
*Monetary Policy and
Economic Developments*

Monetary Policy and the Economic Outlook

The U.S. economy delivered a solid performance in 2005 despite a further sharp increase in energy prices and devastating hurricanes that claimed many lives, destroyed homes and businesses, and displaced more than 1 million persons. Real gross domestic product is estimated to have risen a little more than 3 percent over the four quarters of 2005 even though growth slowed significantly in the fourth quarter as a result of storm-related disruptions and other factors that are likely to prove transitory. The increase in real GDP in 2005 was sufficient to add 2 million new jobs, on net, to employers' payrolls and to further reduce slack in labor and product markets. As in 2004, overall consumer price inflation was boosted by the surge in energy prices. Core consumer price inflation (as measured by the price index for personal consumption expenditures excluding the direct effects of movements in food and energy prices) picked up early in the year, but it subsequently eased and totaled less than 2 percent over the year as a whole. The dollar appreciated against most major currencies in 2005, and, with domestic demand expanding strongly, the U.S. current account deficit widened further.

NOTE: The discussion here and in the next chapter consists of the text, tables, and selected charts from the Monetary Policy Report submitted to the Congress on February 15, 2006, pursuant to section 2B of the Federal Reserve Act; the complete set of charts is available on the Board's web site, at www.federalreserve.gov/boarddocs/hh.

Other materials in this annual report related to the conduct of monetary policy include the minutes of the 2005 meetings of the Federal Open Market Committee (see the "Records" section) and statistical tables 1–4 (at the back of this report).

In 2005, energy prices were up substantially for a second year in a row. Crude oil costs climbed further, on net, and prices of refined petroleum products and natural gas came under additional upward pressure for a time after supplies were curtailed by hurricane damage to production facilities in the Gulf Coast region. As a result, households in the United States faced steep increases in gasoline and home heating expenses, and many firms were likewise burdened with rising energy costs.

The resilience of the U.S. economy in the face of these major shocks likely reflects, in part, improvements in energy efficiency over the past several decades. A number of other factors also helped to keep economic activity moving forward in 2005. For one, the rapid gain in real estate values in the past few years, in combination with the rise in stock prices since 2002, has encouraged households to sustain their spending through a period of relatively weak growth in real income. For another, credit conditions remained supportive for businesses last year, facilitating a brisk expansion of capital spending. In addition, labor productivity has been on a strong uptrend in recent years, which has fostered substantial growth in the economy's productive capacity and no doubt lifted households' and businesses' assessments of their long-term income prospects.

In light of elevated inflation pressures and shrinking margins of unutilized resources, and with short-term interest rates relatively low, the Federal Open Market Committee (FOMC) continued to remove monetary policy accommodation gradually in 2005, raising the target

federal funds rate 25 basis points at each of its eight meetings. This cumulative policy firming of 2 percentage points was substantially greater than market participants had expected at the start of the year. But each action was anticipated by the time of the meeting at which it was taken, as the Committee's communications, policy strategy, and responses to incoming economic data appear to have been well understood. At its meeting in January 2006, the FOMC increased the target federal funds rate another 25 basis points, bringing it to 4½ percent. The Committee indicated that possible increases in resource utilization as well as elevated energy prices had the potential to add to inflation pressures and that, as a result, some further policy tightening may be needed.

The U.S. economy should continue to perform well in 2006 and 2007. To be sure, higher energy prices will probably exert some restraint on activity for a while longer. But so long as energy price increases slow, as is suggested by futures prices, this restraint should diminish as 2006 progresses. In addition, economic activity should receive some impetus from post-hurricane recovery efforts. Although progress to date has been uneven in the affected regions, the reopening of facilities shut down by the hurricanes is already being reflected in a rebound in industrial production. Federal assistance will buttress rebuilding activity in coming quarters.

More broadly, the major factors that contributed to the favorable performance of the U.S. economy in 2005 remain in place. Long-term interest rates are low, and conditions in corporate credit markets are generally positive. The household sector is also in good financial shape overall and should stay so even if—as expected—the housing sector cools. In addition, the improved outlook for economic growth abroad

bodes well for U.S. exports. However, the effects of the cumulative tightening in monetary policy should keep the growth in aggregate output close to that of its longer-run potential.

Core inflation is likely to remain under some upward pressure in the near term from rising costs as the pass-through of higher energy prices runs its course. But those cost pressures should wane as the year progresses. Moreover, strength in labor productivity should continue to damp business costs more generally. With little evidence to date that resource utilization has put appreciable upward pressure on prices, and with longer-run inflation expectations continuing to be well anchored, core inflation should remain contained in 2006 and 2007.

Nonetheless, significant risks attend this economic outlook. Some of the uncertainty is centered on the prospects for the housing sector. On the one hand, some observers believe that home values have moved above levels that can be supported by fundamentals and that some realignment is warranted. Such a realignment—if abrupt—could materially sap household wealth and confidence and, in turn, depress consumer spending. On the other hand, if home values continue to register outsized increases, the accompanying increment to household wealth would stimulate aggregate demand and raise resource utilization further. With the economy already operating in the neighborhood of its productive potential, this higher resource utilization would risk adding to inflation pressures. Another major source of uncertainty is the price of energy, which continues to be buffeted by concerns about future supply disruptions. Additional steep increases in the price of energy would intensify cost pressures and weigh on economic activity.

Monetary Policy, Financial Markets, and the Economy in 2005 and Early 2006

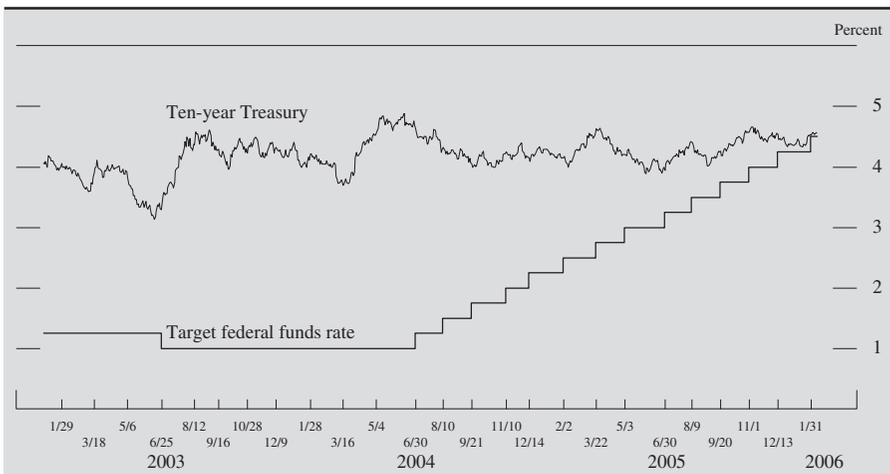
The year 2005 opened with the target federal funds rate at 2¼ percent, a level that Federal Reserve policymakers judged to be quite accommodative. During the first few months of the year, output appeared to be growing at a solid pace despite rising energy prices. Improving labor market conditions and favorable financing terms were providing considerable support to consumer outlays and homebuilding activity, while reasonably bright sales prospects and strong profitability were buoying business investment. Pressures on inflation appeared to be mounting, however, partly owing to increasing energy prices. Measures of inflation compensation derived from securities markets were on the rise as well. In these circumstances, the Committee firmed policy 25 basis points at both its February and March meetings and signaled that, if economic

conditions progressed as anticipated, it would need to continue to remove policy accommodation gradually to keep inflation pressures contained.

In the spring, policymakers perceived some signs of softness in spending, which they attributed in part to the earlier step-up in energy prices. Nonetheless, the federal funds rate was still relatively low, and robust underlying growth in productivity was providing ongoing support to economic activity. Accordingly, the Committee anticipated some strengthening of activity, and it reduced policy accommodation further in May by lifting the target federal funds rate another quarter percentage point, to 3 percent.

In the event, the signs of softness proved transitory. Incoming data suggested that output, employment, and spending were growing moderately through midyear. Inflation expectations seemed to be well contained, but pressures on inflation remained elevated. With the stance of policy still accommo-

Selected Interest Rates, 2003–06



NOTE: The data are daily and extend through February 8, 2006. The ten-year Treasury rate is the constant-maturity yield based on the most actively traded securities. The dates on the horizontal axis are those of FOMC meetings.

SOURCE: Department of the Treasury and the Federal Reserve.

datave, the Committee added another 25 basis points to the target federal funds rate at both its June and August meetings.

Subsequently, the devastation caused by Hurricane Katrina increased uncertainty about the vitality of the economic expansion in the near term. The destruction in the Gulf Coast region, the associated dislocation of economic activity—including considerable disruption of energy production—and the accompanying further boost to energy prices were expected to impose some restraint on spending, production, and employment in the near term. Although the region had been dealt a severe blow, the Committee did not see these developments as posing a more persistent threat to the overall economic expansion. Consequently, it decided to firm policy another 25 basis points at its September meeting.

Over the following weeks, the Gulf Coast region absorbed further setbacks from Hurricanes Rita and Wilma. The growth of economic activity dipped for a time—hiring slowed, consumer spending softened, and confidence declined. At the same time, however, soaring energy prices fed through to top-line consumer price inflation and pushed some survey measures of inflation expectations upward. With employment and growth expected to be supported by accommodative financial conditions, the FOMC continued the process of policy tightening at its November meeting.

By December, incoming data indicated that the overall expansion remained on track, although recovery from the damage in the hurricane-affected areas would apparently require considerable time. The Committee judged that possible increases in resource utilization as well as elevated energy prices had the potential to add to

inflation pressures. Accordingly, policy was firmed another 25 basis points, bringing the target federal funds rate to 4¼ percent. In the accompanying statement, monetary policy was no longer characterized as “accommodative” because the federal funds rate had been boosted substantially and was now within the broad range of values that, in the judgment of the Committee, might turn out to be consistent with output remaining close to its potential. Indeed, because policy actions over the previous eighteen months had significantly reduced the degree of monetary accommodation, Committee members thought that the outlook for their near-term policy actions was becoming considerably less certain. In such an environment, policy decisions would increasingly depend on incoming data and their implications for future economic growth and inflation. Nonetheless, the Committee indicated that some further measured policy firming was likely to be needed to keep the risks to the attainment of its goals of sustainable economic growth and price stability roughly in balance.

Over the period leading up to the January 2006 meeting, incoming data on economic activity were uneven. The advance estimate of real GDP pointed to a slowing in the growth of output in the fourth quarter, but the underlying strength in consumer and business spending suggested that the economic expansion remained on solid footing. With the potential for added pressures on inflation still evident, the FOMC raised the target federal funds rate another 25 basis points, bringing its level to 4½ percent. In its statement after the meeting, the Committee indicated that some further policy firming may be necessary and again noted that it would respond to changes in economic prospects as needed.

Economic Projections for 2006 and 2007

In conjunction with the FOMC meeting in January, the members of the Board of Governors and the Federal Reserve Bank presidents, all of whom participate in the deliberations of the FOMC, provided economic projections for 2006 and 2007. The central tendency of the FOMC participants' forecasts for the increase in real GDP is about 3½ per-

cent over the four quarters of 2006 and 3 percent to 3½ percent in 2007. The civilian unemployment rate is expected to lie between 4¾ percent and 5 percent in the fourth quarter of 2006 and to remain in that area in 2007. As for inflation, the FOMC participants expect that the price index for personal consumption expenditures excluding food and energy (core PCE) will rise about 2 percent in 2006 and between 1¾ percent and 2 percent in 2007. ■

Economic Projections of Federal Reserve Governors and Reserve Bank Presidents for 2006 and 2007

Percent

Indicator	MEMO: 2005 actual	2006		2007	
		Range	Central tendency	Range	Central tendency
<i>Change, fourth quarter to fourth quarter¹</i>					
Nominal GDP	6.2	5¼–6½	5½–6	5–6	5–5¾
Real GDP	3.1	3¼–4	About 3½	3–4	3–3½
PCE price index excluding food and energy	1.9	1¾–2½	About 2	1¾–2	1¾–2
<i>Average level, fourth quarter</i>					
Civilian unemployment rate	5.0	4½–5	4¾–5	4½–5	4¾–5

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

Economic and Financial Developments in 2005 and Early 2006

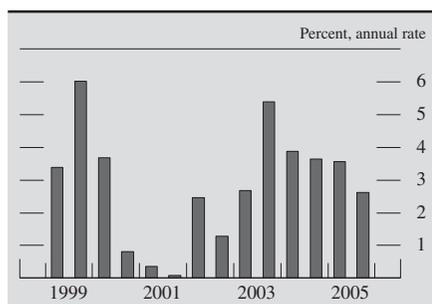
The economic expansion remained firmly entrenched in 2005, although the growth of real GDP late in the year was apparently restrained by the effects of the hurricanes and by sharp drops in some volatile categories of spending. In the labor market, payroll employment rose moderately for a second year in a row, and the unemployment rate declined further. As in 2004, headline inflation was boosted appreciably by soaring energy prices; however, core inflation remained subdued. In 2005, financial market conditions were once again supportive of growth, with long-term market interest rates low and credit spreads and risk premiums narrow.

The Household Sector

Consumer Spending

Consumer spending had gathered considerable steam in 2003 and 2004 and

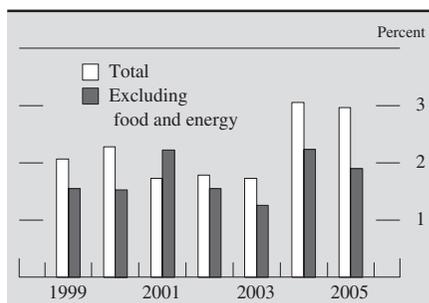
Change in Real GDP, 1999–2005



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.

SOURCE: Department of Commerce, Bureau of Economic Analysis.

Change in PCE Chain-Type Price Index, 1999–2005

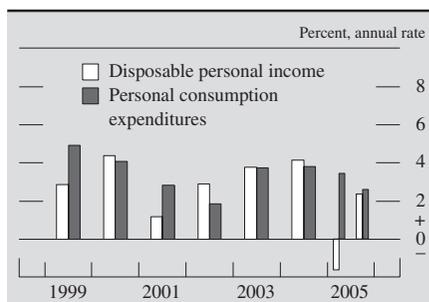


NOTE: The data are for personal consumption expenditures (PCE).

SOURCE: Department of Commerce, Bureau of Economic Analysis.

remained vigorous in 2005. Higher energy prices last year continued to siphon off household purchasing power, and short-term interest rates moved up; nevertheless, spending was again bolstered by an improving labor market and rising household wealth.

Change in Real Income and Consumption, 1999–2005



SOURCE: Department of Commerce, Bureau of Economic Analysis.

Real personal consumption expenditures (PCE) had posted back-to-back increases of 3¾ percent in 2003 and 2004 and continued to rise at about that pace over the first three quarters of 2005; in the fourth quarter, PCE growth slowed to an annual rate of just 1 percent as consumer outlays for motor vehicles slackened after a surge prompted by last summer's "employee discount" programs. For 2005 as a whole, sales of light vehicles (cars, vans, sport-utility vehicles, and pickup trucks) totaled nearly 17 million units, about the same as the annual figure for 2004. Real spending on consumer goods other than motor vehicles was robust in 2005, with substantial gains almost across the board; a notable exception was real spending on gasoline, which was up only modestly for a second year in a row as prices at the pump soared. Real expenditures on services rose moderately in 2005, as a sizable further increase in outlays for medical care was partly offset by a relatively small gain in outlays for energy services.

Excluding the estimated effects of the one-time special dividend payment that Microsoft made in December 2004, disposable personal income (DPI)—that is, personal income less personal current taxes—rose about 1½ percent in real terms in 2005, considerably less than in 2003 and 2004. Although aggregate wages and salaries advanced moderately last year and some other major types of nominal income posted notable gains, the increases in real terms were eroded by the rise in energy prices. In addition, personal tax payments rose faster last year than did personal income as measured in the national income and product accounts (NIPA). In the second half of the year, the growth of real DPI was volatile, mainly because of the hurricanes. Rental income and proprietors' income were pulled down in the third

quarter as a result of uninsured losses on residential and business property. Real DPI snapped back in the fourth quarter as income in these hurricane-affected categories rebounded from the exceptionally low levels in the third quarter.

Although the run-up in energy prices restrained the growth of real DPI in 2005, its effect on overall spending appears to have been largely offset by other factors. In particular, sharp increases in household wealth since 2002 have provided many households with the resources and inclination to sustain their spending through a period of relatively weak growth of real income. Household net worth, which typically feeds through to spending over several quarters, posted sizable gains in 2003 and 2004, and it rose further in 2005 as house values continued to climb and as stock prices moved modestly higher. At the end of the third quarter (the most recent period for which complete data on wealth are available), the ratio of household net worth to disposable income stood at 5.65, well above its long-run average level of 4.75. Meanwhile, surveys by the Michigan Survey Research Center (SRC) and the Conference Board suggest that, apart from the first few months after the hurricanes, consumer confidence was about at the favorable levels that had prevailed in 2004. All in all, personal outlays exceeded disposable income in 2005. As a result, the personal saving rate, which had dropped below 2 percent in 2004, fell further in 2005, ending the year at negative ½ percent.

Residential Investment

Activity in the housing sector remained torrid through much of 2005. By the end of the year, however, a few tentative signs of cooling had begun to appear. In the single-family sector, starts of new

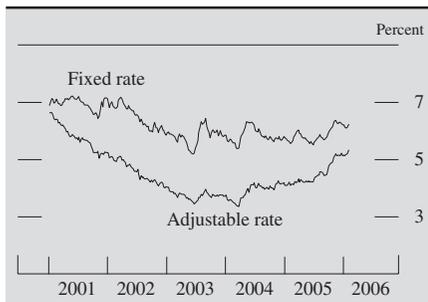
units dipped in December after a string of exceptionally strong months; still, they totaled 1.7 million for the year as a whole—6½ percent above the already rapid pace in 2004. Starts in the multi-family sector totaled 350,000 in 2005, a pace similar to that of the preceding three years. Real expenditures on residential structures—which include outlays not only for new construction but also for additions and alterations as well as commissions paid to real estate agents—rose nearly 8 percent in 2005, the fourth large yearly increase in a row.

Sales of both new and existing homes set records in 2005, although they, like housing starts, seem to have lost some steam late in the year. Rates on thirty-year fixed-rate mortgages were in the neighborhood of 5¾ percent for much of the year, but they rose in the autumn. Since October, they have averaged close to 6¼ percent, at the upper end of the narrow range that has prevailed since 2003 but still fairly low by historical standards. Rates on adjustable-rate mortgages have been trending up since early 2004. The softening of home sales in recent months has contributed to an updrift in the stock of unsold new and existing homes. As of December, the stock of unsold new homes was equal to

nearly five months of supply when measured at that month's sales pace. Between 1998 and 2004, the stock of unsold new homes had averaged about four months of supply.

Measures of house prices that attempt to control for shifts in the quality and composition of homes sold show that prices continued to rise rapidly through the third quarter of 2005, though partial data for the fourth quarter point to some slowing. Notably, the purchase-only version of the repeat-transactions price index for existing homes, which is published by the Office of Federal Housing Enterprise Oversight and tracks sales of the same houses over time, rose 11 percent over the year ending in the third quarter (the latest available data), once again outstripping the increases in household incomes and rents. The Census Bureau's constant-quality price index for new homes, which controls for changes in the composition of sales by geography, home size, and other readily observable characteristics, had also shown sizable increases through the third quarter, but it decelerated sharply in the fourth quarter and was up just 4¾ percent over 2005 as a whole; in 2004, this measure had risen 8½ percent.

Mortgage Rates, 2001–06



NOTE: The data, which are weekly and extend through February 8, 2006, are contract rates on thirty-year mortgages.

SOURCE: Federal Home Loan Mortgage Corporation.

Household Finance

Household debt expanded about 10½ percent at an annual rate over the first three quarters of last year, roughly the same brisk pace as had been registered in 2004. Home-mortgage debt continued to grow rapidly, as homeowners took advantage of the further sizable increases in house prices last year. The use of alternative mortgage products spread further in 2005, in part because rising home values generally made house purchases less affordable. Last May federal regulators issued guid-

ance promoting sound risk-management practices to financial institutions with home equity lending programs. Mortgage-related borrowing likely took the place of some funding with consumer credit, which expanded only modestly again last year. Overall, the expansion in household debt outpaced the growth in disposable personal income, and the financial obligations ratio moved up to a level close to the peak that it had reached earlier this decade. However, the relatively low readings on most measures of loan delinquencies last year indicate that most households were not struggling to meet their obligations.

A large number of households filed for bankruptcy in the weeks leading up to October 17, the date when a new bankruptcy law took effect. The law was designed in part to diminish the ability of households to discharge their debts through chapter 7 filings. After the new law became effective, filings fell sharply to a level significantly below the average of recent years, and they have since remained low. This suggests that, to avoid the new rules, some households accelerated filings they would have undertaken eventually even under the old law. The spike in bankruptcies appears to have induced a jump in charge-offs of consumer loans in the fourth quarter.

The Business Sector

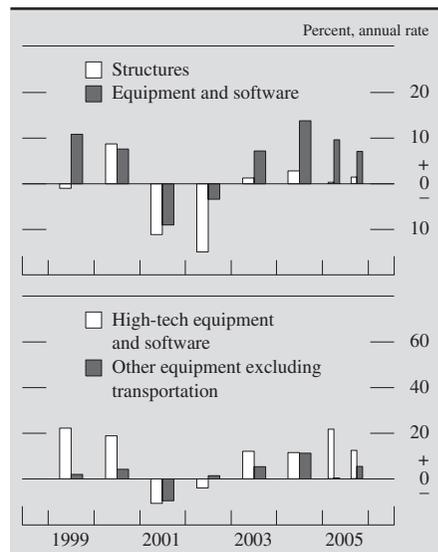
Fixed Investment

Real business fixed investment rose 6½ percent in 2005. Real spending on equipment and software (E&S) posted an increase of more than 8 percent after rising nearly 14 percent in 2004. The broadly based growth in E&S spending last year was supported by favorable fundamentals: appreciable growth in

final sales, ample financial resources in the corporate sector, and supportive conditions in financial markets.

Real investment in high-technology equipment rose 17 percent in 2005, as further declines in prices provided a substantial incentive for firms to step up their outlays on such items; the increase was 5 percentage points faster than in 2003 and 2004 and about in line with the average annual gain over the past twenty-five years. Spending on communications equipment was exceptionally strong last year, as telecom service providers rolled out major new fiber-optic systems and third-generation wireless gear. Business spending for computing equipment rose roughly 30 percent in real terms, a pace close to its historical average, while spending on software posted its largest increase in several years.

Change in Real Business Fixed Investment, 1999–2005



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

SOURCE: Department of Commerce, Bureau of Economic Analysis.

Although aircraft investment remained depressed as domestic airlines continued to grapple with overcapacity and soaring fuel prices, the other major categories of E&S spending outside the high-tech area did well in 2005. Business outlays on motor vehicles rose markedly, with the demand for heavy trucks especially strong. Investment in equipment other than high-tech and transportation goods—a broad category that accounts for nearly half of E&S spending when measured in nominal terms—barely rose in real terms over the first half of 2005. Investment in this category sped up after midyear, to increase moderately over the year as a whole.

Apart from the drilling and mining sector, where investment has strengthened in response to higher energy prices, outlays for nonresidential construction have yet to gain much traction. Spending on office and commercial structures has been essentially flat since 2003; construction of manufacturing facilities leveled out in 2005 after having firmed in late 2004; and investment in the power and communications sector moved down further last year. However, vacancy rates have continued to reverse some of the run-up that occurred between 2000 and 2003, and some industry reports suggest that an upturn in building activity is in train.

Inventory Investment

After having been exceptionally restrained earlier in the economic expansion, inventory investment picked up sharply in 2004, and the higher pace of accumulation extended into early 2005. The step-up in accumulation, which provided considerable impetus to industrial production for a time, brought stocks into better alignment with sales and set the stage for a subsequent downswing in

inventory investment. Inventories in the motor vehicle sector were drawn down in both the second and third quarters, though accumulation resumed in the fourth quarter after last summer's surge in sales cleared out dealers' lots. Apart from motor vehicles, real stockbuilding slowed sharply over the course of the year and, according to the advance NIPA estimate, came to a halt in the fourth quarter. At year-end, inventories seemed to be in reasonable alignment with sales, even taking into account the downward trend in inventory-sales ratios that has resulted from the ongoing improvement in supply-chain management.

Corporate Profits and Business Finance

With profits posting further solid gains in 2005 and ample liquid assets on corporate balance sheets, nonfinancial businesses were able to finance much of their capital expenditures out of internal funds, pay record sums to shareholders in the form of share buybacks, and still maintain strong balance sheets. Nonetheless, elevated merger and acquisition activity and the considerable rise in share buybacks boosted the pace of business borrowing. Short-term borrowing rose significantly, driven by financing from banks. The issuance of long-term debt remained moderate overall, but debt related to commercial mortgages continued to expand rapidly. Indicators of corporate credit quality generally remained favorable.

Corporate profits continued to grow strongly in 2005. The ratio of before-tax profits of domestic nonfinancial corporations to that sector's gross value added rose to more than 12 percent, near its 1997 peak. Gains in earnings were fairly widespread, with profits in the petroleum and gas industries especially strong. In the fourth quarter of 2005,

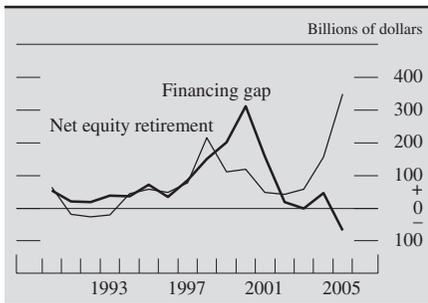
operating earnings per share for S&P 500 firms appear to have been nearly 14 percent above their level four quarters earlier.

Gross equity issuance remained modest in 2005, while net equity issuance sank into deeply negative territory as corporations retired shares at a rapid pace. Both a jump in cash-financed mergers and a record-setting level of share repurchases were spurred by the strong growth of profits as well as by the substantial liquidity that firms had built up in recent years.

Net corporate bond issuance was subdued in 2005, as modest growth in nominal capital expenditures, strong cash positions, and robust profits apparently limited the demand for such financing. However, commercial-mortgage debt grew rapidly last year. Gross issuance of commercial-mortgage-backed securities likely reached a record pace in the fourth quarter.

Short-term borrowing by businesses rose smartly in 2005, as business lend-

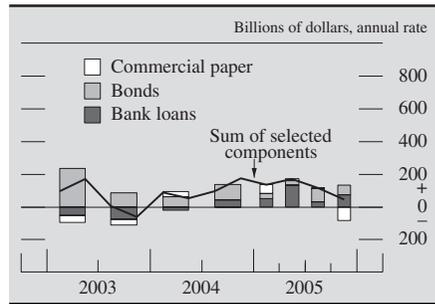
Financing Gap and Net Equity Retirement at Nonfinancial Corporations, 1990–2005



NOTE: The data are annual; the observations for 2005 are based on partially estimated data. 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.

SOURCE: Federal Reserve Board, flow of funds data.

Selected Components of Net Financing for Nonfinancial Corporate Businesses, 2003–05



NOTE: The data for the components excluding bonds are seasonally adjusted. The data for the sum of selected components are quarterly; 2005:Q4 is estimated.

SOURCE: Federal Reserve Board; Securities Data Company; and Federal Financial Institutions Examination Council, Consolidated Reports of Condition and Income (Call Report).

ing by both large and small commercial banks surged. Throughout the year, respondents to the Senior Loan Officer Opinion Surveys indicated that their institutions had further eased standards and terms for lending to businesses and that the demand for such loans had continued to strengthen. Most respondents attributed the stronger demand to borrowers' increased need to finance inventories, accounts receivable, and investment in plant and equipment; a substantial fraction of respondents to some surveys also pointed to a pickup in merger and acquisition activity. By contrast, outstanding commercial paper declined last year.

Readings on credit quality for nonfinancial companies generally remained favorable in 2005 despite some pockets of distress. The amount of corporate debt that was downgraded by Moody's Investors Service last year exceeded the amount that was upgraded, mainly as a result of the high-profile downgrades of the debt of General Motors and Ford. After trending down over the first three quarters of last year, the six-month trail-

ing bond default rate moved up in the fall, most notably because of the bankruptcies of Delta Air Lines, Northwest Airlines, Delphi, and Calpine. However, these bankruptcies were widely anticipated and had little effect on other measures of aggregate credit quality. The credit quality of commercial mortgage debt also appeared to remain robust during 2005; delinquency rates on commercial mortgages held by banks and on those pooled into securities trended down on balance over last year, while delinquencies on mortgages held by insurance companies remained low.

The Government Sector

Federal Government

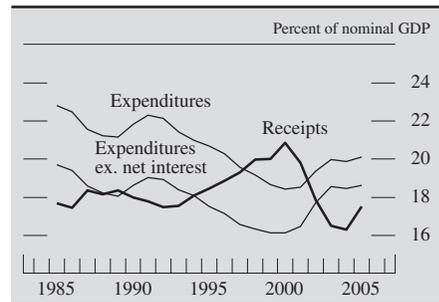
The deficit in the federal unified budget narrowed appreciably in fiscal year 2005. Although outlays continued to rise rapidly, receipts rose even faster; as a consequence, the deficit fell to \$318 billion, roughly \$100 billion less than the deficit in fiscal 2004. The latest projections from the Administration and the Congressional Budget Office, however, point to a deterioration in the unified budget position in fiscal 2006, in part because of the start of the Medicare drug benefit and the need to pay for post-hurricane reconstruction and relief.

Nominal federal spending rose nearly 8 percent in fiscal 2005 and stood at about 20 percent of GDP—virtually the same as in 2003 and 2004 but 1½ percentage points above the recent low in fiscal 2000. Defense spending rose 8½ percent after three years of double-digit increases; outlays for nondefense discretionary programs moved up further as well, in part because of higher spending for education and for disaster relief. (Spending on disaster relief in fiscal 2005, which ended on Septem-

ber 30, was primarily for needs that emerged before Hurricane Katrina.) As for the major health programs, Medicare outlays continued to climb. Medicare spending rose relatively slowly, mainly because it had been boosted during much of fiscal 2004 by the temporary increase in the federal share of the program’s costs included in the Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA). Net interest payments, which had declined steadily from 1998 to 2003 and had increased only moderately in 2004, were up significantly in fiscal 2005 as short-term interest rates rose. Thus far in fiscal 2006, outlays have continued to rise rapidly, in part because of heavy spending for flood insurance payouts and other hurricane-related disaster relief. According to the NIPA, real federal expenditures on consumption and gross investment, the part of government spending that is a component of real GDP, increased 1¼ percent over the four quarters of calendar year 2005.

Federal receipts rose 14½ percent in fiscal 2005; as a ratio to GDP, they stood at 17½ percent—more than 1 percentage point higher than in 2004. Cor-

Federal Receipts and Expenditures, 1985–2005



NOTE: The receipts and expenditures data are on a unified-budget basis and are for fiscal years (October through September); GDP is for the four quarters ending in Q3.

SOURCE: Office of Management and Budget.

porate payments rose nearly 50 percent, lifted by the robust profits of 2004 and 2005 and the termination of the partial-expensing tax incentive at the end of calendar 2004. Individual income taxes increased nearly 15 percent; non-withheld taxes rose especially rapidly because of both substantial strength in nonwage taxable incomes (including capital gains) and certain features of JGTRRA that altered the timing of tax payments in a way that temporarily reduced the level of collections in 2004. Social insurance taxes rose in line with wages and salaries.

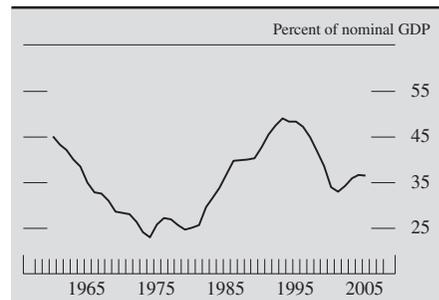
Mirroring the narrowing of the unified deficit, federal saving (essentially, the unified surplus or deficit adjusted to conform to the accounting practices followed in the NIPA) improved from negative 3½ percent of GDP in calendar 2004 to negative 2½ percent in the first half of 2005. However, the beneficial effect of the smaller deficit in terms of national saving was essentially offset by a sharp decline in personal saving. Measured net of estimated depreciation, national saving in the first half of 2005 was equal to just 1½ percent of GDP, about the same as in 2004 and well below the recent highs of more than 6 percent of GDP in the late 1990s. In the third quarter, net saving was dragged down by sizable hurricane-related reductions in both federal and nonfederal net saving; excluding these one-time factors, net saving in the third quarter would have been roughly the same as it was in the first half of the year. If not reversed over the longer haul, persistent low levels of saving will necessitate either slower capital formation or continued heavy borrowing from abroad, either of which would hamper the ability of the nation to cope with the retirement needs of the baby-boom generation and would retard the growth of the standard of living.

Federal Borrowing

Borrowing by the Treasury moderated somewhat in calendar year 2005—federal debt rose 7 percent last year after increasing 9 percent in 2004. Much of the improvement reflected the surge in tax receipts noted earlier. As a result, the amount of Treasury bills outstanding contracted on net in 2005, and Treasury sales of coupon securities declined. As was widely anticipated, the Treasury announced in August that it would resume regular semiannual issuance of a thirty-year nominal bond. The first such auction, held on February 9, 2006, was well received, with a high level of participation from indirect bidders. The Treasury expects issuance of the thirty-year bond to help stabilize the average maturity of outstanding marketable Treasury debt, which declined from a high of about seventy months at the end of 2000 to fifty-three months at the end of 2005.

Federal debt held by the public as a percentage of nominal GDP was steady during 2005 and stood at about 36 percent at the end of the third quarter. The federal debt ceiling did not need to be

Federal Government Debt Held by the Public, 1960–2005



NOTE: The final observation is for 2005:Q3. For previous years, the data for debt are as of year-end, and the corresponding values for GDP are for Q4 at an annual rate. Excludes securities held as investments of federal government accounts.

SOURCE: Federal Reserve Board, flow of funds data.

raised last year, but the Treasury has announced that it expects that the debt will reach its statutory ceiling in February 2006.

The appetite for Treasury securities among foreign investors remained strong in the aggregate in 2005. The proportion of outstanding Treasury securities held by foreign investors is estimated to have climbed to slightly more than 45 percent in the third quarter of 2005, a record. Data from the Treasury International Capital reporting system suggest that net purchases of Treasury securities by foreign private investors jumped last year, whereas such purchases by foreign official institutions slowed significantly amid upward pressure on the foreign exchange value of the dollar.

State and Local Governments

The fiscal positions of state and local governments continued to improve in 2005. Strong growth in income and retail sales boosted revenues, as did rising property values. And although the sector continued to grapple with higher medical costs and pressures to restore funding to programs that had been cut back earlier in the decade, states and localities generally kept a tight rein on current outlays. On a NIPA basis, net saving by state and local governments—which is broadly similar to the surplus in an operating budget—turned positive in the first half of 2005 after having been negative between 2002 and 2004, and it would have remained positive in the third quarter in the absence of the hurricanes. The sizable revenue gains reported by many states in fiscal 2005, which ended on June 30 in all but four states, appear to have extended into fiscal 2006. Even so, some governments are still struggling with strained fiscal

situations, and some face significant structural imbalances in their budgets that likely will be exacerbated in coming years by the need to provide pensions and health care to a growing number of retired employees. In addition, the jurisdictions in the Gulf Coast region confront the dual challenge of substantial post-hurricane demands and diminished flows of tax revenues.

According to the NIPA, real expenditures on consumption and gross investment by state and local governments rose 1¼ percent in 2005. Real outlays for current consumption were up only about 1 percent for a second year, in part because of the relatively slow pace of hiring. Real investment expenditures also registered a small gain.

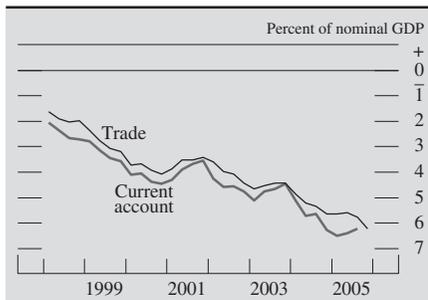
State and Local Government Borrowing

Borrowing by state and local governments picked up in 2005. Gross issuance of municipal securities was brisk, as the relatively low level of longer-term market interest rates spurred advance refundings of outstanding securities. The bulk of new capital issues last year reportedly was earmarked for education-related projects. Credit quality in the state and local sector generally remained favorable in 2005. Notable exceptions were the obligations of numerous municipal issuers in Michigan, which were downgraded last year largely as a consequence of the difficulties of GM and Ford. In addition, the obligations of a number of issuers in the regions that were hit by last year's hurricanes were downgraded in the fourth quarter, and some bonds from these areas remain on watch. Despite these isolated troubles, rating upgrades of municipal bonds slightly outpaced downgrades in 2005.

The External Sector

The U.S. current account deficit widened further in 2005. At an annual rate, it came in at just under \$800 billion, or about 6¼ percent of nominal GDP, in the first three quarters (the latest available data). As in the past, a substantial portion of the widening of the current account deficit came from a larger deficit on trade of goods and services, but a decrease in net investment income also worsened the external account. Net investment income edged into negative territory in the second quarter of 2005 for the first time in the post-World War II period. Unilateral transfer payments to foreigners dropped sharply on net in the third quarter because of a surge in receipts from foreign insurance companies for damage caused by the hurricanes, leading to a slight narrowing of the deficit from the previous quarter. The trade data through December showed that the U.S. trade deficit widened further in the fourth quarter of 2005, to about \$790 billion at an annual rate. This increase suggests that the fourth-quarter current account deficit, yet to be reported, will also widen substantially.

U.S. Trade and Current Account Balances, 1998–2005



NOTE: The data are quarterly. The current account data extend through 2005:Q3, and the trade data extend through 2005:Q4.

SOURCE: Department of Commerce.

International Trade

Real exports of goods and services continued the solid pace of expansion registered in both 2003 and 2004; they rose an estimated 5¾ percent in 2005, supported by robust foreign economic activity. Export growth was rapid in the first half of the year, spurred by the depreciation of the dollar in previous years; it then slowed in the second half of the year, in part owing to the dollar's appreciation since the beginning of 2005. For the year as a whole, exports of capital goods posted solid growth. Exports of aircraft performed especially well despite an interruption of their production in September because of a strike at Boeing. Exports of industrial supplies were hampered late in the year by the effects of the hurricanes on production and shipping in the Gulf Coast region. By destination, exports to Canada and Mexico grew rapidly in 2005, those to Western Europe also increased, but exports to Japan were relatively weak. Exports of services rose about 3 percent in 2005 in real terms.

Prices of exported goods increased at an annual rate of 2¾ percent in 2005, a bit below the rate of increase in 2004. Prices decelerated in the second and third quarters as the dollar strengthened and as pressures on prices of agricultural exports and other nonfuel commodities ebbed. Prices accelerated again in the fourth quarter, when a sharp rise in the prices of oil and metals drove up prices for many nonagricultural industrial supplies.

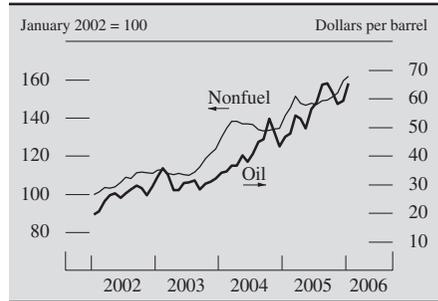
After expanding at a double-digit pace in 2004, real imports of goods and services decelerated to about 4½ percent in 2005, even as U.S. GDP growth remained robust. Although overall growth of non-oil imports was slower last year than in 2004, capital goods imports continued strong. The hurri-

canes affected several categories of imports. Despite a contraction of domestic oil consumption, real imports of oil expanded to offset reduced production in the Gulf Coast region. Chemicals imports also registered strong gains toward year-end amid hurricane-related losses in domestic production. Real imports of services moved up only 2¼ percent in 2005, a substantial cooling from their 2004 pace.

Prices of imported goods excluding oil and natural gas increased at an annual rate of 1½ percent in 2005, down from a rate of 2¾ percent in 2004. Prices decelerated in midyear as the dollar appreciated and nonfuel commodity prices steadied. However, import prices accelerated in the fourth quarter of 2005, led by higher prices for chemicals, metals, and building materials. In global commodity markets, prices of metals increased an average of 30 percent in 2005, a surge that reflected both robust global demand and limited increases in supply.

A key event in 2005 was the substantial increase in the price of crude oil. The spot price of West Texas intermediate (WTI) crude oil climbed from about \$43 per barrel at the start of 2005 to a peak of about \$70 per barrel in late August, at the time of Hurricane Katrina. The spot price then edged down as production revived in the Gulf of Mexico and as above-average temperatures in the United States reduced oil demand. After falling to below \$60 per barrel by late November, oil prices moved up to an average of about \$65 per barrel for January, in part on concerns about possible disruptions of foreign supply. However, oil prices have declined so far in February. Growing conviction among traders that oil-market conditions would remain tight in future years pushed the price of the far-dated NYMEX oil futures contract (currently

Prices of Oil and of Nonfuel Commodities, 2002–06



NOTE: The data are monthly and extend through January 2006. The oil price is the spot price of West Texas intermediate crude oil. The price of nonfuel commodities is an index of forty-five primary-commodity prices.

SOURCE: For oil, the Commodity Research Bureau; for nonfuel commodities, International Monetary Fund.

for delivery in 2012) from an average of \$38 per barrel for January 2005 to about \$61 per barrel for January 2006.

Although the rate of growth in world oil consumption slowed in 2005 from its torrid pace of 2004, spare production capacity among OPEC members remained limited, at an estimated level of only about 1 million barrels per day. With the perception that additional capacity would be slow to come on line, oil markets were highly sensitive to news about fluctuations in supply and demand. Market participants' concerns about crude oil supply were heightened by production difficulties in Iraq and by the resumption of nuclear activities in Iran, both posing risks to the stability of Middle East supply. Elsewhere, production problems in Nigeria stemming from social unrest and a marked slowdown in the growth of Russian production also kept upward pressure on oil prices throughout the year.

Domestic crude oil supply was severely hampered by last year's hurricanes, which were the most damaging in the history of the U.S. energy industry. At the peak of the disruption, all U.S.

crude oil production in the Gulf of Mexico (about 28 percent of total U.S. production) and 88 percent of U.S. natural gas production there (about 17 percent of total U.S. production) were shut in. At the end of January 2006, 25 percent of Gulf oil production remained shut in, and cumulative lost production in the Gulf stood at about 22 percent of the average annual output from that region. Refinery outages, which peaked after Hurricane Rita at more than one-fourth of total U.S. refining capacity, caused sharp increases in the prices of refined products. Retail gasoline prices in the United States jumped to more than \$3 per gallon in early September, briefly crimping gasoline demand and, in turn, demand for crude oil. Petroleum product prices returned to pre-hurricane levels within a few weeks as imports soared and refineries resumed operations, but they began to rise again in December and January.

The Financial Account

In 2005, foreign official financial inflows slowed from their extraordinary pace of 2004 but remained sizable. Most of these official inflows took the form of purchases of U.S. long-term government and private securities for reserve accumulation, primarily by Asian central banks. The slowdown in foreign official inflows last year was more than offset, however, by an increase in foreign private purchases of U.S. securities. Most of this pickup was concentrated in bonds, as in 2004, but foreign private purchases of U.S. equities also increased somewhat. Foreign direct investment flows into the United States continued to be strong in 2005, with the average pace during the first three quarters a bit higher than in 2004.

U.S. residents' net purchases of foreign securities remained brisk last year,

near the levels recorded in 2003 and 2004, with smaller purchases of foreign bonds offset by larger purchases of foreign equities. By contrast, U.S. direct investment flows abroad slowed markedly during the first half of 2005 and turned negative in the third quarter. This unusual pattern reflected responses to the partial tax holiday provided in the 2004 Homeland Investment Act, which allowed firms to repatriate at a preferential tax rate previous years' earnings that had been reinvested in their foreign affiliates.

The Labor Market

Employment and Unemployment

Conditions in the labor market continued to improve, on balance, in 2005, although many individuals lost jobs in the aftermath of the hurricanes. Nonfarm payroll employment rose 175,000 per month, on average, through August, the same as the average monthly increase in 2004. Net hiring then slowed sharply in September and October, as job losses in the Gulf Coast region largely offset moderate increases in payrolls elsewhere in the nation. In November and December, monthly job growth

Net Change in Payroll Employment, 2000-06



NOTE: Nonfarm business sector.
SOURCE: Department of Labor, Bureau of Labor Statistics.

was uneven, but it averaged 250,000, and hiring remained brisk in January. The reemployment of many of those who lost jobs because of the hurricanes appears to have provided a modest lift to overall hiring in recent months. However, others affected by the storms apparently have not found new jobs yet, and the unemployment rate among evacuees seems to have remained quite high.

Employment gains were widespread by industry in 2005. As in 2004, hiring was especially strong at firms supplying professional and business services and in health care. The construction industry also continued to exhibit a good deal of vigor, spurred by the booming housing sector. Employment in retail trade and in food services rose fairly briskly in the first half of the year, but it was held down in the second half by job losses in the Gulf Coast region. In the manufacturing sector, employment was essentially flat for a second year after three years of steep declines. In the government sector, state and local payrolls continued to rise modestly, while civilian employment in the federal government was about unchanged.

After hovering around 5½ percent during the second half of 2004, the unemployment rate fell, on net, over the first three months of 2005. During the remainder of the year, it fluctuated in a narrow range around 5 percent. In January 2006, it decreased to 4.7 percent. The labor force participation rate, which had dropped noticeably between 2000 and 2004, edged up, on net, in 2005. The participation rate in January 2006 was 66 percent, well below the high of 67¼ percent reached in early 2000 but not far from its trend, which has been declining in recent years as a consequence of demographic forces.

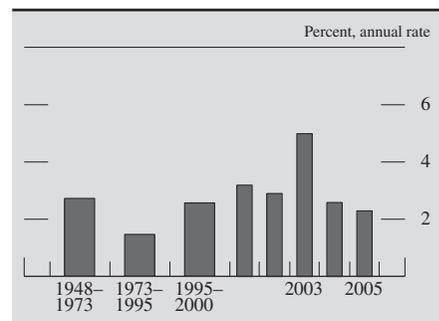
Other indicators also pointed to a gradual improvement in labor market

conditions over the course of 2005. Initial claims for unemployment insurance drifted lower, and the job openings rate moved up. At year-end, the Conference Board reported that a larger proportion of respondents to its monthly survey thought that jobs were plentiful than thought that jobs were hard to get.

Productivity and Labor Costs

Labor productivity in the nonfarm business sector continued to advance in 2005. Last year's increase in output per hour of 2¼ percent was noticeably below the average annual gain over the preceding four years. But taking the longer view, growth in labor productivity over the past five years has averaged 3¼ percent per year, nearly ¾ percentage point faster than the already impressive gains posted between 1995 and 2000. Productivity appears to have received considerable impetus in recent years from a number of factors, including the rapid pace of technological change and the growing ability of firms to use information and other technology to improve the efficiency of their operations. Increases in the amount of capital per worker, especially high-tech capital, have also helped to spur productivity

Change in Output per Hour, 1948–2005



NOTE: Nonfarm business sector.

SOURCE: Department of Labor, Bureau of Labor Statistics.

growth over the past few years, although apparently by less than was the case during the capital spending boom in the late 1990s.

Increases in hourly labor compensation were moderate in 2005 even though overall consumer prices rose relatively rapidly for a second year and the downward pressure on wages from labor market slack diminished. As measured by the employment cost index (ECI) for private nonfarm businesses, hourly compensation increased 3 percent last year, $\frac{3}{4}$ percentage point less than in 2004. The wages and salaries component of the ECI rose just $2\frac{1}{2}$ percent, the same as in 2004, while the cost of providing benefits rose 4 percent after two years of increases in the area of $6\frac{1}{2}$ percent to 7 percent. Much of the deceleration in benefits costs was in employers' contributions to retirement plans, which had increased markedly in 2003 and 2004 as firms ratcheted up their contributions to defined-benefit plans to cover earlier declines in the market value of the plans' assets. Health insurance costs rose $6\frac{1}{2}$ percent in 2005, the smallest increase since the late 1990s.

According to preliminary data, compensation per hour in the nonfarm business (NFB) sector—an alternative measure of compensation developments derived from the data in the NIPA—rose $3\frac{1}{4}$ percent in 2005, about the same rise as in the ECI. In 2004, NFB compensation had risen nearly 6 percent; a fourth-quarter surge in the value of stock option exercises, which are excluded from the ECI, likely contributed to that increase. The preliminary estimate for NFB compensation in 2005 reflects the apparent reversal of some of the late-2004 upswing in compensation, though it is subject to revision when more-detailed information becomes available later this year. In any event, the deceleration in hourly compensation last year

held the increase in unit labor costs to 1 percent. Unit labor costs had risen more than 3 percent in 2004 after having been close to flat over the preceding three years.

Prices

Headline inflation continued to be boosted by soaring energy prices in 2005, while core inflation—which excludes the direct effects of movements in food and energy prices—remained subdued. The PCE chain-type price index rose 3 percent for the second year in a row. The increase in core PCE prices, which in 2004 had ticked up to $2\frac{1}{4}$ percent, remained high in early 2005 by recent standards. Core PCE inflation subsequently subsided and came in a shade below 2 percent for the year as a whole. The market-based component of the core PCE price index—which excludes prices that must be imputed because they cannot be observed in market transactions and that often move erratically—rose $1\frac{3}{4}$ percent in 2005, unchanged from its pace in 2004.

Alternative Measures of Price Change, 2003–05

Percent

Price measure	2003	2004	2005
<i>Chain-type</i>			
Gross domestic product (GDP) ...	2.0	2.9	3.0
Gross domestic purchases	2.0	3.4	3.4
Personal consumption			
expenditures (PCE)	1.7	3.1	3.0
Excluding food and energy ...	1.3	2.2	1.9
Market-based PCE excluding			
food and energy	1.0	1.7	1.7
<i>Fixed-weight</i>			
Consumer price index	1.9	3.4	3.7
Excluding food and energy ...	1.2	2.1	2.1

NOTE: Changes are based on quarterly averages of seasonally adjusted data.

SOURCE: For chain-type measures, Department of Commerce, Bureau of Economic Analysis; for fixed-weight measures, Department of Labor, Bureau of Labor Statistics.

A similar pattern is evident in the core consumer price index, which rose about 2 percent in both 2004 and 2005, and in broad NIPA price measures such as the price index for GDP, which was up about 3 percent in both years.

The PCE price index for energy rose roughly 20 percent in 2005 for the second year in a row. The nearly 25 percent increase in gasoline prices in 2005 largely reflected the effects of the continuing surge in crude oil prices on retail energy prices. Gasoline prices recorded some dramatic spikes—notably in the spring and after the hurricanes—when disruptions at refineries depleted inventories and pushed up the margin of the retail price over the already-elevated cost of the associated crude oil. After peaking at more than \$3 per gallon in early September, gasoline prices fell sharply over the balance of 2005 as demand moderated, refinery capacity in the Gulf Coast region came back on line, and imports surged. In January 2006, gasoline prices turned up in response to higher crude oil costs, and they are now running about 50 cents per gallon higher than they were in January 2005.

Consumer prices for natural gas rose more than 35 percent in 2005, with most of the increase coming in the second half of the year. Prices started to move up around midyear and then skyrocketed in September and October after Hurricanes Katrina and Rita curtailed production in the Gulf of Mexico. Most of the shut-in production was restored by late 2005, and inventories remained ample for a normal heating season, but spot natural gas prices held at elevated levels through mid-December. They have since plummeted in response to unseasonably warm weather in much of the nation but are still far above their levels of a year ago. Reflecting higher input costs, PCE electricity prices rose

10 percent in 2005 after a much smaller rise in 2004.

Consumer food prices rose about 2 percent in 2005 after slightly larger increases in 2003 and 2004. Food prices received some upward pressure late in the year. Crop damage from Hurricane Wilma temporarily pushed up the prices of some fruits and vegetables, and beef prices were boosted by the resumption of some exports to Pacific Rim countries after the lifting in early December of an extended ban (which was subsequently reinstated in January 2006). But, in general, the higher production of several livestock products and a bumper harvest of grains helped to limit increases in retail food prices to about the rate of core inflation.

The broad contours of core inflation in 2005 were about the same as those in 2004. Prices of core goods, which had declined in 2002 and 2003, were about flat for a second year. Prices of core services decelerated a bit—from about 3 percent in 2004 to $2\frac{3}{4}$ percent in 2005. The deceleration was concentrated in some nonmarket categories—in particular, prices of financial services provided by banks without explicit charge, foreign travel by U.S. residents, and life and motor vehicle insurance—that had posted large increases in 2004. With the notable exception of airfares, which picked up in 2005 after having fallen in 2004, prices in other market-based categories of services rose about as fast as they had in 2004.

The run-up in energy prices in 2005 boosted the cost of producing other goods and services—especially for energy-intensive items, including chemicals, plastics, and nitrogenous fertilizers. In addition, prices of other commodities such as lumber and a variety of metals, which had soared in 2004 in response to the strengthening of economic activity worldwide, moved up

further in early 2005. Many of those prices slackened in the spring and summer as industrial production softened, but they turned up again in the fall. All told, however, the higher input costs left only a small mark on the prices of core goods and services. A major reason is that the robust upward trend in labor productivity helped to hold labor costs in check and gave firms scope to absorb cost increases.

Near-term inflation expectations have come under some upward pressure over the past year, but recent readings have been close to those at the beginning of 2005. Apart from an energy-related spurt to 4½ percent in early autumn, the Michigan SRC measure of households' median expectation for inflation over the next twelve months has been in the neighborhood of 3 percent to 3¼ percent since March 2005 after hovering in the area of 2¾ percent to 3 percent in late 2004 and early 2005. In January 2006, it stood at 3 percent. The Michigan SRC measure of the median expectation for inflation over the next five to ten years was also running a bit above 3 percent in late 2005, but it dipped to 2.9 percent in January of this year, a reading similar to those in 2004 and in the first eight months of 2005. Other indicators likewise suggest that longer-run inflation expectations have remained well contained. According to the Survey of Professional Forecasters, conducted by the Federal Reserve Bank of Philadelphia, expectations of inflation over the next ten years remained at 2½ percent in 2005, as they have since 1998. In addition, inflation compensation, as measured by the spread of yields on nominal Treasury securities over their inflation-protected counterparts, fell a bit, on balance, in 2005.

U.S. Financial Markets

U.S. financial markets withstood some strains in 2005, most notably a large cumulative upward revision to the expected path of monetary policy, sharp increases in energy prices, troubles in the auto and airline sectors, and three major hurricanes. Longer-term market interest rates remained low, corporate risk spreads stayed relatively narrow by historical standards, and equity prices advanced modestly. Banks continued to ease standards and terms on loans to businesses, and bank lending to businesses surged. Overall, debt growth in the business sector picked up, and the expansion of household debt remained quite brisk, but federal borrowing dropped back. The M2 monetary aggregate grew moderately.

Interest Rates

The FOMC lifted the target federal funds rate a total of 2 percentage points in 2005, nearly 1 percentage point more than market participants had anticipated at the start of the year. Over the first half of 2005, short- and intermediate-term interest rates rose in line with the gradual firming in the stance of monetary policy, but longer-term interest rates moved lower on balance. For a time early in the year, rising oil prices and incoming data showing higher-than-expected inflation appeared to lift policy expectations as well as interest rates at intermediate- and longer-term horizons. The minutes of the December 2004 FOMC meeting, released on January 4, 2005, and the FOMC's conditioning of its risk assessment on "appropriate monetary policy action" after its March 2005 meeting were read as indicating more concern among Committee mem-

bers about inflation pressures than investors had anticipated. The ten-year Treasury yield moved up after Chairman Greenspan's semiannual congressional testimony in February 2005, as investors reportedly focused on his remark that the low level of long-term interest rates at that time was a "conundrum." However, the subsequent release of weaker-than-expected data on consumer spending, consumer sentiment, and output led investors to mark down again their anticipated path for monetary policy and caused intermediate-term Treasury yields to retreat somewhat on balance during the second quarter, while the ten-year Treasury yield declined sharply.

On balance over the second half of the year, investors became more confident that the economic expansion had substantial momentum, and the expected path of policy and nominal Treasury yields moved considerably higher. Economic data that came in over the summer months suggested more strength in spending and output than investors had been anticipating. However, in response to the devastation caused by Hurricane Katrina in August and the subsequent

landfall of two additional major storms, investors marked down sharply their expectations for the path of monetary policy, predominantly at longer horizons, and nominal Treasury yields dipped. Those declines in yields proved temporary, though, as incoming data in the weeks after the hurricanes indicated that output had been expanding briskly before the storms hit and that the resulting disruptions to economic activity would probably be less severe than investors had initially feared. In addition, a drop in some energy prices might have contributed to an upgrading of the economic outlook. Over the remaining three months of the year, data on spending and production generally appeared robust, and investors raised their expectations for the path of monetary policy a bit more.

On net in 2005, the yield on the two-year nominal Treasury note rose about 135 basis points, whereas the yield on the ten-year Treasury note increased only about 15 basis points. As a result, longer-horizon forward rates extended their decline that had begun around the middle of 2004, the onset of the current tightening cycle. Although the reasons for this large cumulative drop are not entirely clear, this general pattern was also evident last year in other major industrialized economies, where longer-term interest rates mainly declined. One possibility is that higher energy prices might have led investors to trim their assessment of the cumulative amount of monetary policy restraint required over the longer run that would be consistent with sustainable economic growth. Investors also appeared to become less uncertain about the outlook and so might have become more willing to accept smaller risk premiums on long-term securities. Another possible expla-

Interest Rates on Selected Treasury Securities, 2003–06



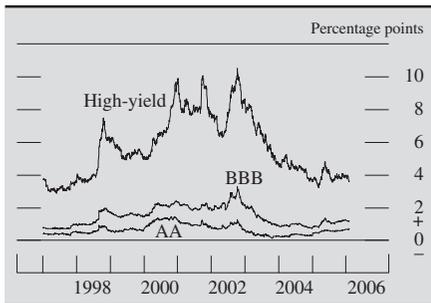
NOTE: The data are daily and extend through February 8, 2006.

SOURCE: Department of the Treasury.

nation is that long-term inflation expectations have fallen and have become more firmly anchored. As measured by the spread between yields on nominal Treasury securities and their inflation-protected counterparts, inflation compensation fell a bit more than 30 basis points at the ten-year horizon over 2005. Finally, it is possible that an excess of global saving over planned investment has lowered real longer-term interest rates.

In the corporate bond market, risk spreads widened modestly in 2005, but the generally healthy state of corporate balance sheets and the robust growth of profits kept spreads low by historical standards. Spreads in the auto sector were an exception, however, as the troubles that emerged in the spring at GM and Ford and the bankruptcy of Delphi last fall boosted spreads sharply in this sector. The bankruptcies of two major airlines and the revelation of apparent accounting fraud at Refco, a large derivatives broker, did not appear to have a material effect on broad corporate risk spreads.

Spreads of Corporate Bond Yields over Comparable Off-the-Run Treasury Yields, 1997–2006



NOTE: The data are daily and extend through February 8, 2006. The high-yield index is compared with the five-year Treasury yield, and the BBB and AA indexes are compared with the ten-year Treasury yield.

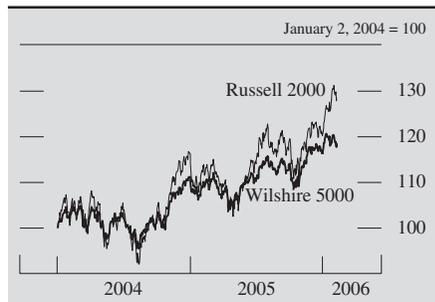
SOURCE: Merrill Lynch AA and BBB indexes and Merrill Lynch Master II high-yield index.

To date in 2006, amid uneven incoming economic data, investors' expectations for the path of the target federal funds rate have edged up, as have intermediate- and longer-term nominal Treasury rates. However, spreads on investment-grade corporate securities have changed little, whereas those on speculative-grade issues have declined somewhat.

Equity Markets

Share values, as measured by the Wilshire 5000 index, rose about 4½ percent in 2005. Higher energy prices and expectations for tighter monetary policy damped equity prices at times during the year, but these downward pressures were offset by continued strong corporate earnings growth and largely upbeat news on the economy. The response of stock prices to the hurricanes was generally muted—low longer-term interest rates and the prospect of additional fiscal stimulus apparently offset concerns that yet-higher energy prices might trim economic growth. On net last year, energy-related stocks registered substantial gains in response to the rise in the price of oil. To date in 2006, major equity indexes have risen modestly amid

Stock Price Indexes, 2004–06



NOTE: The data are daily and extend through February 8, 2006.

SOURCE: Frank Russell Company; Dow Jones Indexes.

largely positive news about fourth-quarter earnings.

Volatilities of equity prices implied by prices on options contracts on both the S&P 500 and Nasdaq 100 indexes remained low over most of 2005, apparently owing to perceptions of only modest near-term macroeconomic risk. However, the spread between the twelve-month forward earnings–price ratio for S&P 500 firms and an estimate of the real long-term Treasury yield—a measure of the long-term equity risk premium—widened a bit last year and is now in the upper part of its range of the past two decades. Arithmetically, the widening in this spread can be attributed to a decline in the measure of the real long-term Treasury yield; the measure of the earnings yield on the S&P 500 changed little on balance last year.

Debt and Financial Intermediation

The total debt of the domestic nonfinancial sectors expanded an estimated 9 percent in 2005, about the same pace as in 2004. However, the composition of debt growth differed somewhat from the previous year: Borrowing by nonfinancial businesses picked up in 2005 while federal borrowing dropped back. The growth of debt of the household sector remained brisk, driven by the rapid expansion of mortgages.

Commercial bank credit expanded 10½ percent in 2005, a bit faster than the brisk pace registered in 2004. Growth of commercial and industrial loans jumped to 13½ percent, the fastest pace in more than two decades. As noted, senior loan officers reported in quarterly surveys that they had eased terms and standards on such loans last year. They attributed the easing to an improved economic outlook and more-aggressive competition from other banks and nonbank lenders. They also reported

that loan demand had strengthened. Real estate lending by banks was brisk again last year, though it cooled somewhat in the fourth quarter in the wake of the backup in longer-term interest rates. Consumer loans on banks' books expanded rapidly during the first quarter of 2005 but then less so over the balance of the year, in part because some households substituted lower-cost mortgage credit for consumer loans.

Measures of bank profitability in 2005 fell back a bit from the very high levels posted in 2003 and 2004 but remained robust by historical standards. Profitability was restrained by vigorous competition and downward pressure on net interest margins from increases in market interest rates, but it was supported by excellent asset quality and reductions in noninterest expenses relative to assets. Banks' provisioning for loan losses over the first three quarters of last year was lower, on average, than in 2004, even with the increase in provisioning in the third quarter owing to the prospective surge in personal bankruptcies and to the hurricanes.

Mortgage market assets held by government-sponsored enterprises declined in 2005, as Fannie Mae reduced its mortgage portfolio about 20 percent and the rate of portfolio increase by Freddie Mac was somewhat below the rate of growth of residential mortgage debt in general. The reduction at Fannie Mae occurred partly in response to regulatory concerns about the adequacy of its capitalization. These concerns increased substantially after the company revealed in late 2004 that it had improperly accounted for certain derivative transactions. Fannie Mae's share price dropped about 30 percent last year, and Freddie Mac's declined about 10 percent. Yield spreads on both firms' debt over comparable-maturity Treasury securities were little changed on net.

The M2 Monetary Aggregate

M2 rose 4 percent in 2005, a pace significantly slower than the growth in nominal income and the lowest annual rate of expansion in about a decade.¹ As is typical in a period of rising rates, the opportunity cost of holding M2 assets increased significantly over the course of the year, as changes in rates on liquid deposits lagged those in market yields. Consequently, growth in liquid deposits almost came to a halt following double-digit expansion during the previous several years. Some offset was provided by a rapid increase in small time deposits, rates on which remained better aligned with short-term market rates. After having contracted sharply in the past couple of years, shares of retail money market mutual funds were about flat, on net, as the return on such balances improved in line with short-term interest rates. Hurricane relief efforts likely added a little to the growth of M2 last year: Funds provided by the federal government to displaced households and funds advanced by insurance companies probably buoyed M2 over the last four months of 2005, as did a rise in the use of currency in the affected areas.

International Developments

Foreign economic activity remained strong in 2005, as the global economy displayed resilience in the face of sizable increases in energy prices. Manufacturing and trade expanded in most industrial and emerging economies. As in 2004, global economic growth in

2005 was driven importantly by strong demand from the United States and China, but domestic demand picked up in a number of other countries as well. The run-up in prices of crude oil and other commodities over 2005 appeared to have had only a modest effect on measures of inflation in most countries.

Cumulative changes in monetary policy in foreign industrial economies during 2005 varied in direction and, in contrast to the United States, were mostly small. The European Central Bank, which had maintained its main policy interest rate at 2 percent since the middle of 2003, tightened 25 basis points late in 2005, citing a need to keep inflation expectations in check. The Bank of England, after tightening 100 basis points in 2004, lowered its policy rate 25 basis points in August 2005, as the U.K. housing market had cooled and as the growth of household spending and business investment had slowed. The Bank of Canada raised its target for the overnight rate a total of 100 basis points in the latter part of 2005 and the beginning of 2006, stating that the Canadian economy was operating again at full capacity. The Bank of Japan did not depart in 2005 from its policy of quantitative easing, as it continued to provide large amounts of bank reserves to keep short-term interest rates near zero. However, in the second half of the year, amid growing evidence that an end to consumer price deflation might be near, Bank of Japan officials began to discuss publicly the possibility of ending the policy in 2006.

Ten-year sovereign yields in the euro area and Canada have declined 15 to 20 basis points on net since the beginning of 2005, and ten-year U.K. sovereign yields have dropped 35 basis points. Over the same period, Japanese ten-year sovereign yields have risen about 15 basis points, somewhat less

1. The Board announced in November that in March 2006 it would cease compilation and publication of data on the M3 monetary aggregate; publication of M3 was judged to be no longer generating sufficient benefit in the analysis of the economy or of the financial sector to justify the costs of publication.

than U.S. Treasury yields of the same maturity. Despite higher energy prices, long-term inflation expectations appear to have remained well contained abroad. In Europe, Canada, and Japan, the differences between ten-year nominal and inflation-indexed bond yields currently are little changed from their levels at the start of 2005.

Our broadest measure of the nominal trade-weighted exchange value of the dollar has risen 2½ percent on net since the beginning of 2005. The dollar likely was supported by the FOMC's significant cumulative policy tightening, only part of which had been anticipated by market participants at the start of 2005. The dollar's overall appreciation was driven by its sharp gains against the currencies of several major industrial countries; the dollar depreciated on average against the currencies of the United States' other important trading partners. Since the start of 2005, the dollar has appreciated about 15 percent versus the euro and the Japanese yen, and 10 percent against the British pound. A notable exception to this pattern is the Canadian dollar, against which the U.S. dollar has depreciated

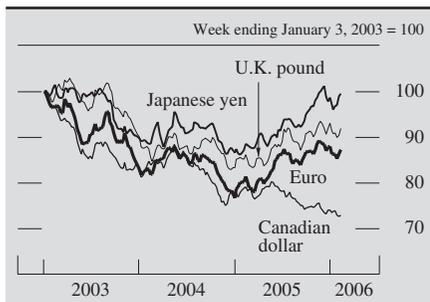
4 percent since early 2005. With respect to currencies of other important trading partners, the dollar has depreciated 6 percent against the Mexican peso, 17 percent versus the Brazilian *real*, and 7 percent against the Korean won.

Equity prices have risen substantially in most foreign industrial and emerging-market countries since early 2005; these prices have been supported by the continued global economic expansion and by interest rates that, in most countries, have remained well below historical averages. Rising commodity prices have buoyed share prices of firms in the energy and mining sectors, and share prices in the technology sector have also increased sharply. Since the beginning of 2005, headline equity indexes, measured in local currencies, have risen about 20 percent on net in the United Kingdom, 30 percent in the euro area, and 45 percent in Japan. In the United States, by contrast, equity prices have increased only modestly over the same period.

Industrial Economies

After expanding at an annual rate of 5¼ percent in the first half of 2005, Japanese real GDP growth declined to 1 percent in the third quarter, largely because of slower inventory accumulation. Throughout the year, the most important source of support to economic growth was domestic demand, which was lifted by improvements in corporate profitability and labor market conditions. The unemployment rate declined sharply during 2005, ending the year at just under 4½ percent. The rate of deflation in core consumer prices subsided considerably in 2005; in fact, from December 2004 to December 2005, core prices posted a 0.1 percent increase. However, the GDP deflator continued to fall at a slow rate.

U.S. Dollar Exchange Rate against Selected Major Currencies, 2003–06



NOTE: The data are weekly and are in foreign currency units per dollar. The last observation for each series is the average of February 6 through February 8, 2006.

SOURCE: Bloomberg L.P.

Economic growth in the euro area remained weak in the first half of 2005, at around a 1½ percent annual rate. Growth picked up to 2½ percent in the third quarter, spurred by stronger exports, especially by Germany. However, weakness in household spending persisted. The area-wide unemployment rate fell slightly over the year, to 8¼ percent near year-end, although employment only edged up. For the sixth straight year, euro-area inflation remained just above the ECB's medium-term goal of less than (but close to) 2 percent.

The rate of growth of real GDP in the United Kingdom slowed from 3¼ percent in 2004 to 1¾ percent in 2005. The slowdown was marked by a substantial deceleration of both private and government consumption. Labor markets remained tight, however; the unemployment rate of 2.9 percent in December was up only slightly from the twenty-year low of 2.6 percent recorded in January 2005. Consumer price inflation over the twelve months ending in December 2005 was 2 percent, in line with the central bank's official target. In contrast to the substantial run-up in real estate prices of 2004, housing price increases in 2005 were small.

Canadian economic growth was solid again in 2005. Recovering from a slow first quarter that featured a sharp but temporary pullback in exports, real GDP growth rebounded to around 3½ percent in the second and third quarters. For a second straight year, strong domestic demand underpinned growth, but net exports also made a positive contribution to growth late in the year. Employment made gains, although not as large as in the previous three years, and the unemployment rate touched a thirty-year low of 6.4 percent at year's end. After spiking in the third quarter on rising gasoline prices, consumer price

inflation settled back toward 2 percent, the midpoint of the Bank of Canada's inflation target range.

Emerging-Market Economies

Growth of real GDP in China remained vigorous in 2005, supported again by robust domestic demand and exports. Both personal consumption and investment expenditures continued to grow rapidly during the year. Export growth also remained strong through most of the year, while import growth slowed. As a result, the Chinese trade surplus more than tripled and exceeded \$100 billion. Consumer price inflation in 2005 was low in comparison with the previous year, when higher food prices had caused inflation to surge; the twelve-month change in consumer prices finished the year at just over 1½ percent.

On July 21, China revalued the renminbi 2.1 percent versus the dollar and announced that henceforth it would manage the value of its currency with reference to a basket of foreign currencies. Since the July revaluation, the exchange value of the renminbi versus the dollar has risen about ½ percent. Chinese authorities also have implemented some reforms of the financial system that are intended to facilitate further exchange rate flexibility, including the introduction of an over-the-counter trading system in the domestic foreign exchange market. China's foreign exchange reserves increased more than \$200 billion in 2005; the pace of reserve accumulation did not change appreciably after the revaluation of the renminbi in July.

In other emerging-market nations in Asia, economic activity also picked up substantially in 2005, driven by the growth of domestic demand and exports. Despite the global rise of energy costs,

consumer price inflation generally remained contained. Equity indexes registered large increases in a number of Asian countries, led in many cases by gains in share prices of technology firms. In particular, Korean equity prices have risen about 45 percent since early 2005. Several countries in the region added to their holdings of foreign exchange reserves over the period, but in all cases far less than China did.

After a solid performance in 2004, the Mexican economy slowed in the first quarter of 2005 and contracted in the second quarter because of weaker exports to the United States and a sharp drop in agricultural production. However, the Mexican economy recovered in the second half of the year, as agricultural and manufacturing production bounced back. Aggressive tightening of monetary policy from early 2004 to March 2005 seemed to be successful in restraining inflationary pressures: Consumer price inflation declined from more than 5 percent at the end of 2004 to a bit less than 4 percent in January 2006, within the central bank's target range of 2 percent to 4 percent. The soft economy and an improved outlook for inflation led the Bank of Mexico to begin easing policy in August 2005, and the central bank has continued to ease

since then. High oil revenues boosted the public-sector surplus, and yield spreads of Mexican sovereign debt over U.S. Treasuries declined to record lows.

In Brazil, growth in economic activity was moderate in the first half of 2005, and some indicators point to a slowing over the second half. Nonetheless, risk spreads of Brazilian sovereign debt declined over the course of the year to their lowest levels since 1997, the *real* appreciated strongly, and stock prices rose sharply. Concerns over inflation kept monetary policy very tight for most of the year, but the central bank began easing in September, and the policy rate was reduced a total of 250 basis points, to 17¼ percent, by January. In late December, Brazil paid in full its debt to the International Monetary Fund (IMF), using a portion of its foreign exchange reserves.

In Argentina, the economic recovery continued last year, driven in part by increases in consumption and investment. After more than three years in default, the government completed a debt swap, restructuring \$80 billion in bonds and obtaining a participation rate of 76 percent. Early this year, Argentina also paid in full its IMF obligations out of its foreign exchange reserves. ■

Monetary Policy Report of July 2005

Monetary Policy and the Economic Outlook

The U.S. economy continued to expand at a solid pace over the first half of 2005 despite the restraint imposed on aggregate demand by a further rise in crude oil prices. Household spending trended up, propelled by rising wealth and income and by low interest rates, and business outlays received ongoing support from favorable financial conditions, rising sales, and increased profitability. Moreover, the earlier declines in the foreign exchange value of the dollar shifted some domestic and foreign demand toward U.S. producers. Overall, the economic expansion was sufficient to create jobs at roughly the same pace as in late 2004 and to lower the unemployment rate further over the first half of this year.

Higher oil prices boosted retail prices of a broad range of consumer energy products and, as a result, continued to hold up the rate of overall consumer price inflation in the first half of 2005. In addition, the rise in energy prices this year, coupled with increases in the prices of some other commodities, imported goods, and industrial materials, put upward pressure on the costs of many businesses. A portion of these costs was passed on to consumers, which contributed to a higher rate of inflation in core consumer prices (that is, total prices excluding the food and

energy components, which are volatile). As measured by the price index for personal consumption expenditures excluding food and energy, core inflation increased from an annual rate of 1½ percent in 2004 to about 2 percent between the fourth quarter of 2004 and May 2005. While survey measures of near-term inflation expectations have edged up this year, surveys, as well as readings from financial markets, suggest that expected inflation at longer horizons has remained contained.

With financial conditions advantageous for households and firms, a solid economic expansion in train, and some upward pressure on inflation, the Federal Open Market Committee (FOMC) continued to remove policy accommodation at a measured pace over the first half of the year, raising the intended federal funds rate an additional 1 percentage point, to 3¼ percent, by the end of June. At the most recent FOMC meeting, the Committee judged that policy remained accommodative. With appropriate monetary policy, however, the upside and downside risks to output and inflation were viewed as balanced, and the Committee underscored its commitment to respond to changes in economic prospects as needed to fulfill its obligation to maintain price stability.

The fundamental factors that supported the U.S. economy in the first half of 2005 should continue to do so over the remainder of 2005 and in 2006. In the household sector, the combination of further gains in employment, favorable borrowing terms, and generally healthy balance sheets should keep consumer spending and residential investment on an upward path. In the business sector,

NOTE: The discussion in this chapter consists of the text and tables from the Monetary Policy Report submitted to the Congress on July 20, 2005; the charts from that report (as well as earlier reports) are available on the Board's web site, at www.federalreserve.gov/boarddocs/hh.

expanding sales, the low cost of capital, and the replacement or upgrade of aging equipment and software should help to maintain increases in capital spending. And, although economic performance has been uneven across countries, continued growth overall in the economies of U.S. trading partners should sustain the demand for U.S. exports. In contrast, ongoing increases in imports will likely continue to subtract from the growth of U.S. gross domestic product. In addition, high energy prices remain a drag on aggregate demand both here and abroad, though this drag should lessen over time if prices for crude oil level out in line with quotes in futures markets.

Despite the upward pressure on costs and prices over the past year or so, core consumer price inflation is likely to remain contained in 2005 and 2006. Longer-run inflation expectations are still well anchored, and because businesses are adding to their stocks of capital and are continuing to find ways to use their capital and work forces more effectively, structural productivity will likely rise at a solid pace over the foreseeable future. In addition, barring a further increase in oil prices, the boost that higher energy costs have given to core inflation should wane in coming quarters, while the recent appreciation of the dollar, as well as the deceleration in global materials prices, will likely reduce the impetus to inflation from rising import prices.

Of course, substantial uncertainties surround this economic outlook. A further sharp rise in crude oil prices would have undesirable consequences for both economic activity and inflation, and the possibility that housing prices, at least in some locales, have moved above levels that can be supported by fundamentals remains a concern. As another example, if the recent surge in measured unit labor costs were to prove more persis-

tent than currently appears likely, the outlook for inflation would be adversely affected. Economic growth and inflation will also be shaped importantly by the evolution of the imbalance in the U.S. current account.

The Conduct of Monetary Policy over the First Half of 2005

Despite increases in the federal funds rate totaling $1\frac{1}{4}$ percentage points in 2004, monetary policy was still judged to be accommodative at the start of 2005. At the time of the February FOMC meeting, the available information indicated that the economy had expanded at a robust pace through the end of 2004 and retained considerable momentum. Accordingly, the Committee voted to raise its target for the federal funds rate from $2\frac{1}{4}$ percent to $2\frac{1}{2}$ percent and to make minimal changes to the text of the accompanying statement. The statement reiterated that “the Committee believes that policy accommodation can be removed at a pace that is likely to be measured.” Members noted, however, that this forward-looking language was clearly conditioned on economic developments and therefore would not stand in the way of either a pause or a step-up in policy firming depending on events.

By March, the data were pointing to a further solid gain in activity during the first quarter, fueled especially by continued increases in consumption expenditures and residential investment. In addition, private nonfarm payrolls were posting widespread advances, and slack in resource utilization appeared to be diminishing. The Committee voted at its March meeting to raise the federal funds rate another 25 basis points, to $2\frac{3}{4}$ percent. In view of the rise in prices of energy and other commodities and recent elevated readings on inflation in

core consumer prices, the Committee altered the text of the policy statement to note the pickup in inflationary pressures. The Committee also decided to modify the assessment of the balance of risks to make it explicitly conditional on an assumption of “appropriate” monetary policy, so as to underscore that maintaining balanced risks would likely require continued removal of policy accommodation.

The evidence that had accumulated by the spring pointed to some moderation in the pace of activity. Retail spending flattened out for a time, likely in response to higher energy prices, and the growth of capital spending dropped back from its elevated pace of late last year. Nonetheless, with long-term interest rates still quite low and with employment and profits continuing to rise, economic activity appeared to retain considerable momentum, suggesting that the softness would be short lived. Against this backdrop, the FOMC decided to raise the federal funds rate another 25 basis points at its May meeting and to make few changes to the text of the accompanying statement.

In the weeks after the May meeting, incoming indicators supported the view that the underlying pace of activity was not faltering. The information that the Committee reviewed at the time of the June FOMC meeting showed that consumer spending and business investment had turned up, on balance, and that demand for housing continued to be strong. With economic activity remaining firm and crude oil prices ratcheting higher, the FOMC voted to raise the funds rate an additional 25 basis points, to 3¼ percent, and to make only minimal changes to the text of the accompanying statement. This action brought the cumulative increase in the target federal funds rate since June 2004 to 2¼ percentage points.

Economic Projections for 2005 and 2006

In conjunction with the FOMC meeting at the end of June, the members of the Board of Governors and the Federal Reserve Bank presidents, all of whom participate in the deliberations of the FOMC, were asked to provide economic projections for 2005 and 2006. In general, Federal Reserve policymakers expect the economy to continue to expand at a moderate pace and core inflation to remain roughly stable over this period. The central tendency of the FOMC participants’ forecasts for the increase in real (that is, inflation adjusted) GDP is 3½ percent over the

Economic Projections for 2005 and 2006

Percent

Indicator	Federal Reserve Governors and Reserve Bank presidents	
	Range	Central tendency
	2005	
<i>Change, fourth quarter to fourth quarter¹</i>		
Nominal GDP	5–6¼	5½–5¾
Real GDP	3–3¾	3½
PCE price index excluding food and energy	1½–2¼	1¾–2
<i>Average level, fourth quarter</i>		
Civilian unemployment rate	5–5¼	5
	2006	
<i>Change, fourth quarter to fourth quarter¹</i>		
Nominal GDP	5–6	5¼–5½
Real GDP	3¼–3¾	3¼–3½
PCE price index excluding food and energy	1½–2½	1¾–2
<i>Average level, fourth quarter</i>		
Civilian unemployment rate	5	5

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

four quarters of 2005 and 3¼ percent to 3½ percent in 2006. The civilian unemployment rate is expected to average 5 percent in both the fourth quarter of 2005 and the fourth quarter of 2006. FOMC participants project that the chain-type price index for personal consumption expenditures excluding food and energy will increase between 1¾ percent and 2 percent both this year and next.

Economic and Financial Developments in 2005

The economic expansion entered 2005 on a solid footing and was led by ongoing increases in consumption, residential investment, and business spending on equipment and software. Although the pace of expansion slowed somewhat in the early spring, activity has picked up again more recently. On average, real GDP appears to have increased a little less rapidly over the first half of 2005 than in the second half of 2004, a reflection in part of reduced fiscal stimulus and the drag on economic activity from higher energy prices. Industrial production has also risen more slowly so far this year than in 2004: The increase totaled 3 percent at an annual rate between December 2004 and June 2005, down from 5 percent during the previous six months. Nevertheless, the economic expansion has been sufficient to gradually absorb slack in labor and product markets. Nonfarm payroll employment has continued to increase, and the unemployment rate has moved down further since the beginning of the year, to 5 percent in June. Similarly, the rate of capacity utilization in the manufacturing sector stood at 78.4 percent in June, up from 77.9 percent at the end of 2004 and just a little below its long-term historical average.

Rising energy prices continued to boost consumer price inflation in the first half of 2005. With consumer energy prices having climbed more than 13 percent at an annual rate so far this year, the price index for personal consumption expenditures (PCE) increased at an annual rate of about 2½ percent between the fourth quarter of 2004 and May 2005, the same pace as in 2004. Meanwhile, the core PCE price index rose at an annual rate of about 2 percent in the first half of 2005, up from 1½ percent in 2004.

The Household Sector

Consumer Spending

Consumer spending continued to move higher in the first half of this year, though not as rapidly as in the second half of 2004. After increasing at an average annual rate of 4½ percent in the third and fourth quarters of last year, real personal consumption expenditures rose at a 3½ percent rate in the first quarter and appear to have advanced at a roughly similar pace in the second quarter. Household spending this year has been supported by rising employment and household wealth as well as by the low level of interest rates. However, higher costs for consumer energy products have eroded households' purchasing power.

Sales of light motor vehicles, which had been buoyed in the second half of last year by a variety of sales inducements, dropped back in the first quarter after many of the inducements expired. However, sales firmed again in the second quarter to an average annual pace of more than 17 million units, a level similar to that in the fourth quarter of last year. Underlying demand for light motor vehicles has remained relatively strong, though sales likely have also

been boosted recently by sizable price discounts.

Excluding motor vehicles, consumer spending posted strong gains in early 2005, flattened out in March, and picked up again in the spring. On a quarterly average basis, the rate of increase in non-auto spending appears to have stepped down in the second quarter, largely because of a deceleration in outlays for consumer goods. Meanwhile, real outlays for services rose at an annual rate of about 3 percent in the first quarter, and the available data point to an increase of about the same magnitude in the second quarter.

If the effect of Microsoft's \$32 billion special dividend payment in December 2004 is excluded from the calculation, real disposable personal income (that is, after-tax income adjusted for inflation) rose at an annual rate of about 2 percent between the fourth quarter of 2004 and May 2005, a slower pace than in 2004. Although increases in employment and earnings pushed up wage and salary income over the first half of 2005, the rise in real income was damped to some degree by the energy-driven increase in consumer prices. Higher energy prices also appear to have weighed on consumer confidence for much of this year. Surveys by both the Michigan Survey Research Center (SRC) and the Conference Board indicate that household sentiment edged down through the early spring, though readings from these surveys turned up again more recently.

Household wealth appears to have increased a bit faster than nominal disposable income over the first half of this year; the small increase in the wealth-to-income ratio comes on the heels of substantial increases in 2003 and 2004. Although stock prices have changed little, on net, thus far this year, home prices have continued to rise sharply.

Because changes in wealth influence consumer spending with a lag, both the earlier and the more-recent increases in household net worth have supported consumption this year. As wealth increased and interest rates remained quite low, the personal saving rate edged down to just $\frac{1}{2}$ percent of disposable income in April and May. Over the previous two decades, the personal saving rate averaged close to 5 percent.

Residential Investment

Activity in the housing market continued at a strong pace in the first half of 2005. Real expenditures on residential structures increased at an annual rate of $11\frac{1}{2}$ percent in the first quarter and appear to have posted another gain in the second quarter. In the single-family sector, starts of new units averaged 1.69 million at an annual rate between January and June—nearly 4 percent above the pace posted over the second half of 2004. Similarly, starts of multi-family units averaged 360,000 over the first six months of 2005, about $3\frac{1}{4}$ percent higher than in the previous six months.

As in 2004, the demand for housing during the first half of 2005 was supported by rising employment and income and by low mortgage rates. Rates on thirty-year fixed-rate mortgages have fluctuated between $5\frac{1}{2}$ percent and 6 percent in recent months and are currently near the low end of that range. In addition, demand reportedly has been boosted by a rise in purchases of second homes—either as vacation units or as investments—and by the greater availability of less-conventional financing instruments. These financing instruments, including interest-only mortgages and adjustable-rate mortgages that allow borrowers a degree of flexibility in the size of their monthly

payments, have enabled some households to buy homes that would otherwise have been unaffordable. As a result, both new and existing home sales have remained remarkably robust this year, and both were at or near record levels in May.

The strong demand for housing has continued to push up home prices this year. Although rates of house price appreciation were a little slower in the first quarter of this year than in 2004, the repeat-transactions price index for existing homes (limited to purchase-transactions only), which is published by the Office of Federal Housing Enterprise Oversight and partially adjusts for changes in the quality of homes sold, was nonetheless up 10 percent relative to its year-earlier level. Price appreciation has been especially sharp over the past year in some large metropolitan areas, including Las Vegas, Miami, San Francisco, and New York, but rapid increases in home prices have been observed in other areas as well. In many of these locales, recent price increases have far exceeded the increases in rents and household incomes.

Household Finance

Supported by rising house prices and continued economic expansion, household debt increased at an annual rate of about 9¼ percent in the first quarter of 2005. This advance was paced by a rise in mortgage debt of 10½ percent at an annual rate. However, even that rapid rise in mortgage debt represented a slight deceleration from the torrid pace in 2004, a development in line with the small slowdown in the pace of house price appreciation. Despite the increase in mortgage debt, net housing wealth rose. Refinancing activity has remained subdued, as rates on fixed-rate mortgages are a little above levels at which

many households would currently find refinancing to be attractive.

Consumer credit expanded at an annual rate of about 4½ percent over the first quarter of the year and was about unchanged in April and May. The growth of consumer credit has continued to be restrained by substitution toward home equity debt as a means to finance household expenditures.

Measures of household credit quality have remained favorable. Delinquency rates on credit card debt and auto loans have continued to decline from already low levels. The pace of bankruptcy filings has run a little higher than at the same time last year; however, that pace has probably been boosted by a rush to file before the new rules in the Bankruptcy Abuse Prevention and Consumer Protection Act of 2005 take effect in October. Reflecting the rapid pace of household debt growth, the ratio of household financial obligations to disposable personal income has edged up from a year earlier, though this ratio remains a bit below the peak level reached in late 2002.

The Business Sector

Fixed Investment

After posting a robust gain in the second half of 2004, real business fixed investment rose at a more moderate pace over the first half of 2005, as the rate of increase in expenditures on equipment and software (E&S) dropped back and outlays for nonresidential structures remained lackluster. Nonetheless, economic and financial conditions appear to be supportive of capital spending: Sales and corporate profits have continued to increase, businesses have ample liquid assets at their disposal, and financial market participants appear willing

to finance new investment projects at favorable terms.

Real E&S spending rose at an annual rate of 6 percent in the first quarter after having advanced at an 18 percent pace in the second half of 2004. Led by large increases in purchases of computers and communications equipment, spending on high-tech equipment posted a sizable gain in the first quarter. In contrast, outlays for transportation equipment dropped back early in the year because of a small decline in business expenditures on motor vehicles and a sharp drop in aircraft purchases after a surge in the fourth quarter of 2004. Investment in equipment other than high-tech and transportation goods, a category that accounts for about 40 percent of E&S in nominal terms, also edged down in the first quarter after registering a sizable gain in the second half of last year. The types of equipment in this category of investment tend to be sensitive to trends in business sales, but the timing of business spending may have been influenced by the provisions of the partial-expensing tax incentive, which encouraged capital spending to be pulled forward in advance of the incentive's expiration at the end of 2004.

More-recent indicators of E&S spending point to another moderate rise in investment in the second quarter. In particular, outlays for transportation equipment appear to have turned up, on net, as a step-up in purchases of aircraft more than offset a further decline in business spending on motor vehicles. At the same time, the evidence on high-tech spending has been mixed: Real spending on computers appears to have registered another large gain in the second quarter, while the rate of increase in outlays for communications equipment apparently fell back. Indicators of spending on equipment other than transportation and high tech have looked

more favorable recently, as shipments and imports for this broad category increased noticeably, on balance, in April and May. In addition, unfilled orders for such equipment remain at high levels.

Real nonresidential construction continued at a low level in the first half of this year, but fundamentals are starting to show signs of improvement. The construction of office buildings and industrial facilities has been restrained for some time by elevated vacancy rates, weak demand, and higher costs for construction materials. However, vacancy rates in these sectors have recently turned down, and construction outlays for these types of buildings appear to have edged higher, on net, so far this year. Commercial building—which includes retail outlets and warehouses—also appears to have increased this year, in part because of strong growth in the construction of large retail stores. Meanwhile, investment in the drilling and mining sector has trended up, on balance, over the past year, as higher prices for natural gas boosted the demand for new drilling rigs.

Inventory Investment

As in 2004, businesses accumulated inventories at an appreciable pace early this year. Outside the motor vehicle industry, nonfarm inventories increased at an annual rate of \$66 billion in real terms in the first quarter of 2005. The rapid rate of inventory accumulation late last year and early in 2005 appears primarily to have been the result of efforts by firms to replenish stocks that had been depleted by the strong pace of sales in 2003 and 2004; apart from firms in a limited number of sectors, such as steel and paper, most businesses do not appear to be holding excess stocks, even taking into account the downward

trend in inventory–sales ratios that has resulted from the improvement in supply-chain management capabilities. The rebuilding of inventories in most industries appears to have been largely completed, and the available data for April and May point to a noticeable step-down in the pace of stockbuilding. Indeed, in recent surveys, businesses have been reporting that they and their customers are increasingly comfortable with current levels of stocks, whereas in 2004 and early 2005, many were still characterizing inventory positions as too lean.

One important exception to this characterization is the motor vehicle industry, for which dealer stocks—especially of light trucks—were high by historical standards in recent months. In response, several major motor vehicle manufacturers reduced production in the second quarter, and, more recently, some have introduced price discounts on many 2005 models. These efforts appear to have helped, in that inventories of light vehicles at the end of June fell to sixty-five days of supply, a level more in line with historical norms.

Corporate Profits and Business Finance

Corporate profits have continued to rise so far this year, though at a slower pace than in 2003 and 2004. Earnings per share for S&P 500 firms in the first quarter of 2005 were up about 13 percent since the same time last year, a pace in line with the profit figures reported in the national income and product accounts (NIPA). The ratio of before-tax profits of nonfinancial corporations to that sector’s gross value added was about flat in the first quarter after having moved up in 2003 and 2004. In the first half of this year, the petroleum and gas industries benefited from higher

oil prices, but corporate earnings in the automobile sector declined sharply.

Given continued strong corporate profits and the accompanying strength in cash flow, nonfinancial firms’ demand for external financing to fund capital expenditures has remained somewhat subdued. Net equity issuance has stayed negative so far this year, and share retirements have been boosted by considerable stock buybacks and cash-financed merger and acquisition activity. Gross corporate bond issuance has been limited, and the proceeds have been used mainly to pay down existing debt. Short-term debt financing, however, continued to pick up in the first half of 2005. Both commercial and industrial loans and commercial paper expanded at a brisk pace that was likely in part the result of firms’ need to fund the rapid rate of inventory accumulation earlier in the year. The Federal Reserve’s Senior Loan Officer Opinion Survey on Bank Lending Practices conducted in April 2005 indicated that demand for business loans had strengthened over the previous three months and that substantial fractions of banks had eased standards and terms on these loans. In response to special questions regarding longer-term changes in lending practices, most banks reported that standards on business loans were somewhat tighter, but that terms were somewhat easier, than they had been in 1996 and 1997.

Indicators of credit quality in the nonfinancial business sector have stayed generally very strong amid continued growth of profits and corporate balance sheets that remain flush with liquid assets. Both the default rate on outstanding corporate bonds and the delinquency rate on business loans stand at the low end of their historical ranges. However, the automobile sector has been an exception to the pattern of solid corpo-

rate credit quality. All three major credit rating agencies downgraded the debt of both Ford and General Motors this year in response to disappointing earnings news. General Motors' debt now has a below-investment-grade rating from both Standard & Poor's and Fitch, though it is still rated as investment-grade by Moody's. Ford retains an investment-grade rating with all the rating agencies except Standard & Poor's.

Expansion of commercial-mortgage debt continued apace in the first half of the year and was accompanied by record issuance of commercial-mortgage-backed securities. Likely because of that heavy issuance, spreads of yields on commercial-mortgage-backed securities over those on comparable-maturity Treasuries have turned up recently, but these spreads remain relatively low. The credit quality of commercial-mortgage debt remains quite strong, as delinquency rates on holdings of commercial mortgages at banks and insurance companies and on loans that back mortgage securities have been declining from already low levels.

The Government Sector

Federal Government

The deficit in the federal unified budget narrowed over the past year. Over the twelve months ending in June, the unified budget recorded a deficit of \$336 billion, \$99 billion less than during the comparable period last year. Both revenues and outlays rose faster than did nominal GDP over this period, but the rise in receipts was especially strong. Even at its lower level, the deficit was still equal to about $2\frac{3}{4}$ percent of nominal GDP.

Nominal federal receipts during the twelve months ending in June were 14 percent higher than during the same

period a year earlier and reached 17 percent of nominal GDP. Revenues were boosted by a large increase in corporate receipts that was driven by the strength of corporate profits. In addition, individual income and payroll taxes rose nearly 12 percent, twice as fast as the growth of household income. However, some of this rise was due to the features of the Jobs and Growth Tax Relief Reconciliation Act of 2003 that altered the timing of tax payments in a way that temporarily reduced the level of tax collections last year.

Nominal federal outlays during the twelve months ending in June were 7 percent higher than during the same period a year ago and stood at 20 percent of nominal GDP. Spending for national defense continued to trend up at a rapid clip, and outlays for Medicare also posted a sizable increase. In addition, federal net interest payments, boosted both by higher interest rates and by the higher level of federal debt, rose more than 13 percent over this period. Real federal expenditures for consumption and investment—the part of government spending that is a component of real GDP—increased at an annual rate of just $\frac{1}{2}$ percent in the first calendar quarter of 2005 after having risen 4 percent in 2004. Although defense spending changed little in real terms in the first quarter, it has risen considerably in recent years and is likely to increase further in coming quarters. Nondefense spending in the first quarter edged up in line with its recent trend, and enacted legislation is consistent with its continuing to rise at a subdued pace.

The deficit in the federal budget has depressed national saving in the past few years. The narrowing of the deficit of late has lessened this reduction in national saving from a little more than 3 percent of nominal GDP in 2003 and 2004 to roughly 2 percent in the first

quarter of 2005. Even so, as business and personal saving rates changed little, on average, over the past year, net national saving rose to just 3¼ percent of nominal GDP in the first quarter, well below the long-term historical average of about 7 percent and below recent levels of net domestic investment. If not reversed, such a low level of net national saving will necessitate either slower capital formation or continued heavy borrowing from abroad. The pressures on national saving will intensify greatly with the retirement of the baby-boom generation and the associated increases in Social Security and Medicare benefit payments.

Federal Borrowing

Because of the need to finance the sizable federal budget deficit, federal debt held by the public expanded at a seasonally adjusted annual rate of 13¾ percent in the first quarter of the year. The ratio of this debt to nominal GDP increased to more than 37 percent for the first time since 2000. The average maturity of outstanding marketable Treasury debt has been declining for several years and reached fifty-three months at the end of the first quarter of 2005, down from about seventy months in 2000. However, in the May mid-quarter refunding statement, the Treasury announced that it was considering reintroducing regular issuance of a thirty-year nominal bond in February 2006, a move that would presumably slow or arrest this downtrend.

Indicators of demand for Treasury securities by foreign investors have been mixed so far this year; demand by foreign official institutions seems to have moderated, but demand by foreign private investors appears to have remained robust. Indirect bidders at Treasury auctions—which include foreign official

institutions that place bids through the Federal Reserve Bank of New York—have been awarded an average of 33 percent of coupon securities issued at auctions held so far this year, down from 42 percent in 2004. Treasury securities held in custody at the Federal Reserve Bank of New York on behalf of foreign official institutions have grown only about \$25 billion so far this year after an increase of more than \$200 billion in 2004. Data from the Treasury International Capital System also suggest an ebbing of demand for Treasury securities from foreign official investors during the first five months of the year. These data, however, indicate that foreign private investors have continued to accumulate Treasury securities at a rapid pace.

State and Local Governments

The fiscal positions of states and localities have improved this year. Ongoing gains in income and consumer spending, along with sharp increases in property values, have continued to boost tax receipts. Although many jurisdictions have increased their spending moderately, some are also using the additional revenues to rebuild reserve funds. On a NIPA basis, net saving by state and local governments equaled \$34 billion at an annual rate in the first quarter (roughly ¼ percent of nominal GDP), double the 2004 average. In addition, virtually all states registered surpluses in their general fund budgets in fiscal year 2005, which ended on June 30 for all but four states. Nevertheless, lingering fiscal concerns are still evident in some jurisdictions; these concerns are related primarily to rising Medicaid costs, the termination of temporary federal grants that were appropriated in fiscal year 2004, and pressures to restore funding to programs—such as elementary and sec-

ondary education—that were cut back earlier in the decade.

Real consumption and investment spending by state and local governments edged down in the first quarter of 2005 after having changed little in 2004. Real outlays for consumption items increased at an annual rate of less than ½ percent, a reflection of some slowing in the pace of hiring. Nominal spending on investment rose at a moderate rate in the first quarter, but because construction costs escalated, investment spending declined a little in real terms.

State and Local Government Borrowing

State and local government debt held by the public expanded at a rapid pace in the first quarter of the year, rising at a seasonally adjusted annual rate of 16¼ percent, up from 5½ percent in the fourth quarter of last year. However, much of this borrowing was for the advance refunding of existing debt, as state and local governments continued to take advantage of low long-term interest rates. A significant portion of the proceeds of these advance refundings were invested in U.S. Treasury instruments tailored to meet the cash management needs of municipal governments. In addition, financing of transportation- and education-related projects boosted issuance of long-term municipal bonds for new capital.

The credit quality of municipal borrowers improved last year, and this trend has generally continued so far in 2005, as upgrades of municipal bonds by Standard & Poor's continued to outpace downgrades.

The External Sector

The U.S. current account deficit expanded in the first quarter of 2005 to

\$780 billion at an annual rate, or about 6.4 percent of nominal GDP. The deficit in trade in goods continued to widen, increasing \$17 billion from the previous quarter. The deficit on net unilateral transfers also widened in the first quarter, largely because of an increase in government grants. In contrast, the surplus on trade in services rose \$7 billion, and the surplus on net investment income rose \$2 billion.

International Trade

Real exports of goods and services accelerated in the first quarter of 2005 to an annual rate of about 9 percent, roughly twice as fast as the rate in the second half of last year. The dollar's decline in recent years has raised the competitiveness of U.S. relative prices and has continued to provide a mounting boost to exports. Support from foreign economic activity, though still substantial, moderated after the first half of 2004 as growth abroad slowed. Increases in exports of U.S. goods were widespread across major U.S. trading partners, with the exception of Japan, and were concentrated in capital goods and consumer goods. Real exports of services rose at an annual rate of about 13¼ percent.

Real imports of goods and services rose at an annual rate of about 9½ percent in the first quarter, a pace similar to the average in 2004. The growth of real oil imports ebbed after surging late last year. Increases in imports of non-oil goods were widespread across categories. The expiration of the Multifibre Arrangement and the resulting elimination of quotas shifted the source of some U.S. textile and apparel imports among U.S. trading partners, but these events appear to have had a limited effect on the overall level of imports of these goods. Real imports of services reversed

their fourth-quarter decline, posting a gain of 7 percent at an annual rate, as some travel-related expenditures and also royalties and license fees recovered from a very weak fourth quarter.

Boosted by substantial increases in the prices of primary commodities and industrial supplies, prices of total exports rose at an annual rate of 4¼ percent in the first quarter. Prices of U.S. agricultural exports rebounded in the first quarter after good harvests in the second half of 2004 had caused prices to fall sharply. The available data for the second quarter point to continued increases in export prices.

Prices of imported non-oil goods rose at an annual rate of 3¾ percent in the first quarter, almost 1½ percentage points faster than in the second half of 2004. Prices of material-intensive items, such as industrial supplies and foods, steadily increased in the last quarter of 2004 and in the first quarter of 2005. In part, this rise reflected higher prices for nonfuel primary commodities, as strength in global demand for many commodities outstripped a slow expansion of supply. Prices for finished goods, such as consumer goods and many kinds of capital goods, also turned noticeably higher. Available data for the second quarter show that the increases in prices of both material-intensive and finished goods have slowed.

The spot price of West Texas intermediate (WTI) crude oil began 2005 near \$43 per barrel, but it climbed above \$50 per barrel in late February and breached \$60 per barrel in late June. The increase in the spot price of WTI largely reflects several global factors: continued strong demand for oil, limited spare production capacity, and concerns about the reliability of supply from some foreign sources. In contrast to the market outlook during last October's peak in oil prices, futures contracts indicate that

market participants now expect oil prices to remain near their current high levels, a view consistent with the belief that demand will remain strong and production will have difficulty keeping pace. The price of the far-dated NYMEX oil futures contract (currently for delivery in December 2011) rose from about \$38 per barrel as of last October to about \$56 per barrel in late June.

OPEC spare production capacity appears to be near historical lows, with only Saudi Arabia able to increase production substantially. Many other OPEC producers are either pumping close to capacity or encountering production problems. Venezuela and Indonesia cannot meet their production quotas, and Iraqi production this year has averaged less than in 2004. In addition, several governments have moved to increase their control of the energy industry as oil prices have risen. Russian oil production, which had provided most of the growth in non-OPEC supply over the previous five years, has stagnated since last September amid the partial nationalization of Yukos, formerly Russia's largest oil company. Venezuela has also increased the taxes and royalty payments of foreign oil firms.

The Financial Account

Foreign official inflows, which accounted for more than half of all net financial inflows to the United States in 2004, slowed significantly in the first quarter but showed signs of renewed strength in April and May. In contrast, private inflows moderated in April and May after having increased substantially in the preceding six months. As has been the case for several years, the U.S. current account has been financed primarily by foreign purchases of U.S. debt securities. U.S. residents' purchases of

foreign securities increased after a temporary lull in the fourth quarter and have been more heavily weighted toward purchases of equities.

Net direct investment outflows in the first quarter were well below their levels in the fourth quarter; direct investment into the United States was roughly unchanged, but U.S. direct investment abroad fell back after a surge in new equity late last year. There is little evidence to date that U.S. companies have repatriated earnings from their foreign subsidiaries using the temporarily reduced tax rate available under the American Jobs Creation Act of 2004. However, there are indications that these remittances may pick up in the second half of this year.

The Labor Market

Employment and Unemployment

Labor markets have continued to improve this year, albeit at an uneven pace from month to month. On average, non-farm payroll employment expanded roughly 180,000 per month over the first half of 2005, about the same pace as in the fourth quarter of 2004. At the same time, the civilian unemployment rate, which had declined from 5¾ percent to just below 5½ percent over 2004, continued to move down. The jobless rate stood at 5 percent in June, the lowest level since September 2001.

The increases in payrolls over the first half of 2005 were relatively widespread across industries. Particularly sizable gains were registered at providers of health-care services and leisure and hospitality services and at establishments that provide business services, such as professional and technical assistance and administrative and support services (a category that includes temporary help). In addition, construction employ-

ment continued to climb at a steady pace, a reflection of the buoyant residential housing market and increased spending on infrastructure by state and local governments. In contrast, manufacturing employment continued to trend down, as cutbacks in industries that produce wood products, furniture, and a variety of nondurable goods more than offset hiring at producers of fabricated metals and machinery. Employment in retail trade has advanced at a moderate pace this year. Increases in employment at state and local governments slowed somewhat in the first half of this year from the pace in the second half of last year, and federal civilian employment changed little.

The gradual rise in job opportunities appears to be attracting some potential workers back into the labor market. The labor force participation rate, which had declined noticeably between 2000 and 2004, edged up over the first half of 2005. Nevertheless, the participation rate in June, at 66 percent, remained well below the high of 67¼ percent reached in early 2000. To some extent, both the high level of the participation rate in 2000 and the more recent decline are likely related to cyclical developments in the economy: The tight labor markets of the late 1990s, perhaps coupled with the introduction of work requirements for many welfare recipients, undoubtedly drew additional people into the labor force at that time, while the subsequent recession and slow recovery in the labor market have discouraged many job seekers in recent years. However, the downtrend in the aggregate participation rate also appears to be associated with structural developments that seem likely to limit future increases. For example, the large baby-boom cohorts are now entering ages at which labor force participation rates typically drop off sharply. And, in con-

trast to patterns observed in previous decades, participation rates for women between 25 and 54 years of age no longer appear to be trending up.

Productivity and Labor Costs

Gains in labor productivity have slowed, on balance, in recent quarters. According to currently published data, output per hour in the nonfarm business sector rose 2½ percent over the year ending in the first quarter of 2005, down from the 5½ percent pace registered in the comparable period a year earlier. A deceleration in productivity is not unusual as an economic expansion matures and as businesses—which become increasingly confident about future prospects for sales—step up their pace of hiring. In addition, the recent slowdown in productivity growth was from the unusually rapid average rate that prevailed between 2002 and early 2004. That elevated rate likely reflected both an atypical reluctance to hire—as employers reacted to a succession of economic and geopolitical shocks—and newfound efficiencies brought about by the better use of high-tech capital purchased by businesses in earlier years and by organizational changes implemented to maintain profitability when the economy was relatively weak. As the impetus from these influences has waned, productivity growth has fallen back.

Measures of labor compensation for recent quarters suggest that the remaining slack in labor markets continued to restrain increases in base wage rates but that large increases in some of the more flexible components of worker pay and for some types of employer-provided benefits added to labor costs. In particular, compensation per hour in the nonfarm business sector, which is based on the data from the national income and product accounts, rose 7 percent over

the four quarters ending in the first quarter of this year, having registered a particularly large bulge in the final quarter of 2004. Much of this sharp rise may be the result of the exercise of a large number of stock options late last year, a development perhaps induced by an increase in equity prices that boosted the number of options that were “in the money” and by a proposed change in accounting regulations that led some companies to accelerate the vesting of options that had been previously granted. In addition, the strong performance of profits in 2004 may have been associated with sizable nonproduction bonus payments at the end of last year.

A more modest rate of increase in hourly compensation is indicated by the employment cost index (ECI), which is based on a quarterly survey of private nonfarm establishments conducted by the Bureau of Labor Statistics and which excludes income received from the exercise of stock options. In particular, the ECI measure of hourly compensation rose 3½ percent over the twelve months ending in March 2005, about ½ percentage point less than the increases over the preceding two years. The wages and salaries component of the ECI was up just 2½ percent over the twelve months ending in March, a pace similar to that in the preceding year, while employer costs for benefits increased 5¾ percent, a bit below the pace of the previous year but a sizable gain nonetheless. Part of the outsized rise in benefit costs stemmed from the need by many companies to rebuild their defined-benefit pension assets to make up for earlier losses in those plans. In addition, health insurance costs have continued to rise more rapidly than wages, although the 7½ percent increase in these costs over the year ending in March of this year was down from the double-digit rates of growth in 2002 and 2003.

The acceleration in the nonfarm business measure of hourly compensation, coupled with the deceleration in productivity, has contributed to a noticeable pickup in unit labor costs in recent quarters. In particular, unit labor costs rose 4¼ percent over the four quarters ending in the first quarter of 2005 after having declined 1 percent over the preceding four quarters. However, to the extent that the acceleration in compensation was the result of a temporary bulge in stock option exercises in late 2004, unit labor costs should moderate significantly this year. Moreover, the implications of such a spike in unit labor costs for price inflation are probably minimal, at least as judged by previous spikes of this nature. For example, the sharp rise in unit labor costs in 2000 had little or no subsequent effect on price inflation.

Prices

Higher energy prices continued to show through to overall consumer price inflation this year. The chain-type price index for personal consumption expenditures rose at an annual rate of about 2½ percent between the fourth quarter of 2004 and May 2005, a rate of increase similar to that over the four quarters of 2004. Within that total, core PCE prices accelerated over that period to an annual rate of about 2 percent, from 1½ percent in 2004. However, data for the consumer price index (CPI), which are available through June, suggest that core inflation has moderated in recent months; the core CPI rose at an annual rate of 1¼ percent in the three months ending in June after having increased at a 3¼ percent pace over the first three months of this year.

The PCE price index for energy, which moved up more than 18 percent in 2004, increased at an annual rate of nearly 14 percent between the fourth

quarter of 2004 and May 2005, having been pushed higher by a further run-up in crude oil prices. Gasoline prices climbed especially rapidly between February and April, when higher crude costs were accompanied by a significant widening in retail margins. Although these margins subsequently dropped back, retail gasoline prices in June were still nearly 10 percent above their level at the end of last year, and they moved up further in early July. Electricity prices also rose sharply over the first half of 2005 because of higher input costs for electricity generation.

Consumer food prices increased at an annual rate of about 2½ percent over the first half of 2005, a bit less than in 2004. Prices for fruits and vegetables dropped back early in the year, as supplies recovered from the damage associated with last year's succession of hurricanes. Although these prices turned up a little in the spring, they remain below their fourth-quarter levels. In contrast, meat prices rose at an annual rate of 3 percent over the first half of the year; relatively strong domestic demand has lifted prices despite increases in the number of cattle being fed for slaughter and ample supplies of other meats and poultry. Prices

Alternative Measures of Price Change

Percent

Price measure	2003 to 2004	2004 to 2005
<i>Chain-type (Q1 to Q1)</i>		
Gross domestic product (GDP) ...	1.7	2.4
Gross domestic purchases	1.7	2.8
Personal consumption expenditures (PCE)	1.7	2.2
Excluding food and energy ...	1.4	1.6
Market-based PCE excluding food and energy	1.3	1.7
<i>Fixed-weight (Q2 to Q2)</i>		
Consumer price index	2.9	2.9
Excluding food and energy ...	1.8	2.2

NOTE. Changes are based on quarterly averages of seasonally adjusted data.

for beef were also influenced by a variety of trade restrictions associated with concerns about mad cow disease: Both the full resumption of imports from Canada (which would tend to push down prices) and the resumption of exports to other important trading partners (which would tend to push up prices) were delayed. Prices of food away from home, for which labor costs are more important than raw food costs, rose at an annual rate of about 3½ percent over the first half of this year, a little higher than the recent trend.

The pickup in core PCE inflation this year is due both to the sharp run-up in energy prices and to higher prices for other intermediate materials; these developments have raised production and distribution costs for a wide range of domestically produced goods and services. In addition, the decline in the exchange value of the dollar into early 2005 continued to push up prices of core nonfuel imports this year, both for items used in the domestic production of other goods and services and for items sold directly to consumers. Partially offsetting these influences have been the gains in productivity, which have enabled firms to absorb a portion of the higher costs. Moreover, although the price of crude oil remains high, prices for some other industrial materials have decelerated or edged down of late: The *Journal of Commerce* industrial price index—which excludes energy items—has fallen 6 percent since the beginning of April, while the producer price index for core intermediate materials rose at an annual rate of just 1¼ percent in the second quarter of this year after having increased at roughly a 7 percent pace, on average, in the preceding few quarters.

Measures of shorter-term inflation expectations have edged higher this year, while those of longer-term expecta-

tations have held steady or moved lower. Most notably, the Michigan SRC survey indicates that households' median expectations for inflation over the next twelve months have ranged between 3 percent and 3¼ percent in recent months, up from just under 3 percent at the beginning of the year. In contrast, households' median expectations for inflation over the next five to ten years, at a little under 3 percent, are similar to readings in recent years. The latest Survey of Professional Forecasters likewise shows that inflation is expected to average 2½ percent over the next ten years, a figure unchanged since 2001. Readings of longer-term inflation compensation from financial markets show a more pronounced decline: Inflation compensation as measured by the spread of the yield on nominal Treasury securities over their indexed counterparts for the period five to ten years ahead has fallen about 50 basis points since the end of 2004.

U.S. Financial Markets

Financial market conditions remained generally accommodative during the first half of 2005, as Treasury and private interest rates stayed low. Risk spreads on speculative-grade debt had become very tight by the end of the first quarter, but they subsequently rose, on balance, after the downgrades of Ford and General Motors; current levels suggest more-typical compensation for default risk. Banks continued easing terms and standards on lending to businesses. The pace of business borrowing, which had been sluggish, picked up last year and remained fairly robust in the first half of 2005. Nevertheless, strong corporate profits and the large stockpile of liquid assets already on firms' balance sheets continued to limit their demand for external financing. Debt of

the federal government, of state and local governments, and of households continued to expand briskly. Broad equity price indexes were little changed on net; higher oil prices boosted share prices in the energy sector but weighed on other stocks.

Interest Rates

The FOMC boosted the intended federal funds rate 25 basis points at each of its four meetings in the first half of the year. Judging from federal funds futures quotes, these policy actions had all been widely anticipated by investors for some time before each meeting. Since the start of the year, rates on interest rate futures contracts that will expire at the end of 2005 have moved up about 60 basis points in response to evidence of robust economic growth and concerns about the possible emergence of inflationary pressures. Two-year nominal Treasury yields have risen about 80 basis points over that period, reflecting both the firming of policy expectations and actual monetary policy tightening.

Nevertheless, ten-year nominal Treasury yields have edged down so far this year and are now about 60 basis points below their level just before the FOMC meeting in June 2004. Moreover, this fall in long-term yields is a global phenomenon: Long-term yields have declined in most foreign industrialized economies, in several cases by more than in the United States. From the term structure of interest rates, the ten-year Treasury yield can be decomposed into a series of ten consecutive one-year forward rates. The last of these—the one-year forward rate ending ten years hence—now stands about 160 basis points below its level just before the June 2004 FOMC meeting.

Several potential explanations have been offered for the decline in long-term

yields and distant-horizon forward rates in the United States since mid-2004. Among these is the possibility that long-term inflation expectations have fallen and become more firmly anchored. Indeed, longer-term inflation compensation, measured by the spread between the yields on ten-year Treasury inflation-protected securities and their nominal counterparts, has fallen about 30 basis points over this period. A second possible explanation is investors' willingness to accept smaller risk premiums on long-term securities amid declining macroeconomic and interest rate uncertainty. The volatility of short-term interest rates and Treasury yields implied by option prices has indeed declined to historically low levels. A third possibility is that several factors have spurred an excess of global saving over planned investment, such as rising incomes in countries with high saving rates, the desire by the aging citizens of many industrialized countries to save for retirement, and apparently diminished investment prospects in many industrialized and developing economies.

Spreads of yields on investment-grade corporate debt over those on comparable-maturity Treasury securities fell during the first quarter of 2005, and risk spreads on high-yield corporate debt reached very low levels. However, in March, news about difficulties in the domestic motor vehicle industry apparently became a focal point for a revision of investors' assessment of risks. Further revelations of accounting irregularities in the insurance industry also seem to have made investors somewhat charier of risk. As a result, risk spreads on corporate bonds and credit default swaps have widened; speculative-grade bond spreads are now about 50 basis points higher than at the start of the year.

Equity Markets

Broad equity price indexes fell modestly in the first quarter, but they rebounded and are now little changed, on net, since the start of 2005. Thus far this year, stock prices have been buoyed by continued strong profits and low long-term interest rates, but higher oil prices and a few high-profile earnings disappointments have weighed on share prices outside the energy sector. The forward earnings–price ratio held about steady despite the fall in real interest rates. Equity price volatility implied by quotes on stock options declined, as the implied volatility on the S&P 500 index dropped to a record low level of less than 11 percent.

Net inflows into equity mutual funds were moderate in the first half of 2005, down from the rapid pace during the same period last year. These flows likely followed the pattern set by share prices, which surged about 30 percent in 2003, rose about 10 percent in 2004, and have been flat so far this year.

Debt and Financial Intermediation

The aggregate debt of the domestic non-financial sectors expanded at an annual rate of about 10 percent in the first quarter of 2005, up from an 8¼ percent pace in the fourth quarter of 2004, mainly because of faster growth of federal government debt and state and local government debt. The mix of household and business debt growth has shifted modestly since the same time last year. Household debt decelerated, though it continued expanding at a rapid pace, and the growth of business-sector debt picked up even though ample internal funding continued to limit firms' need for external financing.

Commercial bank credit expanded at an annual rate of 13 percent in the first

quarter of 2005. Financing secured by residential real estate, including home mortgages, home equity loans, and mortgage-backed securities, extended its long, robust expansion. In May, the Federal Reserve Board and other federal agencies that regulate depository institutions issued guidance on sound underwriting and effective credit-risk-management practices for home equity lending. Recently there has been increased use of potentially riskier types of mortgages, including adjustable-rate and interest-only loans, which could pose challenges to both lenders and borrowers. Business loans, which had begun to grow in 2004 after several years of runoffs, accelerated to a 15 percent annual rate of growth in the first quarter of 2005, supported in part by strong demand for short-term financing to fund rising accounts receivable, inventories, and merger and acquisition activity.

Credit market assets held by government-sponsored enterprises declined in the first quarter of this year, as Freddie Mac and Fannie Mae reduced their outright holdings of mortgage-backed securities.

The M2 Monetary Aggregate

In the first half of 2005, M2 grew at a 2½ percent annual rate—probably slower than nominal GDP and down from a 5¼ percent pace last year. Slower growth in liquid deposits—likely a consequence of their rising opportunity cost—accounted for most of this deceleration. Yields on retail money market mutual funds rose noticeably in the first half but continued to lag interest rates on market instruments, and assets in these funds continued their prolonged runoff. Small time deposits, whose yields have better kept pace with rising market interest rates, rose briskly during

the same period. Currency expanded at a slow rate, apparently a reflection in large measure of weak demand from abroad. On net, the velocity of M2 is estimated to have moved up in the first half at a somewhat slower pace than would be expected from the historical relationship between money, income, and opportunity cost.

International Developments

Foreign economic activity has expanded a bit less rapidly this year than in the second half of 2004, as measured by an export-weighted average of growth among U.S. trading partners. The pace of expansion in the industrial economies has generally increased, but, with the important exception of China, this increase has been offset by moderating growth in many developing economies. Inflation has remained well contained in most countries.

The stance of monetary policy has not changed this year in most major foreign economies. The European Central Bank has held its policy rate constant since June 2003, and both the Bank of England and the Bank of Canada have kept policy rates unchanged after having raised them in the latter half of 2004. The Bank of Japan has maintained its commitment to a policy of quantitative easing until deflation ends, but in late May it made what it described as a technical change to allow temporary deviations below the target range for reserve accounts if banks' demand for funds is too weak to satisfy the target. Reserve account balances temporarily fell below ¥30 trillion, the lower end of the target, in early June. Monetary policy has also remained unchanged in most emerging Asian economies; however, several Latin American monetary authorities have continued tightening cycles that began

last year in efforts to restrain inflationary pressures.

After having edged up during the first three months of this year, long-term interest rates in the major foreign industrial economies have fallen and now stand below their levels at the start of the year. As in the United States, the decline in foreign long-term interest rates continues a trend that began in mid-2004. However, long-term rates in the major foreign industrial economies have fallen more than rates in the United States this year. The decline in European long-term rates occurred amid weak economic news and a shift away from market expectations of a policy rate increase. In contrast, long-term rates in Canada and the United Kingdom have trended down despite policy rate increases in the second half of last year by both countries' central banks, though market perceptions that the Bank of England may cut rates have recently increased. Although the decline in Japanese rates last year was consistent with both the weak performance of the economy and the persistence of deflation, long-term rates fell further this year despite solid growth in the first quarter.

As foreign interest rates have fallen in recent months, the value of the dollar has risen. Most of this rise has been against the currencies of the major industrial countries; the dollar is largely unchanged against the currencies of the United States' other important trading partners. The dollar has appreciated about 12 percent against the euro and about 9 percent against the yen and sterling since the start of the year. Some of the appreciation against the euro occurred after voters in France and the Netherlands rejected the proposed constitution for the European Union by unexpectedly large margins in May.

European, British, and Canadian stock indexes have risen more than

8 percent since the start of the year. The rise in European stock prices is notable because indicators of economic activity have been fairly weak. In contrast, Japanese stock prices are now little changed after having reversed first-quarter gains. Equity prices in the majority of emerging markets began the year on a strong note but reversed course late in the first quarter and currently stand close to their January levels. Despite these swings, intraday volatility has remained subdued in most equity markets.

Industrial Economies

Real GDP in Japan increased at an annual rate of nearly 5 percent in the first quarter of 2005, bouncing back from last year's recession. Personal consumption spending reversed its recent declines, pushing the household saving rate down further. Private investment also rose sharply after having grown tepidly in the second half of 2004. In contrast, the external sector made a small negative contribution to GDP, as imports rose modestly but exports fell. While Japanese manufacturers of high-tech goods reduced their levels of inventories from last year's peak, inventory stocks of firms outside the high-tech sector increased, perhaps because of the slowdown in exports. The labor market has steadily improved: The unemployment rate has reached a seven-year low, and the ratio of job offers to job applicants is at a twelve-year high. Despite the pickup in economic activity and continuing inflation in wholesale prices, consumer price deflation has worsened slightly. The GDP price deflator returned to a year-over-year rate of deflation of more than 1 percent after having temporarily registered a more modest decline in the fourth quarter of 2004.

The pace of activity in the euro area appears to have slowed after a stronger start to the year. Real GDP grew at a 2 percent annual rate in the first quarter, as private consumption rose moderately and both households and firms switched expenditures away from imports and toward domestically produced goods. Both Germany and Spain grew at rates above the area average in the first quarter. In contrast, real GDP in both Italy and the Netherlands declined, while French growth was slower than in most of 2004. Measures of activity point toward slower growth in the euro area in the second quarter. Retail sales, which had risen in the first quarter, were roughly flat, on average, in April and May. The trade balance fell in April, threatening a main engine of growth, though the recent rise in the dollar against the euro should help stimulate export demand going forward. Twelve-month consumer price inflation edged up in June to just above the European Central Bank's target ceiling of 2 percent for inflation over the medium term. The European Central Bank's measure of core inflation, which excludes energy and unprocessed foods, has eased since January to an annual rate comfortably below 2 percent.

Consumer spending in the United Kingdom increased only modestly in the first quarter, slowing real GDP growth to 1½ percent. Nevertheless, the labor market remains tight, as unemployment is at its lowest levels since the mid-1970s and real earnings continue to trend up. The twelve-month rate of consumer price inflation ticked up in June to the Bank of England's target of 2 percent. In its May *Inflation Report*, the Bank of England forecast that inflation would temporarily rise but stay near the target over a two-year period. House prices have been fairly stable this year,

and household net mortgage borrowing has also been subdued.

Growth in Canada remains moderate. Continuing a pattern that has largely held for the past two years, private consumption and investment demand rose in the first quarter while net exports fell. Activity in the second quarter appears to have been solid. Data on housing starts indicate that construction spending grew further, and the merchandise trade surplus improved in April, as exports rose and imports decreased slightly. Twelve-month consumer price inflation fell in May to about 1½ percent after having averaged slightly above 2 percent in the first quarter. The Bank of Canada's measure of core inflation has stayed below 2 percent throughout this year.

Emerging-Market Economies

Chinese real GDP continues to rise rapidly following strong growth in 2004. Economic expansion has been led by investment, exports, and, more recently, a surge in domestic production of goods that had previously been imported. Investment expenditure has remained vigorous despite the government's attempts early last year to slow its rate of increase. Import growth slowed in the first quarter, but the rise of exports was unabated, leading to a significant widening of the trade surplus. Although recent attention has focused on China's exports of textiles, export growth has remained strong across most major categories of goods. The slowdown in imports has also been broadly based. Despite China's strong rate of economic expansion, consumer price inflation fell to less than 3 percent in the first quarter and has remained low, as declining food prices have offset modest increases in nonfood prices.

Economic developments in other Asian emerging-market economies have varied. Hong Kong maintained its strong performance. As in China, growth in Hong Kong has been driven by both investment and exports. Export growth has also played an important role in supporting growth in most of the other countries in this region, but domestic demand, particularly inventory investment, has declined in many economies so far this year. Inflation has risen slightly, reflecting higher food and energy prices, but remains well contained and under 3 percent in most countries.

The Mexican economy has slowed so far this year, as demand for its manufacturing exports has weakened and monetary tightening has tempered investment and consumption demand. The Bank of Mexico has left monetary policy unchanged since March, but its tightening over the preceding twelve months raised short-term interest rates 500 basis points. Twelve-month consumer price inflation has fallen from its levels of late last year but still stands above the Bank of Mexico's target range of 2 percent to 4 percent. After having risen in the second half of last year, core inflation has also trended down in recent months.

Economic growth in most South American economies has also slowed compared with the pace of activity at the end of 2004. Brazil's real GDP rose at only a 1¼ percent annual rate in the first quarter, as both private consumption and investment declined in the wake of the Brazilian central bank's decision to begin raising its policy rate in the second half of 2004 to counter inflationary pressures. Exports, which rose rapidly and outpaced imports, provided the only bright spot. Twelve-month inflation has remained above 7 percent, and the central bank has continued to raise

its policy rate this year. Argentina has gradually recovered from its 2001 crisis, but real GDP sharply decelerated in the first quarter. The unemployment rate, which had steadily fallen over the past few years, also edged up slightly. Twelve-month consumer price inflation appears to have stabilized after having been pushed up by food price increases

earlier in the year, but it still lies above the central bank's unofficial target range of 5 percent to 8 percent. The Argentine government recently completed the final settlement of its debt exchange but has not yet resolved the treatment of the remaining investors (holders of roughly one-fourth of all defaulted government bonds) who rejected the agreement. ■