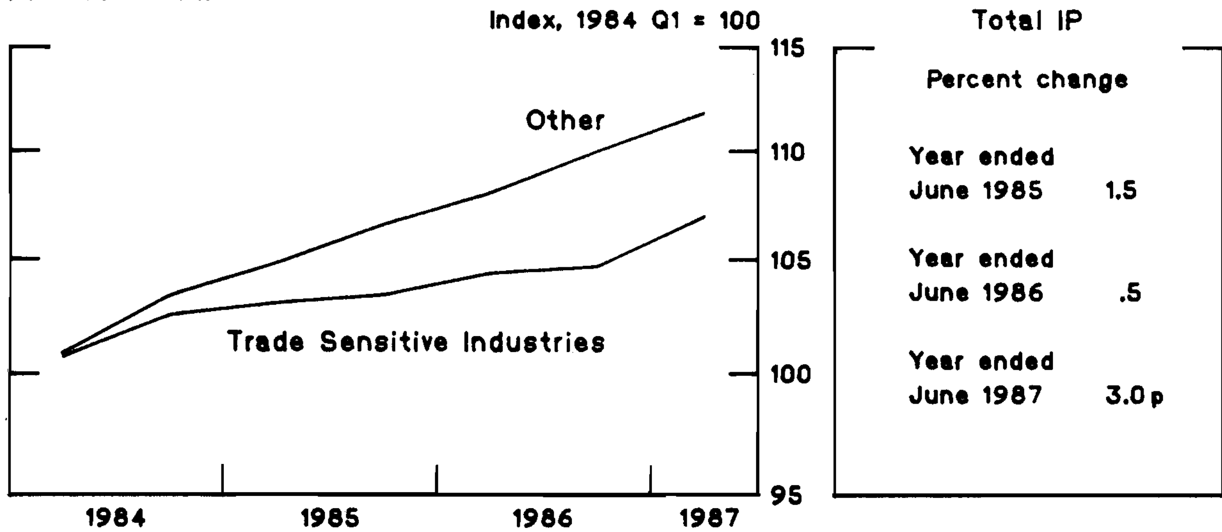
Billions of Dollars, Net Inflows = +

	1984	1985	1986	1987Q1**	1987p
1 Net Private and Official Capital	80	98	117	38	133
2 Private Capital	86	106	84	22	84
3. U S and Foreign Official Capital	-6	-8	33	16	49
4. United States*	-9	-7	-2	2	2
5. G-10 Countries	3	0	31	15	45
6. Other	0	-1	4	-1	2
7 Statistical Discrepancy	27	18	24	-1	21
Memo					
8. Current Account	-107	-116	-141	-37	-154
Intervention					
9. U S Purchases of Dollars	0	-4	0	2	n.a.
10 G-10 Purchases of Dollars	-4	-14	21	35	n.a.

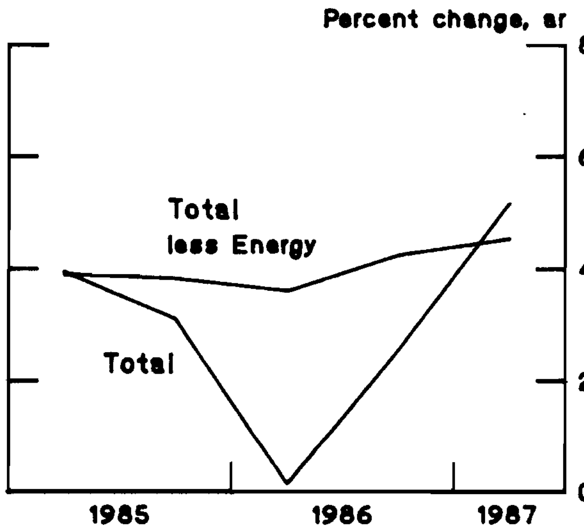
p Projected
* Includes U S official reserve assets and other U.S. government assets
** Differs from data published by the Department of Commerce on June 16 because of later data revisions

Chart 11

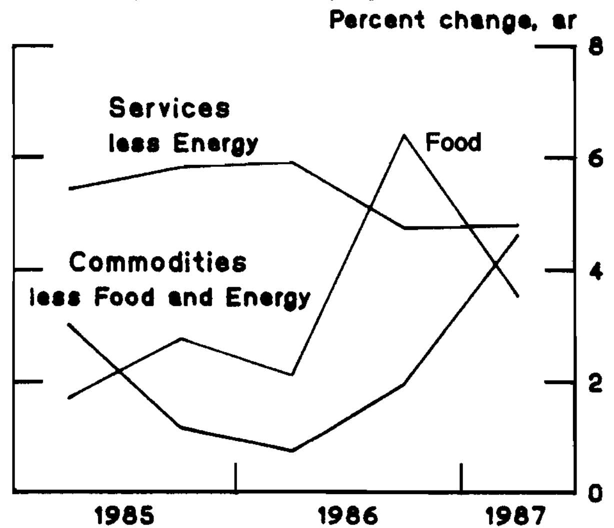
MANUFACTURING OUTPUT



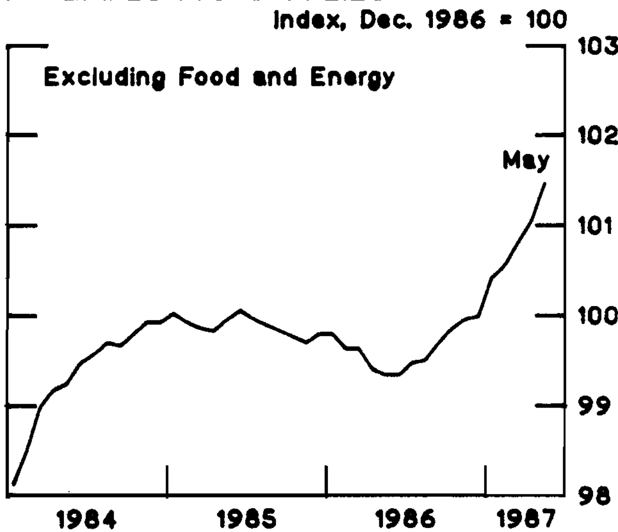
CONSUMER PRICE INDEXES



CONSUMER PRICE INDEXES



PRODUCER PRICES OF INTERMEDIATE MATERIALS AND SUPPLIES



INFLATION EXPECTATIONS

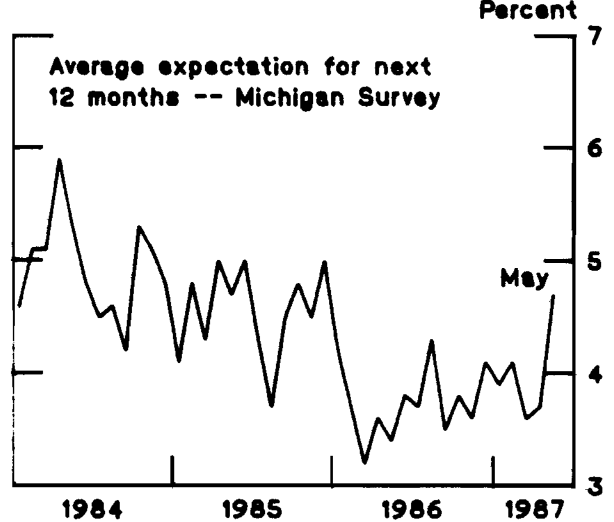
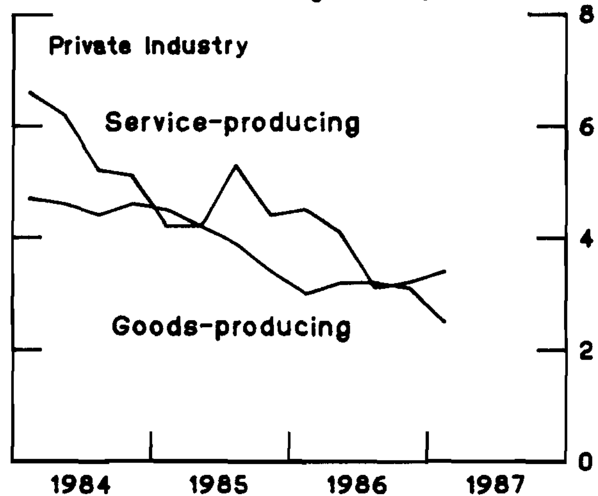
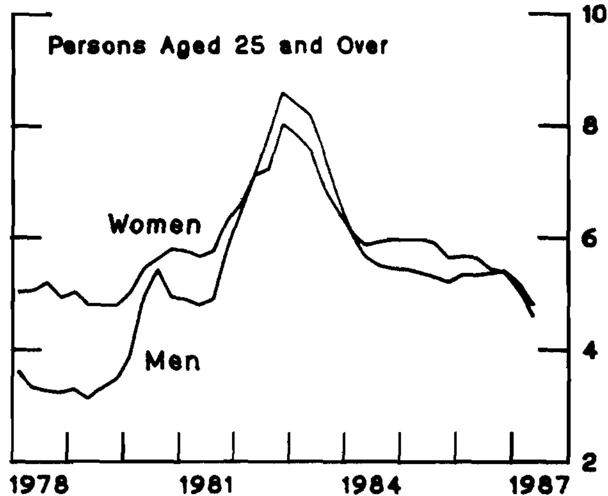


Chart 12

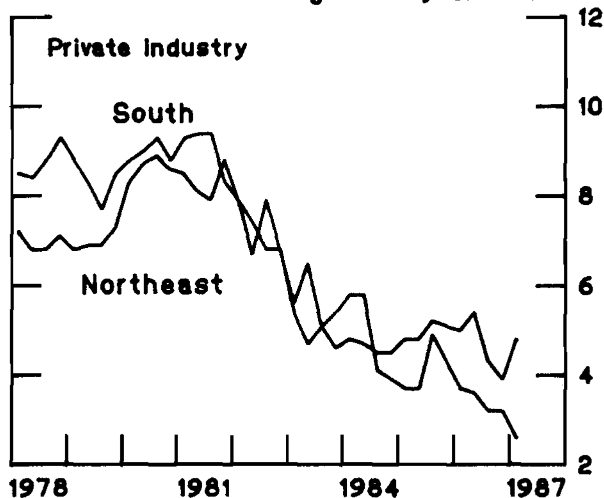
EMPLOYMENT COST INDEX



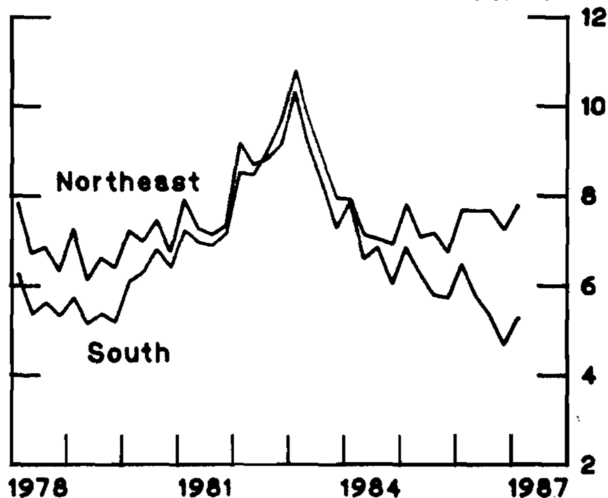
UNEMPLOYMENT RATES



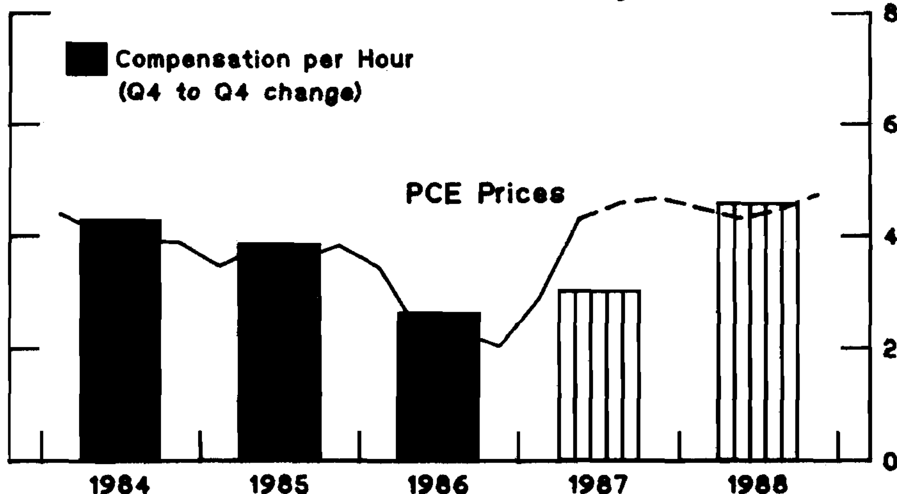
EMPLOYMENT COST INDEX



REGIONAL UNEMPLOYMENT RATES



COMPENSATION AND CONSUMER PRICES

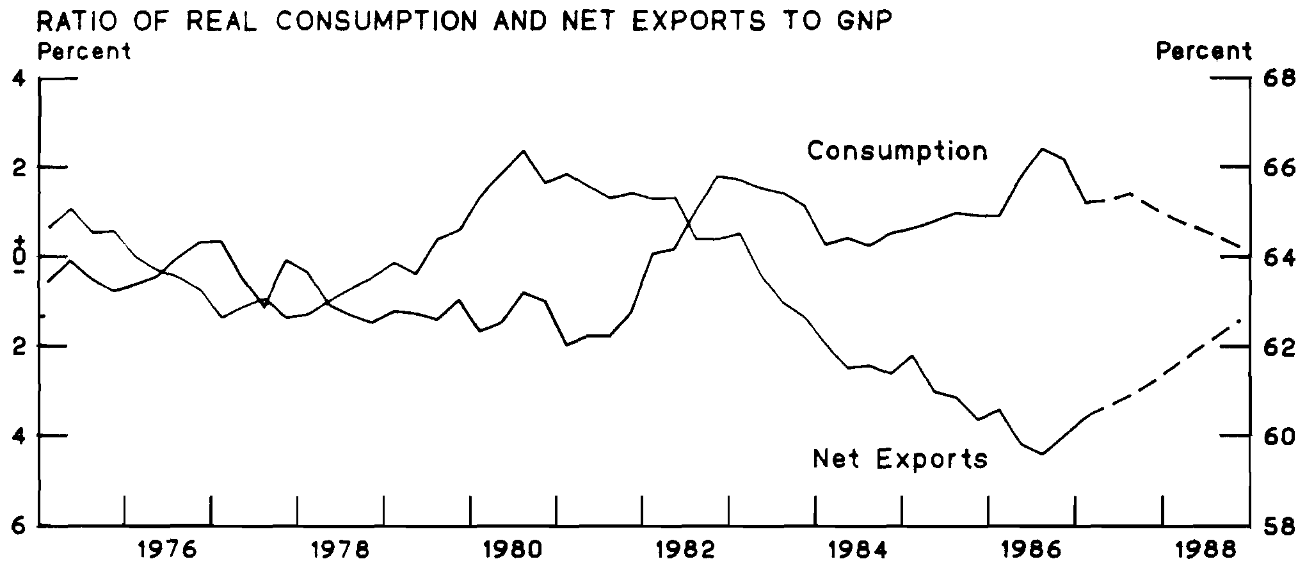


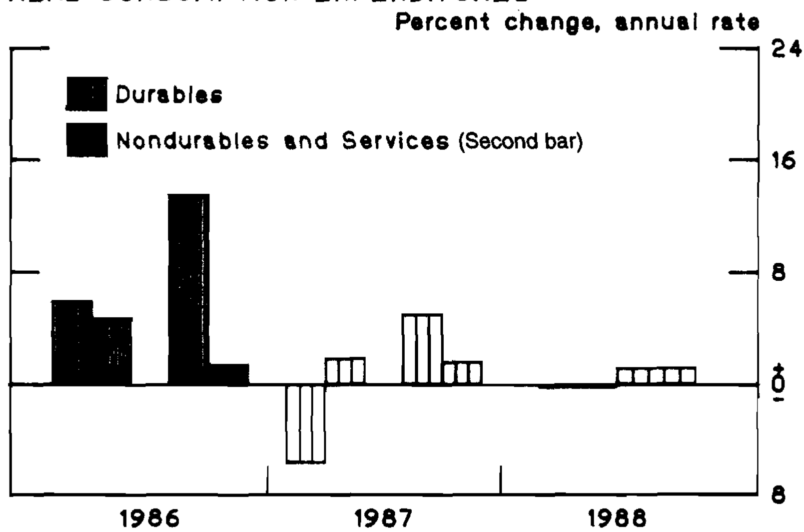
Real Compensation per Hour

Percent change, Q4 to Q4

1986	.6
1987	-1.6
1988	-.2

Chart 13





Spending and Income

Percent change, annual rate
1982 dollars

	PCE	DPI
1986		
H1	4.9	6.8
H2	3.1	-2.3
1987		
H1	0.7	-0.6
H2	2.1	4.7
1988	1.0	1.1

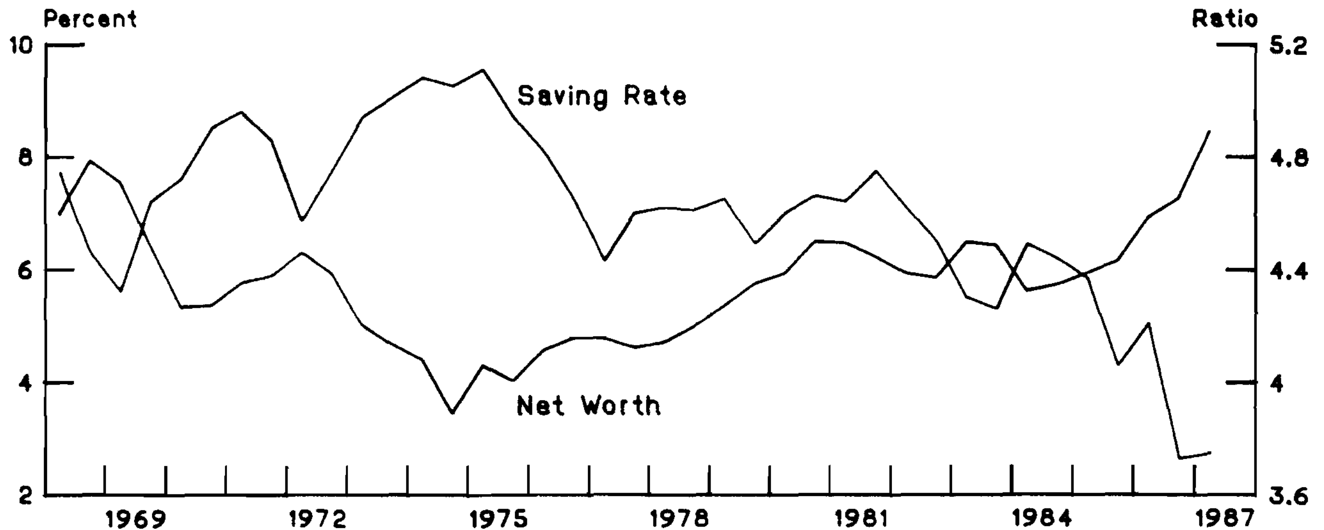
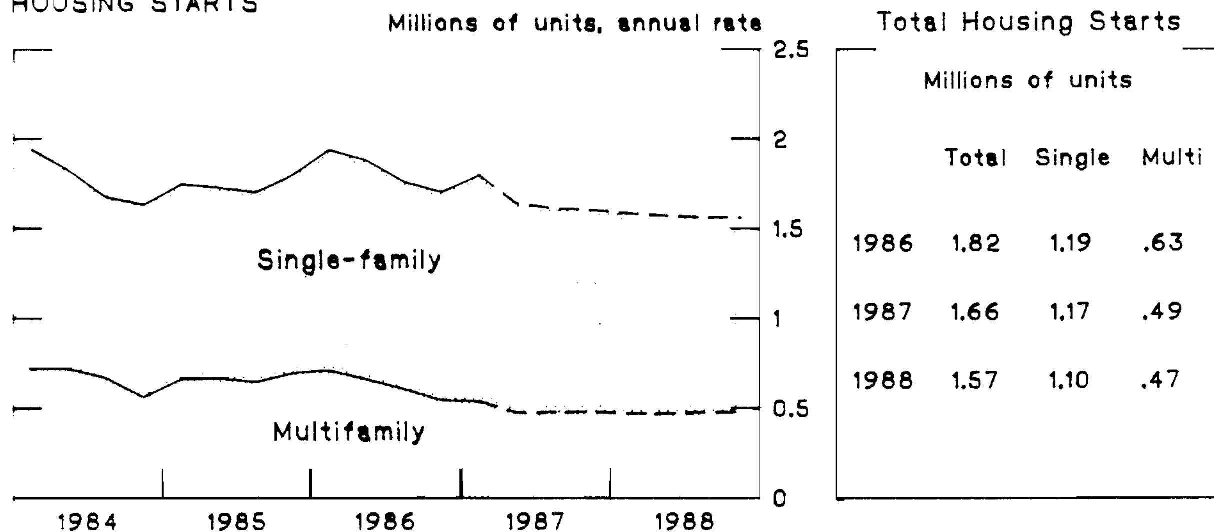


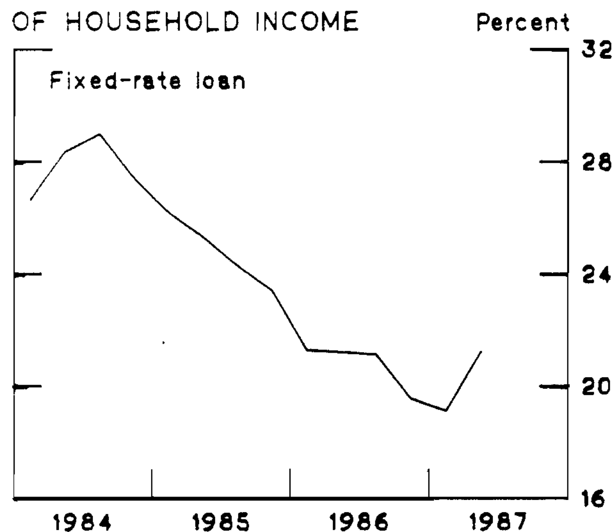
Chart 14

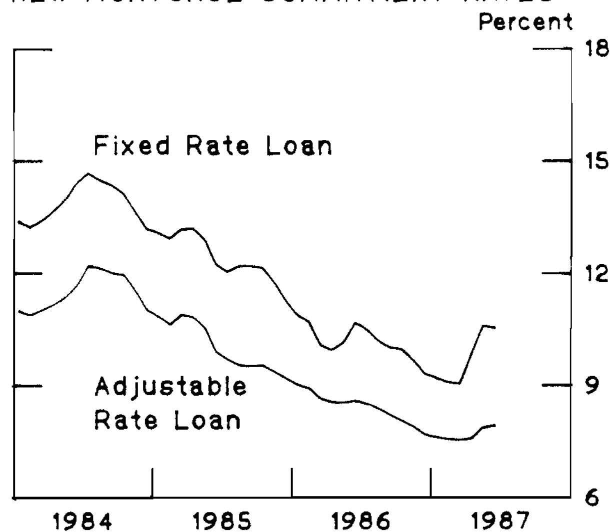


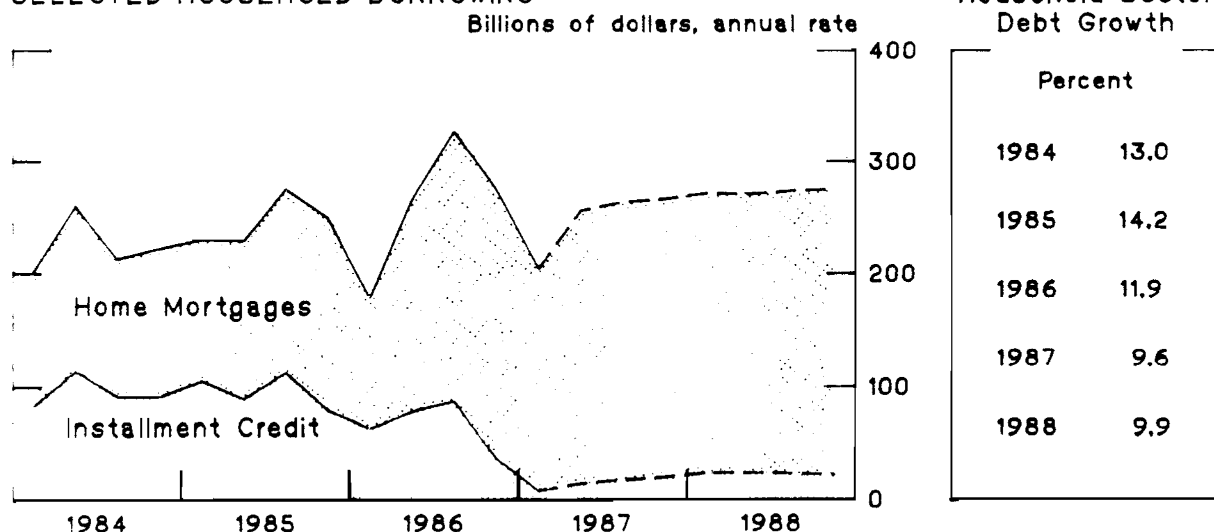
Total Housing Starts

Millions of units

	Total	Single	Multi
1986	1.82	1.19	.63
1987	1.66	1.17	.49
1988	1.57	1.10	.47







Household Sector Debt Growth

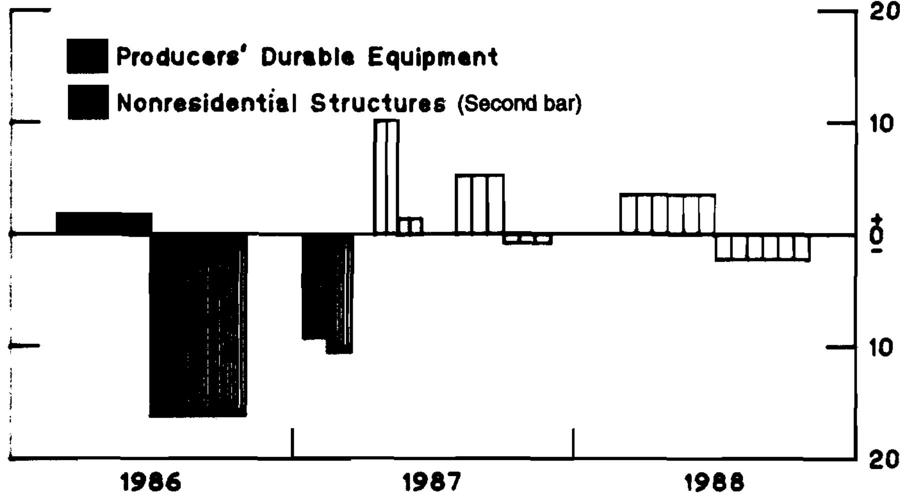
Percent

1984	13.0
1985	14.2
1986	11.9
1987	9.6
1988	9.9

Chart 15

REAL BUSINESS FIXED INVESTMENT

Percent change, annual rate



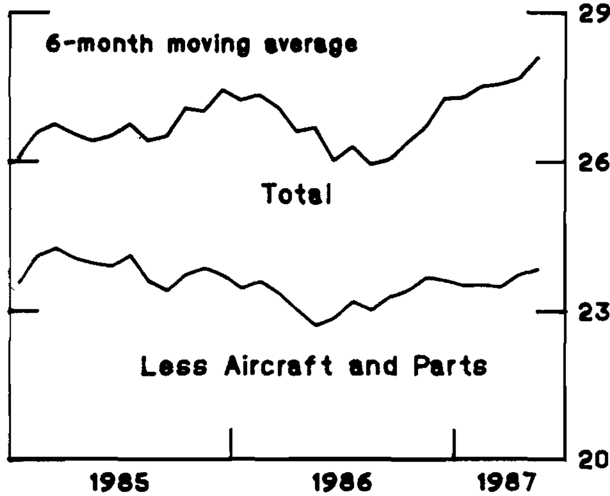
Real Business Fixed Investment

Percent change, annual rate

1986	
Q4	3.0
1987	
Q1	-9.7
Q2	7.8
H2	3.6
1988	2.0

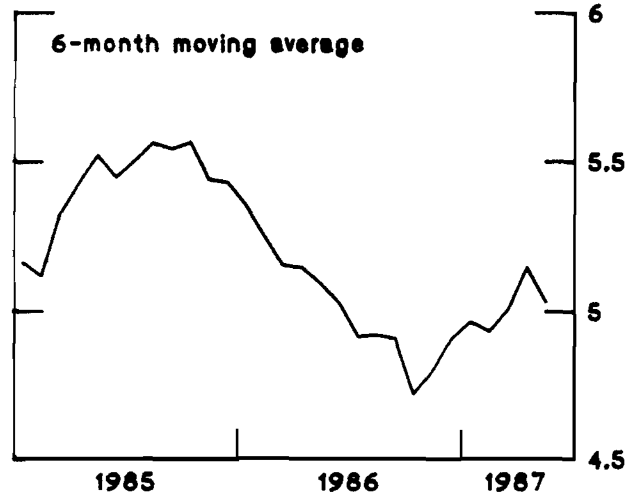
NONDEFENSE CAPITAL GOODS ORDERS

Billions of dollars



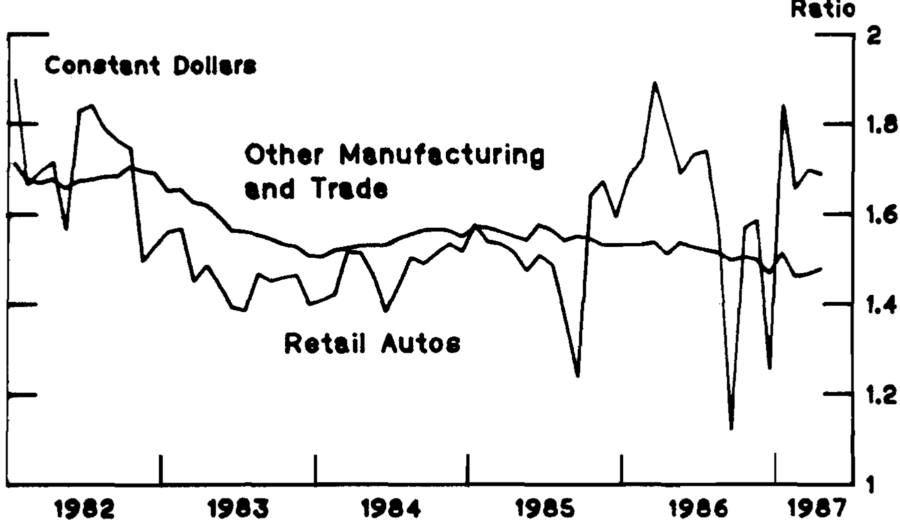
NONRESIDENTIAL BUILDING CONTRACTS

Billions of dollars



INVENTORY-SALES RATIO

Ratio

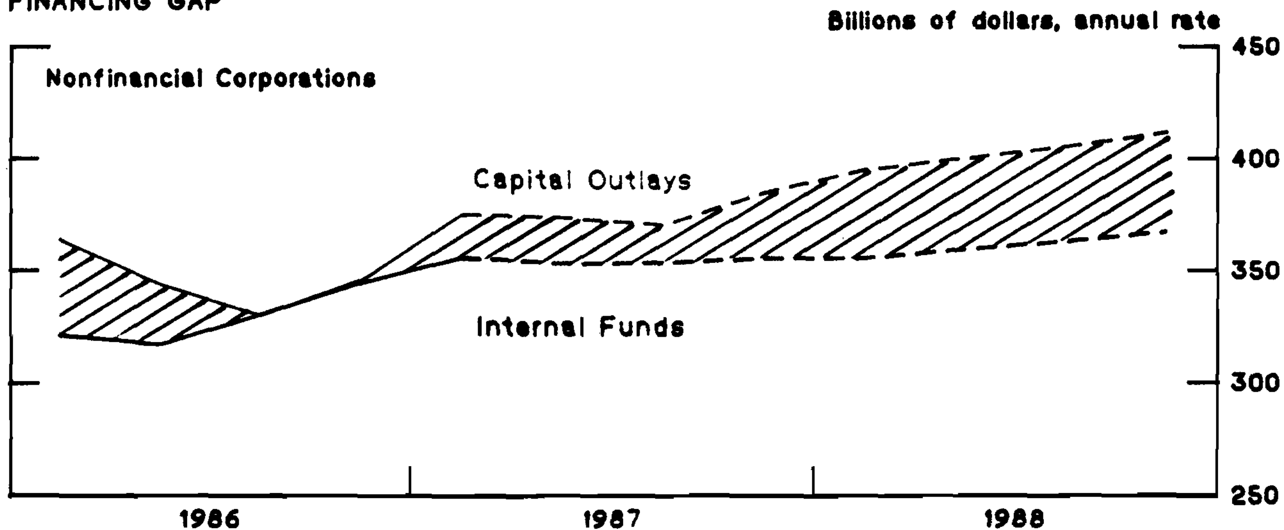


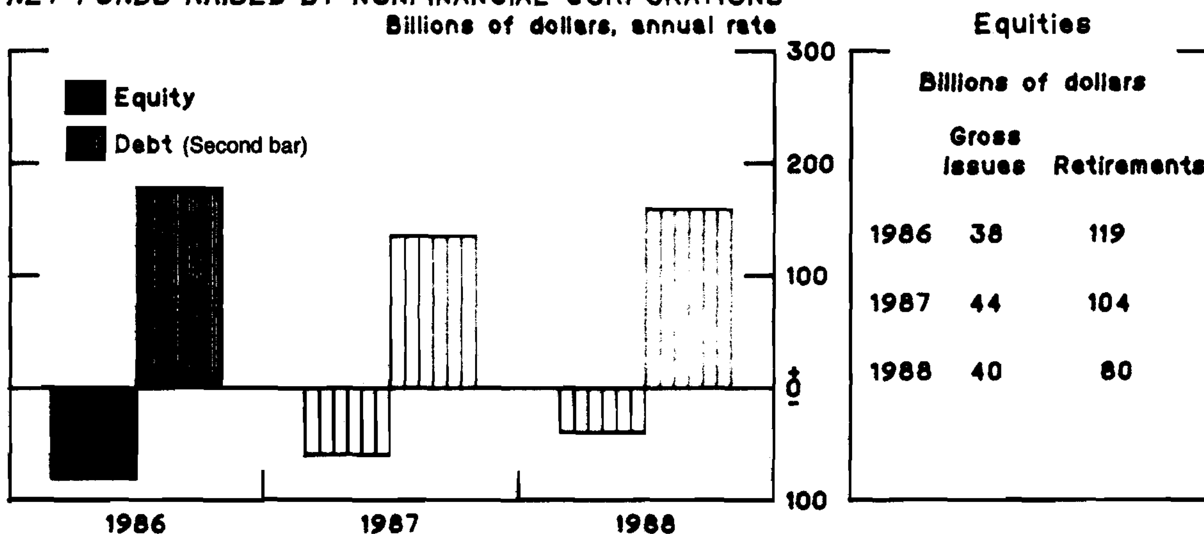
Nonfarm Inventory Investment

Billions of 1982 dollars annual rate

1986	
Q4	-9.8
1987	
Q1	32.8
Q2	19.9
H2	15.5
1988	22.9

Chart 16





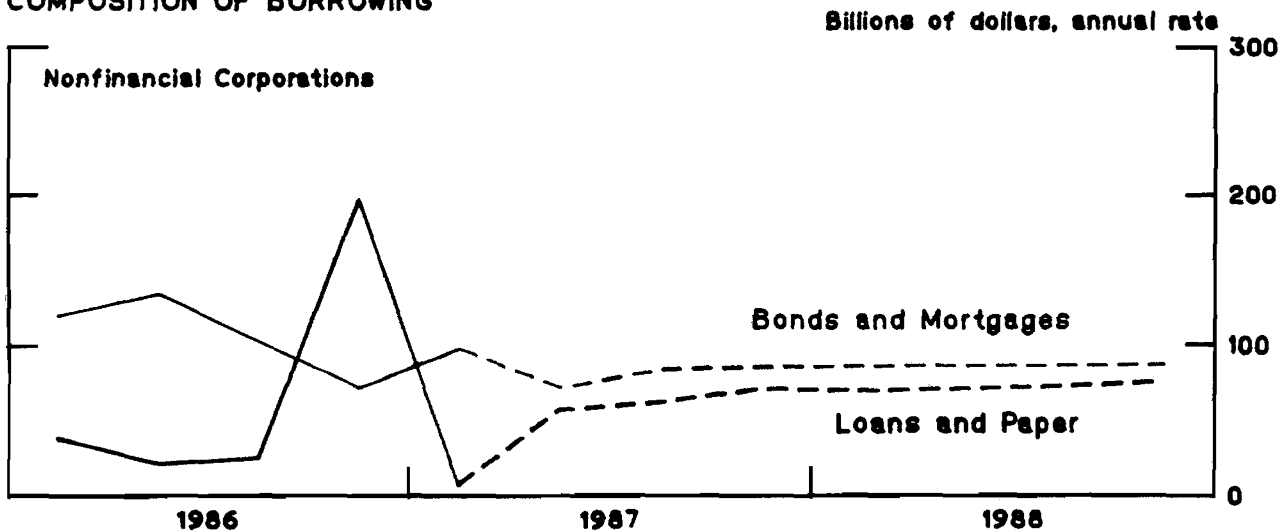
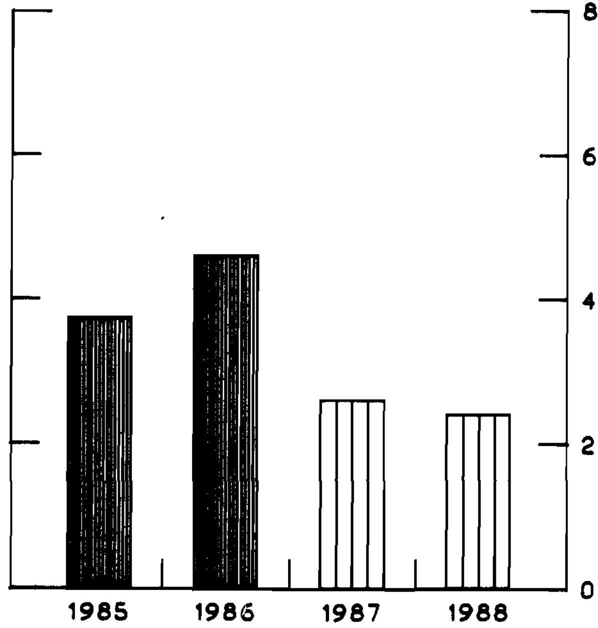
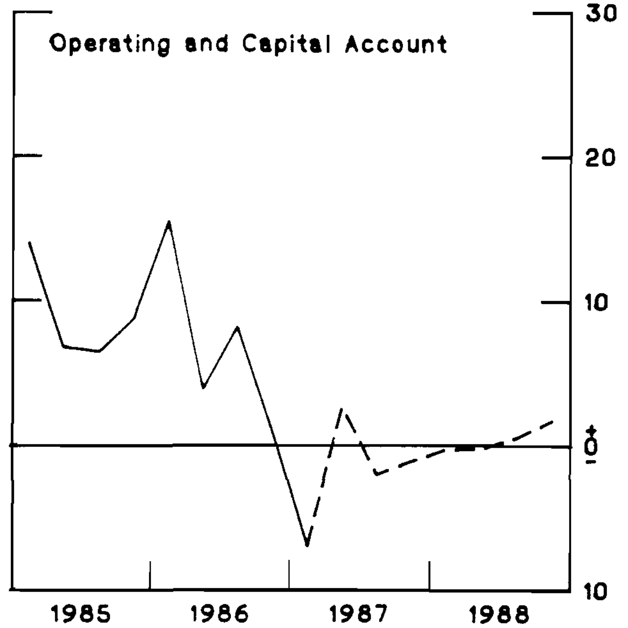
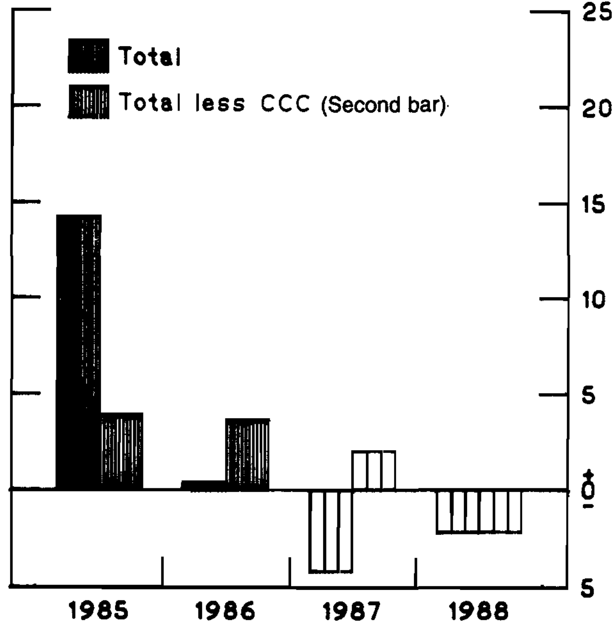
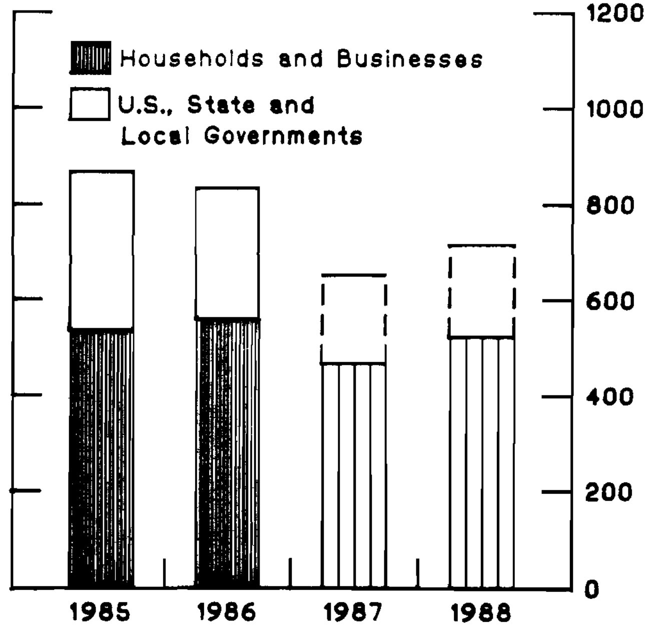


Chart 17









Forecast Summary

	Board Members		Presidents		Staff
Percent change, Q4 to Q4	Range	Median	Range	Median	
Nominal GNP					
1987	5¾ to 7¼	6	6¼ to 7¼	6¾	6½
1988	5 to 7	5½	5¾ to 8	7	6¼
Real GNP					
1987	2 to 3¾	2¾	2½ to 3	2¾	3
1988	1 to 3	3	2 to 3	2½	2¼
GNP Deflator					
1987	3 to 4	3¼	3½ to 4¼	3¾	3½
1988	2½ to 4	3¼	3¾ to 5	4¼	3¾
Average level, Q4, percent					
Unemployment Rate					
1987	6.1 to 6.5	6.2	6.2 to 6.5	6.4	6.3
1988	5.9 to 6.8	6.4	6.0 to 6.7	6.2	6.3

Previous FOMC Projections for 1987

Reported to Congress Feb. 19, 1987

	Range	Central Tendency
Percent change, Q4 to Q4		
Nominal GNP	4½ to 7½	5¾ to 6½
Real GNP	2 to 4	2½ to 3
GNP Deflator	2½ to 4	3 to 3½
Average level, Q4, percent		
Unemployment Rate	6½ to 6¾	6½ to 6¾

FOMC BRIEFING
Donald L. KOHN
July 7, 1987

LONG-RUN TARGETS

The period since the last FOMC meeting has been marked by weakness in the aggregates -- especially M1 and M2. For the first half as a whole, all the aggregates have decelerated sharply from last year and the broad aggregates are running at rates below those anticipated by the Committee at its February meeting. At that time, expectations were for growth in M2 and M3 around the middle of their new ranges, assuming, however, that there were no major changes in interest rates. In June M3 was around the lower end of its range and M2 well below its range, while M1 had expanded at about half last year's pace. Clearly, this experience raises questions about the kind of growth in the monetary aggregates that would be compatible with acceptable performance of the economy and inflation -- and in particular whether the current range for M2 for 1987 is likely to encompass such growth.

Three general points concerning developments in the first half of the year seem relevant. First, the slowing of money growth this year does not appear to signal a concurrent weakening of growth in nominal income; nominal GNP in the first half of the year is estimated to have expanded above the pace of last year, and is projected to continue to do so in coming quarters as well. Second, some special factors, perhaps related to tax reform, may have been at work in the deceleration of M2, which is more than would be predicted by available models of money demand. Also there were some unusual funding patterns that probably affected M3. The staff has implicitly embodied in its forecast of money growth rates given in this bluebook a tapering off or reversal of some of these effects. However, for M2 they are not thought to be very large, and we don't anticipate a spontaneous resurgence of M2 growth of sizable proportions.

Third, the available evidence does suggest that a substantial portion of the slowing in money growth can be ascribed to the relative movements of market and deposit interest rates, which raised opportunity costs of holding money, after several years of decline. The increase in opportunity costs has been particularly marked for M1, where the rise has been accentuated by the steeper yield curve and faster adjustment of time deposit rates. This has had a large impact on NOW accounts, given their use as a saving vehicle, but demand deposits also have weakened very substantially, including a large decline in June. The reasons for this are not entirely clear, but these deposits seem to have become increasingly sensitive to interest rate movements in recent years, perhaps as the proportion linked to compensatory balance arrangements has risen. This weakness in demand deposits probably is showing through to M2, since it is less likely than with NOW accounts to involve a shifting into other M2 assets. The sluggishness of offering rates or other very liquid components of M2 -- such as savings accounts and MMDAs -- also is thought to be contributing to the apparent interest sensitivity of this aggregate over the short- and intermediate-runs.

This interest sensitivity is important in considering the alternatives for 1987 and 1988. In the staff forecast the slower money growth to date is not seen as impairing the outlook for the economy. Implicitly, the rise in nominal rates that has occurred is not thought to have resulted in levels of real rates that would unduly damp domestic demand -- indeed a case can be made that real rates are not at historically high levels given the worsening of inflation expectations earlier this year. And, the decline in the exchange rate to date is expected to work

toward further improvement of our external imbalance, though as Mr. Truman has indicated, further depreciation of the dollar is assumed to be necessary at some point to sustain such progress. The downward movement of the dollar puts upward pressure on prices, especially given a projected robust expansion of net exports that keeps the unemployment rate in the neighborhood of the natural rate. In this environment nominal interest rates are expected to rise further, both in reflection of persisting price pressures and as policy makers act to restrain the inflation process. The upward movement in nominal rates in turn damps money demand and is reflected in rising velocity.

A set of charts distributed this morning shows the projected movements in velocity implied by the interaction of interest rates, income growth and monetary expansion in the staff forecast. As can be seen in chart one, the increase in M2 velocity begun in the first half of 1987 is projected to continue through 1988. M2 is expected to increase at a little over a 5 percent rate for the balance of the year, as the depressing effects of some special factors and recent declines in demand deposits and the managed liability-linked components abates. Growth for 1987 would be between 4-1/2 and 5 percent -- below the lower end of its current range -- and at a similar rate in 1988, about 1-1/2 percent below the growth in nominal GNP over the two years. In effect, the pickup in inflation and interest rates works to reverse a portion -- though by no means all -- of the velocity declines of recent years associated with the disinflationary process. Expansion of M3 is expected to rebound to a bit over 7 percent in the second half of this year, reflecting primarily a shift in funding patterns at banks toward elements in this aggregate.

Such growth would place this aggregate well up into its current range -- growth of about 6-1/2 percent is anticipated for this year and next. The velocity of this aggregate would remain essentially unchanged over the two years, in contrast to its long-term downtrend.

The next chart shows the velocities of M1 and M1A. Demand deposits are projected to resume growing during the third quarter, but with opportunity costs of both demand and NOW accounts rising, growth of M1 and M1A would be quite damped -- on the order of 3 to 4 percent for both aggregates over the next 6 quarters -- and their velocities would increase. The recent focus on M1A in some circles seems to be keyed in part to the persistence of the trend increase in its velocity past the time when M1's velocity turned down. The jump in M1A's velocity in 1981 was associated with the advent of NOW accounts. Its subsequent smooth trend until early 1985 is thought to have been largely a product of two offsetting effects: continued shifts out of demand deposits as deregulation proceeded and the support for demand deposits arising from declines in interest rates. The trend was broken in 1985 once the shifting had tapered off, allowing the underlying declines in velocity associated with interest rate developments to emerge. The projected return to the trend rate of velocity growth this year and next depends on the assumed rise in rates.

Debt velocities are shown in the next chart. The staff projects debt growth of around 9-1/4 percent this year and 8-3/4 percent next, still in excess of income growth, but by smaller margins than in recent years.

In sum, if the staff's assessment of the forces at work is about right, money growth would need to accelerate from its very recent sluggish pace to maintain moderate income growth, but restraint on inflationary forces may require slower growth in M2 in 1987 than now allowed by its present range. The current ranges, along with the bluebook alternatives for 1987 and 1988 are shown for reference on the table on the next page. Hitting the lower end of the current M2 range would require a substantial acceleration of this aggregate over coming months. An acceleration of this magnitude proably would require that interest rates at least not increase noticeably over the second half of the year. Stable or even declining rates may come about should underlying demands on the economy or inflation pressures turn out weaker than the staff or perhaps even the market expects, or should the dollar remain firm. But if these conditions do not prevail the current range could come into conflict with policy options that seemed consistent with other emerging developments.

Alternative II would involve a full percentage point reduction in the M2 range, while retaining the current ranges for M3 and debt. The lower M2 range would give some room for a firming of policy, though probably not very much. Even the lower end of this range requires a considerable pickup in M2 growth from recent experience, and its adoption would imply that the Committee did not expect these very recent growth rates to continue. Another option might be to retain the current range but announce that growth could fall short should inflation pressures and other conditions seem to call for it. This could be seen as in effect further deemphasizing money targets, however.

The issues for 1988 are similar to those for 1987. The 5-1/2 percent lower end of the current range -- given as alternative I -- would seem to offer only a little room for a further increase in velocity should that tend to emerge from the price and financial conditions accompanying an acceptable outcome for the economy and prices. If there were considered to be strong inflationary risks, some reduction in the ranges might be considered approprate. Even in the absence of such risks, lower ranges could be seen as another step in implementing the Federal Reserve's announced intention to move over time to rates of money and credit growth consistent with price stability. Alternatives II and III are two possible approaches. In these alternatives the reductions of the M2 ranges are larger than for the M3 ranges in recognition of the greater interest sensitivity of the former. A higher range for M3 than for M2 is not unprecedented, and is consistent with differences in the behavior of the velocity of these two aggregates over the long run. The alternative II range for M2 is the same as the alternative II range for 1987 for this aggregate, but this alternative would embody lower ranges for M3 and debt. However, the lower end of the alternative II range for M2 is not much below the staff's expectation for growth in this aggregate next year, given the presumed increases in interest rates. The alternative III range for M2 is more nearly centered on the staff forecast, allowing room for slower growth should that be appropriate. The midpoint of the range, at 5 to 5-1/2 percent is a little above where M2 is projected to come out this year. The upper limit of the alternative III range has been lowered only to 7 percent, to accommodate faster growth and possible further declines in velocity should the economy or inflation turn out on the weak side. Any of the alternatives would be consistent with the staff's

projection of debt growth of around 8-3/4 percent next year, although alternatives II and III would allow more room for a shortfall from this projection and the possibility that debt would again expand more in line with income.

With respect to M1, while the staff is projecting a return to an uptrend in velocity, as pointed out before, this is highly dependent on the assumed rise in interest rates. This aggregate appears to remain extraordinarily sensitive to interest rate changes, as indicated by the swing from a 9 percent velocity decline last year to essentially no change in the second quarter. In the model results M1 is from two to three times as interest elastic as M2 over a 4-quarter span. Moreover we are still gaining experience with the behavior of savers and depository institutions in a deregulated environment. Under these circumstances, an M1 range consistent with the M2 range in allowing for various contingent outcomes for the economy in interest rates would have to be extraordinarily wide -- perhaps 6 percentage points or more.

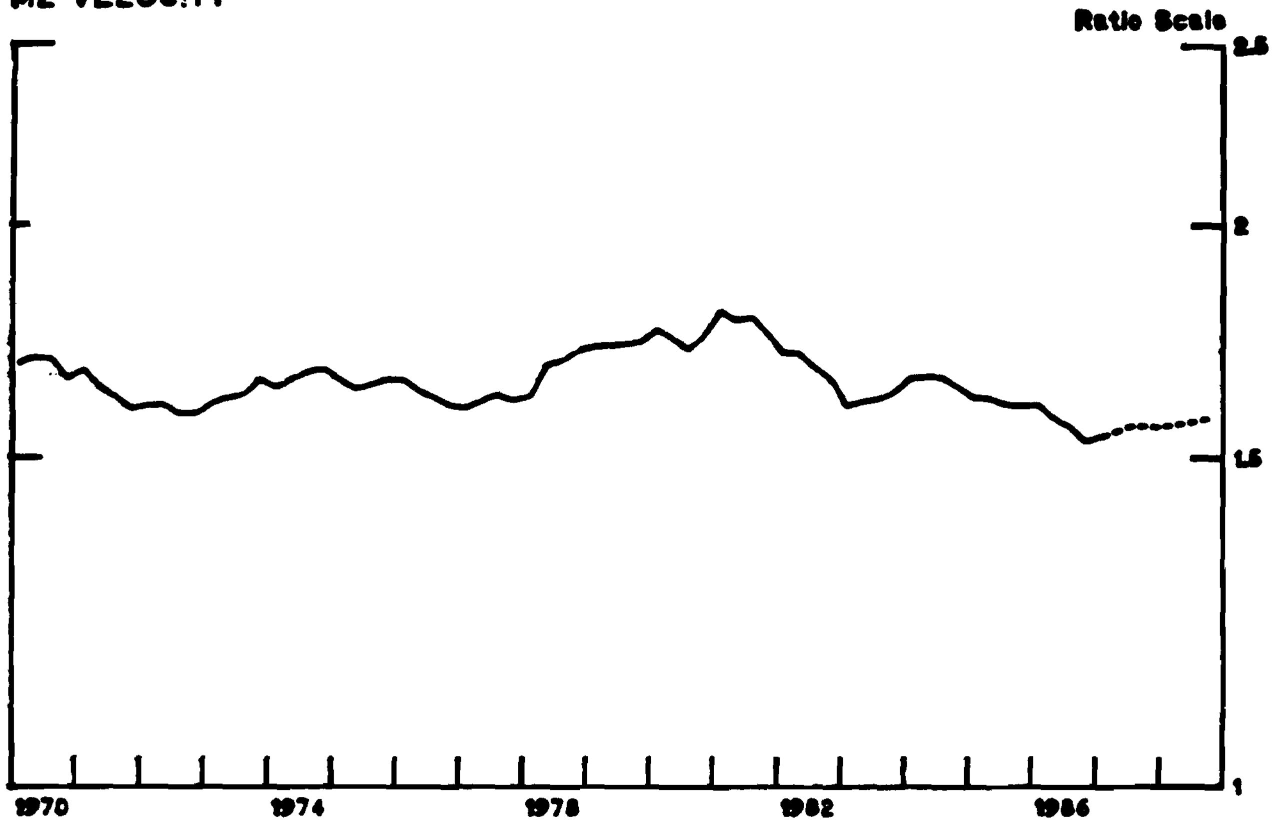
Strictly Confidential

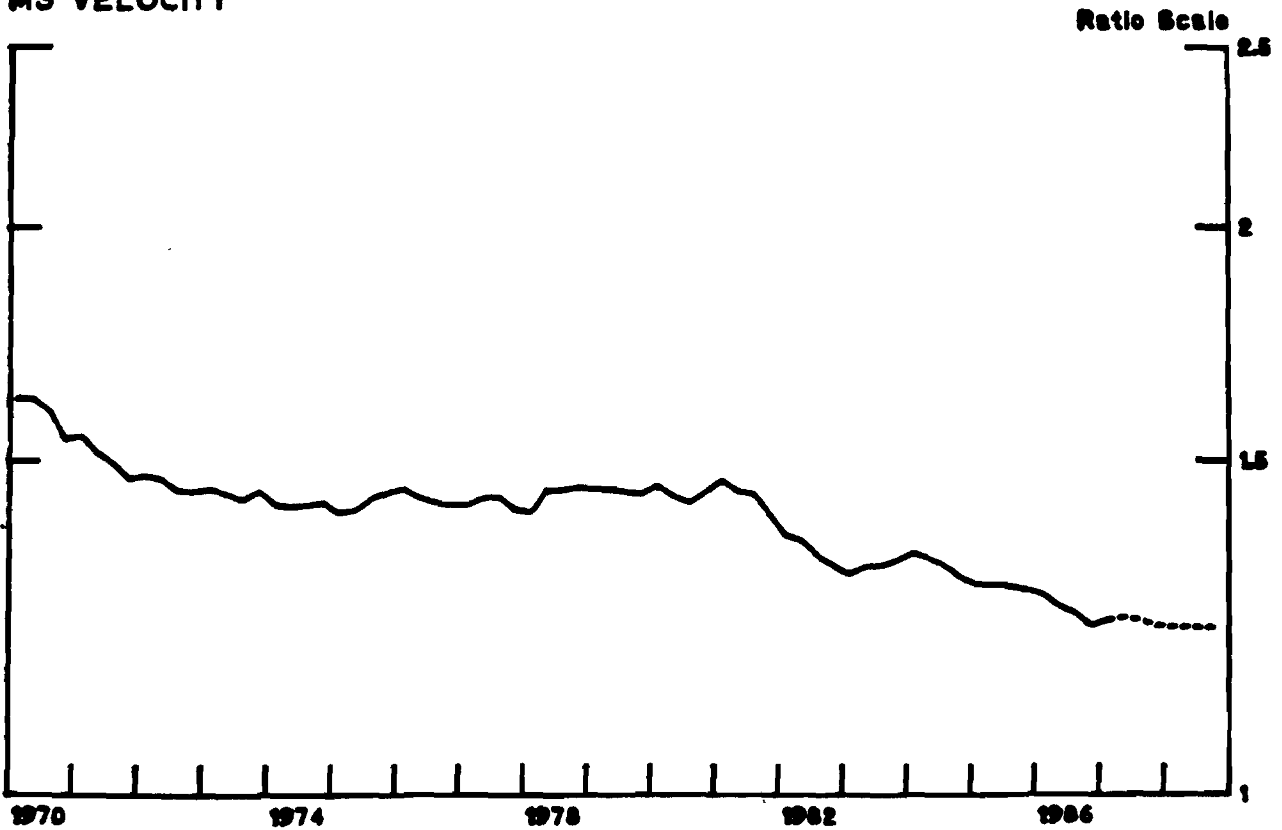
Class I FOMC

Velocity Projections and Long Run Alternatives

Chart 1

ACTUAL AND PROJECTED VELOCITY OF M2 AND M3[1]

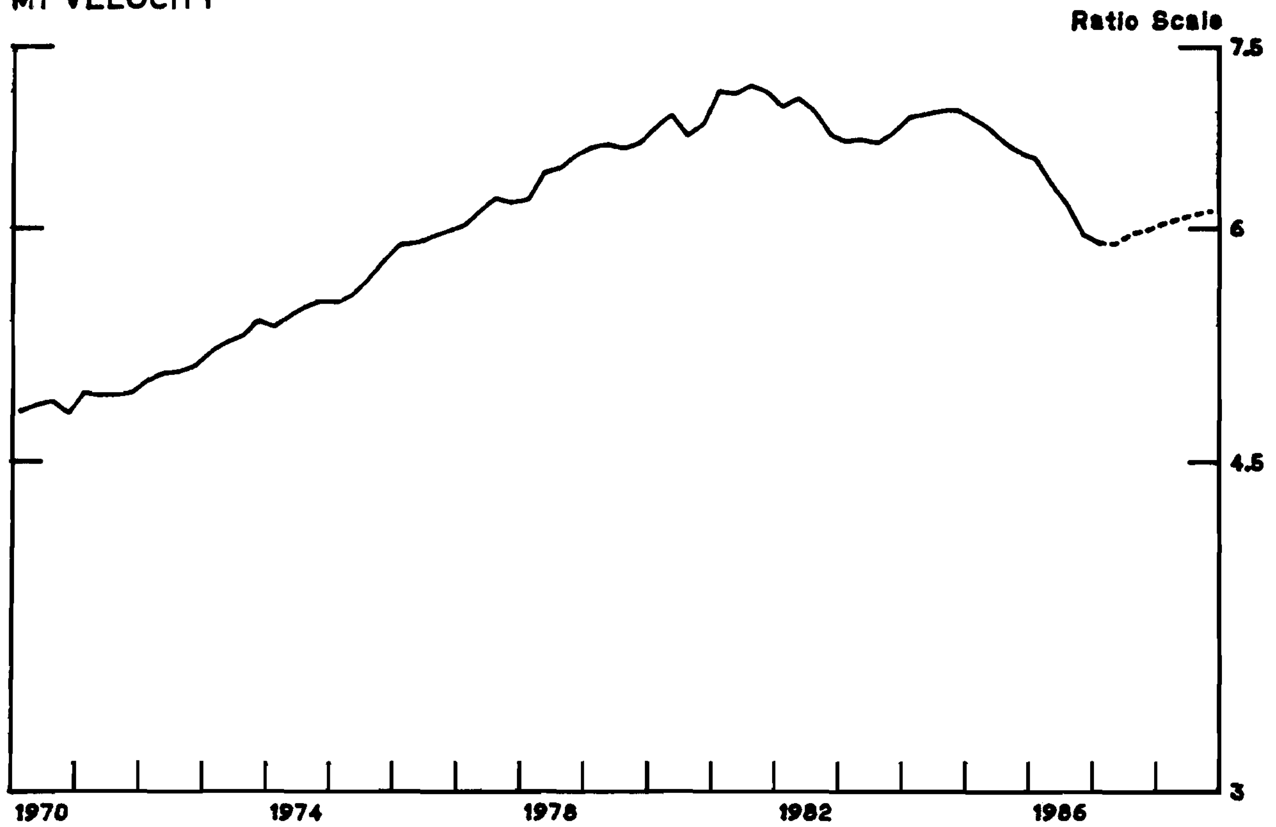


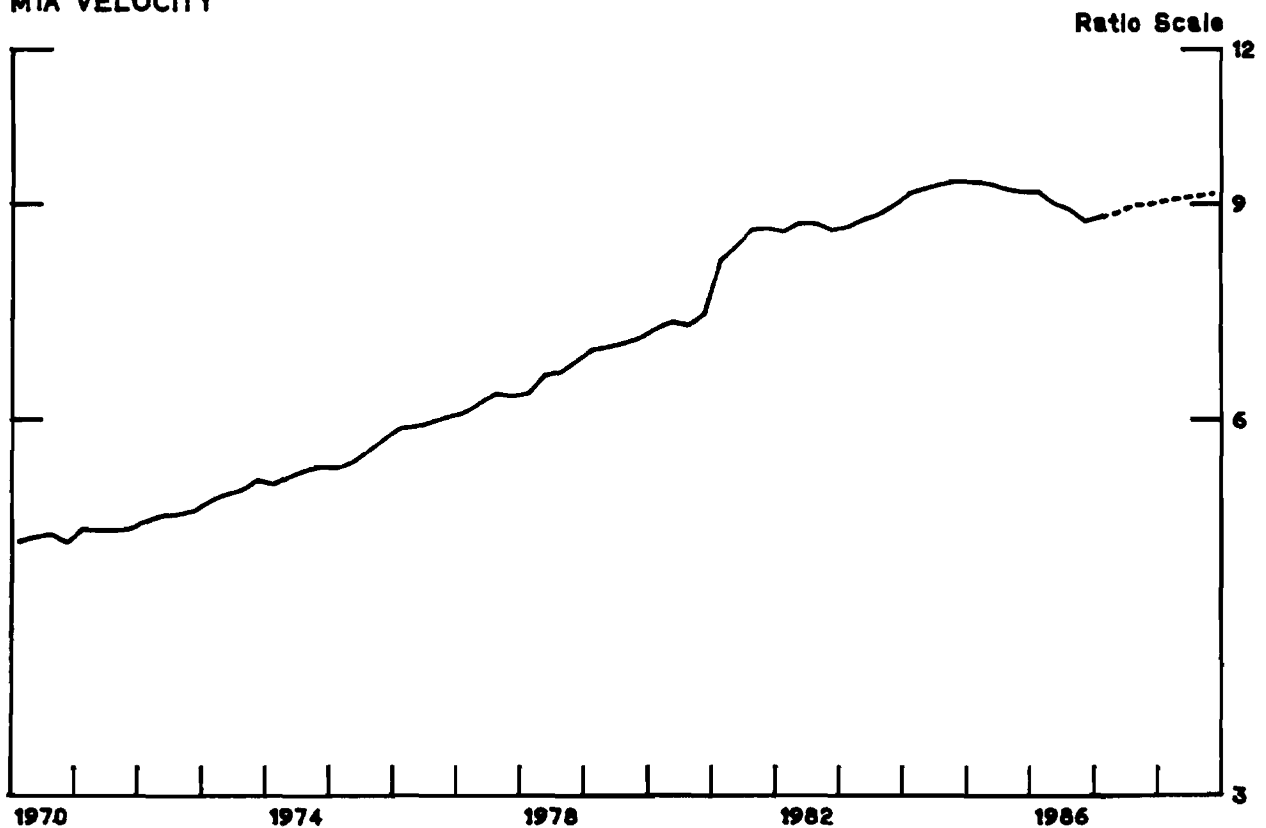


1. Projections based on staff forecast of GNP and money.

Chart 2

ACTUAL AND PROJECTED VELOCITY OF M1 AND M1A [1]

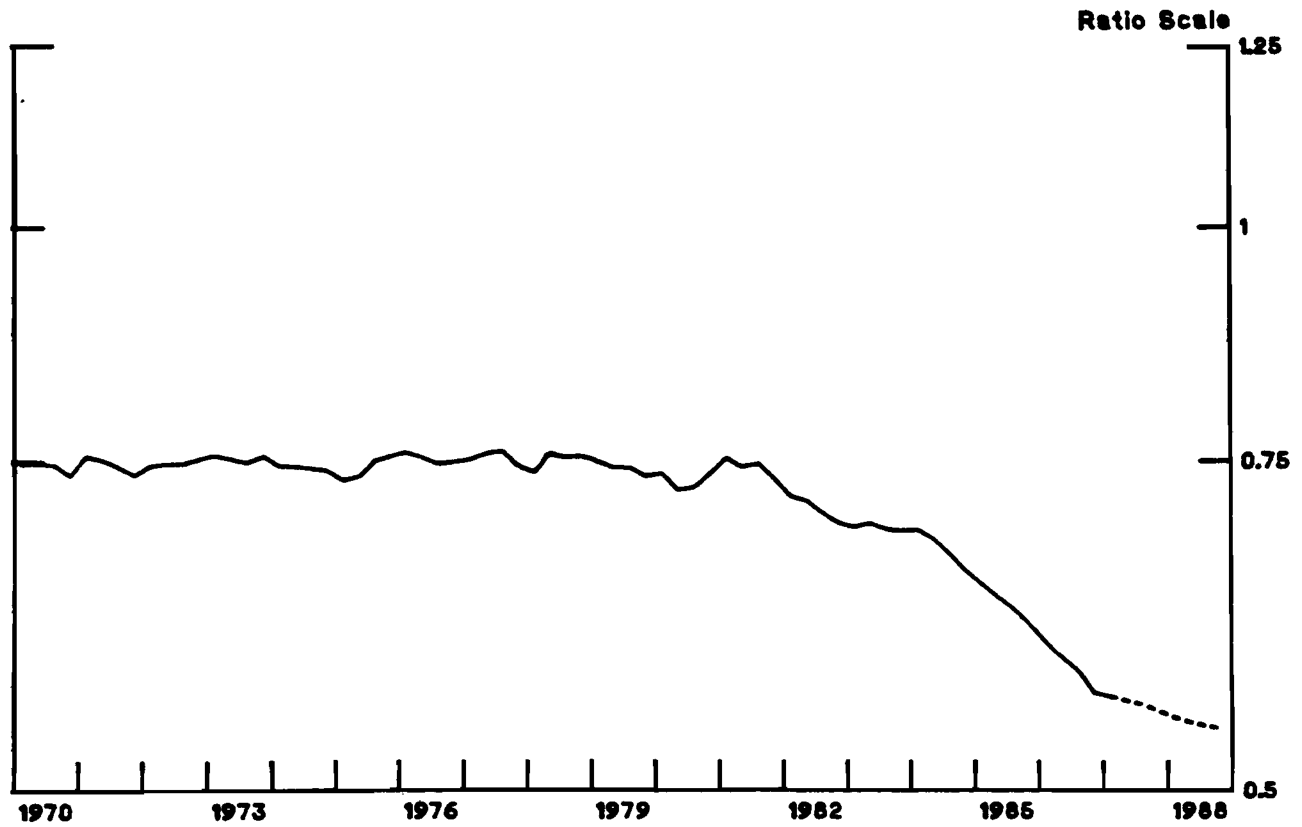




1. Projections based on staff forecast of GNP and money.

Chart 3

ACTUAL AND PROJECTED VELOCITY OF DOMESTIC NONFINANCIAL DEBT [1]



1. Projections based on staff forecast of GNP and debt.

LONG RUN RANGES

	1987	
	Alt. I (current ranges)	Alt. II
M2	5-1/2 to 8-1/2	4-1/2 to 7-1/2
M3	5-1/2 to 8-1/2	5-1/2 to 8-1/2
Debt	8 to 11	8 to 11

	1988		
	Alt. I	Alt. II	Alt. III
M2	5-1/2 to 8-1/2	4-1/2 to 7-1/2	3-1/2 to 7
M3	5-1/2 to 8-1/2	5 to 8	4-1/2 to 7-1/2
Debt	8 to 11	7-1/2 to 10-1/2	7 to 10