# Monetary Policy Report to the Congress

*Report submitted to the Congress on July 15, 2003, pursuant to section 2B of the Federal Reserve Act*

## MONETARY POLICY AND THE ECONOMIC OUTLOOK

The subpar performance of the U.S. economy extended into the first half of 2003. Although accommodative macroeconomic policies and continued robust productivity growth helped to sustain aggregate demand, businesses remained cautious about spending and hiring. All told, real gross domestic product continued to rise in the first half of the year but less quickly than the economy's productive capacity was increasing, and margins of slack in labor and product markets thereby widened further. As a result, underlying inflation remained low—and, indeed, seems to have moved down another notch. In financial markets, longer-term interest rates fell, on net, over the first half of the year as the decline in inflation and the subdued performance of the economy led market participants to conclude that short-term interest rates would be lower than previously anticipated. These lower interest rates helped to sustain a rally in equity prices that had begun in mid-March.

During the first quarter of the year, the economy's prospects were clouded by the uncertainties surrounding the onset, duration, and potential consequences of war in Iraq. War-related concerns provided a sizable boost to crude oil prices; as a result, households faced higher bills for gasoline and heating oil, and many firms were burdened with rising energy costs. These concerns also caused consumer confidence to sag and added to a general disinclination of firms to spend, hire, and accumulate inventories. Caution was apparent in financial markets as well, and investors bid down the prices of equities in favor of less-risky securities.

The swift prosecution of the war in Iraq resolved some of these exceptional uncertainties but by no means all of them. Nonetheless, oil prices receded, and the improvement in the economic climate was sufficient to cause stock prices to rally, risk spreads on corporate securities to narrow, and consumer confidence to rebound. At the same time, the incoming economic data—much of which reflected decisions made before the war—remained mixed, and inflation trended lower. At the conclusion of its May meeting, the Federal Open Market Committee (FOMC) indicated that, whereas the risks to the outlook for economic growth were balanced, the risk of an unwelcome substantial fall in inflation from its already low level, though minor, exceeded that of a pickup in inflation. In the weeks that followed, market participants pushed down the expected future path of the federal funds rate, which contributed to the fall in longer-term interest rates and a further rise in equity prices.

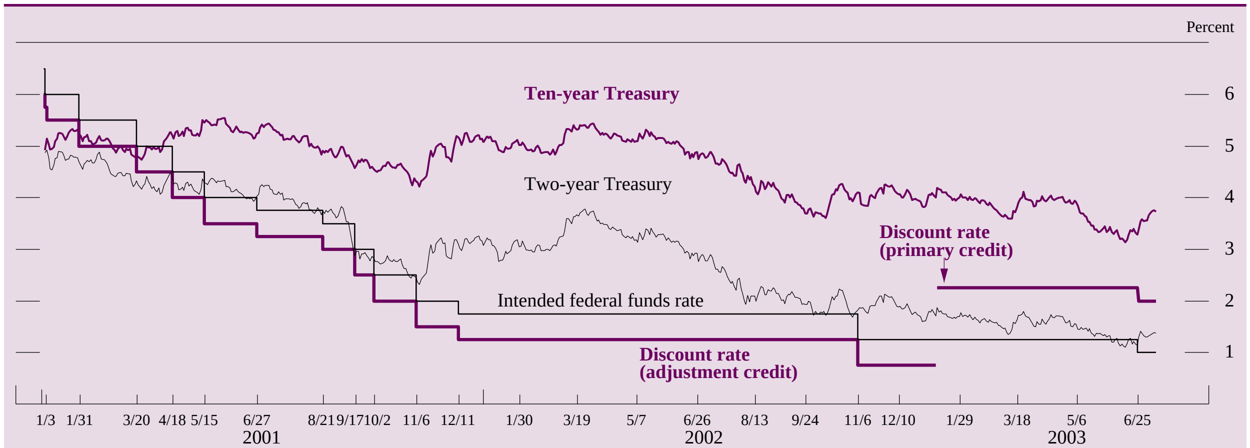
At the time of the June FOMC meeting, the available evidence did not yet compellingly demonstrate that a material step-up in economic growth was under way, though some indicators did point to a firming in spending and a stabilization in the labor and product markets. The Committee concluded that a slightly more expansive monetary policy would be warranted to add further support to the economic expansion. The Committee's assessment and ranking of the risks to the outlook for economic growth and inflation were the same as in May.

The Federal Reserve expects economic activity to strengthen later this year and in 2004, in part because of the accommodative stance of monetary policy and the broad-based improvement in financial conditions. In addition, fiscal policy is likely to be stimulative as the provisions of the Jobs and Growth Tax Relief Reconciliation Act of 2003 go into effect and as defense spending continues to ramp up. Severe budgetary pressures are causing state and local governments to cut spending and to increase taxes and fees, but these actions should offset only a portion of the impetus from the federal sector. Moreover, the continued favorable performance of productivity growth should lift household and business incomes and thereby encourage capital spending. Given the ongoing gains in productivity and the existing margin of resource slack, aggregate demand could grow at a solid pace for some time before generating upward pressure on inflation.

### *Monetary Policy, Financial Markets, and the Economy over the First Half of 2003*

During the weeks before the January meeting of the FOMC, geopolitical developments and the uneven

Selected interest rates




NOTE. The data are daily and extend through July 9, 2003. The dates on the horizontal axis are those of scheduled FOMC meetings and of any intermeeting policy actions. On January 9, 2003, the Federal Reserve changed the main credit program offered at the discount window by terminating the adjustment credit program and beginning the primary credit program.

tone of economic data releases created substantial uncertainty. Businesses had continued to reduce their payrolls and postpone capital expenditures. However, the absence of fresh revelations of lapses in corporate governance or accounting problems and some increased appetite for risk on the part of investors helped push down yields on corporate debt, which encouraged firms to issue bonds to reduce their financing costs and restructure their balance sheets. Meanwhile, moderate gains in household income and historically low mortgage rates underpinned still-considerable demand for housing. Retail sales, particularly those of motor vehicles, also were strong at the end of 2002 despite some drop-off in consumer confidence. Core inflation seemed to be on a declining trend, although the foreign exchange value of the dollar had depreciated, and top-line inflation was being boosted by a sizable run-up in energy prices. The substantial slack in resource utilization, as well as the solid gains in labor productivity, led members to the view that consumer price inflation—by then already very low—was unlikely to increase meaningfully. Against that backdrop, the Committee members continued to believe that economic fundamentals were in place to support a pickup in the growth of economic activity during the year ahead. Accordingly, the FOMC decided at the January meeting to leave interest rates unchanged and assessed the risks as balanced with respect to its dual goals of sustainable economic growth and price stability.

In subsequent weeks, economic performance proved disappointing. The increasing likelihood of war in Iraq was accompanied by a steep rise in crude oil prices and considerable volatility in financial markets. For much of that period, investors sought the relative safety of fixed-income instruments; that preference induced declines in yields on Treasury securities and high-quality corporate bonds and a drop in stock prices. Consumer outlays also softened after January, although low mortgage rates and rising incomes were still providing support for household spending. Businesses continued to trim workforces and cut capital spending.

When the Committee met on March 18, full-scale military conflict in Iraq seemed imminent. In an environment of considerable uncertainty, the FOMC had to weigh whether economic sluggishness was largely related to worries about the war, and hence would lift once the outcome was decided, or was indicative of deep-seated restraints on economic activity. The Committee, which reasoned that it could not make such a distinction in the presence of so much uncertainty, left the funds rate unchanged and declined to characterize the balance of risks with respect to its dual goals. However, the Committee noted that, given the circumstances, heightened surveillance would be particularly informative, and it held a series of conference calls during late March and April to discuss the latest economic developments.

Some of the uncertainty was resolved by the quick end to major military action in Iraq. Equity prices and consumer confidence rose while oil prices and risk spreads on corporate debt fell. Fiscal policy seemed set to become even more stimulative given the prospect of increased spending on defense and homeland security as well as the likely enactment of additional tax cuts. Part of the federal stimulus, however, was thought likely to be offset by the efforts of state and local governments to close their budget gaps.

Economic reports were generally disappointing. Industrial production declined in March, and capacity utilization fell to a twenty-year low. The employment reports for March and April indicated that private nonfarm payrolls had continued to fall. Although order backlogs for nondefense capital goods had risen recently, businesses generally remained reluctant to invest in new capacity.

In light of the financial and policy stimulus already in place, the FOMC left the federal funds rate unchanged at its May meeting. To provide more specific guidance about its views, the FOMC included in its announcement separate assessments of the risks to the outlook for economic growth and inflation as well as the overall balance between the two. The Committee viewed the upside and downside risks to economic growth as balanced, but it perceived a higher probability of an unwelcome substantial fall in inflation than of a pickup in inflation from its current low level. The Committee considered that the overall balance of risks to its dual objectives was weighted toward weakness. That said, members concluded that there was only a remote possibility that resource utilization would remain so low that the disinflation process would cumulate to produce a declining overall price level for an extended period.

Financial market participants reacted strongly to this characterization of risks, believing that the Committee's focus on leaning against appreciable disinflation implied that monetary policy would be more accommodative and remain so for longer than previously thought. Investors pushed down the expected path of the federal funds rate in the weeks following the meeting. Intermediate- and long-term interest rates fell significantly and spurred another round of long-term bond issuance. The resulting decline in real interest rates helped sustain the rally in equity prices.

Between the May and June meetings, a few tentative signs suggested that the pace of economic activity might be firming. Industrial production and retail sales edged up in May, available data indicated that employment had stopped declining, residential investment remained strong, and survey measures of consumer sentiment and business conditions were well above the levels of earlier in the year. Financial conditions had improved markedly, but businesses reportedly remained somewhat averse to new investment projects, in part because of significant unused capacity. They also seemed reluctant to expand their workforces until they viewed a sustained pickup in aggregate demand as more certain.

With inflation already low and inflation expectations subdued, the Committee judged that it would be prudent to add further support for economic expansion, and it lowered the target for the federal funds rate 25 basis points, to 1 percent. The FOMC continued to view the risks to economic growth as balanced and again noted that the minor probability of substantial further disinflation exceeded the probability of a pickup in inflation from its current low level. But because of the considerable amount of economic slack prevailing and the economy's ability to expand without putting upward pressure on prices, the Committee indicated that the small chance of an unwelcome substantial decline in the inflation rate was likely to remain its predominant concern for the foreseeable future.

## *Economic Projections for 2003 and 2004*

The members of the Board of Governors and the Federal Reserve Bank presidents, all of whom participate in the deliberations of the FOMC, expect economic activity to accelerate in the second half of this year and to gather additional momentum in 2004. The central tendency of the FOMC participants' forecasts for the increase in real GDP over the four quarters of 2003 spans a narrow range of 2½ percent to 2¾ percent, which, given the modest increase in real GDP in the first quarter, implies a noticeable pickup in growth as the year progresses. The central tendency for projections of real GDP growth in 2004 spans a range of 3¾ percent to 4¾ percent. The civilian unemployment rate is expected to be between

Economic projections for 2003 and 2004

Percent

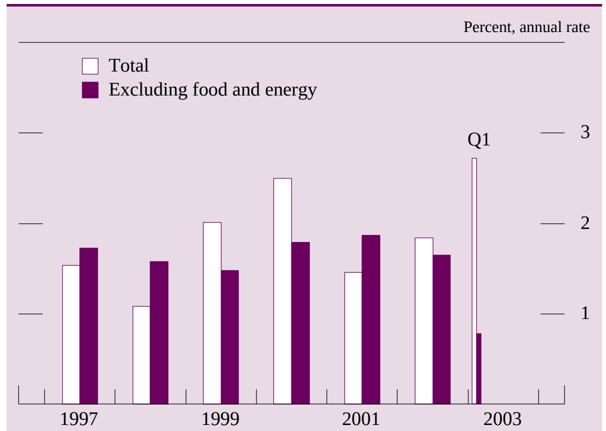
| Indicator | Federal Reserve Governors and Reserve Bank presidents: Range | Federal Reserve Governors and Reserve Bank presidents: Central tendency |
|---|---|---|
| | 2003 | |
| *Change, fourth quarter to fourth quarter*[1] | | |
| Nominal GDP | 3½–4¾ | 3¾–4½ |
| Real GDP | 2¼–3 | 2½–2¾ |
| PCE chain-type price index | 1–1¾ | 1¼–1½ |
| *Average level, fourth quarter* | | |
| Civilian unemployment rate | 6–6¼ | 6–6¼ |
| | 2004 | |
| *Change, fourth quarter to fourth quarter*[1] | | |
| Nominal GDP | 4¾–6½ | 5¼–6¼ |
| Real GDP | 3½–5¼ | 3¾–4¾ |
| PCE chain-type price index | ¾–2 | 1–1½ |
| *Average level, fourth quarter* | | |
| Civilian unemployment rate | 5½–6¼ | 5½–6 |

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

6 percent and 6¼ percent in the fourth quarter of 2003 and to decline to between 5½ percent and 6 percent by the fourth quarter of 2004.

Inflation is anticipated to be quite low over the next year and a half. The chain-type price index for personal consumption expenditures (PCE) rose 1¾ percent over the four quarters of 2002, and most FOMC participants expect inflation to run somewhat lower this year and then to hold fairly steady in 2004. The central tendency of projections for PCE inflation is 1¼ percent to 1½ percent in 2003 and 1 percent to 1½ percent in 2004.

Change in PCE chain-type price index




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

## *ECONOMIC AND FINANCIAL DEVELOPMENTS IN 2003*

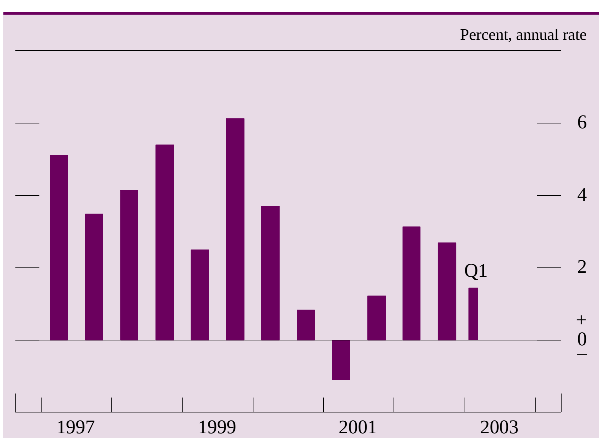
Economic activity in the United States remained sluggish in the first half of 2003. Businesses continued to be reluctant to undertake new projects given the unusual degree of uncertainty in the economic environment, and the softness in activity abroad crimped the demand for U.S. exports. However, consumer spending grew moderately, housing activity retained considerable vigor, and defense spending picked up. Real GDP rose at an annual rate of just 1½ percent in the first quarter and appears to have posted another modest gain in the second quarter. With output growth remaining tepid and labor productivity rising at a fairly robust pace, firms continued to trim payrolls in the first half of 2003, though job losses in the private sector were a little smaller than they had been, on average, in 2002.

For much of the first half of the year, headline inflation news was shaped by movements in energy prices, which soared during the winter, retreated during the spring, and more recently firmed. Core inflation—which excludes the direct effects of food and energy prices—was held to a low level by slack in resource utilization and continued sizable advances in labor productivity.

As a result of slow economic growth and the prospect that inflation would remain very subdued, the federal funds rate was maintained at the accommodative level of 1¼ percent for much of the first half of the year. Intermediate- and longer-term yields declined, in some cases to their lowest levels on record. Equity prices, which through mid-March had fallen in response to weaker-than-expected economic news and rising geopolitical tensions, began a broad rally as it became clear that the war in Iraq would begin imminently. The apparent increase in investors' appetite for risk also helped push down risk spreads on corporate bonds and triggered inflows to equity and high-yield bond mutual funds. Since the beginning of the year, the foreign exchange value of the dollar has depreciated nearly 5 percent against the broad group of currencies of our major trading partners.

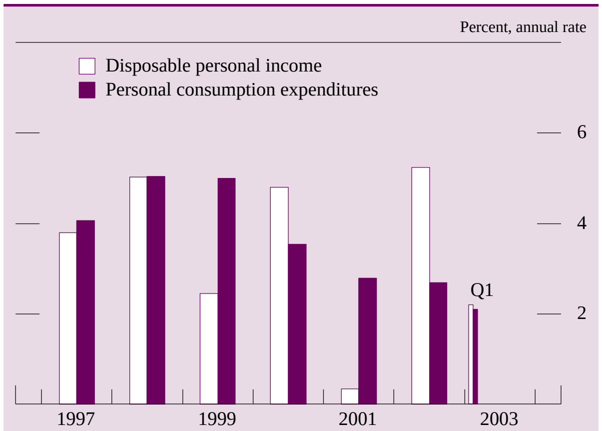
Households and businesses have taken advantage of the decline in intermediate-term and long-term interest rates from their already low levels, mostly by refinancing debt at ever more favorable rates. Partly as a result, household credit quality was little changed over the first half of the year, and household debt continued to expand at a rapid pace as mortgage interest rates fell to their lowest levels in more than three decades. Business balance sheets strengthened noticeably, and many measures of corporate credit performance showed some improvement. Still, net borrowing by businesses continued to be damped by the softness in investment spending.

Change in real GDP

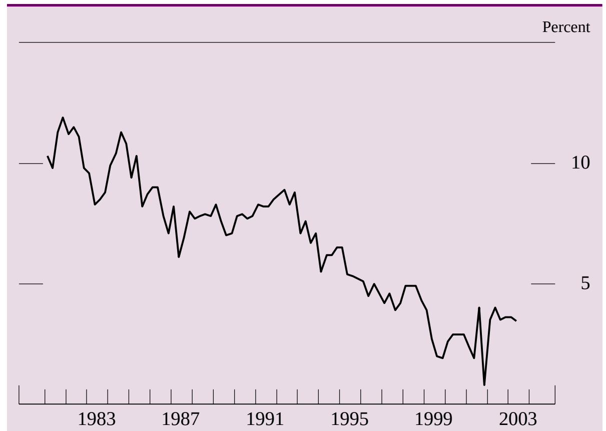



NOTE. Here and in subsequent charts, except as noted, change for a given period is measured to its final quarter from the final quarter of the preceding period.

Change in real income and consumption




Personal saving rate




NOTE. The data are quarterly; the reading for 2003:Q2 is the average for April and May.

## *The Household Sector*

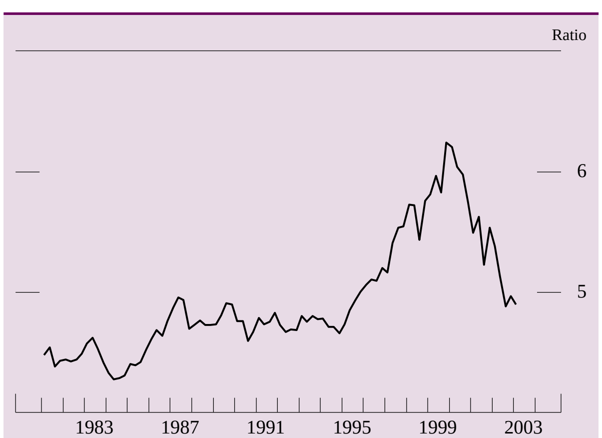
### Consumer Spending

Consumer spending continued to increase in the first half of 2003, though not as quickly as in the past few years. In total, real personal consumption expenditures (PCE) rose at an annual rate of 2 percent in the first quarter and likely posted another moderate advance in the second quarter. Purchases of new light motor vehicles were sustained by the automakers' use of increasingly aggressive price and financing incentives. Spending on goods other than motor vehicles rose briskly in the first quarter, though that was largely because of the high level of spending around the turn of the year; the data through May suggest a further increase for this category in the second quarter. In contrast, outlays on services rose only slowly over the first five months of the year as weakness lingered in a number of categories, including air travel and recreation.

The rise in real consumption expenditures so far in 2003 has about matched the growth in real disposable personal income (DPI), which has been restrained by the poor job market and by the surge in consumer energy prices early in the year. Real DPI rose about 2¼ percent at an annual rate between the fourth quarter of 2002 and May after having increased at a considerably faster pace in 2002; the larger increase in real DPI in 2002 in part reflected the effects of the tax cuts enacted in 2001.

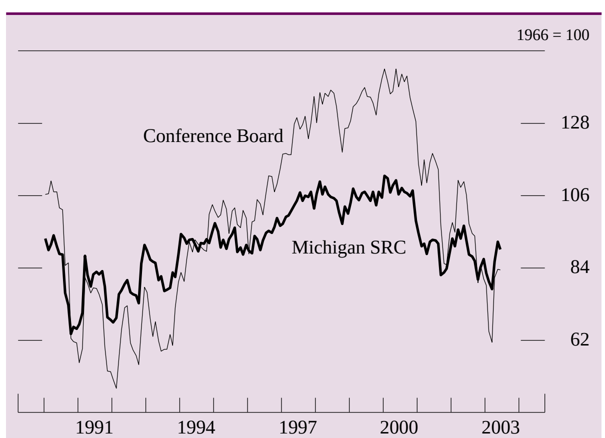
Among other key influences on consumption, household wealth grew about in line with nominal DPI in the fourth quarter of 2002 and the first quarter of 2003 after having fallen sharply over the preceding two years. While the rebound in the stock market in the second quarter should help the wealth-to-income ratio recoup some of the ground it lost earlier, households likely have not yet completed the adjustment of

Wealth-to-income ratio




NOTE. The data are quarterly and extend through 2003:Q1. The wealth-to-income ratio is the ratio of household net worth to disposable personal income.

Consumer sentiment




NOTE. The data are monthly and extend through June 2003.
SOURCE. University of Michigan Survey Research Center and The Conference Board.

their spending to the earlier drop in wealth. Meanwhile, the high level of mortgage refinancing in recent quarters has bolstered consumer spending by allowing homeowners to reduce their monthly payments, pay down more costly consumer debt, and in many cases cash out some of the equity that has accumulated during the upswing in house prices over the past few years. Reflecting these influences, the personal saving rate averaged 3½ percent over the first five months of the year—about the same as the annual average for 2002 but more than 1 percentage point above that for 2001.

Consumer confidence, which has exhibited some sharp swings in recent years, remained volatile in the first half of 2003. After having declined markedly over the second half of 2002, survey readings from both the Michigan Survey Research Center and the Conference Board took another tumble early this year on concerns about the potential consequences of a war in Iraq. With the combat in Iraq largely over and the stock market recovering, confidence rose appreciably, on net, in the spring.

## Residential Investment

Housing activity remained robust in the first half of this year, as very low mortgage interest rates apparently offset much of the downward pressure from the soft labor market. In the single-family sector, starts averaged an annual rate of 1.39 million units over the first five months of the year—2 percent greater than the rapid pace for 2002 as a whole. In addition, sales of new and existing homes moved to exceptionally high levels. According to the Michigan survey, consumers' assessments of homebuying conditions currently are very favorable, mainly because of the low mortgage rates.

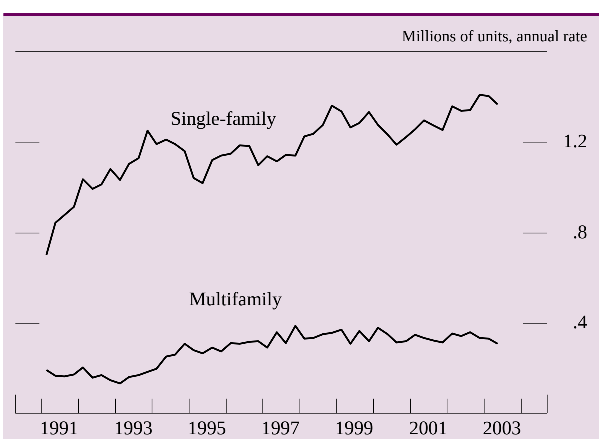
The available indicators provide differing signals on the magnitude of recent increases in home prices, but, in general, they point to smaller gains than those recorded a year or two ago. Notably, over the year ending in the first quarter, the constant-quality price index for new homes rose just 2½ percent, one of the lowest readings of the past few years. Meanwhile, the four-quarter increase in the repeat-sales price index for existing homes, which topped out at 8½ percent in 2001, was 6½ percent in the first quarter. Still, the share of income required to finance the purchase of a new home, adjusted for variations over time in structural characteristics, has continued to move down as mortgage rates have dropped, and it is now very low by historical standards.

Activity in the multifamily sector appears to have slipped somewhat this year, perhaps in part because the strong demand for single-family homes may be cutting into the demand for apartments. Multifamily starts totaled 325,000 units at an annual rate over the first five months of the year, a pace 6 percent below that for 2002 as a whole. In addition, vacancy rates for multifamily rental properties rose further in the first quarter, and apartment rents continued to fall.

## Household Finance

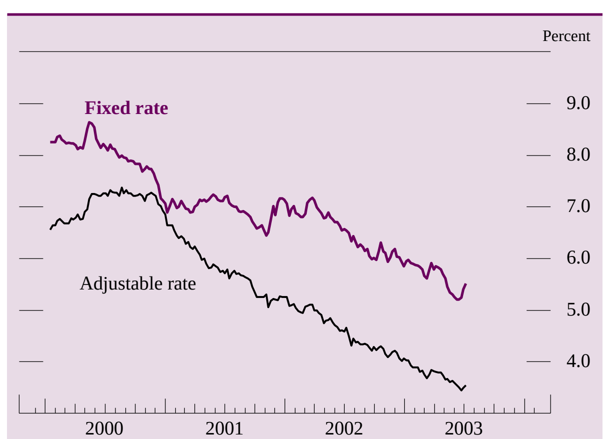
Household real estate debt grew rapidly in the first half of the year with the support of the brisk pace of home sales, rising home prices, and falling mortgage interest rates. Indeed, according to Freddie Mac, the average rate on thirty-year conventional home mortgages fell sharply until June, though it has edged

Private housing starts



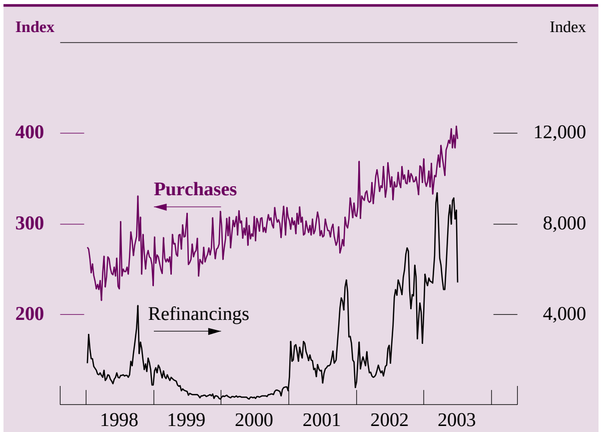

NOTE. The data are quarterly; the readings for 2003:Q2 are the averages for April and May.

Mortgage rates



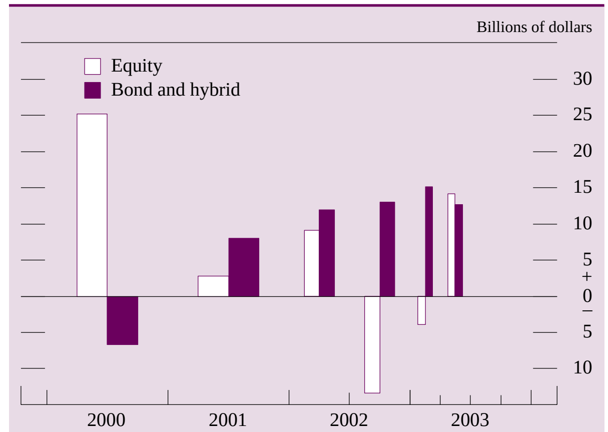

NOTE. The data, which are weekly and extend through July 9, 2003, are contract rates on thirty-year mortgages.
SOURCE. Federal Home Loan Mortgage Corporation.

Mortgage applications for purchases and refinancings




NOTE. The data are weekly and extend through July 4, 2003. The index for purchases is seasonally adjusted by Federal Reserve Board staff.
SOURCE. Mortgage Bankers Association.

Mutual fund investment flows



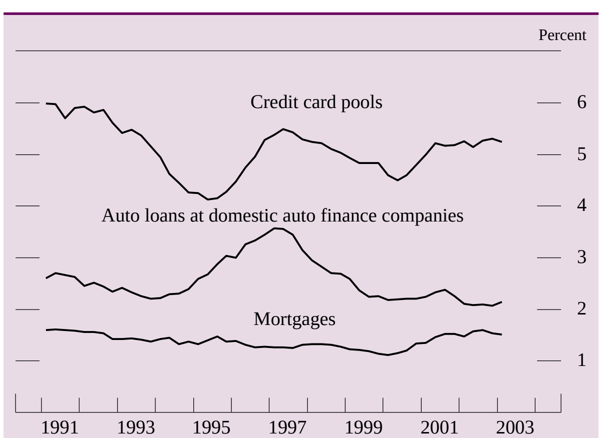

NOTE. Data are expressed at a monthly rate. Estimates for 2003:Q2 are based on monthly data for April and May.
SOURCE. Investment Company Institute.

back up in recent weeks and now stands at about 5½ percent. Applications for mortgages to purchase homes rose well above the already elevated level of last year. Sales of existing homes, in particular, add significantly to the level of mortgage debt because the purchaser's mortgage is typically much larger than the seller's had been. The pace of mortgage refinancing—which adds to borrowing because households often increase the size of their mortgages when they refinance—set consecutive quarterly records in the first and second quarters of 2003 in response to the declines in mortgage rates. According to Freddie Mac, more than 40 percent of the refinancings in the first quarter were ''cash-out'' refinancings, and the amount of equity extracted likely set a record in the first half of this year. The combination of rising home prices and low interest rates also energized home equity lending during the first half of 2003.

A major use of the proceeds from both cash-out refinancing and home equity loans reportedly has been to pay down credit card and other higher-cost consumer debt. Indeed, in line with those reports, consumer debt advanced at a relatively subdued 4½ percent annual rate in the first quarter. The growth of revolving debt was about 5 percent at an annual rate, and nonrevolving debt expanded at a 3½ percent annual rate. The growth of consumer debt picked up in the spring; the acceleration in part reflected somewhat higher motor vehicle sales that boosted the nonrevolving component, which in turn offset a deceleration in revolving credit. Meanwhile, the average interest rates charged on credit cards and on new car loans at auto finance companies this year have remained near the low end of their recent ranges.

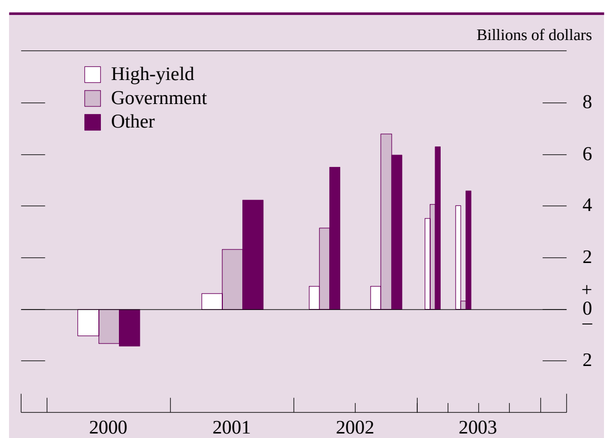
In total, household debt grew at a 10 percent annual rate in the first quarter, a pace about unchanged from

Delinquency rates on selected types of household loans




NOTE. The data are quarterly and extend through 2003:Q1.
SOURCE. For mortgages, the Mortgage Bankers Association; for auto loans, the Big Three automakers; for credit cards, Moody's Investors Service.

Bond mutual fund investment flows



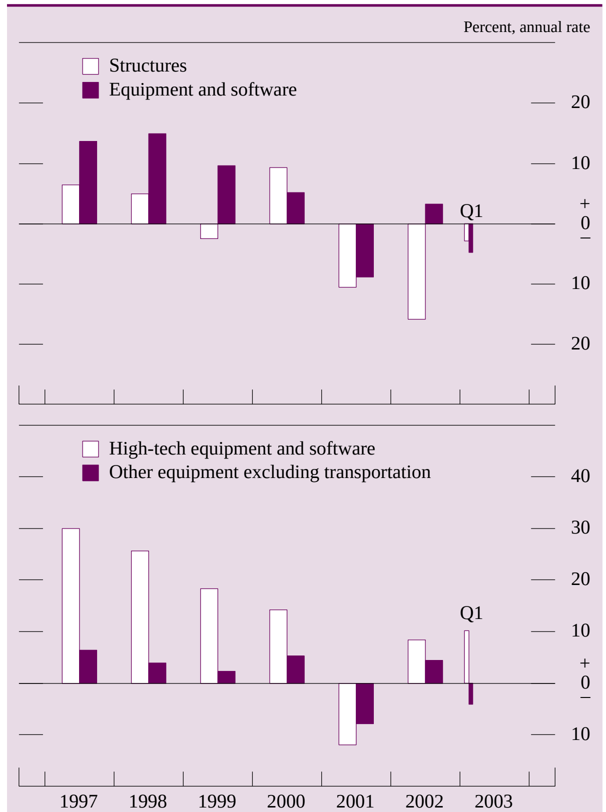

NOTE. Data are expressed at a monthly rate. Estimates for 2003:Q2 are based on monthly data for April and May.
SOURCE. Investment Company Institute.

last year's. Despite the marked rise of this debt over the past several quarters, the aggregate debt-service burden of households ticked down in both the fourth quarter of 2002 and the first quarter of this year—periods during which borrowing rates fell and the average maturity of household debt rose. Although households continued to borrow at a rapid pace in the second quarter, the declines in mortgage interest rates and an elevated level of refinancing imply that the debt-service burden was likely little changed.

The credit quality of household debt remained fairly stable in the first quarter. The delinquency rates both on residential mortgages and on credit card loans edged down in the first quarter, though persistently high delinquencies among subprime borrowers remain a problem area. Delinquency rates on auto loans at captive finance companies have edged up in recent months from their very low levels of the past few years. However, lenders probably anticipated some increase as the plethora of new vehicle loans issued in late 2001 and early 2002 seasoned. The fact that a large number of households declared bankruptcy in the first half of the year suggests that some households continue to experience considerable distress.

In a continuation of the trend during the second half of 2002, households invested heavily in bond mutual funds—and relatively safe bond funds at that—during the first quarter of 2003 and disinvested from equity funds. However, starting in March, households showed a growing willingness to purchase shares of riskier funds. As corporate credit quality improved and risk-free interest rates fell to record lows, a significantly larger portion of the investment in bond mutual funds flowed into corporate bond funds—including high-yield funds—at the expense of government bond funds. Inflows to equity mutual funds reportedly resumed in mid-March and continued through June.

Change in real business fixed investment




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

## *The Business Sector*

### Fixed Investment

Investment in equipment and software (E&S) continues to languish. Firms reportedly remain reluctant to undertake new projects because of the uncertainty about the economic outlook and heightened risk aversion in the wake of last year's corporate governance and accounting problems. Excess capacity—in addition to being a factor weighing on nonresidential construction—also is limiting demand for some types of equipment, most notably in the telecommunications area. But other key determinants of equipment spending are reasonably favorable. The aggressive actions taken by firms over the past few years to boost productivity and trim costs have provided a lift to corporate profits and cash flow. In addition, low interest rates and a rising stock market are helping hold down firms' cost of capital, as is the partial-expensing investment tax incentive. In addition, technological advances continue to depress the relative price of computers at a time when stretched-out replacement cycles have apparently widened the gap between the latest technology and that embodied in many of the machines currently in use.

Real spending on E&S fell at an annual rate of nearly 5 percent in the first quarter. The outlays were restrained by a sharp decline in spending on transportation equipment, especially motor vehicles; excluding that category, spending posted a small gain. Real outlays on high-tech equipment and software rose at an annual rate of about 11 percent in the first quarter, a bit faster than they had in 2002. Real purchases of computers and peripheral equipment remained on the moderate uptrend that has been evident since such spending bottomed out in 2001, and outlays on communications equipment picked up after an extended period of weakness. Meanwhile, investment outside the transportation and high-tech areas dropped back a bit.

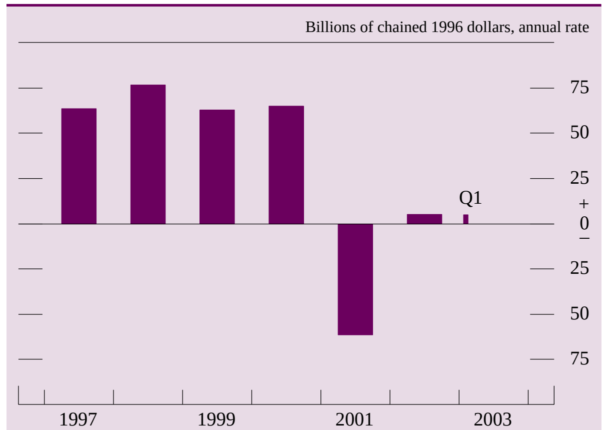
Real E&S spending appears to have turned up in the second quarter, in part because of a step-up in the pace of real computer investment. However, incoming data suggest that outlays on communications equipment did not repeat their first-quarter spurt. The data on shipments of capital goods point to moderate increases in spending outside of high-tech and transportation in the second quarter; moreover, backlogs of unfilled orders for equipment in this broad category have risen some this year after having declined over the preceding two years.

Nonresidential construction remained weak in the first half of 2003. Although real construction outlays were off only a little in the first quarter, they had fallen nearly 16 percent in 2002, and partial data for the second quarter point to continued softness. The downturn in spending has been especially pronounced in the office sector, where vacancy rates have surged and rents have plunged. Spending on industrial facilities also has fallen dramatically over the past couple of years; it has continued to contract in recent quarters and is unlikely to improve much in the absence of a significant rise in factory operating rates. Construction expenditures on other commercial buildings (such as those for retail, wholesale, and warehouse space), which had declined less than did outlays for other major categories of nonresidential construction over the past couple of years, moved up in the first quarter of 2003, but they too have shown some renewed softness lately. One bright spot is the drilling and mining sector, in which outlays have risen sharply this year in response to higher natural gas prices.

## Inventory Investment

Most businesses have continued to keep a tight rein on inventories after the massive liquidation in 2001. Real inventory investment in the first quarter was a meager $5 billion at an annual rate and occurred entirely in the motor vehicle industry, where sagging sales and ambitious production early in the year created a noticeable bulge in dealer stocks, especially of light trucks. In the second quarter, the automakers reduced assemblies and expanded incentives to bolster sales, but these steps were sufficient only to reduce stocks a little, and inventories remained high relative to sales through June. Apart from the motor vehicle industry, firms reduced stocks, on net,

Change in real business inventories

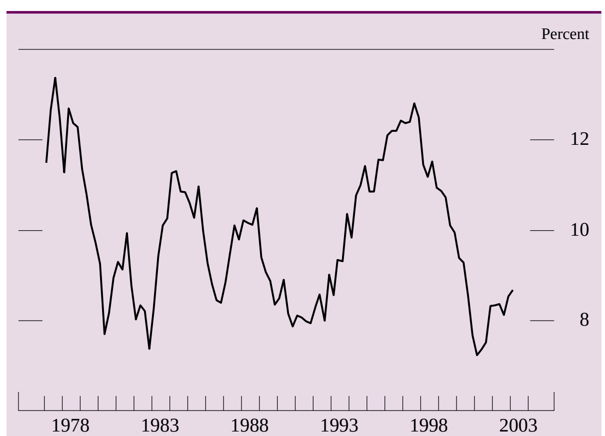



over the first five months of 2003, and, with only a few exceptions, inventories appear reasonably well aligned with sales.

## Corporate Profits and Business Finance

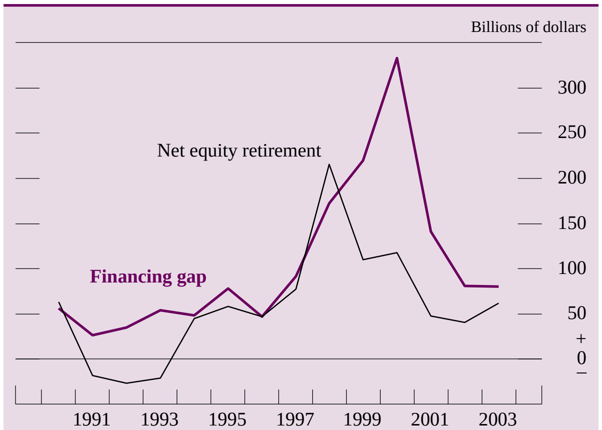
Before-tax profits of nonfarm, nonfinancial corporations grew at a 6½ percent annual rate in the first quarter of 2003, and they constituted 8½ percent of the sector's first-quarter GDP, the highest proportion since the third quarter of 2000. Focusing on the companies that make up the S&P 500, earnings per share for the first quarter were up about 7 percent at a quarterly rate from the fourth quarter of 2002 and were 11 percent higher than four quarters earlier. Although oil companies accounted for the majority of the four-quarter increase, earnings from the financial, utility, and consumer durable sectors were also strong

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




NOTE. The data are quarterly and extend through 2003:Q1. Profits are from domestic operations of nonfinancial corporations, with inventory valuation and capital consumption adjustments.

Financing gap and net equity retirement at nonfarm nonfinancial corporations

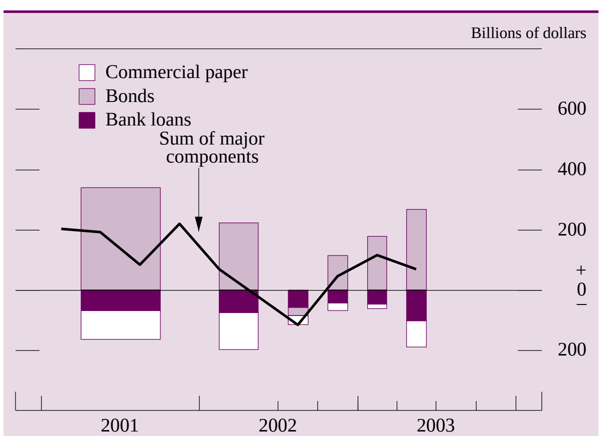



NOTE. The data are annual through 2002; for 2003, they are estimates based on data from 2003:Q1. The financing gap is the difference between capital expenditures and internally generated funds. Net equity retirement is the difference between equity retired through share repurchases, domestic cash-financed mergers, or foreign takeovers of U.S. firms and equity issued in public or private markets, including funds invested by venture capital partnerships.

and exceeded the market's conservative expectations by larger-than-usual margins. The recent depreciation of the dollar substantially boosted revenues of U.S. multinational corporations, but the hedging of currency risk likely limited the extent to which sales gains showed through to profits.

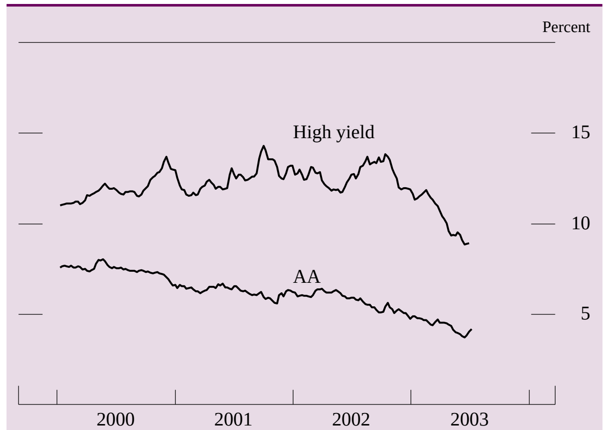
Net equity retirements in the first quarter of 2003 were probably a shade larger than in the fourth quarter of 2002, as the decline in gross new issuance more than offset lower gross retirements. Equity retirements from cash-financed mergers were a bit below their pace in the past two years, and share repurchases appear to be running somewhat slower as

Major components of net business financing




NOTE. Seasonally adjusted annual rate for nonfarm nonfinancial corporate business. The sum of major components is quarterly. The data for 2003:Q2 are estimated.

Corporate bond yields



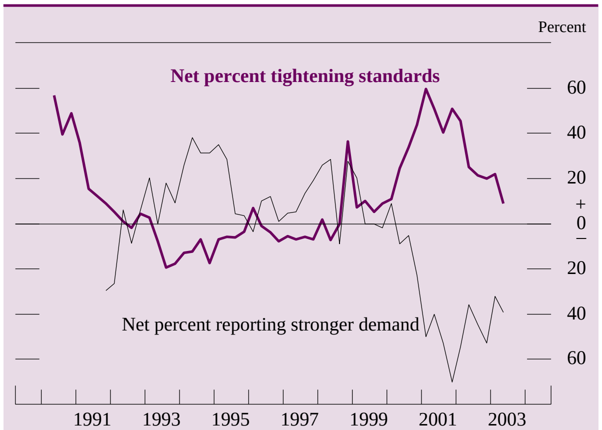

NOTE. The data are weekly averages and extend through July 9 except for the high-yield series, which extends through July 7. The AA rate is calculated from bonds in the Merrill Lynch AA index with seven to ten years of maturity remaining. The high-yield rate is the yield on the Merrill Lynch 175 high-yield index.

well. Volatile and declining equity prices in the first quarter brought initial public offerings (IPOs) to a standstill during the first four months of this year. One small IPO was undertaken in May, and another one came to market in June. With regard to seasoned equity offerings, a war-related lull in March and April held the average monthly pace of issuance this year well below last year's level. Most of these offerings have been from energy firms and utilities that have used the proceeds primarily to reduce leverage and increase liquidity.

The net debt growth of nonfinancial corporate business was just 3 percent at an annual rate in the first quarter, as rising profits and lower outlays for fixed and working capital held down corporations' need for external funds. Nonetheless, low interest rates continued to attract firms to the bond market during the first half of 2003, and issuance ran well ahead of its rate of the second half of 2002. Moreover, a large fraction of the issues were from below-investment-grade firms, which likely were responding to the even sharper fall in their borrowing rates than investment-grade firms enjoyed. A substantial portion of the proceeds of recent bond issues have been slated to pay down commercial paper and commercial and industrial (C&I) loans, and each of those components contracted markedly during the first half of the year. Another factor contributing to the weakening in demand for C&I loans this year was the absence of merger and acquisition activity, according to the Federal Reserve's Senior Loan Officer Opinion Survey on Bank Lending Practices.

The runoff in C&I loans appears related more to a decrease in demand than to a tightening of supply

Standards and demand for C&I loans to large and medium-sized firms at domestic banks

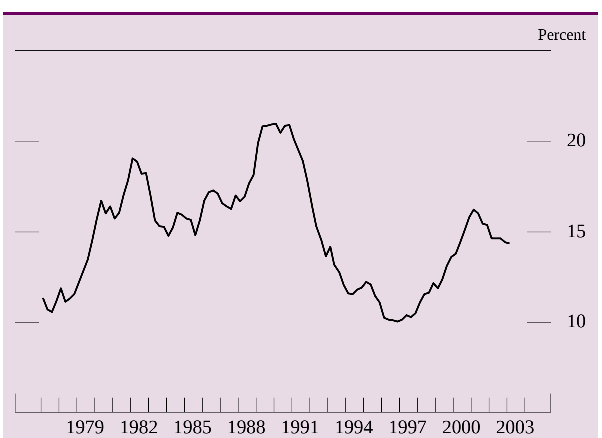



NOTE. The data are based on a survey generally conducted four times per year; the last reading is from the April 2003 survey. Large and medium-sized firms are those with annual sales of $50 million or more. Net percentage is the percentage reporting a tightening less the percentage reporting an easing.
SOURCE. Federal Reserve, Senior Loan Officer Opinion Survey on Bank Lending Practices.

conditions, and bank credit appears to remain available for qualified business borrowers. The net fraction of banks in the Senior Loan Officer Opinion Survey that reported having tightened lending standards and terms on C&I loans during the first part of the year decreased markedly, and the Survey of Small Business by the National Federation of Independent Business showed that the net percentage of small businesses believing credit had become more difficult to obtain hovered near the middle of its recent range. Moreover, in the April Senior Loan Officer Opinion Survey, a number of banks reported that they had eased lending terms in response to increased competition for C&I loans from nonbank lenders. Indeed, data from Loan Pricing Corporation indicate that nonbank financial institutions purchased a record amount of new syndicated loans during the first quarter of this year; the buyers were reportedly attracted in part by improving liquidity in the secondary loan market.

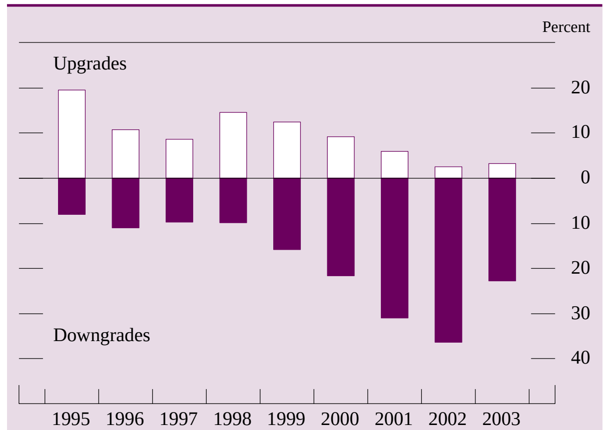
The decline in both short- and long-term interest rates, combined with slow increases in total business debt, contributed to a further reduction in the net interest burden of nonfinancial corporations during the first quarter. Moreover, by issuing bonds and paying down short-term debt, businesses have substantially lengthened the overall maturity of their debt, thus reducing their near-term repayment obligations. These developments, together with higher prof-

Net interest payments of nonfinancial corporations relative to cash flow



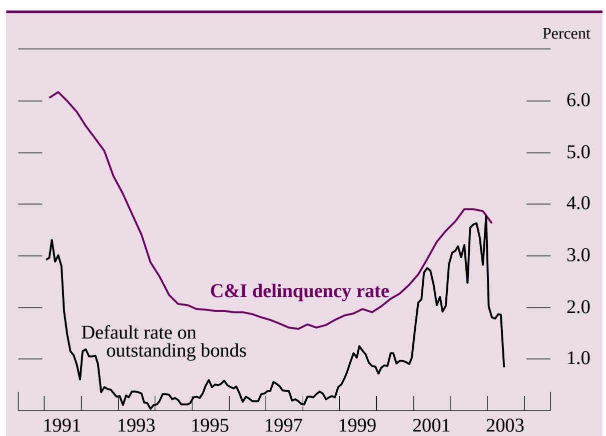

NOTE. The data are quarterly and extend through 2003:Q1.

Ratings changes of nonfinancial corporations




NOTE. Data are at an annual rate; for 2003, they are the annualized values of monthly data through May. Debt upgrades and downgrades are expressed as a percentage of the par value of all bonds outstanding.
SOURCE. Moody's Investors Service.

Default rate on outstanding bonds and C&I delinquency rate




NOTE. The default rate is monthly and extends through June 2003. The C&I delinquency rate is quarterly and extends through 2003:Q1. The default rate for a given month is the face value of bonds that defaulted in the six months ending in that month divided by the face value of all bonds outstanding at the end of the calendar quarter immediately preceding the six-month period.

itability, have helped most measures of corporate credit performance to improve this year. The number of ratings downgrades continued to exceed upgrades but by a notably smaller margin than last year. The six-month trailing bond default rate declined considerably in the first half of the year. The four-quarter moving average of recovery rates on defaulted bonds improved a bit in the first quarter, although it remained at the low end of its range of the past several years. The delinquency rate on C&I loans at commercial banks also moved down some in the first quarter, albeit to a level well above that of the late 1990s.

### Commercial Real Estate

The growth of debt backed by commercial real estate remained robust this year despite some deterioration in that sector's underlying fundamentals. In the first quarter of 2003, the expansion of debt was driven by lending at commercial banks and was spread about equally across broadly defined types of commercial real estate loans. Although the issuance of commercial-mortgage-backed securities (CMBS) slowed somewhat in the first quarter from the rapid pace of the second half of last year, issuance appears to have rebounded strongly in the second quarter.

Despite continued increases in vacancy rates and declines in the rents charged for various types of commercial properties, the credit quality of commercial mortgages has yet to show appreciable signs of deterioration. At commercial banks, delinquency rates on commercial mortgages edged up only slightly in the first quarter of 2003 from their historically low levels of recent years. Delinquency rates on CMBS, which were stable in 2002 at about the midpoint of their recent range, have also risen just a bit this year. Respondents to the April 2003 Senior Loan Officer Opinion Survey attributed the resiliency of the credit quality of commercial real estate loans in part to borrowers' ability to refinance at lower interest rates; they also mentioned that the many borrowers with substantial equity positions in the mortgaged properties have an extra incentive to remain current. Banks also pointed to their having tightened lending standards and terms, including maximum loan-to-value ratios, well in advance of the current downturn.

In line with the assessment that, to date, credit quality in the sector remains good, spreads on CMBS over Treasuries have remained in the lower half of the ranges observed over the past few years. Market reports indicate that CMBS issuers generally have had access to terrorism insurance for the underlying properties, and the cost of that insurance has come down significantly. In addition, newly formed pools that include high-profile properties reportedly have been diversified to further protect investors from losses due to acts of terrorism.

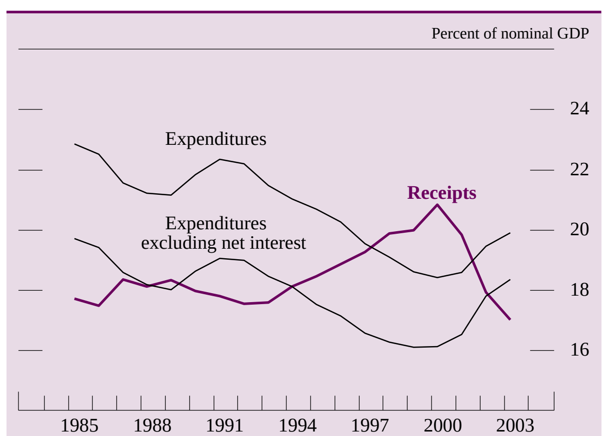
## *The Government Sector*

### Federal Government

The federal budget deficit has widened significantly as a consequence of the persistent softness in receipts and legislative actions affecting both spending and taxes. Over the first eight months of the current fiscal year—October to May—the deficit in the unified budget was $292 billion, nearly $150 billion larger than that recorded during the comparable period last year. Moreover, recent policy actions are projected to boost the deficit significantly over the remainder of the fiscal year. In particular, receipts will be reduced appreciably by several provisions of the Jobs and Growth Tax Relief Reconciliation Act of 2003, including advance refund checks for the 2003 increment to the child tax credit, downward adjustments to withholding schedules for individual taxpayers, and the sweetening of the partial-expensing investment incentive for businesses. In addition, outlays will be boosted by the supplemental appropriations for defense and foreign aid and by additional grants to the states. If the latest projection from the Congressional Budget Office is realized, the unified deficit will increase from $158 billion in fiscal 2002 to more than $400 billion in fiscal 2003.

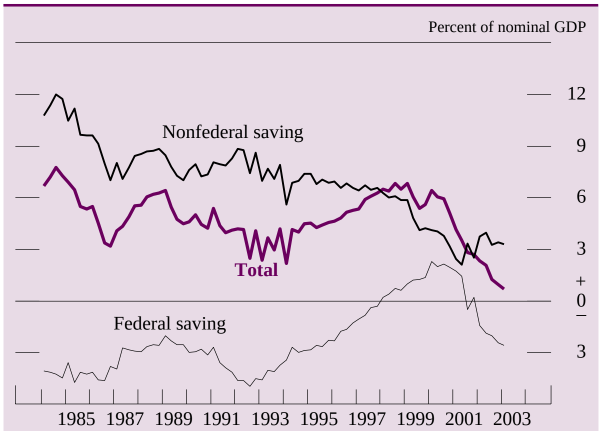
The deterioration in the unified budget has been mirrored in a sharp downswing in federal saving—

Federal receipts and expenditures




NOTE. The budget data are from the unified budget; through 2002 they are for fiscal years (October through September), and GDP is for Q4 to Q3. For 2003, the budget data are for the twelve months ending in May, and GDP is for 2002:Q2 to 2003:Q1.

Net national saving




NOTE. The data are quarterly and extend through 2003:Q1. Nonfederal saving is the sum of personal and net business saving and the current surplus or deficit of state and local governments.

essentially, the unified surplus or deficit adjusted to conform to the accounting practices followed in the national income and product accounts (NIPA). Indeed, net federal saving, which accounts for the depreciation of government capital, fell from a high of a positive 2 percent of GDP in 2000 to a negative 2½ percent of GDP in the first quarter of 2003. With little change, on balance, in nonfederal domestic saving over this period, the downswing in federal saving showed through into net national saving, which was equal to less than 1 percent of GDP in the first quarter, compared with the recent high of 6½ percent of GDP in 1998. If not reversed over the longer haul, such low levels of national saving could eventually impinge on the formation of private capital that contributed to the improved productivity performance of the past half-decade.

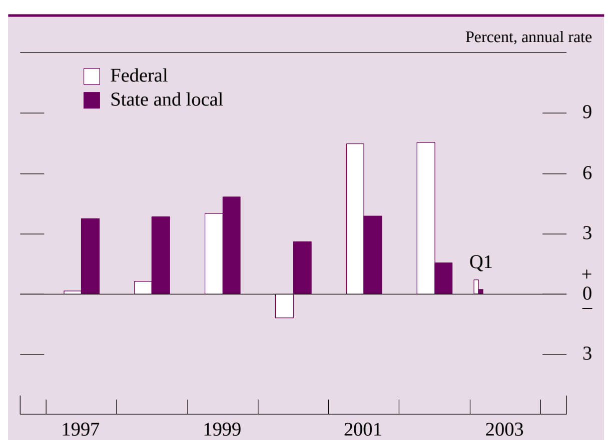
Federal receipts in the first eight months of the current fiscal year were nearly 3 percent lower than during the comparable period of fiscal 2002 after adjusting for some shifts in the timing of payments during the fall of 2001. Individual receipts were especially weak: Although withheld taxes, which tend to move in line with wages and salaries, held up fairly well (after adjusting for changes in tax law) during this period, nonwithheld payments, which are more sensitive to capital income, dropped sharply. This spring's net final payments, which are largely payments on the previous year's liabilities, were exceptionally soft for a second year in a row; in combination with the information on withheld and estimated payments, they imply that individual liabilities continued to shrink as a percentage of the NIPA tax base in 2002. The substantial drop in the ratio of liabilities to NIPA income over the past couple of years reflects in part a reversal of the capital gains bonanza of the late 1990s and the tax reductions enacted in 2001. (Capital gains are not included in the NIPA income measure, which, by design, includes only income from current production.) In addition, the change in the distribution of income in the late 1990s, which concentrated more income in the upper tax brackets, may have been reversed some during the past couple of years.

Federal spending during the first eight months of fiscal year 2003 was 6½ percent higher than during the same period last year; excluding the drop in net interest outlays, spending was more than 7½ percent higher. Spurred by the war in Iraq, defense spending has moved up another 15 percent thus far this year; outlays for homeland security have risen briskly as well. Expenditures for income security programs, which include the temporary extended unemployment compensation program, also have risen at a fairly rapid rate. Though growth in spending on Medicare and Medicaid, taken together, has slowed a bit this year, the rising cost and utilization of medical care continue to put upward pressure on these programs.

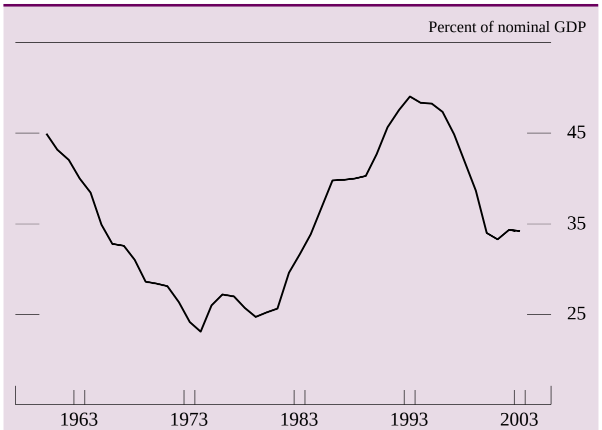
Expenditures for consumption and gross investment, the part of federal spending that is included in GDP, rose just slightly in real terms in the first quarter as a sizable increase in nondefense purchases was nearly offset by a surprising decline in defense spending. The dip in defense spending followed several quarters of large increases; with the supplemental appropriation in place, defense spending in the second quarter appears to have resumed its rapid growth.

Federal debt held by the public advanced at a 2¼ percent annual rate in the first quarter and remained at just below 35 percent of nominal GDP.

Change in real government expenditures on consumption and investment



Federal government debt held by the public




NOTE. Through 2002, 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 2003:Q1. Excludes securities held as investments of federal government accounts.

During the first half of the year, the Treasury announced several changes in its debt management, including the reintroduction of three-year notes and regular reopenings of certain five-year and ten-year notes, to position itself better to address the widening federal deficit. These steps have the consequences of lengthening the average maturity of its outstanding debt and trimming the size of some of its auctions. The Treasury also noted that it would be increasing the frequency and size of its auctions of inflation-indexed securities.

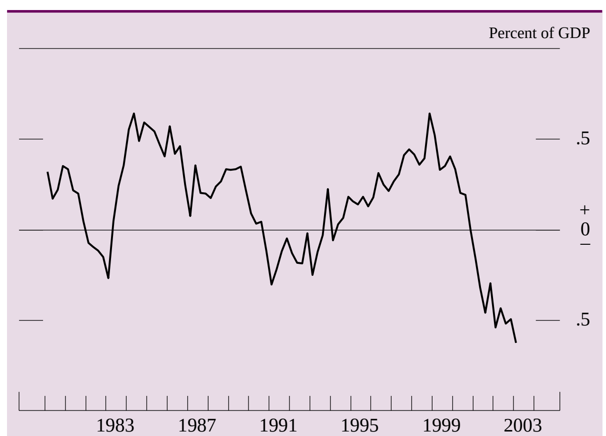
Beginning in February 2003, the Treasury needed to take steps to avoid exceeding the level of the statutory debt ceiling and employed several accounting devices to which market participants have become accustomed. It also temporarily suspended the issuance of the type of Treasury debt instrument in which the proceeds of advance refundings by state and local governments are allowed to be invested. No adverse reaction in financial markets was apparent during this period, however, and a bill increasing the debt ceiling $984 billion, to $7.384 trillion, was enacted on May 23.

## State and Local Governments

On the whole, the budget situation at state and local governments remains grim. Like the federal government, states and localities were running sizable budgetary surpluses in the late 1990s and now face large deficits. After having enacted a series of tax reductions in the second half of the 1990s, they subsequently saw their receipts eroded by weak incomes and the falling stock market. At the same time, these entities boosted their outlays considerably, in large part because of rising health care costs and increased demands for security-related spending. The fiscal difficulties have been especially acute at the state level. And although local governments generally have fared somewhat better, many are now facing reductions in assistance from cash-strapped states. According to the NIPA, the state and local sector's aggregate current deficit rose to about $50 billion in 2002—or ½ percent of GDP, the largest annual deficit relative to GDP on record—and that gap exceeded $65 billion at an annual rate in the first quarter of 2003.

Almost all states and most localities are subject to balanced budget and other statutory rules that force them to address fiscal imbalances. These rules typically apply to operating budgets, and governments have taken a variety of actions to meet their budgetary requirements for fiscal 2003 and to pass acceptable budgets for fiscal 2004, which started on July 1 in most states and many localities. Strategies have included drawing upon accumulated reserves, issuing bonds, and, in some cases, using one-time measures such as moving payments into the next fiscal year and selling assets. Increases in taxes and fees also have become more widespread. Still, spending restraint has remained an important component of the adjustment. Governments—especially at the state level—have held the line on hiring and have limited their outlays for a variety of other goods and services. In the NIPA, real expenditures for consumption and gross investment in the state and local sector rose only ½ percent over the year ending in the first quarter, compared with increases averaging more than 3½ percent per year over the preceding five years.

State and local government current surplus or deficit




NOTE. The data, which are quarterly, are on a national income and product account basis and extend through 2003:Q1. The current surplus or deficit excludes social insurance funds.

Available data point to continued softness in such spending in the second quarter.

The pace of gross issuance of municipal bonds remained robust in the first half of the year; it was fueled in part by the needs of state and local governments to finance capital spending, which is not subject to balanced budget requirements. Long-term debt issuance was heavily used for new education and transportation projects. Declining yields on municipal debt and high short-term borrowing demands also provided important impetus to debt issuance. Despite continued fiscal pressures on many state and local governments, the credit quality of municipal bonds has shown some signs of stabilizing. Although the spread of BBB-rated over AAA-rated municipal bond yields has widened somewhat, the number of municipal bond upgrades by S&P has slightly exceeded the number of downgrades so far this year. The yields on municipal bonds declined more slowly than the yields on Treasury securities of comparable maturity over much of the first half of the year; these moves lowered the yield differential from the tax-advantaged status of municipal securities.

## *The External Sector*

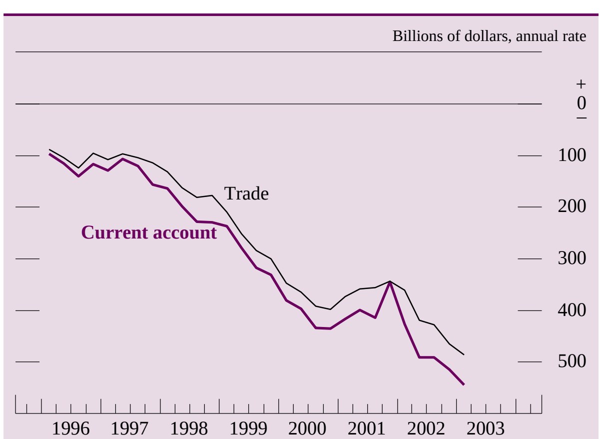
### Trade and the Current Account

In the first quarter of 2003, the U.S. current account deficit amounted to $544 billion at an annual rate, or about 5 percent of GDP, a somewhat higher percentage than in any quarter of last year. The deficit on trade in goods and services widened $22 billion in the first quarter, to $486 billion, as the value of imports rose more than that of exports. U.S. net investment income registered a $16 billion surplus in the first quarter, little changed from the previous quarter but significantly larger than the outcome for last year as a whole. The increase over last year is attributable primarily to lower net interest and dividend payments. Net unilateral transfers and other income were a negative $74 billion, down from a negative $67 billion in the fourth quarter.

Real exports of goods and services fell 1¼ percent at an annual rate in the first quarter; this decline, like that in the previous quarter, reflected in part slow economic growth of our major trading partners. Within this total, exports of goods increased nearly 2 percent after declining sharply in the fourth quarter of last year. Moderate increases in most trade categories were partly offset by a decrease in exports of capital goods (particularly aircraft and computers). Meanwhile, real exports of services declined about 8 percent in the first quarter, mainly because of a drop in receipts from foreign travelers. Prices of exported goods and services, which rose nearly 4 percent at an annual rate in the first quarter, were boosted by rising prices of services and industrial supplies (mainly goods with a high energy component). Prices of exported capital goods, automotive products, and consumer goods showed little change in the first quarter.

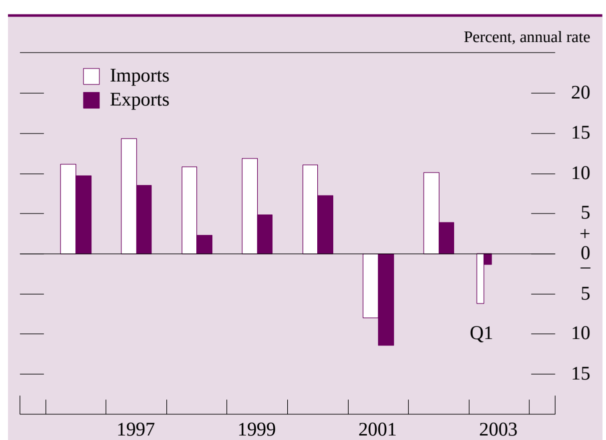
U.S. real imports of goods and services declined 6¼ percent at an annual rate in the first quarter following four quarters of increases. Imports of oil, other industrial supplies, aircraft, and services (primarily U.S. travel abroad) all dropped sharply. Imports of automotive products decreased for the second consecutive quarter, but imports of machinery and consumer goods rose. The price of imported goods jumped 12 percent at an annual rate in the first quarter, mainly resulting from spikes in the prices of natural gas and oil. The price of imported goods excluding fuels rose about 2 percent in the first

U.S. trade and current account balances

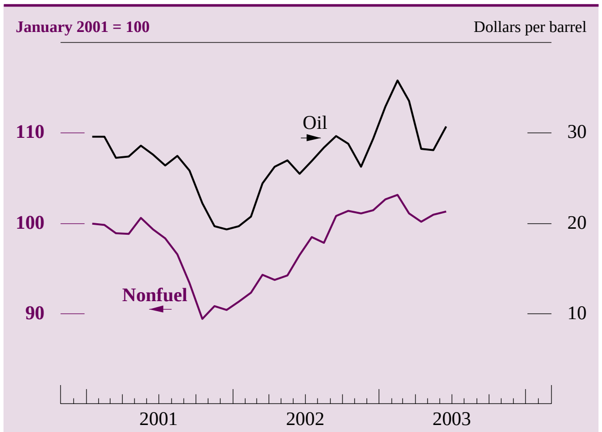



NOTE. The data are quarterly and extend through 2003:Q1.

Change in real imports and exports of goods and services



Prices of oil and of nonfuel commodities




NOTE. The data are monthly and extend through June 2003. The oil price is the spot price of West Texas intermediate crude oil. The price of nonfuel commodities is a weighted average of thirty-nine primary-commodity prices from the International Monetary Fund.

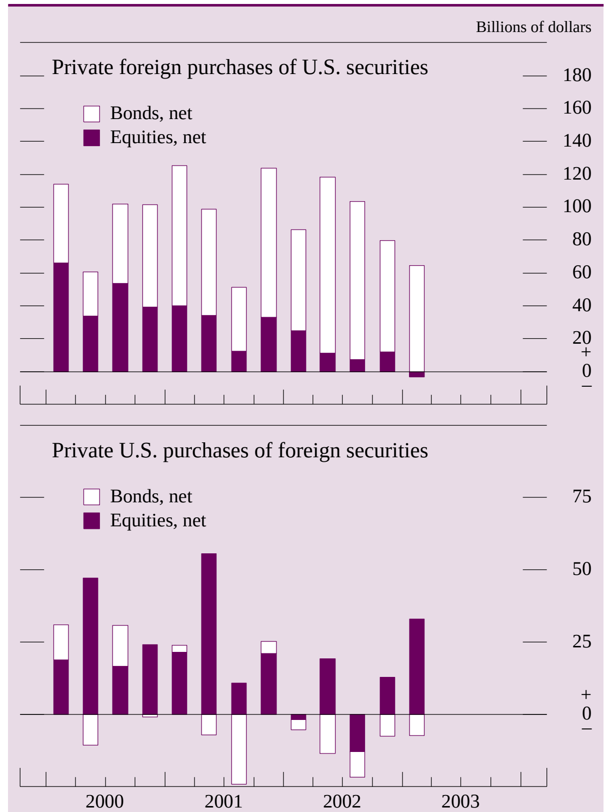
quarter, the fourth consecutive quarter of small increases, in part because of the depreciation of the dollar since early 2002. Slight declines in prices of imported capital goods, automotive products, and consumer goods were offset by small increases in other categories.

The spot price of West Texas intermediate crude oil rose to a twelve-year high of nearly $38 per barrel in mid-March as the United States moved closer to war in Iraq and as a nationwide strike slowed Venezuelan oil production to a trickle. With the commencement of military action in Iraq and the relatively rapid conclusion of the war, prices fell to less than $26 per barrel by late April. Downward pressure on prices was also exerted by increased production from some OPEC countries, particularly Saudi Arabia, Kuwait, and Venezuela, where oil production recovered substantially relative to the first quarter. In early June, oil prices moved back above $30 per barrel after it became apparent that Iraqi exports of oil would return more slowly than market participants had previously expected.

## The Financial Account

The U.S. current account deficit continued to be financed in large part by private flows into U.S. bonds and by foreign official inflows. Private foreign purchases of U.S. securities, which slowed in the latter part of 2002, stepped down a bit more in the first quarter of 2003, owing in part to weaker demand for U.S. equities. In contrast, inflows into the United States from official sources, which surged in 2002, picked up further in the first half of 2003 partly in

U.S. international securities transactions




SOURCE. Department of Commerce and the Federal Reserve Board.

response to downward pressures on the foreign exchange value of the dollar. U.S. residents, who had sold foreign securities on net last year, recorded sizable net purchases in the first quarter of this year: Relatively large purchases of foreign equities outweighed further sales of bonds.

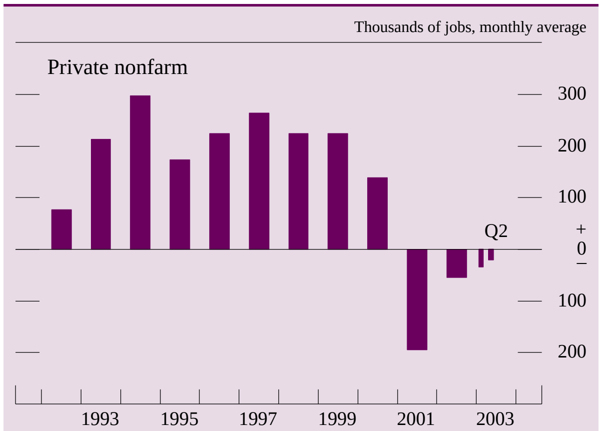
Direct investment into the United States, after being restrained in 2002 by a slowdown of global mergers and acquisitions, picked up in the first quarter of 2003, as merger activity resumed. U.S. direct investment abroad was steady in 2002 and the first quarter of 2003.

# *The Labor Market*

## Employment and Unemployment

The demand for labor has weakened further this year, though the pace of job losses appears to have slowed somewhat. After having fallen an average of 55,000 per month in 2002, private payroll employment declined 35,000 per month, on average, in the first quarter of 2003 and 21,000 per month in the second quarter. The civilian unemployment rate, which had

Net change in payroll employment




been fluctuating around 5¾ percent since late 2001, was little changed in the first quarter but moved up in the spring. In June, it stood at 6.4 percent.

The manufacturing sector has continued to shed jobs this year. On average, factory payrolls fell 55,000 per month over the first half of 2003—essentially as fast as over 2002 as a whole. Employment declines were widespread, but the metals, machinery, and computers and electronics industries continued to be especially hard hit. The weakness in manufacturing also cut into employment at help-supply firms and at wholesale trade establishments, although help-supply jobs increased noticeably in May and June.

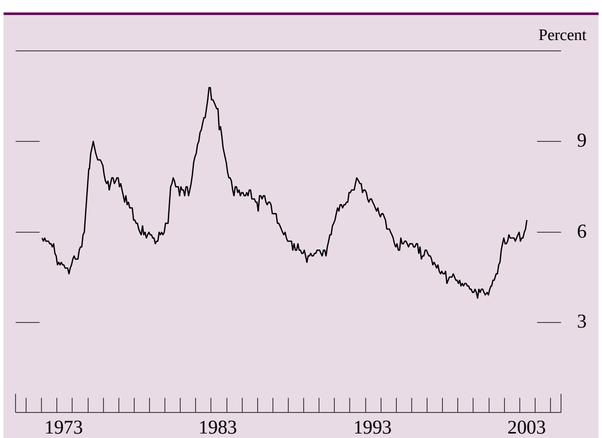
Apart from manufacturing and related industries, private employment increased slightly, on net, in the first half after having been about unchanged in 2002. Employment in the financial activities sector rose briskly, in part because of the boom in mortgage refinancings. Construction employment, which had been essentially unchanged, on net, since 1999, remained soft in the first quarter but posted a sizable gain in the second quarter. Employment in the information sector, which includes telecommunications, publishing, and Internet-related services, continued to decrease, though a shade less rapidly than over the preceding two years. Demand for workers in retail trade, leisure and hospitality, and transportation and utilities remained lackluster.

The unemployment rate was little changed in the first quarter, but it subsequently turned up. In June, it stood at 6.4 percent, ½ percentage point higher than the average in the fourth quarter of 2002 and about 2½ percentage points above the lows reached in 2000. The rise in the unemployment rate over the spring was chiefly driven by the ongoing softness in labor demand. Most recently, it also coincided with an uptick in labor force participation. That uptick notwithstanding, the participation rate has trended down over the past couple of years, a slide mainly reflecting declines for adult men and younger persons.

## Productivity and Labor Costs

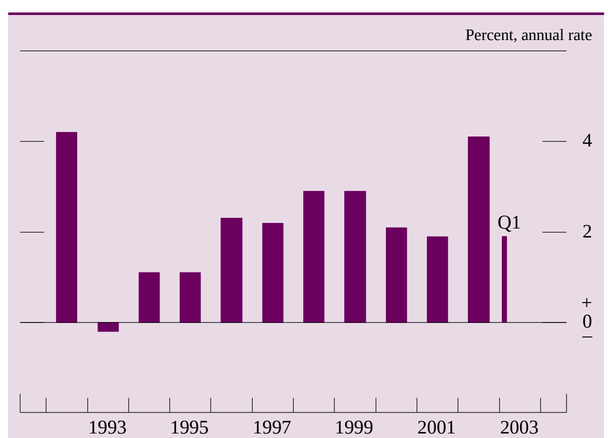
Labor productivity has continued to post solid gains in recent quarters as businesses have remained reluctant to expand their payrolls and instead have focused on cutting costs in an environment of sluggish—and uncertain—demand. According to the currently published data, output per hour worked in the nonfarm business sector rose at an annual rate of 2 percent in the first quarter and 2½ percent over the four quarters ending in the first quarter. Though the recent gains are down from the very rapid increases in late 2001 and 2002, they are similar to those achieved in the second half of the 1990s. However, whereas the

Civilian unemployment rate



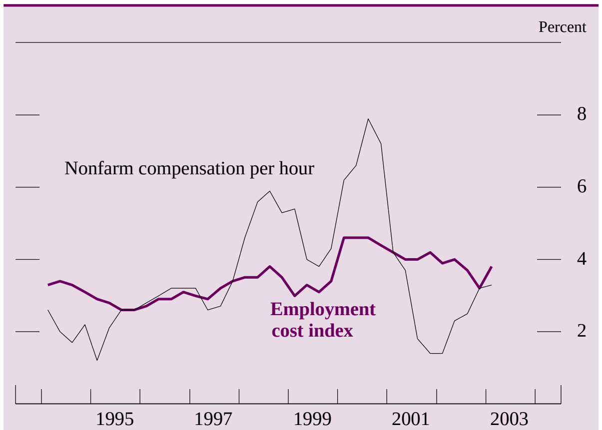

NOTE. The data extend through June 2003.

Change in output per hour




NOTE. Nonfarm business sector.

Measures of change in hourly compensation




NOTE. The data extend through 2003: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.

earlier productivity gains were driven importantly by an expansion of the capital stock, the recent gains appear to have come mainly from efficiency-enhancing changes in organizational structures and better use of the capital already in place.

The employment cost index (ECI) for private nonfarm businesses increased about 3¾ percent over the twelve months ending in March—only a shade less than over the preceding year but more than ½ percentage point below the increases of a few years earlier. The deceleration in hourly compensation over the past few years has been concentrated in wages, for which gains slowed from about 4 percent per year in 2000 and 2001 to 3 percent over the year ending this March. The slowing in wage growth primarily reflects the effects of the soft labor market and lower rates of price inflation; in addition, employers may be exerting more restraint on wages to offset some of the upward pressure on total compensation from rising benefit costs. The increase in benefits was especially sharp in the first quarter of 2003; in that period, employers stepped up their contributions to defined-benefit retirement plans in response to declines in the market value of plan assets, and health insurance costs continued to increase rapidly. In total, benefit costs rose 6 percent over the year ending in March.

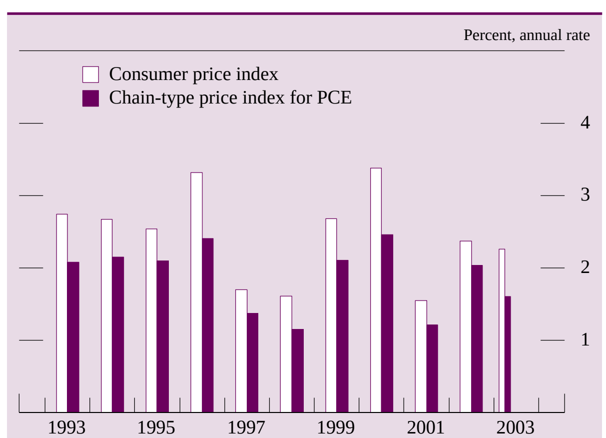
The growth in compensation per hour in the nonfarm business sector—an alternative measure of hourly compensation based on the NIPA—has swung widely in recent years. Fluctuations in the value of stock option exercises, which are excluded from the ECI, likely have contributed importantly to these swings. In any event, the increase in this measure over the year ending in the first quarter was 3¼ percent and roughly in line with the rise indicated by the ECI.

## *Prices*

Headline inflation numbers have been heavily influenced by movements in energy prices, but underlying inflation has remained subdued and according to some measures has even moved somewhat lower. Reflecting the surge in energy prices, the chain-type price index for personal consumption expenditures (PCE) increased at an annual rate of 2¾ percent in the first quarter, about 1 percentage point faster than the increase over 2002 as a whole; this index moved down in April and May as energy prices retreated. PCE prices excluding food and energy—the so-called core PCE price index—were nearly unchanged during the spring, and the twelve-month change in this series stood at 1¼ percent in May, compared with a reading of 1¾ percent over the preceding twelve months.

In the main, the quiescence of underlying inflation reflects continued slack in labor and product markets and the robust productivity gains of recent years. In addition, inflation expectations have remained in check—and, indeed, may have subsided a bit further. For example, according to the Michigan Survey Research Center, the median expectation for inflation over the coming year was running about 2 percent in May and June, compared with 2½ percent to 3 percent over much of the preceding few years. Readings on this measure had been considerably higher earlier in the year, when energy prices were rising, and it is difficult to know whether the decline of late was driven chiefly by the retreat in energy prices during

Change in consumer prices



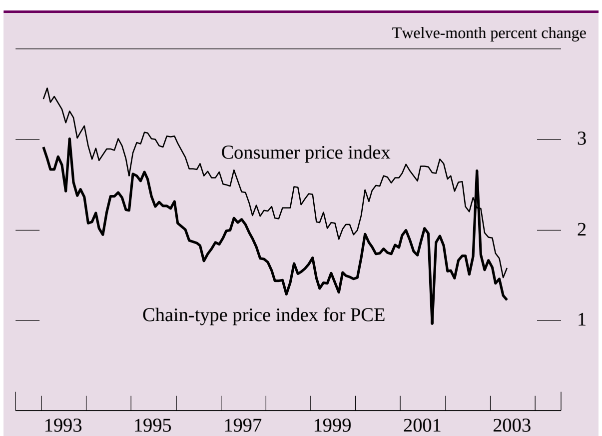

NOTE. Change for 2003 is from December 2002 to May 2003 at an annual rate; changes for earlier periods are from December to December.

the spring. Non-oil import prices posted a sizable increase in the first quarter after having been little changed in 2002, but the first-quarter rise was due largely to a spike in the price of imported natural gas, which should not have much effect on core consumer price inflation. Given the decline in the dollar from its peak in early 2002, non-oil import prices will probably trend up modestly in coming quarters.

PCE energy prices rose sharply in the first quarter but turned down in the spring, a pattern largely mirroring the swings in crude oil prices. Gasoline prices, which had already been elevated in late 2002 by weather-related supply disruptions, increased further early this year as crude oil costs rose and wholesale margins remained large; by June 1, gasoline prices had reversed that increase, and they have changed little, on net, since that time. Natural gas prices also soared in early 2003 as tight inventories were depleted further by unusually cold weather; since the unwinding of February's dramatic spike, prices have held in a narrow range. Inventories of natural gas have increased significantly of late, but they are still low enough to raise concerns about the possibility of future price spikes in the event of a heat wave later this summer or an unusually cold winter. Reflecting the higher natural gas input costs, PCE electricity prices rose substantially over the first five months of 2003 after having fallen some in 2002.

Increases in core consumer prices of both goods and services have slowed over the past year, with the deceleration most pronounced for goods. Prices for core PCE goods fell 2¼ percent over the year ending in May after having decreased 1 percent over the preceding twelve months. Meanwhile, the rise in prices for non-energy services totaled 2¾ percent over the year ending in May, a little less than over the preceding period. Among the major types of services,

Change in consumer prices excluding food and energy




NOTE. The data extend through May 2003.

the price of owner-occupied housing was up only 2½ percent after having risen 4¼ percent over the preceding period. But prices for some other types of services accelerated. Most notably, the prices of financial services provided by banks without explicit charge turned up after having decreased over the preceding two years; because these prices cannot be derived from market transactions and thus must be imputed, they are difficult to measure and tend to be volatile from year to year.

Increases in the core consumer price index (CPI) also have been very small recently, and the twelve-month change in this measure slowed from 2½ percent in May 2002 to 1½ percent in May 2003—a somewhat greater deceleration than in core PCE prices. The greater deceleration in the CPI is primarily accounted for by its narrower scope and different weighting structure than the PCE measure. In particular, it excludes the imputed prices of financial services rendered without explicit charge as well as several other categories for which market prices are not available; these non-market-based prices have accelerated notably recently. In fact, when the non-market categories are stripped from the core PCE index, the remaining components show a deceleration close to that in the core CPI. Another consideration is that housing costs have a much larger weight in the CPI than in the PCE index, partly because of the CPI's narrower coverage. Thus, the smaller price increases for housing services of late have a bigger damping effect on core CPI inflation, just as the hefty increases in this category in 2001 and 2002 tended to lift the CPI relative to the PCE index.

Broader price measures likewise point to low inflation over the year ending in the first quarter. In particular, the chain-type price index for GDP rose only 1½ percent over that period, about the same as during the comparable period four quarters earlier. Meanwhile, the price index for gross domestic purchases—which is defined as the prices paid

Alternative measures of price change

Percent

| Price measure | 2001 to 2002 | 2002 to 2003 |
|---|---|---|
| *Chain-type* | | |
| Gross domestic product | 1.4 | 1.6 |
| Gross domestic purchases | .8 | 2.3 |
| Personal consumption expenditures | .9 | 2.2 |
| Excluding food and energy | 1.5 | 1.5 |
| Chained CPI | .9 | 2.5 |
| Excluding food and energy | 1.9 | 1.4 |
| *Fixed-weight* | | |
| Consumer price index | 1.3 | 2.9 |
| Excluding food and energy | 2.5 | 1.8 |

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

for consumption, investment, and government purchases—increased 2¼ percent, up from ¾ percent during the preceding period. The upswing mainly reflects the effect of higher energy prices and roughly matches the acceleration in total PCE prices; the price indexes for construction and government purchases also recorded somewhat larger increases than they had over the preceding period.

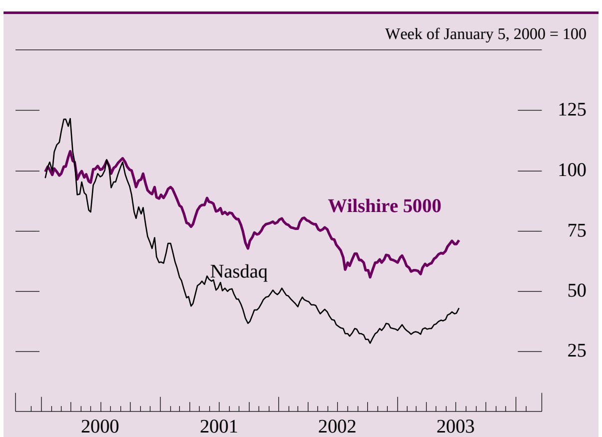
## *U.S. Financial Markets*

On balance, major stock indexes have climbed noticeably this year, government and corporate interest rates have declined, and risk spreads, which had dropped significantly late last year, have fallen further.

### Before the War in Iraq

The year began on an optimistic note in financial markets, in part owing to the release of a surprisingly strong report from the Institute for Supply Management and the announcement of a larger-than-expected package of proposed tax cuts, which included elimination of the personal federal income tax on many corporate dividend payments. In addition, yields and risk spreads on corporate bonds had dropped significantly in the fourth quarter of 2002, partly in reaction to the absence of new revelations of accounting irregularities and to the improved outlook for corporate credit quality. Money market futures rates apparently embedded an expectation that the FOMC would begin increasing the federal funds rate as early as mid-summer 2003.

Major stock price indexes




NOTE. The data are weekly averages and extend through July 9.

Interest rates on selected Treasury securities

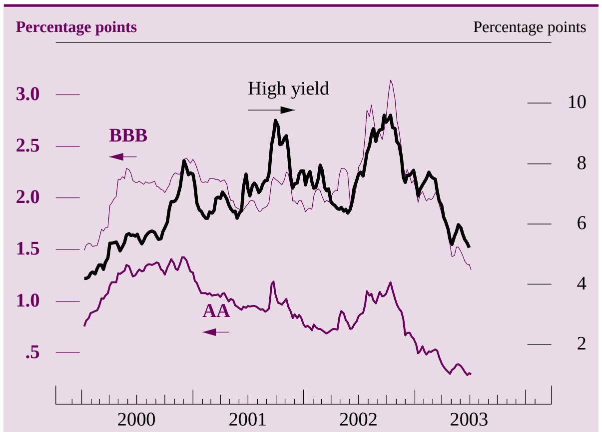

NOTE. The data are weekly averages and extend through July 9.

That short burst of optimism was quickly damped by subsequent economic reports that were decidedly less rosy, a jump in oil prices in response to the looming prospect of war in Iraq, and increased tensions with North Korea. Measures of uncertainty, such as implied volatility, moved up in several markets. Major equity indexes slid and by mid-March were off about 4 percent to 9 percent from the beginning of the year. Investors also came to believe that the onset of FOMC tightening would occur later than they had earlier believed, a shift in perception that was reflected in lower yields on Treasury bonds. Yields on investment-grade corporate bonds fell about in line with those on Treasuries, and investors appeared to be substituting high-quality bonds for equities as part of a broader flight to fixed-income securities over this period. By contrast, yields on below-investment-grade bonds rose a bit, on balance, between mid-January and mid-March, a move that left their risk spreads higher as well.

### After the War in Iraq

Once it became clear that military action in Iraq was imminent, a robust rally erupted in both the equity and bond markets, as some of the uncertainties apparently dissipated and investors began to show a greater appetite for riskier assets. Equity indexes jumped about 8 percent in the two weeks bracketing the President's ultimatum to Saddam Hussein, and prices climbed an additional 3 percent through the end of April, partly on the release of generally better-than-expected earnings reports for the first quarter. Gains in share prices were fairly widespread and included technology, defense, petroleum, and especially financial companies.

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




NOTE. The data are weekly averages and extend through July 9 except for the high-yield series, which extends through July 7. The spreads compare the yields on Merrill Lynch AA, BBB, and 175 indexes with the yield on the ten-year off-the-run Treasury note.

The easing of tensions also put upward pressure on Treasury yields, but additional disappointing economic data offset the diminished safe-haven demands and left those rates down, on balance, during the period covering the war in Iraq and its immediate aftermath. Yields on corporate bonds also declined, in part because of strengthened corporate balance sheets, the reduction in uncertainty, and perhaps because investors began to search for higher returns. Moreover, according to one widely used measure, spreads on speculative-grade bonds tumbled about 150 basis points, to about 520 basis points, from mid-March until mid-May, and then fluctuated somewhat before ending June near that level. The rally in below-investment-grade bonds was particularly evident in sectors that had previously experienced some of the greatest widening of spreads—telecom, energy trading, and utilities; the interest in these sectors further indicated investors' increased appetite for risk.

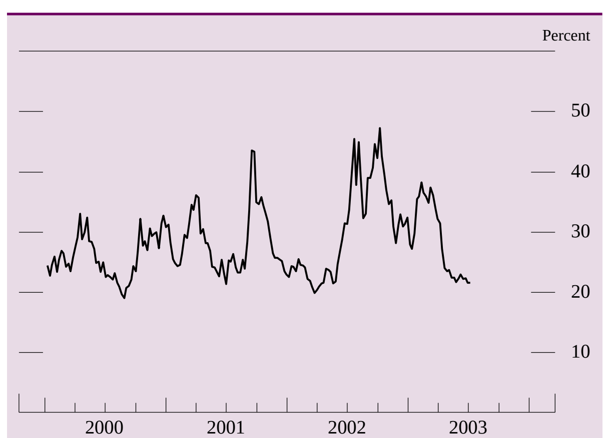
A stubbornly sluggish economy and rapid growth of productivity muted both inflation and inflation expectations, inducing the FOMC to begin pointing to a further substantial decline in inflation as a concern at its May meeting. Market participants took this to imply that short-term rates would be held along a lower path for longer than they had previously expected. This shift in expectations triggered a further decline in intermediate- and long-term yields. With long-term inflation expectations apparently only little changed, the decline in yields translated into a sizable decline in real interest rates.

That drop in real interest rates was among several factors providing a boost to equity prices in May and June. Implied volatility of the S&P 100 index, which had been elevated earlier in the year, fell substantially with the conclusion of major hostilities in Iraq; it is now near the bottom of its range of the past several years. Moreover, downward revisions to analysts' earnings expectations for the year ahead have been the smallest since early 2000. The tax package passed in late May, which included a cut in taxes on capital gains and dividends, may have provided some additional impetus to equity prices.

The FOMC decided on June 25 to reduce the target federal funds rate 25 basis points, to 1 percent, but some observers had been anticipating a cut of 50 basis points. In addition, markets appeared to read the Committee's assessment of economic prospects as more upbeat than expected. Partly as a result, yields on longer-dated Treasury securities reversed a portion of their previous decline in the weeks following the meeting. Yields on high-quality corporate bonds rose about in line with Treasuries over the same period, but yields on speculative-grade bonds edged up only slightly, and risk spreads narrowed further. Forward-looking economic indicators were generally positive, and stock price indexes—the Nasdaq, in particular—continued to trend higher.

On net, the constant-maturity yield on the two-year Treasury note has fallen 24 basis points this year, to 1.37 percent as of July 9, while the yield on the ten-year Treasury bond has fallen 10 basis points, to 3.73 percent. Over the same period, the Wilshire 5000 is up 15½ percent, and the Nasdaq has surged more than 30 percent. As a result of the decline in real interest rates, the spread between the twelve-month forward earnings–price ratio for the

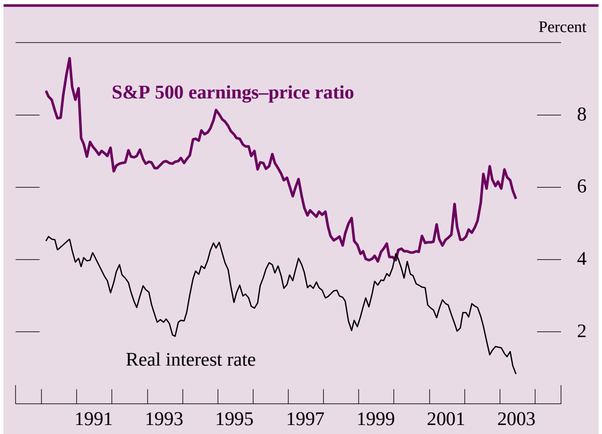
Implied S&P 100 volatility




NOTE. The data are weekly averages and extend through July 9. The series shown is the implied volatility of the S&P 100 stock price index as calculated from the prices of options that expire over the next several months.

SOURCE. Chicago Board Options Exchange.

S&P 500 forward earnings–price ratio
and the real interest rate



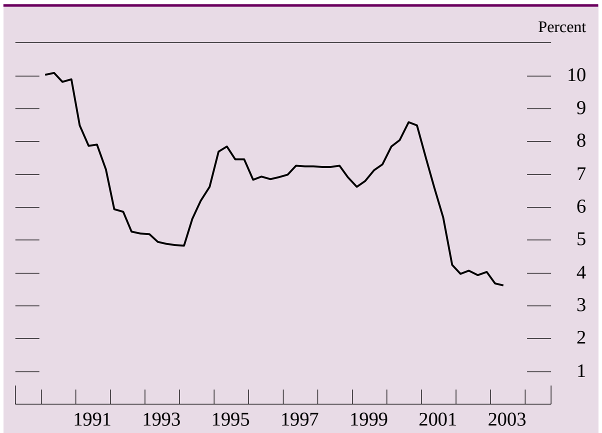

NOTE. The data are monthly and extend through June 2003. The earnings–price ratio is based on I/B/E/S consensus estimates of earnings over the coming year. The real rate is estimated as the difference between the ten-year Treasury rate and the five-year to ten-year expected inflation rate from the FRB Philadelphia survey.

S&P 500 and the real ten-year yield remains wide despite the run-up in stock prices.

## Shorter-term Debt Markets

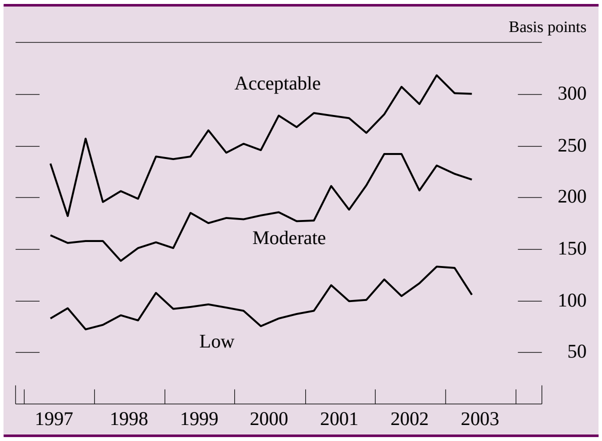
The average interest rate on commercial and industrial loan originations—a substantial majority of which have adjustable interest rates—has fallen to its lowest level since the start of the Federal Reserve's Survey of Terms of Business Lending in 1977. The survey also indicates that risk spreads on these loans receded a bit over the first half of 2003 after having trended up for most of the past several years. Prices in the secondary loan market have risen this year,

Average C&I loan rate, domestic banks




NOTE. The data are quarterly and extend through 2003:Q2.
SOURCE. Federal Reserve, Survey of Terms of Business Lending.

C&I loan rate spreads, by internal risk rating




NOTE. The data are quarterly and extend through 2003:Q2. Spreads are over a market interest rate of comparable maturity. Low-risk loans are those in risk categories "minimal" and "low."
SOURCE. Federal Reserve, Survey of Terms of Business Lending.

reportedly in part because some of the large inflows to high-yield mutual funds were used to purchase distressed loans and because of the expectation that many outstanding loans would continue to be prepaid with the proceeds of bond refinancing.

Interest rates on commercial paper also dropped to very low levels in the first half of 2003. Risk spreads in this market were relatively stable and near the bottom of the range observed over the past several years, in part because of businesses' efforts to strengthen their balance sheets and improve their liquidity.

## Debt and Financial Intermediation

The debt of all domestic nonfinancial sectors—government, businesses, and households—grew at a 6½ percent annual rate in the first quarter, down from 8 percent in the fourth quarter of 2002 but still well in excess of the growth of nominal GDP. The proportion of the new credit supplied by depository institutions rose significantly in the second half of last year and remained at about 25 percent in the first half of this year. In large part, the jump reflects the sector's support of the booming mortgage market—through both direct lending and the acquisition of mortgage-backed securities—which has more than offset weak business lending. At commercial banks, revenues from mortgage-related activities reportedly helped sustain profits in the first quarter at the elevated levels of the past several years despite some erosion in net interest margins.

The delinquency rate on all loans and leases at banks edged down further during the first quarter, to

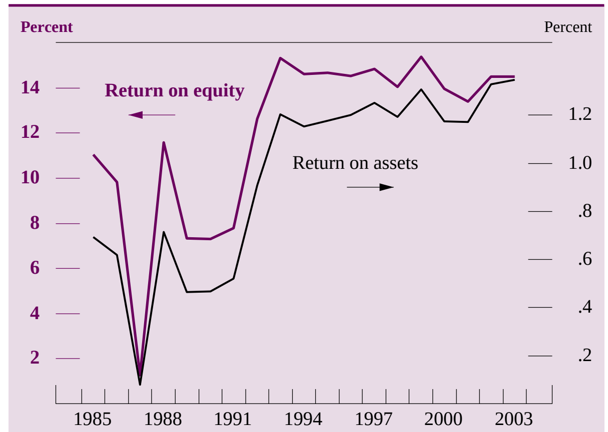
Change in domestic nonfinancial debt


NOTE. The data are annual; the observations for 2003 are annualized values for Q1. 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.

its lowest level in two years. Increases in the delinquency rates on commercial real estate loans and non-credit-card consumer loans were offset by declines in those on residential real estate loans, credit card loans, and business loans. For business and credit card loans, however, the delinquency rates at banks remain elevated, and the recent improvement likely reflects, in part, the effect of the tightening of lending standards and terms that has been reported for some time now in the Senior Loan Officer Opinion Survey. On a seasonally adjusted basis, the ratio of loan-loss provisions to assets declined in the final quarter of last year, and it was about unchanged from that still-elevated level in the first quarter of 2003. In addition to the buffer against future losses provided by their high profitability and substantial provisions, virtually all banks—98 percent by assets—remain well capitalized.

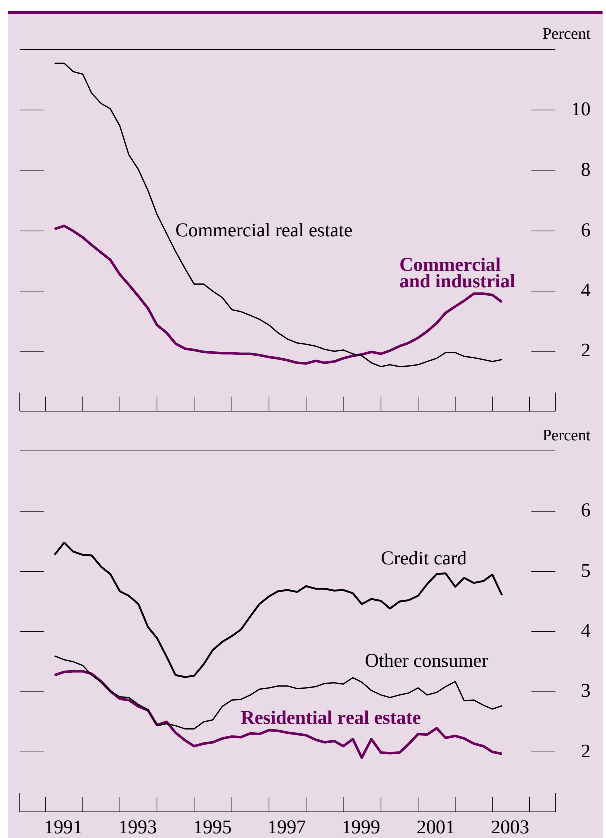
Among nondepository financial institutions, issuers of asset-backed securities provided about 13 percent of the total credit extended to domestic nonfinancial sectors in the first quarter. The share of net lending supplied by mutual funds increased notably to almost 10 percent in the first quarter, and with the continuation of strong flows to bond mutual funds,

Measures of bank profitability



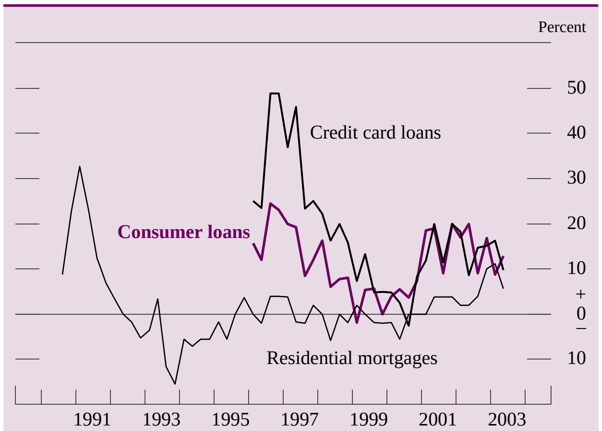

NOTE. Through 2002 the data are annual; for 2003 they are seasonally adjusted data for Q1.
SOURCE. Call Report.

Delinquency rates on selected types of loans at banks




NOTE. The data are quarterly, seasonally adjusted, and extend through 2003:Q1.
SOURCE. Call Report.

Net percentage of domestic banks tightening standards on loans to households



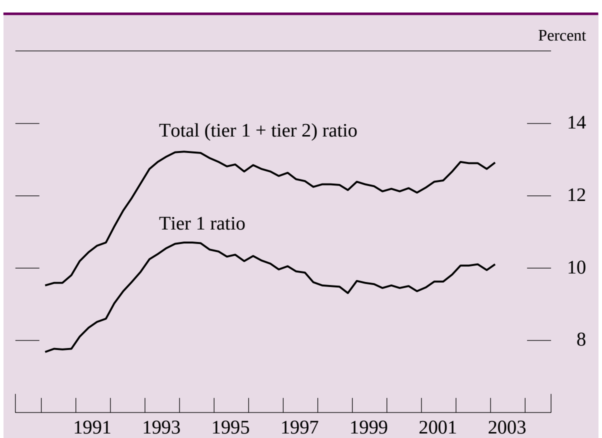

NOTE. The data are based on a survey generally conducted four times per year; the last reading is from the April 2003 survey. Net percentage is the percentage reporting a tightening less the percentage reporting an easing.

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

they likely were large suppliers in the second quarter as well. Meanwhile, available data suggest that insurance companies likely accounted for about 7 percent of total credit extended during the first half of the year, a proportion near the top of the range seen since the mid-1990s.

Government-sponsored enterprises (GSEs) provided 11 percent of the net lending (net acquisition of credit market instruments) in the first quarter, an amount roughly in line with their level in the second half of 2002. The duration gaps in the portfolios of the housing GSEs were maintained near their targets.

Regulatory capital ratios of commercial banks




NOTE. The data, which are quarterly and extend through 2003:Q1, are ratios of capital to risk-weighted assets. Tier 1 capital consists primarily of common equity and certain perpetual preferred stock. Tier 2 capital consists primarily of subordinated debt, preferred stock not included in tier 1 capital, and a limited amount of loan-loss reserves.

SOURCE. Call Report.

In early June, Freddie Mac replaced its top three executives amid questions about its accounting practices. The spreads on longer-term Freddie Mac debt widened a bit, and its stock price declined sharply; the prices of Fannie Mae securities also declined but to a lesser extent. On net, there appears to be little, if any, spillover into broader financial markets.

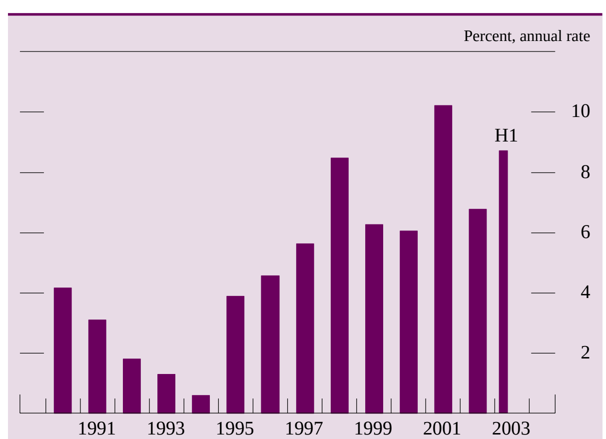
## Monetary Aggregates

Through the first half of 2003, the growth rate of M2 was buoyed by several factors and remained elevated. The rising level of mortgage refinancing causes money growth to accelerate because the associated prepayments on mortgage-backed securities that are temporarily held in escrow accounts increase liquid deposits. Demand for M2 was also supported by the decline in short-term market interest rates, which further reduced the opportunity cost of holding money. Precautionary demand for safe and liquid M2 assets also likely buttressed the growth of M2 in the run-up to the war in Iraq.

In contrast, mutual fund flows related to the bond market rally and the post-war pickup in the stock market may have siphoned funds from M2. Retail money market mutual funds and small time deposits both experienced net outflows during the first half of the year. While some of that money continued to feed the extraordinary growth of liquid deposits, it is likely that a portion was redirected to long-term mutual funds.

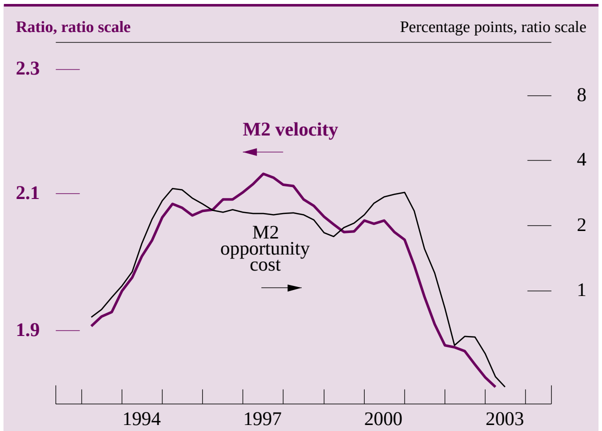
After having weakened significantly in 2002, growth of M3 slowed further in the first half of 2003. Much of this year's slowdown can be attributed to

M2 growth rate



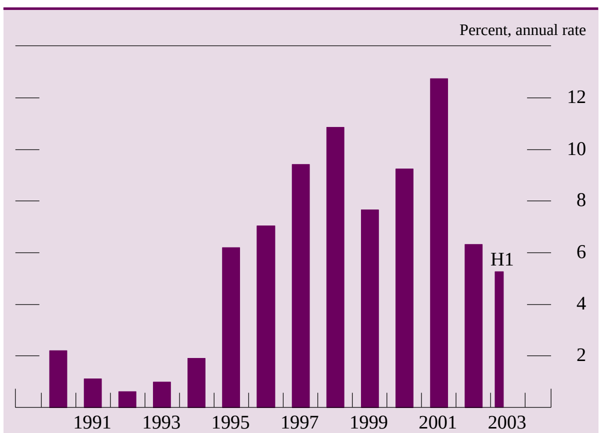

NOTE. M2 consists of currency, travelers checks, demand deposits, other checkable deposits, savings deposits (including money market deposit accounts), small-denomination time deposits, and balances in retail money market funds.

M2 velocity and opportunity cost




NOTE. The data are quarterly. They extend through 2003:Q1 for velocity and 2003:Q2 for opportunity cost. 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.

M3 growth rate



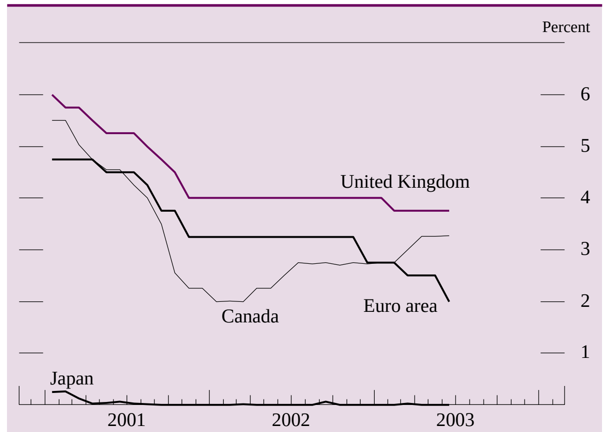

NOTE. M3 consists of M2 plus large-denomination time deposits, balances in institutional money market funds, repurchase-agreement liabilities (overnight and term), and eurodollars (overnight and term).

rapid runoffs of institutional money market mutual funds. The runoffs were, in turn, partially the result of an unwinding of the strength late last year and the fact that interest rates paid by those funds declined faster than the interest rates paid by the underlying assets this year. The drop in institutional money funds has been offset by growth in eurodollar deposits and repurchase agreements.

## *International Developments*

Economic activity abroad was sluggish in the first quarter of 2003, with real output in the euro area and Japan little changed from the previous quarter. Geo-

Official interest rates in selected foreign industrial countries

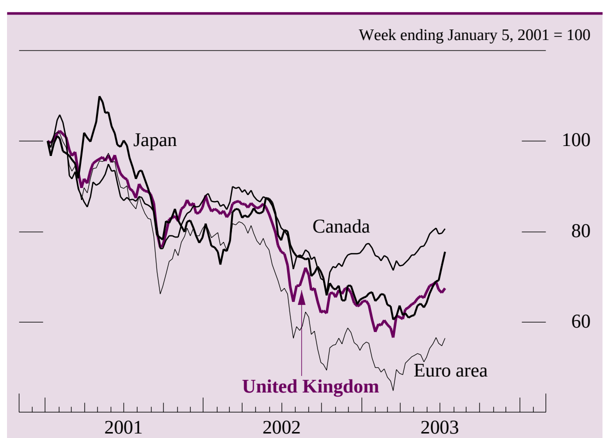



NOTE. The data are as of month-end and extend through June 2003. The interest rates shown are the call money rate for Japan, the overnight rate for Canada, the refinancing rate for the euro area, and the repurchase rate for the United Kingdom.

political uncertainties, higher oil prices, slow growth in the United States, persistent weakness in global high-tech sectors, and continued negative wealth effects from past declines in equity prices all weighed on foreign growth. Foreign economic expansion appeared to remain weak in the second quarter despite the reduction in uncertainty associated with Iraq. Indicators suggest that manufacturing activity abroad has not picked up; instead, industrial production declined in April and May, on average, relative to the first quarter in Japan, Germany, and France. Concerns over the spread of the SARS virus appear to have hurt growth in the second quarter in several Asian developing economies and in Canada.

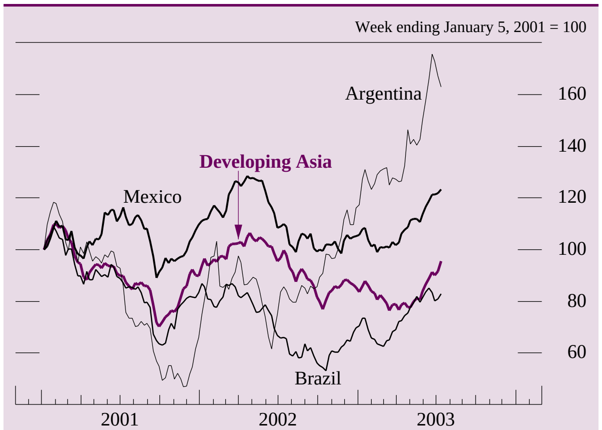
Central banks in several major foreign industrial countries moved to ease monetary policy during the first half of this year. The European Central Bank and

Equity indexes in selected foreign industrial countries




NOTE. The data are weekly. The last observations are the average of trading days through July 9, 2003.

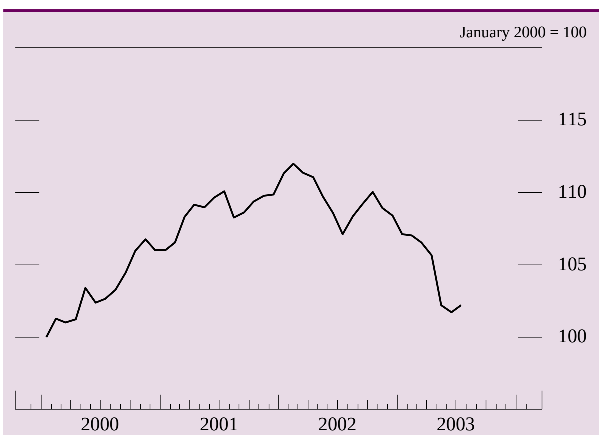
Equity indexes in selected emerging markets




NOTE. The data are weekly. The last observations are the average of trading days through July 9, 2003. Developing Asia consists of China, Hong Kong, India, Indonesia, Malaysia, Pakistan, the Philippines, Singapore, South Korea, Taiwan, and Thailand.

the central banks of the United Kingdom, Sweden, Switzerland, Norway, and New Zealand all cut official interest rates. The pace of monetary easing in Europe picked up toward midyear, when inflation pressures dissipated amid growing slack, currency appreciation vis-à-vis the dollar, and the decline in oil prices after the conflict in Iraq. In contrast, the Bank of Canada raised interest rates twice in the spring, in a continued effort to contain inflation. The Bank of Canada left rates unchanged in June, however, in response to a sharp appreciation of the Canadian dollar and a drop in Canadian inflation in April, some slackening of demand in labor markets in May, and concerns about the pace of activity in the United States. The Bank of Japan (BOJ) maintained short-term interest rates at near-zero levels, further expanded its target for current account balances held by financial institutions at the BOJ, and took some additional measures to add stimulus to the economy.

U.S. dollar nominal exchange rate, broad index




NOTE. The data are monthly and are in foreign currency units per dollar. The last observation is the average of trading days through July 9, 2003. The broad index is a weighted average of the foreign exchange values of the U.S. dollar against the currencies of a large group of major U.S. trading partners. The index weights, which change over time, are derived from U.S. export shares and from U.S. and foreign import shares.

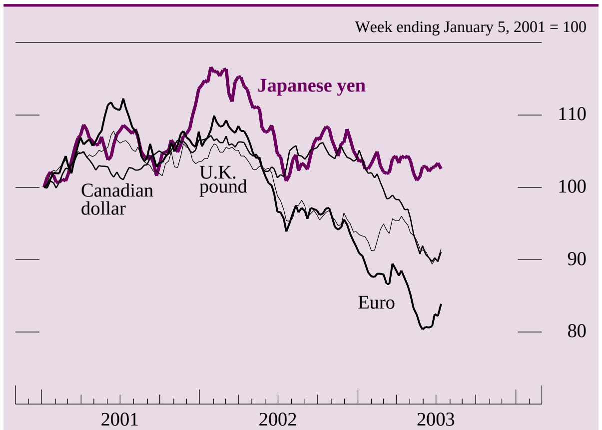
In the first quarter, foreign financial markets were influenced by heightened anxieties ahead of the war in Iraq, but those concerns appeared to diminish as the war proceeded. Foreign equity prices declined in the first quarter, but they have since recovered. Broad stock indexes for the major industrial countries are up on balance since the beginning of the year but, with the exception of Japan, they have gained less than in the United States. Long-term interest rates in most foreign industrial countries fell during the first half of the year because prospects for inflation diminished, growth sputtered, and market participants began to expect that policy interest rates would remain low for an extended period. Asset prices in emerging markets, particularly in Latin America, picked up during the first half of this year; equity prices rose significantly, and risk spreads on emerging-market bonds narrowed. Bonds issued by a number of emerging-market economies included collective action clauses (CACs) that are designed to facilitate a debt restructuring in the event of default; this development had little noticeable effect on spreads.

The dollar's foreign exchange value continued to decrease in the first half of 2003. Since the end of 2002, the dollar has depreciated on a trade-weighted basis nearly 5 percent against the currencies of a broad group of U.S. trading partners. The dollar has declined 13 percent against the Canadian dollar and more than 7 percent on net against the euro but has fallen less than 1 percent versus the Japanese yen. During the first quarter, the dollar appeared to react to concerns about the war in Iraq, falling when news indicated a heightened risk of hostilities and strengthening as concerns appeared to abate. After the resolution in April of major hostilities, the dollar fell further, and market commentary focused more on the financing needs posed by the large and growing U.S. current account deficit.

## Industrial Economies

The euro-area economy stagnated in the first quarter of 2003. Consumer spending continued to expand at a modest rate and inventory investment grew, but business fixed investment fell sharply and exports declined. The German economy contracted in the first quarter and continued to underperform the euro-area average, in part owing to a fiscal tightening

U.S. dollar exchange rate against selected major currencies




NOTE. The data are weekly. Last observations are the average of trading days through July 9, 2003. Exchange rates are in foreign currency units per dollar.

undertaken to bring the budget deficit into line with limits set out in the euro area's Stability and Growth Pact. The rise in the exchange value of the euro over the past year has begun to hurt euro-area manufacturers; exports have leveled off while imports have continued to rise. Recent indicators have shown little rebound in the pace of euro-area activity following the conclusion of the Iraq war, and business and consumer sentiment have remained sour. Core inflation has slowed from its 2002 peak, and headline inflation, which was temporarily boosted by oil prices, recently has fallen to the 2 percent upper limit of the ECB's definition of price stability.

Economic growth in the United Kingdom slowed to a crawl in the first quarter, but recent indicators—such as consumer confidence and industrial production—suggest that the pace has been somewhat stronger during the past few months. Growth of consumption has slowed but continues to be held up by a strong labor market and by past gains in housing prices, although lately these prices have decelerated.

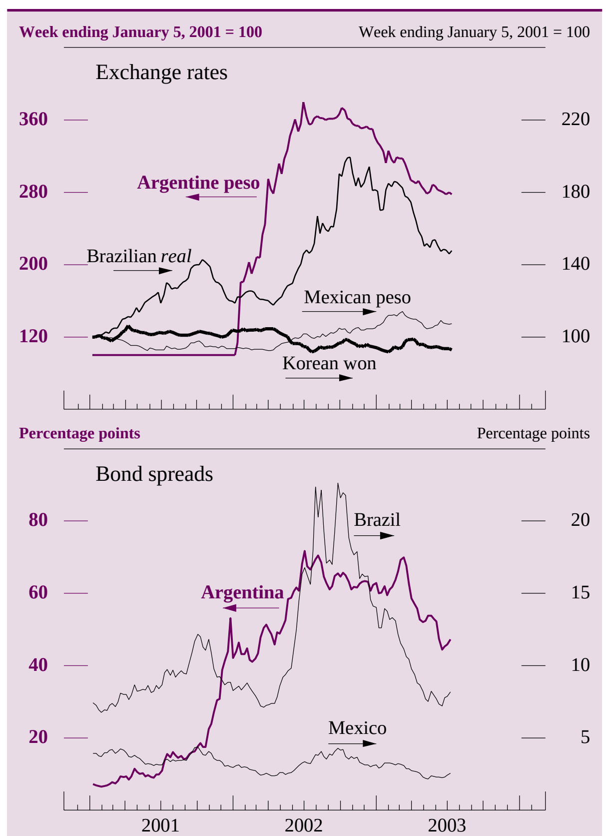
The Japanese economy barely grew in the first quarter after expanding almost 2½ percent in 2002. Business investment continued to grow in the first quarter, and private consumption increased despite stagnating incomes; however, residential and public investment both fell sharply, and exports declined because of the weak global economy. The severity of consumer price deflation lessened somewhat, partly because of the spike in energy prices. Japanese banks continued to be weighed down by bad loans.

Canada's economy maintained a moderate pace of expansion in the first quarter, but recent indicators suggest that growth of real GDP slowed in the second quarter. First-quarter growth was supported by continued strength in domestic demand, as Canada's strong labor and housing markets kept propelling the economy. However, exports declined in the first quarter, largely because of a drop in exports of industrial supplies and forestry products to the United States. More recently, employment declined slightly in April and May, and the unemployment rate moved up. The outbreak of the SARS virus in Toronto hurt Canadian travel and tourism, and weak U.S. demand slowed the Canadian manufacturing sector. In June, employment rebounded, but the gain was almost all in part-time work, and manufacturing employment continued to fall.

## Emerging-Market Economies

Economic growth in the Asian developing countries slowed in the first quarter, brought down by weakness in business investment and consumer spending. In South Korea, growth of real GDP turned negative in the first quarter after a rapid expansion in 2002.

U.S. dollar exchange rates and bond spreads for selected emerging markets




NOTE. The data are weekly averages. Last observations are the average of trading days through July 9, 2003. 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.

Tensions with North Korea contributed to a decline in consumer and business sentiment, but these indicators have stabilized in the past couple of months. The Hong Kong economy also contracted, following strong growth in the second half of last year. The SARS outbreak held down both personal consumption and tourism in the first quarter, and even more negative effects are likely to be seen in the second-quarter data. Although the Chinese economy has also been adversely affected by SARS, it has been sustained by strong export growth and investment. Chinese inflation has moved back into positive territory on a twelve-month basis, largely owing to higher prices for energy and food.

The Mexican economy contracted in the first quarter, and exports and business confidence have declined in recent months. Consumer price inflation has come down recently, a decline helped in part by the net appreciation of the Mexican peso since early March. Measures of inflation expectations suggest that market participants expect the central bank to come close to achieving its inflation target this year.

Brazilian economic growth stagnated in the first quarter largely as a result of the tightening of macroeconomic policies in response to the financial crisis that erupted in mid-2002. The growth slowdown largely reflected a continued weakening in domestic demand, but exports also deteriorated. Monthly inflation has come down since early this year, and Brazil's central bank recently lowered slightly its benchmark interest rate. The Lula administration's efforts to implement social security and tax reforms have bolstered investor confidence. Financial conditions in Brazil have improved markedly: Equity prices have risen more than 20 percent so far this year, the *real* has gained more than 20 percent against the U.S. dollar, and credit spreads on Brazilian government debt have narrowed more than 600 basis points.

The Argentine economy has started to turn around from the sharp contraction that occurred in the wake of the devaluation and default in late 2001, but the level of economic activity remains far below pre-crisis levels, and many of Argentina's structural problems have not been addressed. The Argentine peso appreciated more than 20 percent against the dollar during the first half of the year. In July, Argentina implemented controls on short-term capital inflows in an effort to stabilize the appreciating currency. □