
Monetary Policy Report to the Congress

*Report submitted to the Congress on July 16, 2002,
pursuant to section 2B of the Federal Reserve Act*

MONETARY POLICY AND THE ECONOMIC OUTLOOK

The pace of economic activity in the United States picked up noticeably in the first half of 2002 as some of the powerful forces that had been restraining spending for the preceding year and a half abated. With inventories in many industries having been brought into more comfortable alignment with sales, firms began boosting production around the turn of the year to stem further runoffs of their stocks. And while capital spending by businesses has yet to show any real vigor, the steep contraction of the past year or so appears to have come to an end. Household spending, as it has throughout this cyclical episode, continued to trend up in the first half. With employment stabilizing, the increases in real wages made possible by gains in labor productivity and the effects of a variety of fiscal actions have provided noticeable support to disposable incomes. At the same time, low interest rates have buoyed the purchase of durable goods and the demand for housing. Growth was not strong enough to forestall a rise in the unemployment rate, and slack in product and labor markets, along with declining unit costs as productivity has soared, has helped to keep core inflation low. The exceptionally strong performance of productivity over the past year provides further evidence of the U.S. economy's expanded capacity to provide growth over the longer haul.

The Federal Reserve had moved aggressively in 2001 to counter the weakness that had emerged in aggregate demand; by the end of the year, it had lowered the federal funds rate to 1¾ percent, the lowest level in forty years. With only tentative signs that activity was picking up, the Federal Open Market Committee (FOMC) decided to retain that unusual degree of monetary accommodation by leaving the federal funds rate unchanged at its January meeting. Confirmation of an improvement in activity was evident by the time of the March meeting, and the FOMC moved toward an assessment that the risks to the outlook were balanced between its long-run

goals of price stability and maximum sustainable economic growth, a view maintained through its June meeting. The durability and strength of the expansion were recognized to depend on the trajectory of final sales. The extent of a prospective strengthening of final sales was—and still is—uncertain, however, and with inflation likely to remain contained, the Committee has chosen to maintain an accommodative stance of policy, leaving the federal funds rate at its level at the end of last year.

The economy expanded especially rapidly early in the year. As had been anticipated, much of the first quarter's strength in production resulted from the efforts of firms to limit a further drawdown of inventories after the enormous liquidation in the fourth quarter of 2001. With respect to first-quarter sales, purchases of light motor vehicles dropped back from their extraordinary fourth-quarter level, but other consumer spending increased substantially. Housing starts, too, jumped early in the year—albeit with the help of weather conditions favorable for building in many parts of the country—and spending on national defense moved sharply higher. All told, real GDP is now estimated to have increased at an annual rate in excess of 6 percent in the first quarter.

Economic activity appears to have moved up further in recent months but at a slower pace than earlier in the year. Industrial production has continued to post moderate gains, and nonfarm payrolls edged up in the second quarter after a year of nearly steady declines. However, several factors that had contributed importantly to the outsized gain of real output in the first quarter appear to have made more modest contributions to growth in the second quarter. Available data suggest that the swing in inventory investment was considerably smaller in the second quarter than in the first. Consumer spending has advanced more slowly of late, and while the construction of new homes has expanded further, its contribution to the growth of real output has not matched that of earlier in the year.

Notable crosscurrents remain at work in the outlook for economic activity. Although some of the most recent indicators have been encouraging, businesses still appear to be reluctant to add appreciably to workforces or to boost capital spending, presumably until they see clearer signs of improving pros-

pects for sales and profits. These concerns, as well as ongoing disclosures of corporate accounting irregularities and lapses in corporate governance, have pulled down equity prices appreciably on balance this year. The accompanying decline in net worth is likely to continue to restrain household spending in the period ahead, and less favorable financial market conditions could reinforce business caution.

Nevertheless, a number of factors are likely to boost activity as the economy moves into the second half of 2002. With the inflation-adjusted federal funds rate barely positive, monetary policy should continue to provide substantial support to the growth of interest-sensitive spending. Low interest rates also have allowed businesses and households to strengthen balance sheets by refinancing debt on more favorable terms. Fiscal policy actions in the form of lower taxes, investment incentives, and higher spending are providing considerable stimulus to aggregate demand this year. Foreign economic growth has strengthened and, together with a decline in the foreign exchange value of the dollar, should bolster U.S. exports. Finally, the exceptional performance of productivity has supported household and business incomes while relieving pressures on price inflation, a combination that augurs well for the future.

Monetary Policy, Financial Markets, and the Economy over the First Half of 2002

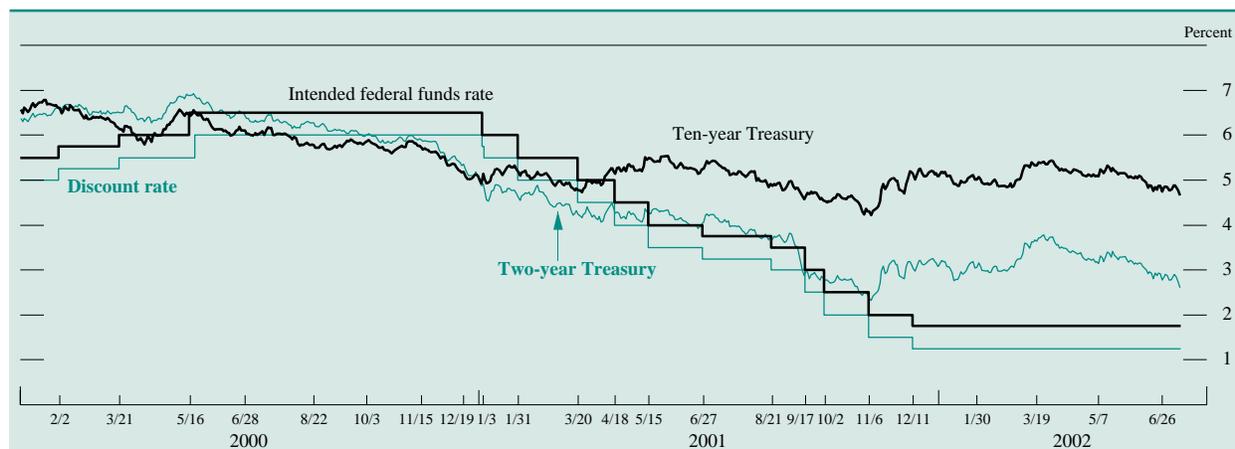
The information reviewed by the FOMC at its meeting of January 29 and 30 seemed on the whole to indicate that economic activity was bottoming out and that a recovery might already be under way. Consumer spending had held up remarkably well, and the rates of decline in manufacturing production and business purchases of durable equipment and software had apparently moderated toward the end of 2001. In addition, the expectation that the pace of inventory runoff would slow after several quarters of substantial and growing liquidation constituted another reason for anticipating that economic activity would improve in the period immediately ahead. Nonetheless, looking beyond the near term, the FOMC faced considerable uncertainty about the strength of final demand. Because household spending had not softened to the usual extent during the recession, it appeared likely to have only limited room to pick up over coming quarters. Intense competitive pressures were thought to be constraining the growth of profits, which could damp investment and equity prices. At the same time, the outlook for

continued subdued inflation remained favorable given the reduced utilization of resources and the further pass-through of earlier declines in energy prices. Taken together, these conditions led the FOMC to leave the stance of monetary policy unchanged, keeping its target for the federal funds rate at 1 $\frac{3}{4}$ percent. In light of the tentative nature of the evidence suggesting that the upturn in final demand would be sustained, the FOMC decided to retain its assessment that the more important risk to achieving its long-run objectives remained economic weakness—the possibility that growth would fall short of the rate of increase in the economy’s potential and that resource utilization would fall further.

When the FOMC met on March 19, economic indicators had turned even more positive, providing encouraging evidence that the economy was recovering from last year’s recession. Consumer spending had remained brisk in the early part of the year, the decline in business expenditures on equipment and software appeared to have about run its course, and housing starts had turned back up. Industrial production, which had been falling for nearly a year and a half, increased in January and February as businesses began to meet more of the rise in sales from current production and less from drawing down inventories. Indications that an expansion had taken hold led to noticeable increases in broad stock indexes and in long-term interest rates. But the strength of the recovery remained unclear. The outlook for business fixed investment—which would be one key to the strength of economic activity once the thrust from inventory restocking came to an end—was especially uncertain, with anecdotal reports indicating that businesses remained hesitant to enter into major long-term commitments. While the FOMC believed that the fiscal and monetary policies already in place would continue to stimulate economic activity, it considered the questions surrounding the outlook for final demand over the quarters ahead still substantial enough to justify the retention of the current accommodative stance of monetary policy, particularly in light of the relatively high unemployment rate and the prospect that the lack of price pressures would persist. Given the positive tone of the available economic indicators, the FOMC announced that it considered the risks to achieving its long-run objectives as now being balanced over the foreseeable future.

By the time of the May 7 FOMC meeting, it had become evident that economic activity had expanded rapidly early in 2002. But the latest statistical data and anecdotal reports suggested that the expansion was moderating considerably in the second quarter and that the extent to which final demand would

Selected interest rates



NOTE. The data are daily and extend through July 10, 2002. The dates on the horizontal axis are those of scheduled FOMC meetings and of any intermeeting policy actions.

strengthen was still unresolved. Business sentiment remained gloomy as many firms had significantly marked down their own forecasts of growth in sales and profits over coming quarters. These revised projections, along with the uncertainty surrounding the robustness of the overall economic recovery, had contributed to sizable declines in market interest rates and weighed heavily on equity prices, which had dropped substantially between the March and May meetings. The outlook for inflation had remained benign despite some firming in energy prices, as excess capacity in labor and product markets held the pricing power of many firms in check, and the apparent strong uptrend in productivity reduced cost pressures. In these circumstances, the FOMC decided to keep the federal funds rate at its accommodative level of $1\frac{3}{4}$ percent and maintained its view that, against the background of its long-run goals of price stability and sustainable economic growth, the risks to the outlook remained balanced.

Over the next seven weeks, news on the economy did little to clarify questions regarding the vigor of the ongoing recovery. The information received in advance of the June 25–26 meeting of the FOMC continued to suggest that economic activity had expanded in the second quarter, but both the upward impetus from the swing in inventory investment and the growth in final demand appeared to have diminished. In financial markets, heightened concerns about accounting irregularities at prominent corporations and about the outlook for profits had contributed to a substantial decline in equity prices and correspondingly to a further erosion in household wealth. But some cushion to the effects on aggregate demand of the decline in share prices had been provided by the fall in the foreign exchange value of

the dollar and the drop in long-term interest rates. Although the FOMC believed that robust underlying growth in productivity, as well as accommodative fiscal and monetary policies, would continue to support a pickup in the rate of increase of final demand over coming quarters, the likely degree of the strengthening remained uncertain. The FOMC decided to keep unchanged its monetary policy stance and its view that the risks to the economic outlook remained balanced.

Economic Projections for 2002 and 2003

The members of the Board of Governors and the Federal Reserve Bank presidents, all of whom participate in the deliberations of the FOMC, expect the economy to expand rapidly enough over the next six quarters to erode current margins of underutilized capital and labor resources. The central tendency of the forecasts for the increase in real GDP over the four quarters of 2002 is $3\frac{1}{2}$ percent to $3\frac{3}{4}$ percent, and the central tendency for real GDP growth in 2003 is $3\frac{1}{2}$ percent to 4 percent. The central tendency of the projections of the civilian unemployment rate, which averaged just under 6 percent in the second quarter of 2002, is that it stays close to this figure for the remainder of the year and then moves down to between $5\frac{1}{4}$ percent and $5\frac{1}{2}$ percent by the end of 2003.

Support from monetary and fiscal policies, as well as other factors, should lead to a strengthening in final demand over coming quarters. Business spending on equipment and software will likely be boosted by rising sales, improving profitability, tax incentives, and by the desire to acquire new capital

Economic projections for 2002 and 2003

Percent

Indicator	Federal Reserve Governors and Reserve Bank presidents	
	Range	Central tendency
2002		
<i>Change, fourth quarter to fourth quarter¹</i>		
Nominal GDP	4½–5½	4¾–5¼
Real GDP	3–4	3½–3¾
PCE chain-type price index	1¼–2	1½–1¾
<i>Average level, fourth quarter</i>		
Civilian unemployment rate	5½–6¼	5¾–6
2003		
<i>Change, fourth quarter to fourth quarter¹</i>		
Nominal GDP	4½–6	5–5¾
Real GDP	3¼–4¼	3½–4
PCE chain-type price index	1–2¼	1½–1¾
<i>Average level, fourth quarter</i>		
Civilian unemployment rate	5–6	5¼–5½

1. Change from average for fourth quarter of previous year to average for fourth quarter of year indicated.

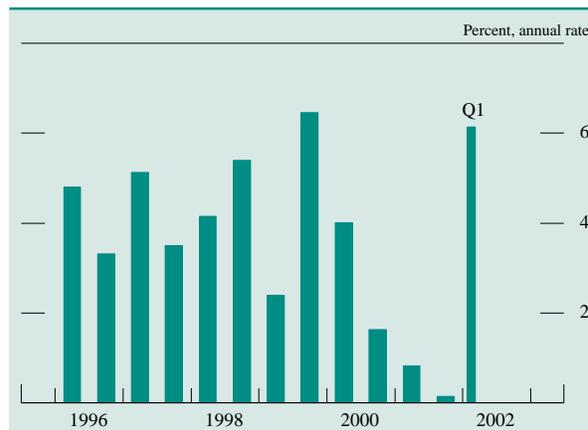
embodying ongoing technological advances. Improving labor market conditions and a robust underlying trend in productivity growth should further bolster household income and contribute to an uptrend in spending. In addition, the liquidation of last year's inventory overhangs has left businesses in a position to begin rebuilding stocks as they become more persuaded that the recovery in final sales will be sustained.

Most FOMC participants expect underlying inflation to remain close to recent levels through the end of 2003. Core inflation should be held in check by productivity gains that hold down cost increases, a lack of pressure on resources, and well-anchored inflation expectations. Overall inflation, which was depressed last year by a notable decline in energy prices, is likely to run slightly higher this year. In particular, the central tendency of the projections of the increase in the chain-type index for personal consumption expenditures over the four quarters of both 2002 and 2003 is 1½ percent to 1¾ percent, compared with last year's pace of 1¼ percent.

ECONOMIC AND FINANCIAL DEVELOPMENTS IN 2002

The pace of economic activity picked up considerably in the first half of 2002 after being about unchanged, on balance, in the second half of 2001. Final sales advanced modestly as substantial gains in

Change in real GDP



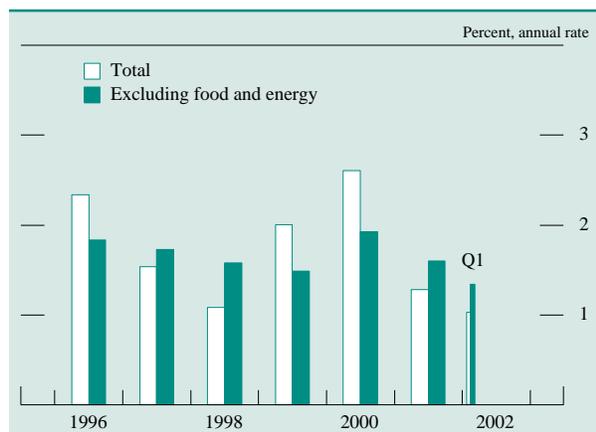
NOTE. Here and in subsequent charts, except as noted, change for a given period is measured to its final quarter from the final quarter of the preceding period.

household and government spending were partly offset by weak business fixed investment and a widening gap between imports and exports. In addition, inventory liquidation slowed sharply as businesses stepped up production to bring it more closely in line with the pace of final sales. The increase in real GDP was particularly rapid early in the year, with the first-quarter gain elevated by a steep reduction in the pace of the inventory run-off, a surge in defense spending, and a weather-induced spurt in construction. Real GDP is currently estimated to have risen at an annual rate of just over 6 percent in the first quarter and appears to have posted a more moderate gain in the second quarter.

Private payroll employment declined through April, and at midyear the unemployment rate stood somewhat above its average in the fourth quarter of 2001. Core inflation—which excludes the direct influences of the food and energy sectors—remained subdued through May, held down by slack in resource utilization and continued sizable advances in labor productivity. Overall inflation was boosted by a surge in energy prices in March and April, but energy prices have since retreated a bit. Inflation expectations remained in check in the first half of this year.

As judged by declines in most interest rates over the first half of the year, financial market participants have marked down their expectation of the vigor of the economic expansion. Interest rates, along with most equity indexes, rose noticeably toward the end of the first quarter in reaction to generally stronger-than-expected economic data. But Treasury yields and equity prices more than rolled back those increases on renewed questions about the strength of the rebound in the economy, including growing

Change in PCE chain-type price index



NOTE: The data are for personal consumption expenditures (PCE).

uncertainty regarding prospective corporate profits and concerns about escalating geopolitical tensions and about the governance and transparency of U.S. corporations. Private demands on credit markets moderated in the first half of the year, as businesses substantially curbed their net borrowing. For the most part, this reduction reflected further declines in business investment, a pickup in operating profits, and a return to net equity issuance. But, in addition, lenders became more cautious and selective, especially for borrowers of marginal credit quality.

Market perceptions that the recovery in the United States might turn out to be less robust than anticipated also put downward pressure on the foreign exchange value of the dollar as measured against the currencies of our major trading partners, especially during the second quarter of 2002. Central banks in some foreign countries, including Canada, tightened policy as growth firmed. The euro-area economy recovered modestly during the first half, and some brighter signs were evident in Japan. In contrast, the dollar strengthened on balance against the currencies of our other important trading partners; in particular, the Mexican peso lost ground, and financial markets reacted to political and economic problems in several South American countries.

The Household Sector

Household spending began the year on a strong note and continued to rise in the second quarter. Further gains in disposable income have supported a solid underlying pace of spending. The decline in stock prices in the first half of 2002 reduced household wealth, and the debt-service burden remained high,

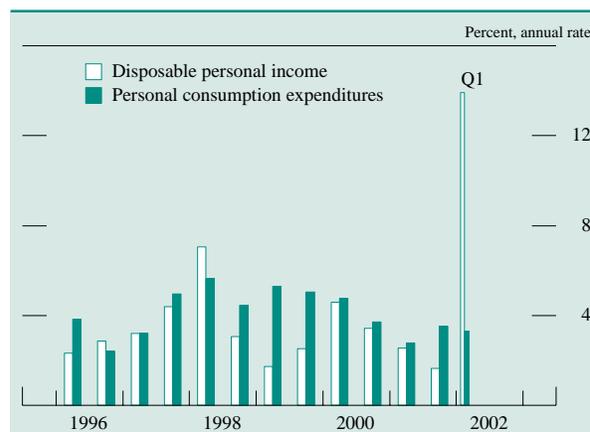
but financial stress among households to date has been limited.

Consumer Spending

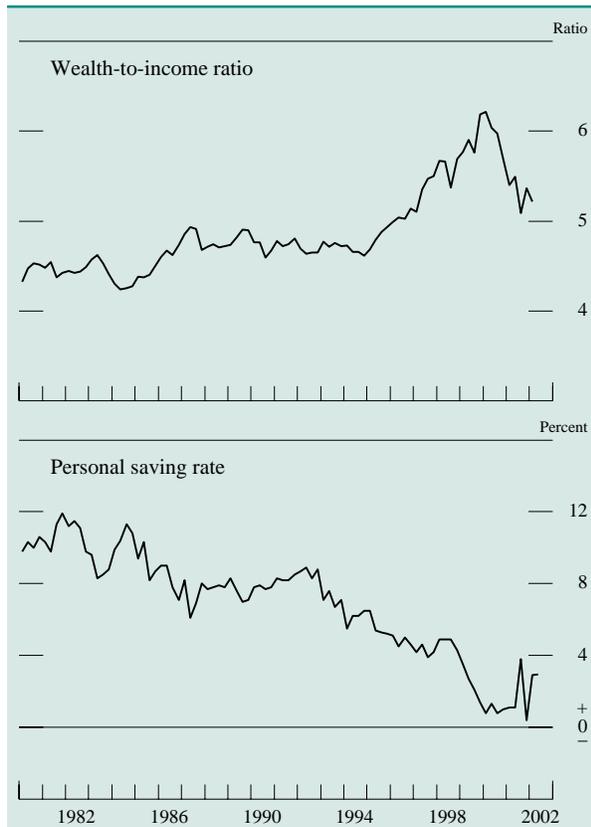
Real consumer expenditures increased at an annual rate of 3¼ percent in the first quarter. Demand for motor vehicles dropped from an extraordinary fourth-quarter pace, but purchases remained supported in part by continued large incentive packages. Outlays for other goods and services advanced smartly in the first quarter. In the second quarter, the rate of increase in consumer spending looks to have eased somewhat. Motor vehicle purchases were little changed, and most other major categories of consumer spending likely posted smaller gains than earlier in the year.

Real disposable personal income moved sharply higher in the first quarter and appears to have risen a little further in the second quarter. Wages and salaries have increased only moderately this year. But tax payments have fallen markedly; last year's legislation lowered withheld tax payments again this year, and final payments this spring on tax obligations for 2001 were substantially below last year's level (likely related at least in part to a decline in capital gains realized last year). All told, real disposable income increased at an annual rate of 8 percent between the fourth quarter of last year and May. However, household net worth has likely fallen further because the negative effect of the decline in stock prices has been only partly offset by an apparent continued appreciation in the value of residential real estate. According to the flow of funds accounts, by the end of the first quarter, the ratio of household net worth to disposable income had reversed close to two-thirds of its run-up in the second half of the 1990s; this ratio has

Change in real income and consumption



Wealth and saving



NOTE. The data are quarterly. The wealth-to-income ratio is the ratio of household net worth to disposable personal income and extends through 2002:Q1. The personal saving rate extends through 2002:Q2; the reading for that quarter is the average for April and May.

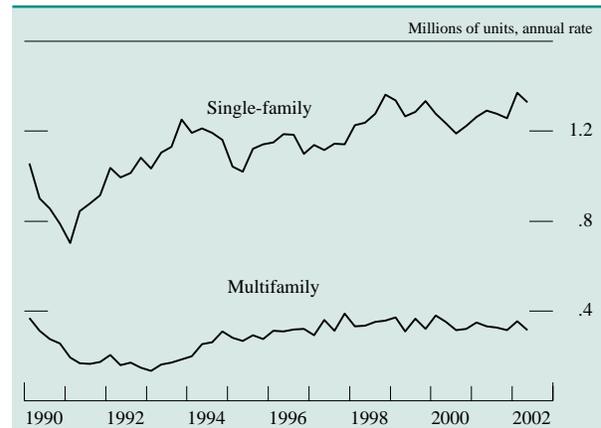
undoubtedly registered additional declines since the end of March. Consumer sentiment improved over the first several months of the year, with indexes from both the Conference Board and the Michigan Survey Research Center reversing last fall's sharp deterioration. However, both indexes have given up some of those gains more recently.

The personal saving rate increased in the first half of this year, as the decline in wealth over the past two years likely held down consumer spending relative to disposable personal income. In May, the saving rate stood at 3 percent of disposable income, up from an average of 1½ percent over 2001. Movements in the saving rate have been very erratic over the past year, reflecting cyclical factors, the timing of tax cuts, and adjustments in incentives to purchase motor vehicles.

Residential Investment

Real residential investment increased at an annual rate of about 15 percent in the first quarter, and the

Private housing starts

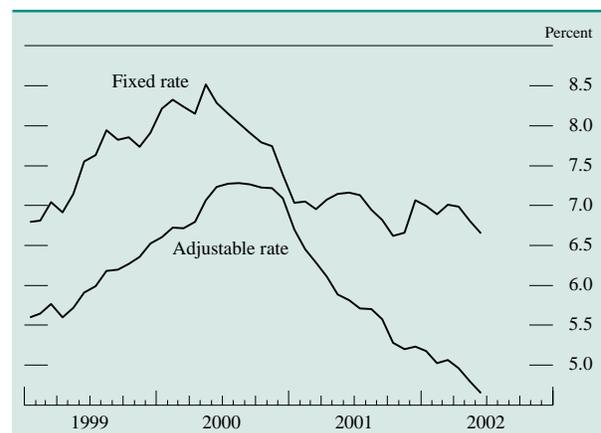


NOTE. The data for 2002:Q2 are the averages for April and May; the data for earlier periods are quarterly.

level of activity appears to have remained robust in the second quarter. The first-quarter surge was spurred partly by unseasonably warm and dry winter weather, which apparently encouraged builders to move forward some of their planned construction. At the same time, underlying housing activity has been supported by the gains in income and confidence noted above, and, importantly, by low interest rates on mortgages. In the single-family sector, starts averaged an annual rate of 1.35 million units over the first five months of the year—up 6½ percent from the already buoyant pace registered in 2001. Sales of existing homes jumped in early 2002 after moving sideways during the preceding three years; sales of new homes have also been running quite high in recent months.

Home prices have continued to move up strongly. For example, over the year ending in the first quarter,

Mortgage rates



NOTE. The data, which are monthly and extend through June 2002, are contract rates on thirty-year mortgages.

SOURCE. Federal Home Loan Mortgage Corporation.

the constant-quality price index for new homes rose 5¼ percent, and the repeat-sales price index for existing homes was up 6¼ percent. Despite these increases, low mortgage rates have kept housing affordable. Rates on thirty-year conventional fixed-rate loans averaged less than 7 percent in the first half of this year, and rates on adjustable-rate loans continued the downtrend that began in early 2001. The share of median household income required to finance the purchase of a median-price house is close to its average for the past ten years and well below the levels that prevailed in the 1970s and 1980s.

In the multifamily sector, housing starts averaged 340,000 units at an annual rate over the first five months of the year, a pace close to the average of the previous five years. However, conditions in this market have deteriorated somewhat during the past year. In the first quarter, the vacancy rate for apartments spiked to the highest level since the late 1980s, and rents and property values were below year-earlier readings.

Household Finance

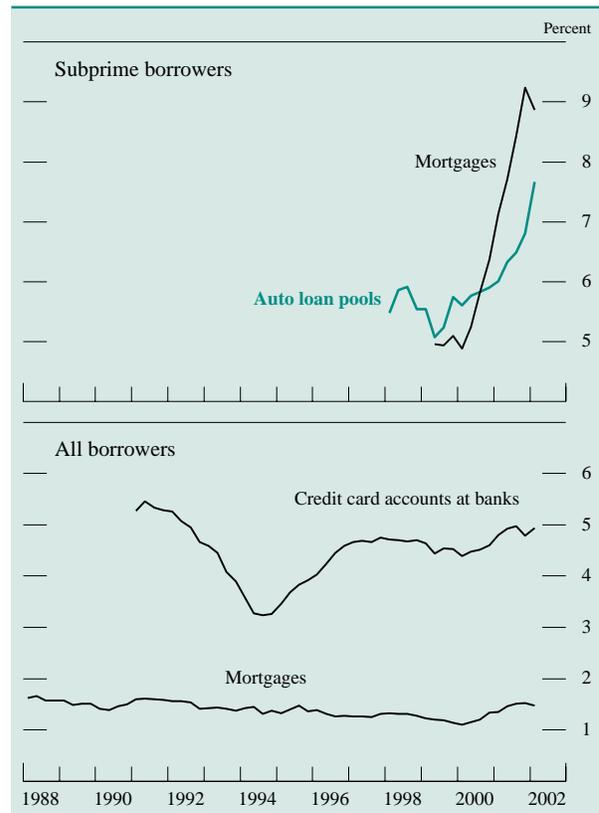
As it did last year, household debt appears to have expanded at more than an 8 percent annual rate during the first half of 2002. Although consumer credit (debt not secured by real estate) has increased, the bulk of the expansion in household debt has come from a sizable buildup of home mortgage debt. Refinancing activity has fallen below last year's record pace, but it has remained strong as households have continued to extract a portion of the accumulated equity in their homes.

Household debt service burden



NOTE. The data are quarterly and extend through 2002:Q1. Debt burden is an estimate of the ratio of debt payments to disposable income; debt payments consist of the estimated required payments on outstanding mortgage and consumer debt.

Delinquency rates on selected types of household loans



NOTE. The data are quarterly and extend through 2002:Q1. SOURCE. For auto loans, Federal Reserve staff estimates based on data from Moody's Investors Service; for mortgages, the Mortgage Bankers Association and LoanPerformance; for credit cards, bank Call Reports.

The aggregate household debt-service burden—the ratio of estimated minimum scheduled payments on mortgage and consumer debt to disposable personal income—although still elevated, has moved little this year. The effect of the fast pace of household borrowing on the debt burden has been offset by lower interest rates and the brisk growth in disposable income. On balance, indicators of credit quality do not suggest much further deterioration in the financial condition of households. While delinquency rates for subprime borrowers have risen further for auto loan pools and have stayed high for mortgages, mortgage delinquencies for all borrowers have changed little, and delinquencies on credit card accounts at banks have not risen significantly since the mid-1990s. The number of personal bankruptcy filings also has essentially moved sideways this year, albeit at a historically high rate. Lenders have apparently reacted to these indicators of household credit quality by tightening standards for consumer loans, as reported on the Federal Reserve's Senior Loan Officer Opinion Surveys. Standards for mortgage loans, however,

Net percentage of domestic banks tightening standards on consumer loans and residential mortgage loans



NOTE. The data are based on a survey generally conducted four times per year; the last reading is from the April 2002 survey. Net percentage is the percentage reporting a tightening less the percentage reporting an easing.

SOURCE. Federal Reserve Senior Loan Officer Opinion Survey on Bank Lending Practices.

have changed little, and, on the whole, credit appears to have remained readily available to the household sector.

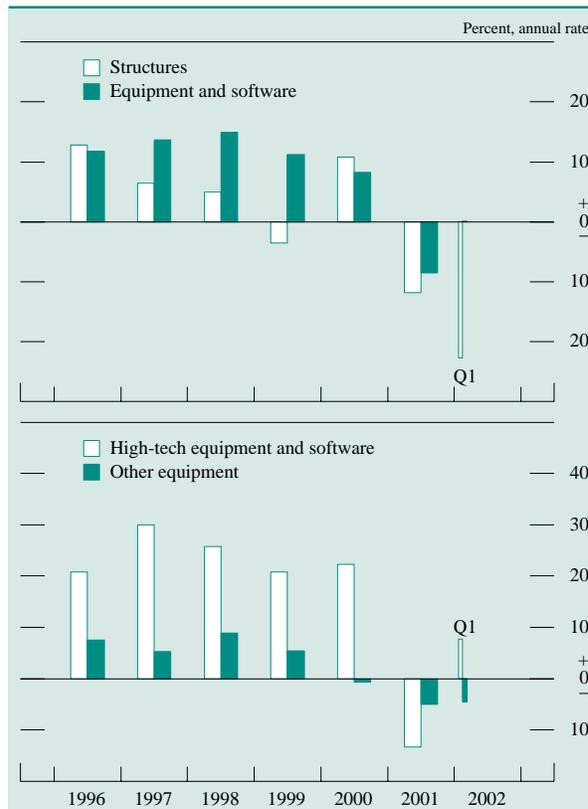
The Business Sector

Spending in the business sector appears to have bottomed out recently, but a strong recovery has not yet taken hold. Real business fixed investment, which declined sharply last year, fell again in the first quarter, but seems to have firmed in the second quarter. Excess capacity in some sectors and uncertainty about the pace of the economic expansion are likely still restraining equipment demand, but rising output, improving corporate profits, and continuing technological advances appear to be working in the opposite direction. Many businesses have worked off their excess stocks, and the substantial inventory runoff that began in the first quarter of last year seems to be drawing to a close. The combination of higher profits and weak investment spending has led to a drop in borrowing by the nonfinancial business sector thus far this year.

Fixed Investment

Real business spending on equipment and software (E&S) was little changed in the first quarter after having dropped sharply last year. In the high-tech category, real expenditures moved up in the first quarter after a double-digit decline in 2001. Outlays

Change in real business fixed investment



NOTE. High-tech equipment consists of computers and peripheral equipment and communications equipment.

for computers posted large gains in inflation-adjusted terms in both the fourth and first quarters; many businesses apparently postponed computer replacement over much of last year but now seem to be taking advantage of ongoing technological progress and the associated large declines in prices. In contrast, real expenditures for communications equipment were little changed in the first quarter after having plunged by one-third during 2001. Excess capacity in the provision of telecom services is continuing to weigh heavily on the demand for communications equipment. Business outlays for software edged down in real terms in the first quarter.

Real spending on transportation equipment dropped in the first quarter. Outlays for aircraft shrank dramatically as the reduction in orders after last year's terrorist attacks began to show through to spending. Outlays for motor vehicles fell sharply early in the year owing to weakness in the market for heavy trucks and a reported reduction in fleet sales to rental companies related to the downturn in air travel. Real E&S spending outside of the high-tech and transportation categories moved up in the first quarter after sizable declines in the three preceding quarters.

This pattern probably reflects the deceleration and subsequent acceleration in business output, which is an important determinant of spending in this category.

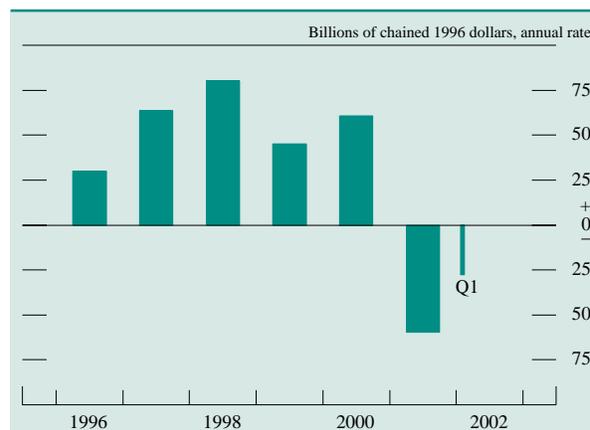
In the second quarter, real E&S spending likely rose, borne along by increases in sales and a rebound in profits. Incoming data on orders and shipments suggest that real outlays for high-tech equipment advanced and that expenditures for other nontransportation equipment also rose. Spending on aircraft probably contracted further, but orders for heavy trucks surged this spring, as some companies reportedly shifted purchases forward in anticipation of stricter emissions requirements that are scheduled to take effect in the fall. Because of lags in the ordering and building of new equipment, the provision for partial expensing in the Job Creation and Worker Assistance Act passed by the Congress in early March will likely bolster investment spending gradually.

Real outlays for nonresidential structures registered a very large decline in the first quarter after having slipped appreciably in 2001. Outlays for office and industrial structures, lodging facilities, and public utilities dropped substantially. Vacancy rates for offices jumped in the first quarter to their highest level since the mid-1990s; in addition, rents and property values were noticeably below their levels one year earlier. Vacancy rates have risen dramatically in the industrial sector as well. Construction of drilling structures also contracted sharply in the first quarter, thereby continuing the downtrend that began in the middle of last year in the wake of the decline in the prices of oil and natural gas from their peaks a few quarters earlier. Incoming data point to further declines in spending for nonresidential structures in the second quarter.

Inventory Investment

Businesses ran off inventories at an annual rate of nearly \$30 billion in the first quarter. This drawdown followed a much larger liquidation—at an annual rate of roughly \$120 billion—in the fourth quarter, and the associated step-up in production contributed almost 3½ percentage points to the first-quarter increase in real GDP. Book-value data on inventories outside of the motor vehicle sector point to a further slackening of the drawdown more recently. Since last fall, inventory–sales ratios have more than reversed the run-up that occurred as the economy softened. Currently, inventories do not appear to be excessive for the economy as a whole, although industry reports

Change in real business inventories



suggest that overhangs persist in a few areas. In contrast to inventories in other sectors, motor vehicle stocks increased in the first half of this year, as automakers boosted production in order to rebuild stocks that had been depleted by the robust pace of sales in late 2001. Motor vehicle inventories were no longer lean as of the middle of this year.

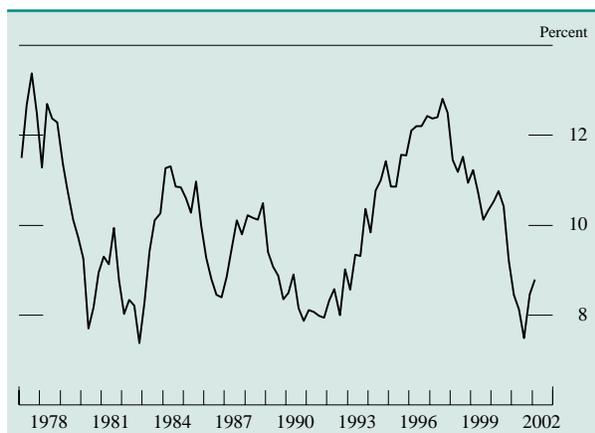
Corporate Profits and Business Finance

The economic profits of the U.S. nonfinancial corporate sector grew 5 percent at a quarterly rate in the first quarter of this year after a surge of 13¾ percent in the fourth quarter of 2001. The corresponding ratio of profits to sector GDP has edged up to 8¾ percent, reversing a portion of the steep decline registered over the preceding few years but remaining well below its peak in the mid-1990s. Early indicators point to further profit gains in the second quarter.

The rise in profits since late 2001, combined with weak capital expenditures and low share repurchase and cash-financed merger activities, have helped keep nonfinancial corporations' need for external funds (the financing gap) below the average of last year. In addition, corporations have turned to the equity markets to raise a portion of their needed external funds: Corporations have sold more new equity than they have retired this year—the first period of net equity issuance in nearly a decade. They have used much of these funds to repay debt. As a result, the growth of nonfinancial business debt appears to have slowed considerably in the first half of 2002 after rapid gains in preceding years.

Much of the growth in nonfinancial business debt this year has been concentrated in the corporate bond market (though issuance has not been quite so strong

Before-tax profits of nonfinancial corporations as a percent of sector GDP

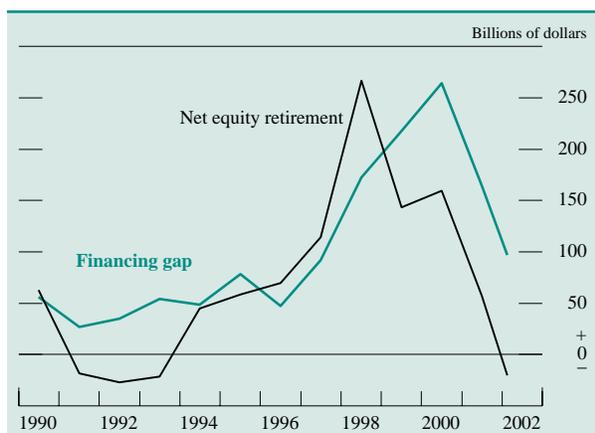


NOTE. The data are quarterly and extend through 2002:Q1. Profits are from domestic operations of nonfinancial corporations, with inventory valuation and capital consumption adjustments.

as in 2001), as firms have taken advantage of historically attractive yields. Many corporations have used the proceeds of their bond offerings to pay down commercial and industrial (C&I) loans at banks and commercial paper. In recent months, however, net corporate bond issuance has slowed, and the contraction in short-term funding appears to have moderated.

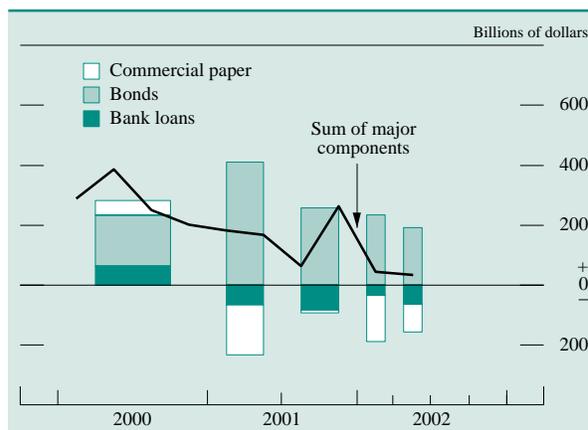
About one fifth of total bond offerings over the first half of 2002 have been in the speculative-grade market. This fraction is about unchanged from last year but still well below the proportions seen in the latter half of the 1990s, and speculative-grade bond offer-

Financing gap and net equity retirement at nonfarm nonfinancial corporations



NOTE. The data are annual through 2001; the final observation is for 2002:Q1 at an annual rate. The financing gap is the difference between capital expenditures and internally generated funds. Net equity retirement is the difference between equity retired through share repurchases, domestic cash-financed mergers, or foreign takeovers of U.S. firms and equity issued in public or private markets, including funds invested by venture capital partnerships.

Major components of net business financing

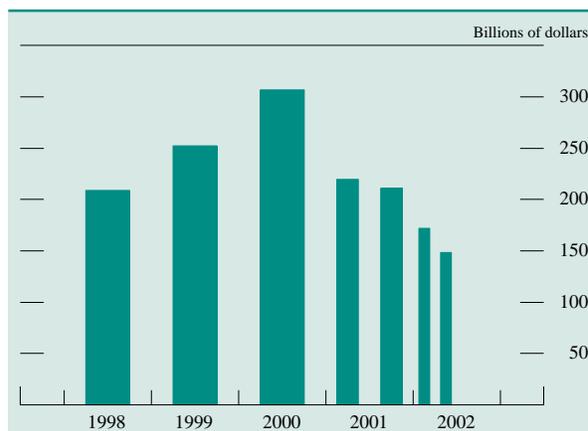


NOTE. Seasonally adjusted annual rate for nonfarm nonfinancial corporate business. The data for the sum of major components are quarterly. The data for 2002:Q2 are estimated.

ings have been concentrated in the higher quality end of that market. Troubles in the two largest sectors of the market—telecommunications and energy—have continued to weigh on issuance this year.

Although many businesses have apparently substituted bond debt for shorter-term financing by choice, others, especially investment-grade firms in the telecommunications sector, have done so by necessity: They were pushed out of the commercial paper market or otherwise encouraged by investors and credit-rating agencies to curb their reliance on short-term sources of financing to limit the associated rollover risk. Indeed, commercial paper outstanding ran off sharply in February and early March, when several companies that were perceived as having questionable accounting practices were forced to tap bank lines to pay off maturing commercial paper. With lower-quality borrowers leaving the market in the

Nonfinancial commercial paper outstanding



NOTE. The data are period-end figures and extend through 2002:Q2.

Net percentage of domestic banks tightening standards on commercial and industrial loans to large and medium-sized firms



NOTE. The data are based on a survey generally conducted four times per year; the last reading is from the April 2002 survey. Large and medium-sized firms are those with annual sales of \$50 million or more. Net percentage is the percentage reporting a tightening less the percentage reporting an easing.

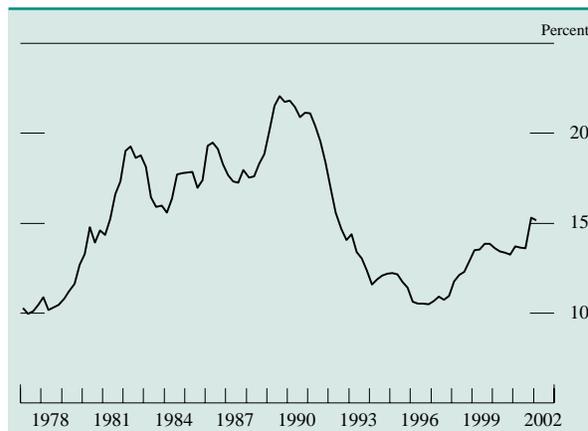
SOURCE. Federal Reserve Senior Loan Officer Opinion Survey on Bank Lending Practices.

face of elevated risk spreads, commercial paper outstanding shrank nearly 30 percent in the first half of the year after a sizable decline in 2001.

Some firms that exited the commercial paper market turned, at least temporarily, to banks as an alternative. Nonetheless, on net, commercial and industrial loans at banks have declined this year, reflecting borrowers' preference for lengthening the maturity of their liabilities and the overall reduction in the demand for external financing, noted earlier. To a more limited extent, a somewhat less receptive lending environment probably also weighed on business borrowing at banks. In particular, banks continued to tighten terms and standards on C&I loans on net over the first half of this year, although the fraction of banks that reported having done so fell noticeably in the Federal Reserve's Senior Loan Officer Opinion Survey in April. Banks have also imposed stricter underwriting standards and higher fees and spreads on backup lines of credit for commercial paper over most of 2001 and early 2002; banks cited increased concerns about the creditworthiness of issuers and a higher likelihood of lines being drawn down.

Indicators of credit quality still point to some trouble spots in the nonfinancial business sector. The ratio of net interest payments to cash flow has trended up since the mid-1990s for the nonfinancial corporate sector as a whole, with increases most pronounced for weaker speculative-grade firms. The default rate on outstanding corporate bonds has remained quite elevated by historical standards. By contrast,

Net interest payments of nonfinancial corporations relative to cash flow



NOTE. The data are quarterly and extend through 2002:Q1.

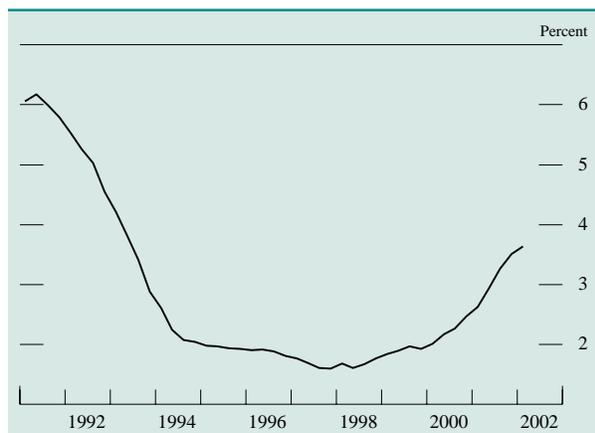
although the delinquency rate on C&I loans at banks has risen a bit further this year, it has stayed well below rates observed in the early 1990s. In part, however, this performance may be attributable to more aggressive loan sales and charge-offs than in the past. It may be that problems have risen more for large firms than for smaller ones, as the increase in C&I loan delinquencies over recent quarters was limited to large banks, where loans to larger firms are more likely to be held. Credit rating downgrades continued to outpace upgrades by a substantial margin, as was the case in the last quarter of 2001. Spreads of corporate bond yields over those on comparable Treasuries have remained high by historical standards and have risen considerably across the credit-quality spectrum for telecom firms. Corporate

Default rate on outstanding bonds



NOTE. The default rate is monthly and extends through May 2002. The rate for a given month is the face value of bonds that defaulted in the twelve months ending in that month divided by the face value of all bonds outstanding at the end of the calendar quarter immediately preceding the twelve-month period.

Delinquency rates on commercial and industrial loans at banks

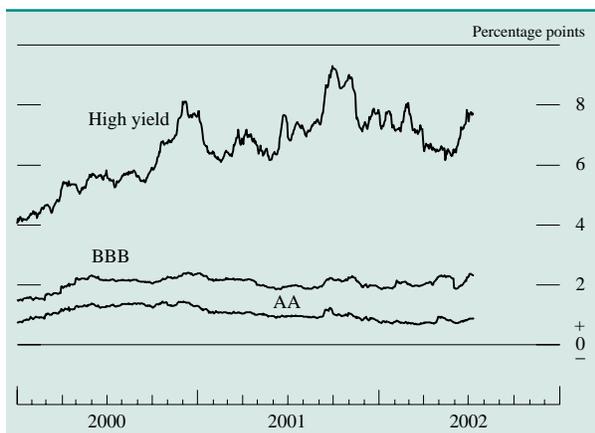


NOTE. The data, from bank Call Reports, are quarterly, seasonally adjusted, and extend through 2002:Q1.

bond spreads also widened, though to a much smaller extent, for a few highly rated firms in other industries owing to concerns about their accounting practices.

After having surged late last year, growth in commercial mortgage debt dropped back in the first half of this year amid a sharp decline in construction activity. Issuance of commercial mortgage backed securities (CMBS), a major component of commercial mortgage finance, has been especially weak. Nonetheless, investor appetite for CMBS has apparently been strong, as yield spreads have narrowed this year. Delinquency rates on CMBS pools, which had been rising during the early part of the year, seem to have stabilized in recent months, and delinquency rates on commercial mortgages held by banks and

Spreads of corporate bond yields over the ten-year Treasury yield



NOTE. The data are daily and extend through July 10, 2002. The spreads compare the yields on the Merrill Lynch AA, BBB, and 175 indexes with the yield on the ten-year off-the-run Treasury note.

insurance companies have remained near their historical lows.

The low level of risk spreads for CMBS suggests that concerns about terrorism insurance have not been widespread in the market for commercial mortgages, and responses to the Federal Reserve's Senior Loan Officer Opinion Survey in April indicate that most domestic banks required insurance on less than 10 percent of the loans being used to finance high-profile or heavy-traffic properties. Nonetheless, that fraction was much higher at a few banks, and some credit-rating agencies have placed certain CMBS issues—mainly those backed by high-profile properties—on watch for possible downgrade because of insufficient terrorism insurance.

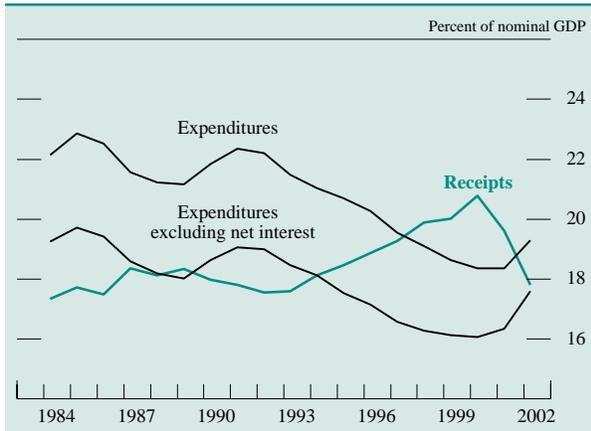
The Government Sector

The federal unified budget moved into deficit in fiscal 2002 after having posted a substantial surplus in fiscal 2001. The deterioration reflects a sharp drop in tax collections (resulting in part from the effects of the economic downturn, the decline in stock prices, and legislated tax cuts) and unusually large supplemental spending measures. As a consequence, federal debt held by the public increased in the first half of the year after rapid declines during the previous several years. The budgets of states and localities have also been strained by economic events, and many state and local governments have taken steps to relieve these pressures.

Federal Government

Over the first eight months of fiscal year 2002 (October through May) the unified budget recorded a deficit of \$147 billion, compared with a surplus of \$137 billion over the same period of fiscal year 2001. Nominal receipts were 12 percent lower than during the same period of fiscal 2001, and daily Treasury data since May suggest that receipts have remained subdued. Individual tax payments are running well below last year's pace; this weakness reflects general macroeconomic conditions, the legislated changes in tax policy, and the decline in stock prices and consequent reduction in capital gains realizations in 2001. The extent of the weakness was not widely anticipated—this spring's nonwithheld tax payments, which largely pertain to last year's liabilities, generated the first substantial negative April surprise in revenue collections in a number of years. Corporate tax payments have also dropped from last year's level

Federal receipts and expenditures



NOTE. The budget data are from the unified budget; through 2001 they are for fiscal years (October through September), and GDP is for Q3 to Q3. For 2002, the budget data are for the twelve months ending in May, and GDP is for 2001:Q1 to 2002:Q1.

because of weak profits and the business tax provisions included in the Job Creation and Worker Assistance Act of 2002.

Nominal federal outlays during the first eight months of fiscal 2002 were 10 percent higher than during the same period last year; excluding a drop in net interest payments owing to the current low level of interest rates, outlays were up 14 percent. The rate of increase was especially large for expenditures on income security, health, and national and homeland defense. Real federal expenditures for consumption and gross investment, the part of government spending that is a component of real GDP, rose at an annual rate of roughly 11½ percent in the first calendar quarter of 2002 as defense spending surged. The available data suggest that real federal expenditures for consumption and gross investment increased further in the second quarter.

Net national saving



NOTE. The data are quarterly and extend through 2002:Q1.

Federal saving, which equals the unified budget surplus adjusted to conform to the accounting practices followed in the national income and product accounts, has fallen considerably since the middle of last year. Net federal saving, which accounts for the depreciation of government capital, turned negative in the first quarter of this year. At the same time, the net saving of households, businesses, and state and local governments has moved up from its trough of last year. On balance, net national saving as a share of GDP has held roughly steady in the past several quarters after having moved down sharply since 1999.

Federal debt held by the public, which had been declining rapidly over the past few years, grew at a ¾ percent annual rate in the first quarter of 2002 and is estimated to have increased considerably more in the second quarter. The ratio of federal government debt held by the public to nominal GDP fell only slightly in the first quarter following several years of steep declines. In response to the changing budget outlook, the Treasury suspended its buyback operations through mid-August and increased the number of auctions of new five-year notes and ten-year indexed securities.

During the second quarter, the Treasury took unusual steps to avoid breaching its statutory borrowing limit of \$5.95 trillion. In early April, it temporarily suspended investments in the Government Securities Investment Fund—the so called G-fund of the Federal Employees’ Retirement System. Incoming individual nonwithheld tax receipts later that month allowed the Treasury to reinvest the G-fund assets with an adjustment for interest. Late in May, the Treasury declared a debt ceiling emergency,

Federal government debt held by the public



NOTE. Through 2001, the data for debt are year-end figures and the corresponding value for GDP is for Q4 at an annual rate; the final observation is for 2002:Q1. Excludes securities held as investments of federal government accounts.

which allowed it to disinvest a portion of the Civil Service Retirement and Disability Fund, in addition to the G-fund, to keep its debt from breaching the statutory limit. At the time of the declaration, the Treasury indicated that disinvestments from these two funds, combined with other stopgap measures, would be sufficient to keep it from breaching the debt ceiling only through late June. The Congress approved legislation raising the statutory borrowing limit to \$6.4 trillion on June 27.

State and Local Governments

Slow growth of revenue resulting from the economic downturn has also generated a notable deterioration in the fiscal position of many state and local governments over the past year. In response, many states and localities have been trimming spending plans and, in some cases, raising taxes and fees. In addition, many states have been dipping into rainy-day and other reserve funds. Together, these actions are helping to move operating budgets toward balance.

Real consumption and investment spending by state and local governments rose at an annual rate of 4¼ percent in the first quarter, but available data suggest that outlays were little changed in the second quarter. Outlays for consumption items seem to have held to only moderate increases in the first half of this year, a step-down from last year's more robust gains. Investment spending rose briskly in the first quarter and retreated in the second quarter; this pattern largely reflects the contour of construction expenditures, which were boosted early in the year by unseasonably warm and dry weather.

Debt growth in the state and local government sector has slowed so far in 2002 from last year's very rapid pace. States and localities have continued to borrow heavily in bond markets to finance capital expenditures and to refund existing obligations, including short-term debt issued last year. The overall credit quality of the sector has remained high despite the fiscal stresses associated with the recent economic slowdown, and yield ratios relative to Treasuries have changed little this year, on net.

The External Sector

Stronger growth in the United States contributed to a widening of U.S. external deficits in the first quarter of this year. The United States has continued to receive large net private financial inflows in 2002, but both inflows and outflows have been at lower levels than in recent years.

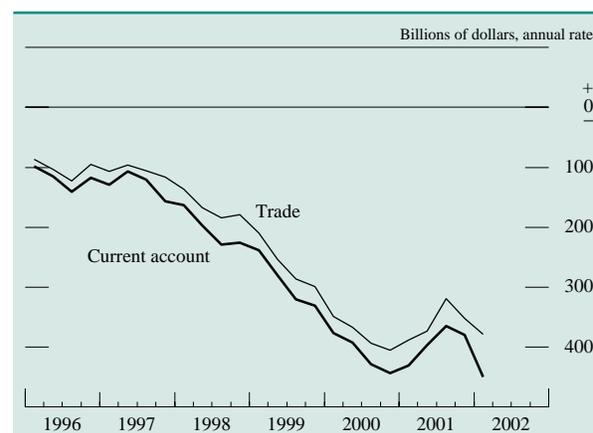
Trade and the Current Account

The U.S. deficit on trade in goods and services widened about \$27 billion in the first quarter, to nearly \$380 billion at an annual rate, as a surge in imports overwhelmed a slower expansion of exports. U.S. net investment income decreased \$33 billion to a slight deficit position after recording modest surpluses in all four quarters last year. The U.S. deficit on other income and transfers widened about \$9 billion, to nearly \$70 billion at an annual rate. The U.S. current account, which is the sum of the above, recorded a deficit in the first quarter of \$450 billion at an annual rate, 4.3 percent of GDP and nearly \$70 billion larger than the deficit in the fourth quarter of 2001.

Real exports of goods and services increased 3 percent at an annual rate in the first quarter, after five quarters of decline. This improvement resulted from a very large step-up in service receipts, as payments by foreign travelers moved back up to near pre-September 11 levels and other private service receipts increased as well. The real value of exported goods contracted in the first quarter, but at only a 3½ percent annual rate. Goods exports had declined much more steeply in the previous three quarters under the effects of slower output growth abroad, continued appreciation of the dollar, and plunging global demand for high-tech products. The better performance in the first quarter of 2002 included a markedly slower rate of decline of machinery exports and a small increase in exported aircraft. While exports of computers continued to fall, exports of semiconductors rose for the first time in nearly two years. Export prices continued to edge down in the first quarter.

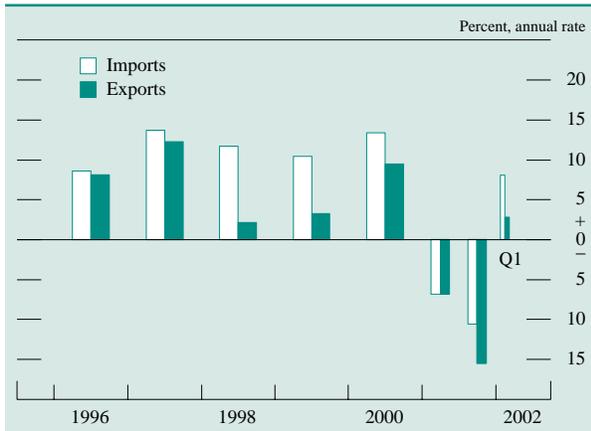
U.S. real imports of goods and services expanded in the first quarter at an 8 percent annual rate. As was

U.S. trade and current account balances



NOTE: The data are quarterly and extend through 2002:Q1.

Change in real imports and exports of goods and services

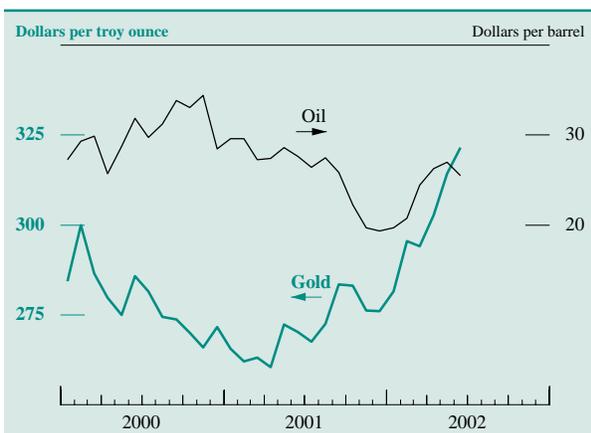


NOTE. Change for the half-year indicated is measured from the preceding half-year, and the change for 2002:Q1 is from 2001:Q4. Imports and exports for each period are the average of the levels for component quarters.

the case with exports, a substantial part of the increase came from larger service payments related to increased travel abroad by U.S. residents. Reflecting the rebound in U.S. economic activity, imports of real goods rose at about a 4 percent pace in the first quarter of 2002, the first increase in four quarters, as a decline in oil imports was more than offset by a substantial increase in imports of other goods. Growth of non-oil imports was led by increased imports of computers, autos, and consumer goods. The price of imported non-oil goods declined at about a 2¼ percent annual rate, in line with its trend in 2001; prices fell for a wide range of capital goods and industrial supplies.

Declining demand during the second half of last year put the price of West Texas intermediate (WTI) crude oil in December 2001 at around \$19 per barrel, its lowest level since mid-1999. Unusually warm

Prices of oil and gold



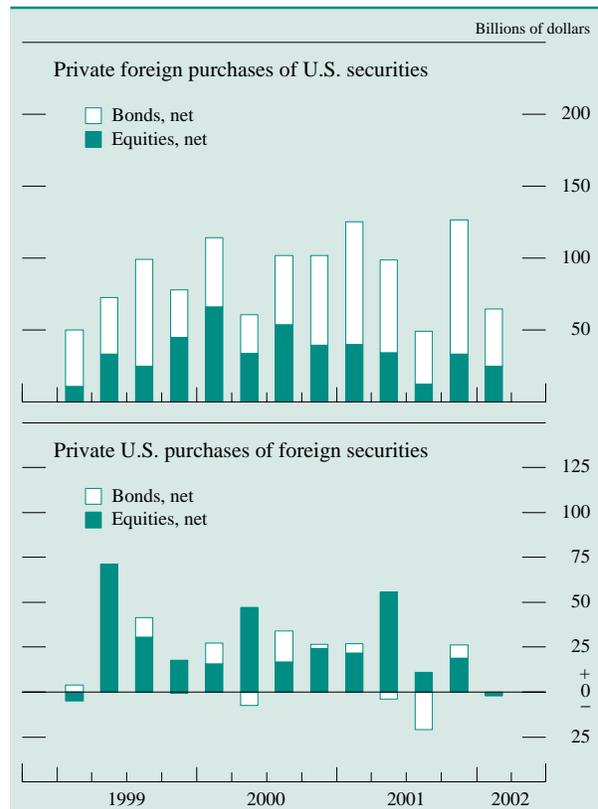
NOTE. The data are monthly. The oil price is the spot price of West Texas intermediate crude oil. The gold price is the price in London.

winter weather in the United States—along with low prices—helped keep the value of oil imports at a very low level in the first quarter. But oil prices began to rise in February and March as global economic activity picked up and as OPEC reduced its production targets in an agreement with five major non-OPEC producers (Angola, Mexico, Norway, Oman, and Russia). Oil prices remained firm in the second quarter around \$26 per barrel amid turmoil in the Middle East, a one-month suspension of oil exports by Iraq, disruption of supply from Venezuela, and increasing global demand. The price of gold also has reacted to heightened geopolitical tensions and moved up more than 13 percent over the first half of 2002.

The Financial Account

The shift in the pattern of U.S. international financial flows observed in the second half of 2001 continued into the first quarter of this year. Influenced by increased economic uncertainty, questions about corporate governance and accounting, and sagging share prices, foreign demand for U.S. equities remained weak. Foreign net purchases of U.S. bonds slowed;

U.S. international securities transactions



SOURCE. Department of Commerce and the Federal Reserve Board.

although purchases of corporate bonds continued to be robust, demand for agency and Treasury bonds slackened. Nonetheless, because U.S. net purchases of foreign securities also fell off, the contribution of net inflows through private securities transactions to financing the U.S. current account deficit remained at a high level. Preliminary and incomplete data for the second quarter of 2002 suggest a continuation of this pattern.

Slower economic activity, both in the United States and abroad, and reduced merger activity caused direct investment inflows and outflows to drop sharply late last year. Direct investment inflows, which were strong through the first half of 2001, plummeted in the second half. U.S. direct investment abroad stayed at a high level through the third quarter but then fell sharply. Both inflows and outflows remained weak in the first quarter of 2002. Available data point to a pickup of capital inflows from official sources during the first half of 2002, as the recent weakening of the foreign exchange value of the dollar prompted some official purchases.

The Labor Market

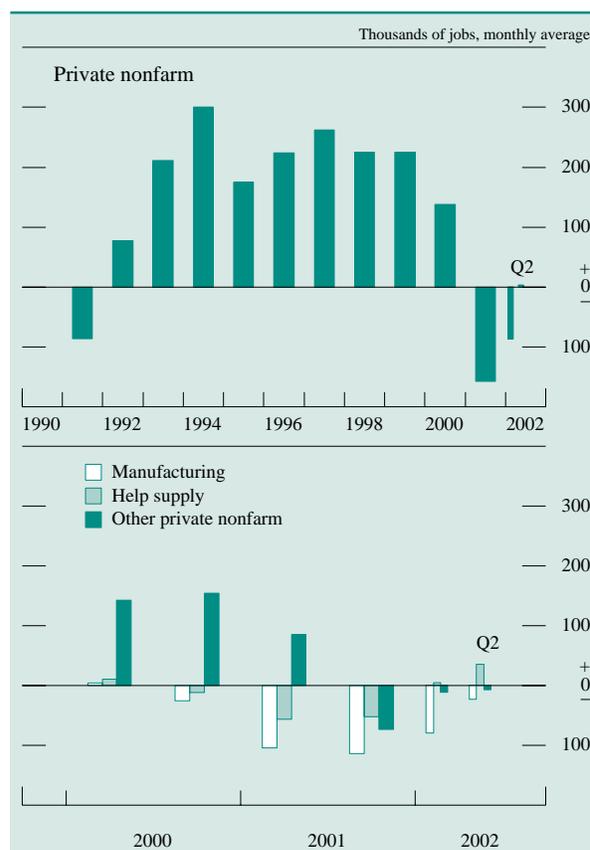
Labor markets weakened further in the first few months of the year; they now appear to have stabilized but have yet to show signs of a sustained and substantial pickup. Growth of nominal compensation slowed further in the first part of the year after having decelerated in 2001. With productivity soaring in recent quarters, unit labor costs have fallen sharply.

Employment and Unemployment

After having fallen an average of nearly 160,000 per month in 2001, private payroll employment declined at an average monthly rate of 88,000 in the first quarter and was about unchanged in the second quarter. Employment losses in the manufacturing sector have moderated in recent months, and employment in the help supply services industry—which provides many of its workers to the manufacturing sector—has increased. These two categories, which were a major locus of weakness last year, gained an average of 11,000 jobs per month over the past three months, compared with an average loss of 76,000 jobs per month in the first quarter of the year and 163,000 jobs per month over 2001.

Apart from manufacturing and help supply, private payrolls fell 12,000 per month in the first quarter and declined 8,000 per month in the second quarter. In the second quarter, hiring in construction fell by the same

Net change in payroll employment



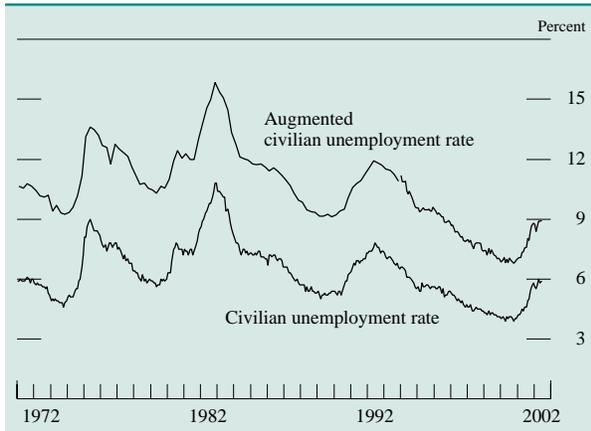
amount as in the first quarter. Retail employment declined somewhat after rising a bit in the first quarter, and the employment gain in services other than help supply was slightly smaller than in the first quarter. However, employment losses in several other categories abated in the second quarter.

The unemployment rate in the second quarter averaged 5.9 percent, up from a reading of 5.6 percent in both the fourth quarter of last year and the first quarter of this year. The higher unemployment rate in recent months is consistent with weak employment gains, and it probably was boosted a bit by the federal temporary extended unemployment compensation program. Because this program provides additional benefits to individuals who have exhausted their regular state benefits, it encourages unemployed individuals to be more selective about taking a job offer and likely draws some people into the labor force to become eligible for these benefits.

Productivity and Labor Costs

Labor productivity has increased rapidly in recent quarters. After rising at an average annual rate of

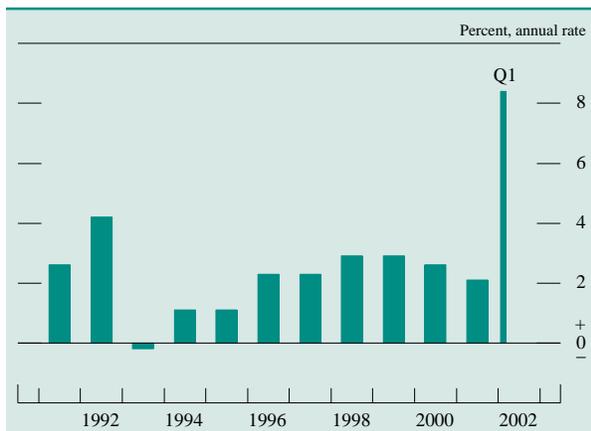
Measures of labor utilization



NOTE. The data extend through June 2002. The civilian rate is the number of civilian unemployed divided by the civilian labor force. The augmented rate adds to the numerator and the denominator of the civilian rate the number of those who are not in the labor force but want a job. The small break in the augmented rate in January 1994 arises from the introduction of a redesigned survey. For the civilian rate, the data are monthly; for the augmented rate, the data are quarterly through December 1993 and monthly thereafter.

around 1 percent in the first three quarters of last year, output per hour in the nonfarm business sector jumped at an annual rate of 5½ percent in the fourth quarter of last year and 8½ percent in the first quarter of this year. Productivity likely continued to rise in the second quarter, albeit at a slower pace. Labor productivity often rises briskly in the early stages of economic recoveries, but what makes the recent surge unusual is that it followed a period of modest increases, rather than declines. In earlier postwar recessions, productivity deteriorated as firms retained more workers than may have been required to meet reduced production needs. The strength in productivity growth around the beginning of this year suggests that employers may have doubted the durability of the pickup in sales and, therefore, deferred new hir-

Change in output per hour



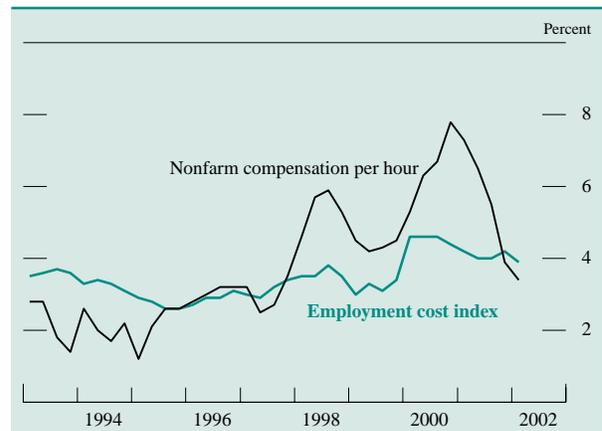
NOTE. Nonfarm business sector.

ing until they became more convinced of the vigor of the expansion. Smoothing through the recent cyclical fluctuations, productivity advanced at an average annual rate of close to 3½ percent between the fourth quarter of 2000 and the first quarter of this year. Although this pace is unlikely to be sustained, it further bolsters the view that the underlying trend in productivity has moved up since the first half of the 1990s.

The employment cost index (ECI) for private nonfarm businesses increased just under 4 percent during the twelve months ended in March of this year, after rising about 4¼ percent in the preceding twelve-month period. The recent small step-down likely reflects the lagged effects of the greater slack in labor markets and lower consumer price inflation. The wages and salaries component and the benefits component of the ECI both decelerated by ¼ percentage point relative to the preceding year. The slowing in benefits costs occurred despite a 2½ percentage point pickup in health insurance cost inflation, to a 10½ percent rate of increase.

Nominal compensation per hour in the nonfarm business sector—an alternative measure of compensation based on the national income and product accounts—rose 3½ percent during the year ending in the first quarter. This rate represented a sharp slowing from the 7¼ percent pace recorded four quarters earlier, which likely had been boosted significantly by stock options; stock options are included in this measure at their value when exercised. The deceleration in this measure of compensation is much more dramatic than in the ECI because the ECI does not include stock options. The moderate increase in

Measures of change in hourly compensation



NOTE. The data extend through 2002:Q1. For nonfarm compensation, change is over four quarters; for the employment cost index (ECI), change is over the twelve months ending in the last month of each quarter. Nonfarm compensation is for the nonfarm business sector; the ECI is for private industry excluding farm and household workers.

nominal compensation combined with the spike in productivity growth led unit labor costs to drop at an annual rate in excess of 5 percent in the first quarter, after a decline of 3 percent in the fourth quarter.

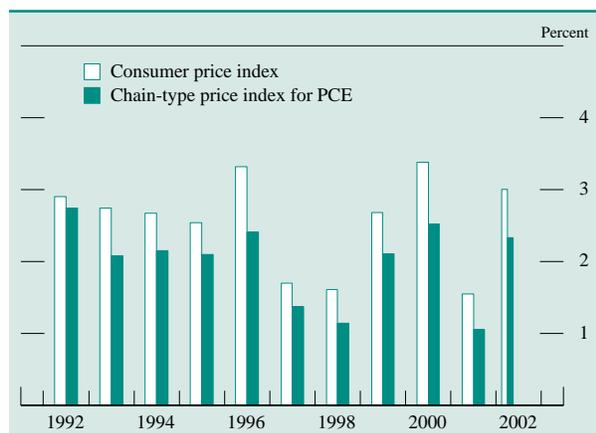
Information about the behavior of compensation in more recent months is limited. Readings on average hourly earnings of production or nonsupervisory workers suggest a further deceleration in wages: The twelve-month change in this series was $3\frac{1}{4}$ percent in June, $\frac{3}{4}$ percentage point below the change for the preceding twelve months.

Prices

A jump in energy prices in the spring pushed up overall inflation in the first part of 2002, but core inflation remained subdued. The chain-type price index for personal consumption expenditures (PCE) increased at an annual rate of $2\frac{1}{4}$ percent over the first five months of the year, compared with a rise of just over 1 percent for the twelve months of 2001. Core PCE prices rose at an annual rate of just over $1\frac{1}{2}$ percent during the first five months of this year, which was the pace recorded for 2001.

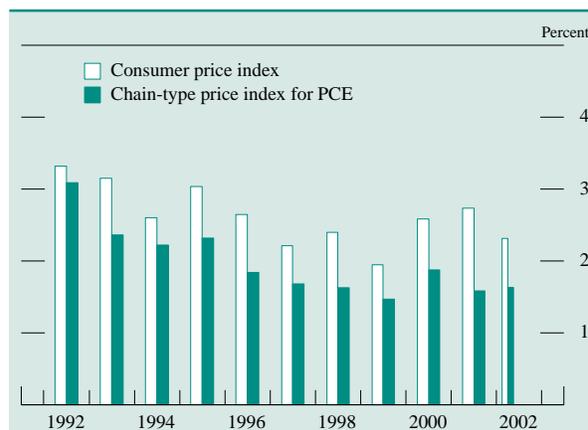
Energy prices rose sharply in March and April but have turned down more recently. Gasoline prices spiked in those two months, as crude oil costs moved higher and retail gasoline margins surged. Since April, gasoline prices have, on balance, reversed a small part of this rise. Natural gas prices stayed low in early 2002 against a backdrop of very high inventories; however, these prices have, on average, moved higher in more recent months. Electricity prices have dropped this year, a move reflecting deregulation of residential prices in Texas as well as lower prices

Change in consumer prices



NOTE. Change for 2002 is from December 2001 to May 2002 at an annual rate; changes for earlier periods are from December to December.

Change in consumer prices excluding food and energy



NOTE. Change for 2002 is from December 2001 to May 2002 at an annual rate; changes for earlier periods are from December to December.

for coal and natural gas, which are used as inputs in electricity generation. All told, energy prices increased at an annual rate of 20 percent over the first five months of the year, reversing a little more than half of last year's decline.

Consumer food prices increased at an annual rate of $1\frac{1}{2}$ percent between December and May. A poor winter crop of vegetables pushed up prices early this year, but supplies subsequently increased and prices came down. In addition, consumer prices for meats and poultry, which began to weaken late last year, remained subdued this spring.

Core inflation was held down over the first five months of the year by continued softness in goods prices, including a significant decline in motor vehicle prices. Non-energy services prices continued to move up at a faster pace than core goods prices, although the very sizable increases in residential rent and the imputed rent of owner-occupied housing have eased off in recent months. The rate of increase in core consumer prices has been damped by several forces. One is the lower level of resource utilization that has prevailed over the past year. Core price increases were also held down by declines in non-oil import prices and the lagged effects of last year's decline in energy prices on firms' costs. In addition, inflation expectations have stayed in check: The Michigan Survey Research Center index of median expected inflation over the subsequent year has rebounded from last fall's highly unusual tumble, but its average in recent months of $2\frac{3}{4}$ percent is below the average reading of 3 percent in 2000.

Like core PCE inflation, inflation measured by the core consumer price index (CPI) has remained subdued. However, the levels of inflation corresponding to these two alternative measures of consumer prices

are markedly different: Core PCE inflation was about 1½ percent over the twelve months ended in May, while core CPI inflation was about 2½ percent. This gap is more than ½ percentage point larger than the average difference between these inflation measures during the 1990s (based on the current methods used to construct the CPI instead of the official published CPI). The larger differential arises from several factors. First, the PCE price index (unlike the CPI) includes several components for which market-based prices are not available, such as checking services provided by banks without explicit charges; the imputed prices for these components have increased considerably less rapidly in the past couple of years than previously. Second, the substantial acceleration in shelter costs since the late 1990s has provided a larger boost to the CPI than to the PCE price index because housing services have a much larger weight in the CPI. Third, PCE medical services prices—which are largely based on producer price indexes rather than information from the CPI—have increased more slowly than CPI medical services prices over the past couple of years.

The chain-type price index for gross domestic purchases—which captures prices paid for consumption, investment, and government purchases—rose at an annual rate of roughly 1 percent in the first quarter of 2002, putting the four-quarter change at ¾ percent. This pace represents a marked slowing relative to the 2¼ percent rise in the year-earlier period, owing to both a drop in energy prices (as the decline in the second half of 2001 was only partly offset by the increase this spring) and more rapid declines in the prices of investment goods such as computers. The GDP price index rose at an annual rate of 1¼ percent in the first quarter and was up almost 1½ percent relative to the first quarter of last year. The GDP price index decelerated somewhat less than the index for gross domestic purchases, in part because declining oil prices receive a smaller weight in U.S. production than in U.S. purchases.

Alternative measures of price change

Percent

Price measure	2000 to 2001	2001 to 2002
<i>Chain-type</i>		
Gross domestic product	2.3	1.4
Gross domestic purchases	2.2	.7
Personal consumption expenditures	2.4	.7
Excluding food and energy	1.9	1.3
<i>Fixed-weight</i>		
Consumer price index	3.4	1.2
Excluding food and energy	2.7	2.5

NOTE. Changes are based on quarterly averages and are measured from Q1 to Q1.

U.S. Financial Markets

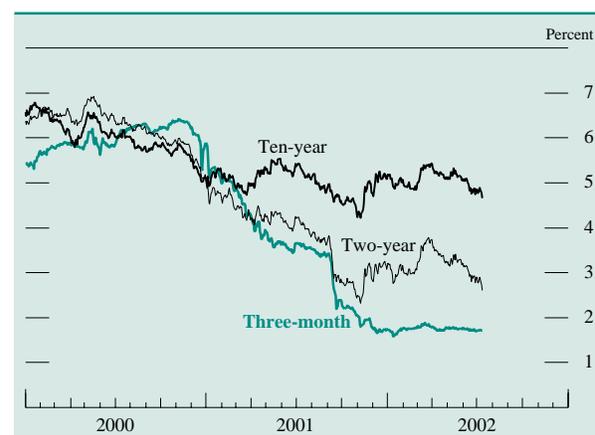
Market interest rates have moved lower, on net, since the end of 2001, as market participants apparently viewed the ongoing recovery as likely to be less robust than they had been expecting late last year. Such a reassessment of the strength of economic activity and associated business earnings, along with worries about the accuracy of published corporate financial statements, weighed heavily on major equity indexes, which dropped 12 to 31 percent. The debt of the nonfinancial sectors expanded at a moderate pace, but lenders have imposed somewhat firmer financing terms, especially on marginal borrowers.

Households' preferences for safer assets, which had intensified following last year's terrorist attacks, diminished early in 2002, as evidenced by strong flows into both equity and bond mutual funds. Equity fund inflows lessened in May and turned into outflows in June, however, as concerns about the strength and accuracy of corporate earnings reports mounted. But the net shift toward longer-term assets this year appears to have contributed to a significant deceleration in M2, which has also been slowed by reduced mortgage refinancing activity and a leveling out of the opportunity cost of holding M2 assets.

Interest Rates

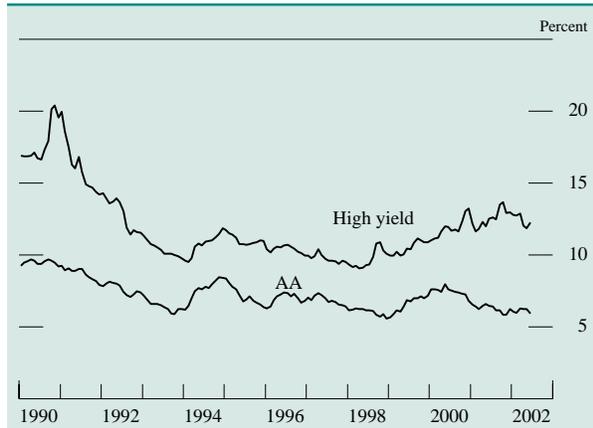
Uncertain about the robustness of the economic recovery, the FOMC opted to retain its accommodative policy stance over the first half of 2002, leaving its target for the federal funds rate at 1¾ percent. Market participants, too, have apparently been unsure about the strength of the recovery, and shifts in their views of the economic outlook have played a signifi-

Rates on selected Treasury securities



NOTE. The data are daily and extend through July 10, 2002.

Corporate bond yields

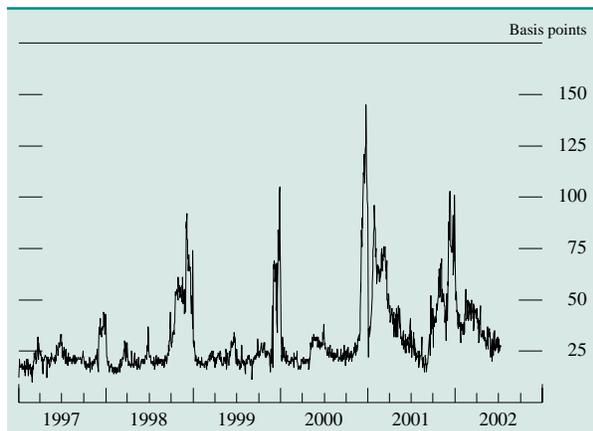


NOTE. The data are monthly averages and extend through June 2002. The AA rate is calculated from bonds in the Merrill Lynch AA index with seven to ten years remaining maturity. The high-yield rate is the yield on the Merrill Lynch 175 high-yield index.

cant role in movements in market interest rates so far this year. During the first quarter of the year, news on aggregate spending and output came in well above expectations, and Treasury coupon yields rose between 35 and 65 basis points. The second quarter, however, brought renewed concerns about the economic outlook, compounded by sharp declines in equity prices. In recent months, Treasury coupon yields have more than reversed their earlier increases and are now 40 to 50 basis points below their levels at the end of 2001.

Survey measures of long-term inflation expectations have been quite stable this year, implying that real rates changed about as much as nominal rates. The spread between nominal and inflation-indexed Treasury yields, another gauge of investors' expectations about inflation, has moved over a relatively

Spread of low-tier CP rates over high-tier CP rates



NOTE. The data are daily and extend through July 10, 2002. The series shown is the difference between the rate on A2/P2 nonfinancial commercial paper and the AA rate.

wide range since the end of 2001, but, on net, it has edged up only slightly. Even the small widening of this spread likely overstates a shift in sentiment regarding future price pressures in the economy. In mid-February, the Treasury reassured investors that it would continue to issue indexed debt, an announcement that was reinforced in May when the Treasury made public its decision to add one more auction of ten-year indexed notes to its annual schedule of offerings. This reaffirmation of the Treasury's commitment to issue indexed securities may have pulled indexed yields down by bolstering the actual and expected liquidity of the market.

Yields on longer-maturity bonds issued by investment-grade corporations have stayed close to their lows of the past ten years, but speculative-grade yields remained near the high end of their range since the mid-1990s. Spreads relative to Treasury yields have widened most recently for both investment- and speculative-grade bonds as concerns about corporate earnings reporting intensified. Such concerns have also played a prominent role in the commercial paper market, especially early this year, when investors, who had become increasingly worried about accounting scandals, imposed high premiums on lower-quality borrowers. Subsequently, however, many such borrowers either left the commercial paper market or reduced their reliance on commercial paper financing, and the average yield spread on second-tier commercial paper over top-tier paper has narrowed considerably.

Interest rates on car loans have changed little, on net, this year, and mortgage rates have moved lower. However, according to the Federal Reserve's Survey

Spread of average business loan rate over the intended federal funds rate



NOTE. The data are for loans made by domestic commercial banks and are based on a survey conducted in the middle month of each quarter; the final observation is for 2002:Q2.

SOURCE. Federal Reserve Survey of Terms of Business Lending.

of Terms of Business Lending, interest rates on C&I loans at domestic banks have moved a bit higher this year, as banks have raised the spread of the average interest rate on business loans over the target federal funds rate. The wider spread reflects higher risk premiums on C&I loans to lower-quality borrowers; spreads for higher-quality borrowers have changed little on net.

Equity Markets

After falling in January in reaction to pessimistic assessments of expected business conditions over the coming year—especially in the tech sector—stock prices rebounded smartly toward the end of the first quarter on stronger-than-expected macroeconomic data. Most first-quarter corporate earnings releases met or even exceeded market participants’ expectations, but many firms included sobering guidance on sales and earnings prospects in those announcements. These warnings, combined with mounting questions about corporate accounting practices, worries about threats of domestic terrorism, and escalating geopolitical tensions, have taken a considerable toll on equity prices since the end of March. On net, all major equity indexes are down substantially so far this year. Share prices in the telecom and technology sectors have performed particularly poorly, and, on July 10, the Nasdaq was 31 percent lower than at the end of 2001. The Wilshire 5000, a broad measure of equity prices, fell 18½ percent over the same period, returning to a level 40 percent below its historical peak reached in March 2000.

Declining share prices pulled down the price-earnings ratio for the S&P 500 index (calculated using operating profits expected over the coming

Price-earnings ratio for the S&P 500



NOTE. The data are monthly and extend through June 2002. The ratio is based on I/B/E/S consensus estimates of earnings over the coming twelve months.

year). Nonetheless, the ratio remained elevated relative to its typical values before the mid-1990s, suggesting that investors continued to anticipate rapid long-term growth in corporate profits.

Monetary Policy Instruments

At its March 19 meeting, the FOMC assessed the priorities, given limited resources, it should attach to further studies of the feasibility of outright purchases for the System Open Market Account (SOMA) of mortgage-backed securities guaranteed by the Government National Mortgage Association (GNMA-MBS) and the addition of foreign sovereign debt securities to the list of collateral eligible for U.S. dollar repurchase agreements by the System. As noted in the February and July 2001 Monetary Policy Reports to the Congress, such alternatives could prove useful if outstanding Treasury debt obligations were to become increasingly scarce relative to the necessary growth in the System’s portfolio, and the FOMC had requested that the staff explore these options. Noting that many of the staff engaged in these studies were also involved in contingency planning, which had been intensified after the September 11 attacks, the FOMC decided to give the highest priority to such planning. Federal budgetary developments over the past year meant that constraints on Treasury debt supply would not become as pressing an issue as soon as the FOMC had previously thought. Still, given the inherent uncertainty of budget forecasts, the likely significant needs for large SOMA operations in coming years, and the lead times required to implement new procedures, the

Major stock price indexes



NOTE. The data are daily and extend through July 10, 2002.

FOMC decided that the exploratory work on the possible addition of outright purchases of GNMA-MBS should go forward once it was possible to do so without impeding contingency planning efforts.

The Federal Reserve also addressed possible changes to the structure of its discount window facility. On May 17, 2002, the Federal Reserve Board released for public comment a proposed amendment to the Board's Regulation A that would substantially revise its discount window lending procedures. Regulation A currently authorizes the Federal Reserve Banks to operate three main discount window programs: adjustment credit, extended credit, and seasonal credit. The proposed amendment would establish two new discount window programs called primary credit and secondary credit as replacements for adjustment and extended credit. The Board also requested comment on the continued need for the seasonal program but did not propose any substantive changes to the program.

The proposal envisions that primary credit would be available for very short terms, ordinarily overnight, to depository institutions that are in generally sound financial condition at an interest rate that would usually be above short-term market interest rates, including the federal funds rate; currently, the discount rate is typically below money market interest rates. The requirement that only financially sound institutions should have access to primary credit should help reduce the stigma currently associated with discount window borrowings. In addition, because the proposed discount rate structure will eliminate the incentive that currently exists for depository institutions to borrow to exploit a positive spread between short-term money market rates and the discount rate, the Federal Reserve will be able to reduce the administrative burden on borrowing banks. As a result, depository institutions should be more likely to turn to the discount window when money markets tighten significantly, enhancing the window's ability to serve as a marginal source of reserves for the overall banking system and as a backup source of liquidity for individual depository institutions. Secondary credit would be available, subject to Reserve Bank approval and monitoring, for depository institutions that do not qualify for primary credit.

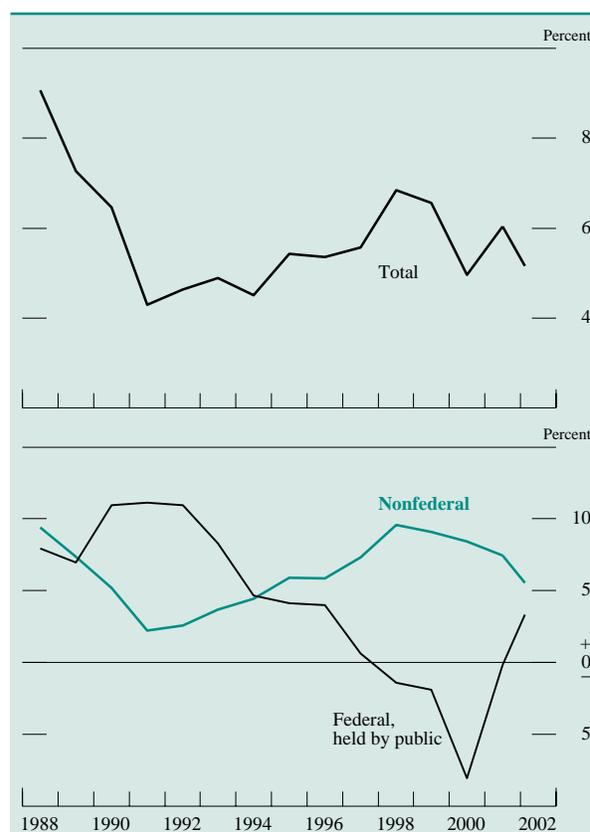
The proposed amendment is intended to improve the functioning of the discount window and the money market more generally. Adoption of the proposal would *not* entail a change in the stance of monetary policy. It would not require a change in the FOMC's target for the federal funds rate and would not affect the overall level of market interest rates. The comment period on the proposal ends August 22,

2002. If the Board then votes to revise its lending programs, the changes likely would take place several months later.

Debt and Financial Intermediation

Growth of the debt of domestic nonfinancial sectors other than the federal government is estimated to have slowed during the first half of 2002, as businesses' needs for external funds declined further owing to weak capital spending, continuing inventory liquidation, and rising profits. In addition, growth in consumer credit moderated following a surge in auto financing late last year. On balance, nonfederal debt expanded at a 5½ percent annual rate in the first quarter of the year after growing 7½ percent in 2001. In contrast, the stock of federal debt held by the public, which had contracted slightly in 2001, grew 3¼ percent at an annual rate in the first quarter and

Change in domestic nonfinancial debt



NOTE. For 2002, change is from 2001:Q4 to 2002:Q1 at an annual rate. For earlier years, the data are annual and are computed by dividing the annual flow for a given year by the level at the end of the preceding year. The total consists of nonfederal debt and federal debt held by the public. Nonfederal debt consists of the outstanding credit market debt of state and local governments, households, nonprofit organizations, nonfinancial businesses, and farms. Federal debt held by the public excludes securities held as investments of federal government accounts.

expanded further in the second quarter, as federal tax revenues fell short of expectations and government spending increased substantially. The sharp rise in federal debt outstanding followed a few years of declines.

The proportion of total credit supplied by depository institutions over the first half of the year is estimated to have been near its lowest value since 1993. Although banks have continued to acquire securities at about the same rapid pace observed in 2001, the shift in household and business preferences toward longer-term sources of credit greatly reduced the demand for bank loans. As noted, banks' loans to businesses ran off considerably, as corporate borrowers turned to the bond market in volume to take advantage of favorable long-term interest rates. Growth of real estate loans slowed markedly this year, partly as outlays for nonresidential structures declined, but growth of consumer loans was fairly well maintained. With some measures of credit quality in the business and household sectors still pointing to pockets of potential strain, loan-loss provisions remained high at banks and weighed on profits. Nonetheless, bank profits in the first quarter stayed in the elevated range observed over the past several years, and virtually all banks—98 percent by assets—remained well capitalized.

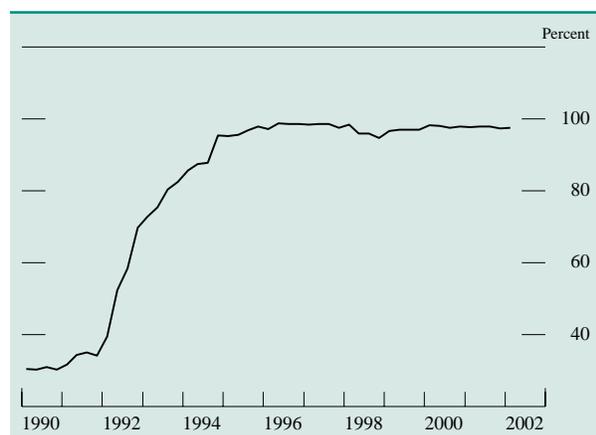
Among nondepository financial intermediaries, government-sponsored enterprises (GSEs) curtailed their net lending (net acquisition of credit market instruments) during the first quarter of the year, but available data suggest that insurance companies more than made up for the shortfall. The GSEs appeared to continue to restrain their net lending in the second

quarter, in part as yields on mortgage-backed securities, which are a major component of their holdings of financial assets, compared less favorably to yields on the debt they issue. Net lending by insurance providers in the first quarter was especially strong among life insurance companies, which experienced a surge in sales late last year in the aftermath of the September 11 terrorist attacks. Net lending by the GSEs amounted to 14 percent of the net funds raised by both the financial and nonfinancial sectors in the credit markets in the first quarter of 2002, and the figure for insurance companies was 10 percent; depository credit accounted for 13 percent of all net borrowing over the same period.

Monetary Aggregates

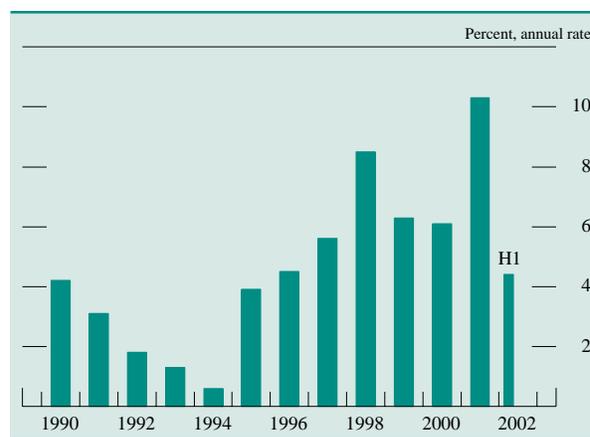
The broad monetary aggregates decelerated considerably during the first half of this year. M2 rose $4\frac{1}{2}$ percent at an annual rate after having grown $10\frac{1}{4}$ percent in 2001. Several factors contributed to the slowing in M2. Mortgage refinancing activity, which results in prepayments that temporarily accumulate in deposit accounts before being distributed to investors in mortgage-backed securities, moderated over the first half of this year. In addition, the opportunity cost of holding M2 assets has leveled out in recent months, so the increase in this aggregate has been more in line with income. Because the rates of return provided by many components of M2 move sluggishly, the rapid declines in short-term market interest rates last year temporarily boosted the attractiveness of M2 assets. In recent months, however, yields on M2 components have fallen to more typical levels

Percent of all U.S. commercial bank assets at well-capitalized banks



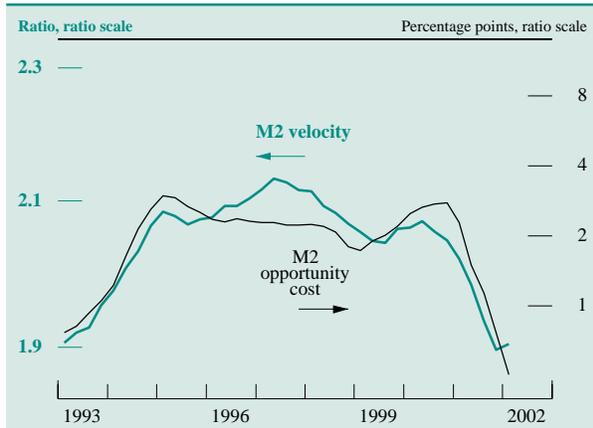
NOTE. The data are quarterly and extend through 2002:Q1. Capital status is determined using the regulatory standards for the leverage, tier 1, and total capital ratios.

M2 growth rate



NOTE. M2 consists of currency, travelers checks, demand deposits, other checkable deposits, savings deposits (including money market deposit accounts), small-denomination time deposits, and balances in retail money market funds.

M2 velocity and opportunity cost

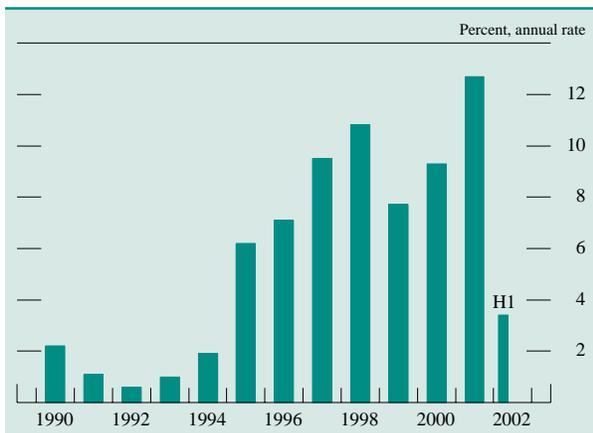


NOTE. The data are quarterly and extend through 2002:Q1. The velocity of M2 is the ratio of nominal gross domestic product to the stock of M2. The opportunity cost of holding M2 is a two-quarter moving average of the difference between the three-month Treasury bill rate and the weighted average return on assets included in M2.

relative to short-term market interest rates. Lastly, precautionary demand for M2, which was high in the aftermath of last year’s terrorist attacks, seems to have unwound in 2002, with investors shifting their portfolios back toward longer-term assets such as equity and bond mutual funds. With growth in nominal GDP picking up significantly this year, M2 velocity—the ratio of nominal GDP to M2—rose about 1½ percent at an annual rate in the first quarter of 2002, in sharp contrast to the large declines registered throughout 2001.

M3—the broadest monetary aggregate—grew 3½ percent at an annual rate through the first six months of the year after rising 12¾ percent in 2001. Most of this deceleration, apart from that accounted

M3 growth rate



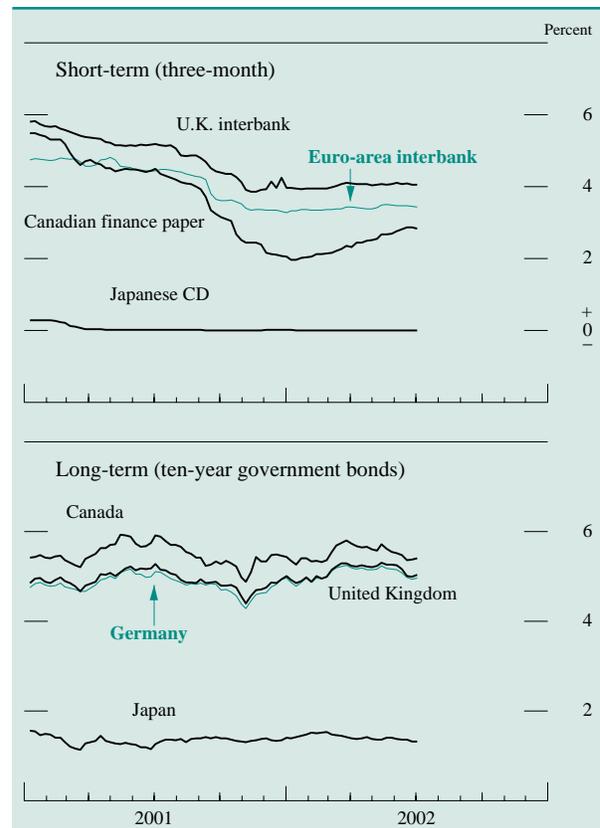
NOTE. M3 consists of M2 plus large-denomination time deposits, balances in institutional money market funds, repurchase-agreement liabilities (overnight and term), and eurodollars (overnight and term).

for by M2, resulted from the weakness of institutional money market funds, which declined slightly, after having surged about 50 percent last year. Yields on these funds tend to lag market yields somewhat, and so the returns on the funds, like those on many M2 assets, became less attractive as their yields caught up with market rates.

International Developments

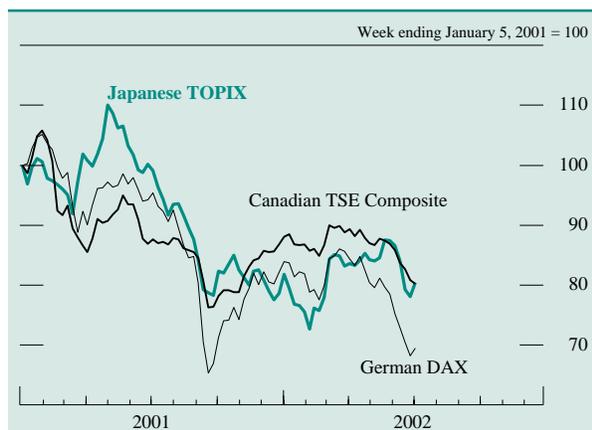
Signs that economic activity abroad had reached a turning point became clearer during the first half of 2002, but recovery has been uneven and somewhat tepid on average in the major foreign industrial countries. Improving conditions in the high-tech sector have given a boost to some emerging-market economies, especially in Asia, but several Latin American economies have been troubled by a variety of adverse domestic developments. Foreign financial markets became increasingly skittish during the first half of the year amid worries about global political and economic developments, including concerns about corporate governance and accounting triggered by

Foreign interest rates



NOTE. The data are weekly and extend through July 5, 2002.

Foreign equity indexes



NOTE. The data are weekly and extend through July 5, 2002.

U.S. events. Oil prices reversed a large part of their 2001 decline.

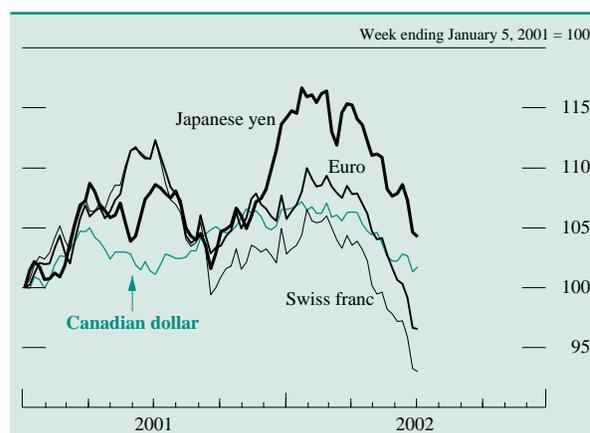
During the first half, monetary authorities in some foreign countries where signs of recovery were most evident and possible future inflation pressures were becoming a concern—Canada, Australia, New Zealand, and Sweden, among others—began to roll back a portion of last year’s easing, raising expectations that policy tightening might become more widespread. However, policy was held steady at the European Central Bank (ECB) and the Bank of England. The Bank of Japan (BOJ) maintained short-term interest rates near zero and kept balances of bank deposits at the BOJ at elevated levels. Yield curves in most foreign industrial countries became a bit steeper during the first quarter as long-term rates rose in reaction to news suggesting stronger U.S. growth and improving prospects for global recovery. Since then, long-term rates have edged lower, on balance, in part as investors shifted out of equity investments. Foreign equities performed well in most countries early in the year, but share prices in many countries have fallen since early in the second quarter—in some cases more steeply than in the United States. The broad stock indexes for the major industrial countries are down since the beginning of the year, except in Japan, where stock prices, on balance, are about unchanged. High-tech stocks have been hit especially hard.

During the first quarter of 2002, the foreign exchange value of the dollar (measured by a trade-weighted index against the currencies of major industrial countries) appeared to react primarily to shifting market views about the relative strength of the U.S. recovery and its implications for the timing and extent of future monetary tightening. Despite some fluctuations in this period, the dollar stayed fairly

close to the more than sixteen-year high reached in January. In the second quarter, however, the dollar trended downward as earlier market enthusiasm about U.S. recovery dimmed. Concerns about profitability, corporate governance, and disclosure at U.S. corporations appeared to dampen the attraction of U.S. securities to investors, as did worries that the United States was particularly vulnerable to the consequences of global geopolitical developments. With U.S. investments perceived as becoming less attractive, the financing requirements of a large and growing U.S. current account deficit also seemed to emerge as a more prominent negative factor. The dollar has lost more than 9 percent against the major currencies since the end of March and is down, on balance, more than 8 percent so far in 2002. In contrast, the dollar has gained about 2 percent this year, on a weighted-average basis, against the currencies of our other important trading partners.

The dollar’s exchange rate against the Japanese yen was quite volatile in the first half and, on balance, the dollar has fallen more than 10 percent since the beginning of the year. Although Japan’s domestic economy continued to struggle with deflation and severe structural problems, including mounting bad loans in the financial sector and growing bankruptcies, some indicators (including strong reported first-quarter GDP, a firming of industrial production, and a somewhat better reading on business sentiment in the BOJ’s second-quarter Tankan survey) suggested that a cyclical recovery has begun. The yen’s rise occurred despite downgradings of Japan’s government debt by leading rating services in April and May and several episodes of intervention sales of yen in foreign exchange markets by Japanese authorities in May and June. Japanese stock prices, which had

U.S. dollar exchange rate against selected currencies



NOTE. The data are weekly and extend through July 5, 2002. Exchange rates are in foreign currency units per dollar.

fallen to eighteen-year lows in early February, turned up later as economic prospects became less gloomy. At midyear, the TOPIX index was about where it was at the start of the calendar year.

After declining in the final quarter of 2001, euro-area GDP appears to have increased in the first half, though at only a modest rate. Exports firmed and inventory destocking appeared to be winding down, but consumption remained weak. The pace of activity varied across countries, with growth in Germany—the euro area’s largest economy—lagging behind. Despite lackluster area-wide growth, concerns about inflation became increasingly prominent. For most of the first half, euro-area headline inflation persisted at or above the ECB’s 2 percent target limit, partly on higher energy and food price inflation; even excluding the effects of those two components, inflation picked up somewhat during the period. Inflation concerns also were fanned by difficult labor market negotiations this spring, but the strength of the euro may blunt inflationary pressures to some extent. The new euro notes and coins were introduced with no noticeable difficulties at the beginning of the year, but the euro drifted down against the dollar for several weeks thereafter. Since then, however, the euro has reversed direction and moved steadily higher. On balance, the dollar has lost nearly 11 percent against the euro so far in 2002.

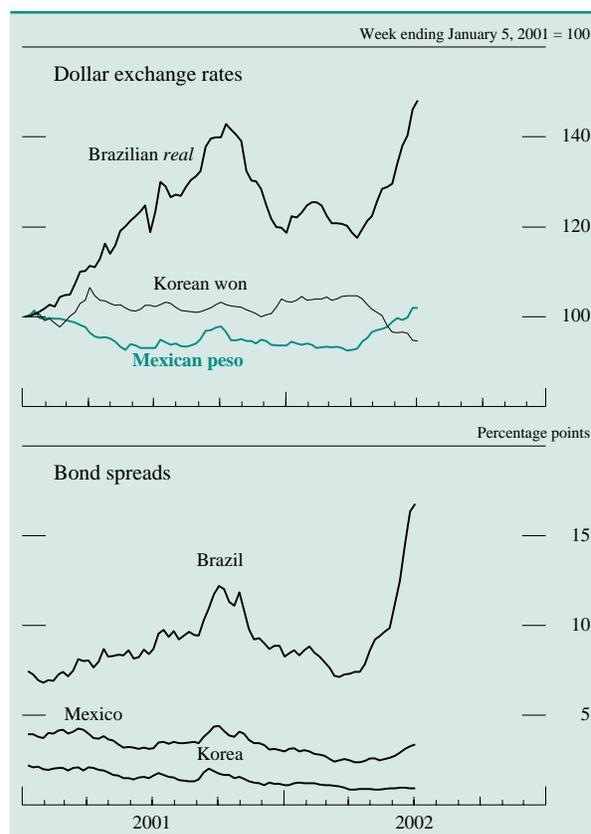
The United Kingdom seemed to weather last year’s slump better than most industrial countries, as strength in consumption counteracted weakness in investment and net exports, though growth did weaken in the last quarter of 2001 and into the first quarter of 2002. Notable increases in industrial production and continued strength in the service sector indicate that growth picked up in the second quarter. Household borrowing has increased briskly, supported by rapid increases in housing prices, and unemployment rates remain near record lows. At the same time, retail price inflation has remained below the Bank of England’s 2½ percent target. Sterling has fallen nearly 5 percent against the euro since the beginning of the year, while it has gained more than 6 percent against the dollar. Elsewhere in Europe, the exchange value of the Swiss franc has been driven up by flows into Swiss assets prompted in part by uncertainties about global political developments. The Swiss National Bank eased its official rates in May to counteract this pressure and provide support for the Swiss economy.

Economic recovery appears to be well under way in Canada. Real GDP increased 6 percent at an annual rate in the first quarter, and other indicators point to continued strong performance in the second quarter.

Canadian exports—particularly automotive exports—benefited early in the year from the firming of U.S. demand, but the expansion has become more widespread, and employment growth has been strong. Although headline consumer price inflation has remained in the bottom half of the Bank of Canada’s target range of 1 percent to 3 percent, core inflation has crept up this year. In April, the Bank of Canada increased its overnight rate 25 basis points, citing stronger-than-expected growth in both the United States and Canada, and it increased that rate again by the same amount in June. The Canadian dollar, which had been at a historically low level against the U.S. dollar in January, moved up quite steeply in the second quarter and has gained about 5 percent for the year so far.

The Mexican economy was hit hard by the global slump in 2001 and especially by the weaker performance of the U.S. economy. Mexican exports stabilized early this year as U.S. activity picked up, and other indicators also now suggest that the Mexican economy is beginning to recover. In February, despite

Selected emerging markets



NOTE. The data are weekly and extend through July 5, 2002. Exchange rates (top panel) are in foreign currency units per dollar. Bond spreads (bottom panel) are the J.P. Morgan Emerging Market Bond Index (EMBI+) spreads over U.S. Treasuries.

the weak level of activity at the time, the Bank of Mexico tightened monetary policy to keep inflation on track to meet its 4½ percent target for 2002, and the Mexican peso moved up a bit against the dollar during February and March. In April, with inflation apparently under control, the central bank eased policy, and since then the peso has moved down substantially. Against the dollar, the decline since the beginning of the year has amounted to almost 7 percent. After rising through April, Mexican share prices also fell sharply, leaving them at midyear about unchanged from their end-2001 levels.

Financial and economic conditions deteriorated significantly in Argentina this year. The Argentine peso was devalued in January and then allowed to float in early February; since then, it has lost more than 70 percent of its value versus the dollar. The peso's fall severely strained balance sheets of Argentine issuers of dollar-based obligations. Various stop-gap measures intended to restrict withdrawals from bank accounts and to force conversion of dollar-denominated loans and deposits into peso-denominated form put banks and depositors under further stress. Meanwhile, economic activity has continued to plummet, and the government has struggled to gain support for reforms that would address chronic fiscal imbalances. Since late 2001, the government has been servicing its obligations only to its multilateral creditors, and spreads on Argentina's international debt have soared to more than 65 percentage points.

In recent months financial markets elsewhere in the region have become more volatile. Brazilian markets have been roiled by political uncertainties related to national elections coming in the fall. Attention has focused on vulnerabilities associated with Brazil's large outstanding stock of debt, much of which is short-term. Since April, the value of the *real* against the dollar has fallen nearly 20 percent, and Brazilian spreads have widened substantially. Several other South American countries, including Uruguay and Venezuela, also have been beset by growing financial and economic problems.

Asian economies that rely importantly on exports of computers and semiconductors (Korea, Singapore, Malaysia, and Taiwan) have grown quite vigorously so far this year, a buoyancy reflecting in part the recent turnaround of conditions in the technology sector and stronger U.S. growth. The currencies of several countries of this group have moved up against the dollar. In Korea, the expansion has been more broad-based, as domestic demand was fairly resilient during the recent global downturn and has remained firm. China, which is less dependent on technology exports, has continued to record strong growth as well. Other countries in the region also have started to recover from steep slowdowns or contractions in 2001, although Hong Kong has continued to be troubled by the collapse of property prices. Most stock markets in the region have recorded gains so far this year. □