Monetary Policy Report to the Congress

Report submitted to the Congress on July 20, 2005, pursuant to section 2B of the Federal Reserve Act

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 11/2 percent in 2004 to about 2 percent between the fourth quarter of 2004 and May 2005. While survey measures of nearterm 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 $3\frac{1}{4}$ 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, 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 persistent 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.

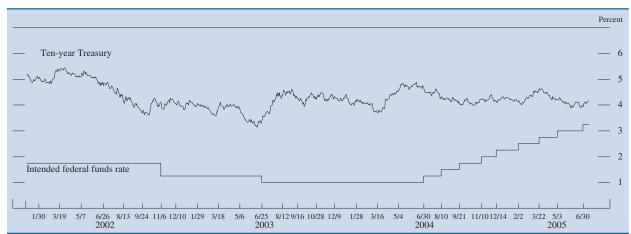
The Conduct of Monetary Policy over the First Half of 2005

Despite increases in the federal funds rate totaling 1¹/₄ 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 21/4 percent to 21/2 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 2³/₄ 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



Selected interest rates

NOTE: The data are daily and extend through July 13, 2005. 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.

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 3¹/₄ 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 2¹/₄ 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 $3\frac{1}{2}$ percent over the four quarters of 2005 and $3\frac{1}{4}$ percent to $3\frac{1}{2}$ percent in 2006. The civilian unemployment rate is expected to average 5 percent in both the fourth quarter of 2005

Economic	projections	for	2005	and	2006
Percent					

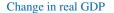
Indicator	Federal Reserve Governors and Reserve Bank presidents			
	Range	Central tendency		
	2005			
Change, fourth quarter to fourth quarter ¹ Nominal GDP Real GDP PCE price index excluding food and energy Average level, fourth quarter	561/4 333/4 11/221/4	5 ¹ /25 ³ /4 3 ¹ /2 1 ³ /4-2		
Civilian unemployment rate	5-51/4	5		
	2006			
Change, fourth quarter to fourth quarter ¹ Nominal GDP Real GDP PCE price index excluding food and energy	5-6 3 ¹ ⁄ ₄ -3 ³ ⁄ ₄ 1 ¹ ⁄ ₂ -2 ¹ ⁄ ₂	51/4-51/2 31/4-31/2 13/4-2		
Average level, fourth quarter Civilian unemployment rate	5	5		

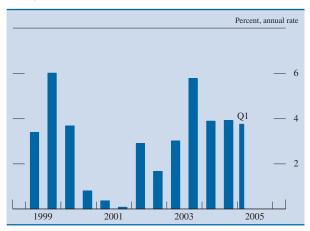
^{1.} Change from average for fourth quarter of previous year to average for fourth quarter of year indicated.

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 1³/₄ percent and 2 percent both this year and next.

ECONOMIC AND FINANCIAL DEVELOPMENTS IN 2005

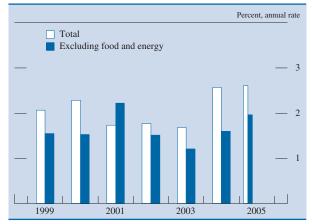
The economic expansion entered 2005 on a solid footing and was led by ongoing increases in consumption, residential investment, and business spending on equipment and software. Although the pace of expansion slowed somewhat in the early spring, activity has picked up again more recently. On average, 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.



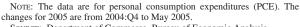


NOTE: Here and in subsequent charts, except as noted, change for a given period is measured to its final quarter from the final quarter of the preceding period.

SOURCE: Department of Commerce, Bureau of Economic Analysis.



Change in PCE chain-type price index



SOURCE: Department of Commerce, Bureau of Economic Analysis.

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 $2\frac{1}{2}$ 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 $1\frac{1}{2}$ percent in 2004.

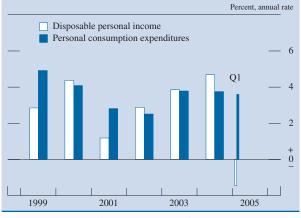
The Household Sector

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 $4\frac{1}{2}$ percent in the third and fourth quarters of last year, real personal consumption expenditures rose at a $3\frac{1}{2}$ 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.

Change in real income and consumption



SOURCE: Department of Commerce, Bureau of Economic Analysis.

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 nonauto 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





NOTE: The Conference Board data are monthly and extend through June 2005. The Michigan SRC data are monthly and extend through a preliminary estimate for July 2005.

 $[\]ensuremath{\mathsf{SOURCE}}$ The Conference Board and University of Michigan Survey Research Center.

Wealth-to-income ratio



NOTE: The data are quarterly and extend through 2005:Q1. The wealthto-income ratio is the ratio of household net worth to disposable personal income.

SOURCE: For net worth, Federal Reserve Board, flow of funds data; for income, Department of Commerce, Bureau of Economic Analysis.

(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

Personal saving rate



Note: The data are quarterly; the reading for 2005:Q2 is the average of April and May.

SOURCE: Department of Commerce, Bureau of Economic Analysis.

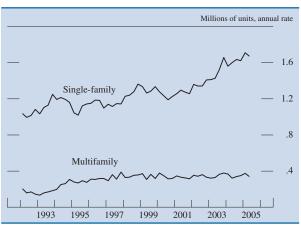
half of this year; the small increase in the wealthto-income ratio comes on the heels of substantial increases in 2003 and 2004. Although stock prices have changed little, on net, thus far this year, home prices have continued to rise sharply. Because changes in wealth influence consumer spending with 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 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

Private housing starts

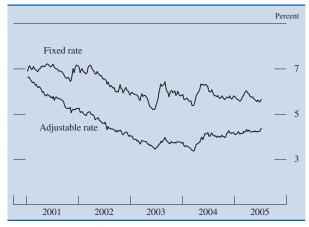
Activity in the housing market continued at a strong pace in the first half of 2005. Real expenditures on residential structures increased at an annual rate of $11\frac{1}{2}$ percent in the first quarter and appear to have posted another gain in the second quarter. In the single-family sector, starts 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 multifamily 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



NOTE: The data are quarterly and extend through 2005:Q2. SOURCE: Department of Commerce, Bureau of the Census.

Mortgage rates



NOTE: The data, which are weekly and extend through July 13, 2005, are contract rates on thirty-year mortgages.

SOURCE: Federal Home Loan Mortgage Corporation.

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-



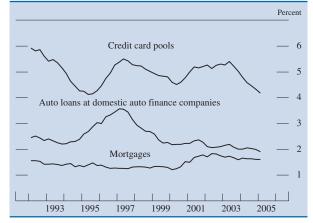


NOTE: The data are quarterly and extend through 2005;Q1. Change is over four quarters. For the years preceding 1991, changes are based on an index that includes appraisals associated with mortgage refinancings. Beginning in 1991, changes are based on an index that includes purchase transactions only. SOURCE: Office of Federal Housing Enterprise Oversight. 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 9¹/₄ percent in the first quarter of 2005. This advance was paced by a rise in mortgage debt of 10¹/₂ 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.

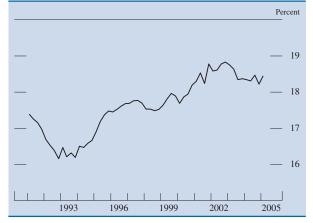
Consumer credit expanded at an annual rate of about $4\frac{1}{2}$ percent over the first quarter of the year and was about unchanged in April and May. The growth of consumer credit has continued to be



Delinquency rates on selected types of household loans

SOURCE: For credit cards, Moody's Investors Service; for auto loans, the financing subsidiaries of the three major U.S. automobile manufacturers; for mortgages, Mortgage Bankers Association.

NOTE: The data are quarterly and extend through 2005:Q1.



NOTE: The data are quarterly and extend through 2005:Q1. The financial obligations ratio equals the sum of required payments on mortgage and consumer debt, automobile leases, rent on tenant-occupied property, homeowners' insurance, and property taxes, all divided by disposable personal income.

SOURCE: Federal Reserve Board.

restrained by substitution toward home equity debt as a means to finance household expenditures.

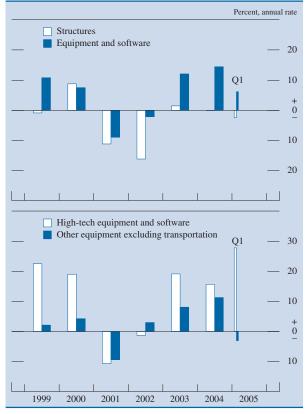
Measures of household credit quality have remained favorable. Delinquency rates on credit card debt and auto loans have continued to decline from already low levels. The pace of bankruptcy filings has run a little higher than at the same time last year; however, that pace has probably been boosted by 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.

Change in real business fixed investment



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

SOURCE: Department of Commerce, Bureau of Economic Analysis.

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 partialexpensing tax incentive, which encouraged capital spending to be pulled forward in advance of the incentive's expiration at the end of 2004.

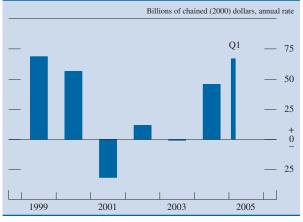
More-recent indicators of E&S spending point to another moderate rise in investment in the second quarter. In particular, outlays for transportation equipment appear to have turned up, on net, as a step-up in purchases of aircraft more than offset a further decline in business spending on motor vehicles. 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





SOURCE: Department of Commerce, Bureau of Economic Analysis.

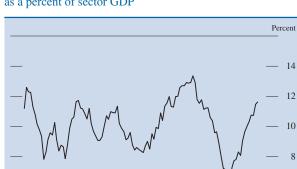
recent surveys, businesses have been reporting that they and their customers are increasingly comfortable with current levels of stocks, whereas in 2004 and early 2005, many were still characterizing inventory positions as too lean.

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.

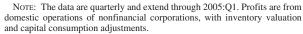
Corporate Profits and Business Finance

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



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



1993

1997

2001

6

2005

SOURCE: Department of Commerce, Bureau of Economic Analysis.

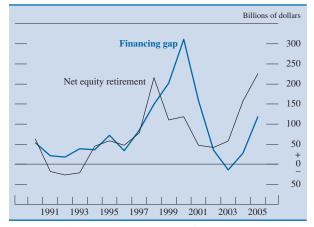
1989

1981

1985

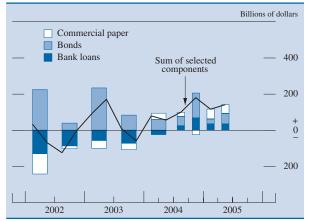
equity issuance has stayed negative so far this year, and share retirements have been boosted by considerable stock buybacks and cash-financed merger and acquisition activity. Gross corporate bond issuance has been limited, and the proceeds have been used mainly to pay down existing debt. Short-term 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

Financing gap and net equity retirement at nonfinancial corporations



NOTE: The data are annual through 2004; for 2005, they are estimates based on data from 2005:Q1. The financing gap is the difference between capital expenditures and internally generated funds. Net equity retirement is the difference between equity retired through share repurchases, domestic cash-financed mergers, or foreign takeovers of U.S. firms and equity issued in public or private markets, including funds invested by venture capital partnerships.

SOURCE: Federal Reserve Board, flow of funds data.



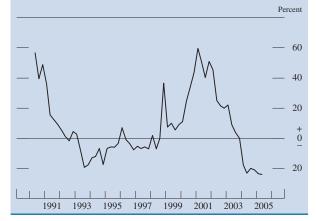
Selected components of net business financing

NOTE: Seasonally adjusted annual rate for nonfinancial corporate business. The data for the sum of selected components are quarterly. The data for 2005:Q2 are estimated.

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

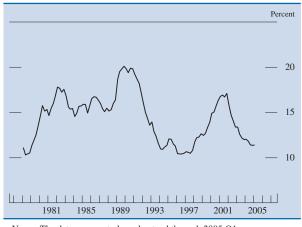
Opinion Survey on Bank Lending Practices conducted in April 2005 indicated that demand for business loans had strengthened over the previous three months and that substantial fractions of banks had eased standards and terms on these loans. In response to special questions regarding longer-term changes 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.

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



NOTE: The data are drawn from a survey generally conducted four times per year; the last observation is for the April (Q2) 2005 survey. Net percentage is the percentage of banks reporting a tightening of standards less the percentage reporting an easing. The definition for firm size suggested for, and generally used by, survey respondents is that large and medium-sized firms have sales of \$50 million or more.

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

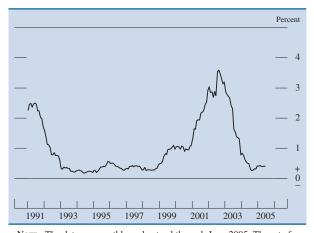


Net interest payments of nonfinancial corporations as a percent of cash flow

NOTE: The data are quarterly and extend through 2005:Q1. SOURCE: Department of Commerce, Bureau of Economic Analysis.

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 corporate 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





NOTE: The data are monthly and extend through June 2005. The rate for a given month is the face value of bonds that defaulted in the twelve months ending in that month divided by the face value of all bonds outstanding at the end of the calendar quarter immediately preceding the twelve-month period. SOURCE: Moody's Investors Service.

investment-grade rating with all the rating agencies except Standard & Poor's.

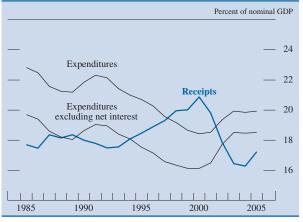
Expansion of commercial-mortgage debt continued apace in the first half of the year and was accompanied by record issuance of commercial-mortgagebacked securities. Likely because of that heavy issuance, spreads of yields on commercial-mortgagebacked securities over those on comparable-maturity Treasuries 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 $2^{3}/4$ 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

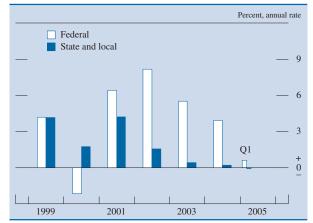


Federal receipts and expenditures

SOURCE: Office of Management and Budget.

NOTE: The budget data are from the unified budget through 2004 and are for fiscal years (October through September), and GDP is for Q4 to Q3. For 2005, the budget data are for the twelve months ending in June, and GDP is for 2004:Q4 to 2005:Q1.



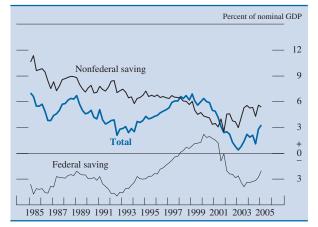


SOURCE: Department of Commerce, Bureau of Economic Analysis.

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 fed-

Net saving



NOTE: The data are quarterly and extend through 2005:Q1. Nonfederal saving is the sum of personal and net business saving and the net saving of state and local governments.

SOURCE: Department of Commerce, Bureau of Economic Analysis.

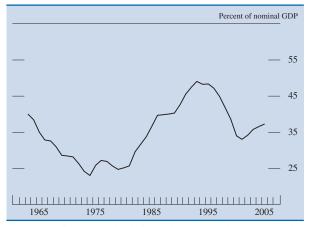
eral debt, rose more than 13 percent over this period. Real federal expenditures for consumption and investment—the part of government spending that is a component of real GDP—increased at an annual rate of just ½ percent in the first calendar quarter of 2005 after having risen 4 percent in 2004. Although 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 31/4 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 13³/₄ 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



Federal government debt held by the public

NOTE: The final observation is for 2005:Q1. 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.

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 ¹/₄ 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

State and local government net saving



NOTE: The data, which are quarterly, are on a national income and product account basis and extend through 2005:Q1. Net saving excludes social insurance funds.

SOURCE: Department of Commerce, Bureau of Economic Analysis.

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 secondary 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 ¹/₂ 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 16¹/₄ percent, up from 5¹/₂ 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 longterm 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.

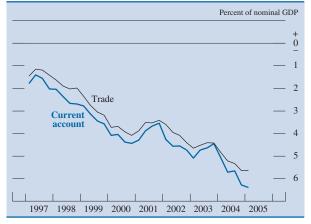
The External Sector

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.

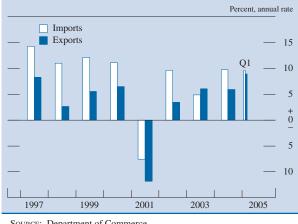
International Trade

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 131/4 percent.

U.S. trade and current account balances



NOTE: The data are quarterly and extend through 2005:01. SOURCE: Department of Commerce.



Change in real imports and exports of goods and services



Real imports of goods and services rose at an annual rate of about 91/2 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 41/4 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 3³/₄ percent in the first quarter, almost 1¹/₂ 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 quar-



Prices of major nonfuel commodities

NOTE: The data are monthly and extend through June 2005. The category of agricultural raw materials consists of timber, cotton, wool, rubber, and hides; food includes cereals, vegetable oils and protein meals, seafood, and meat; and metals includes aluminum, copper, and iron ore. SOURCE: International Monetary Fund.

ter show that the increases in prices of both materialintensive 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

Prices of oil and of nonfuel commodities



NOTE: The data are monthly and extend through June 2005. 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, Wall Street Journal: for nonfuel commodities. Inter-

national Monetary Fund.

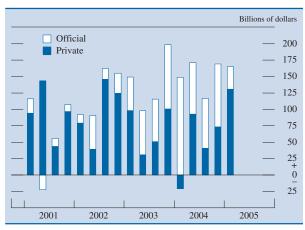
the belief that demand will remain strong and production will have difficulty keeping pace. The price of the far-dated NYMEX oil futures contract (currently for delivery in December 2011) rose from about \$38 per barrel as of last October to about \$56 per barrel in late June.

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

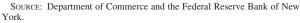




SOURCE: Department of Commerce



U.S. net international securities transactions



and have been more heavily weighted toward purchases of equities.

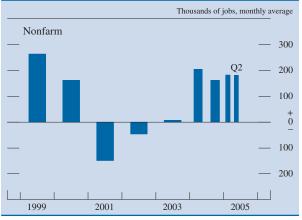
Net direct investment outflows in the first quarter were well below their levels in the fourth quarter; direct investment into the United States was roughly unchanged, but U.S. direct investment abroad fell back after a surge in new equity late last year. There is little evidence to date that U.S. companies 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, nonfarm 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 $5^{3}/_{4}$ percent to just below $5^{1}/_{2}$ 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, con-



Net change in payroll employment

SOURCE: Department of Labor, Bureau of Labor Statistics.

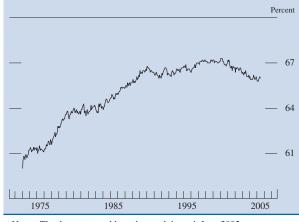
struction employment continued to climb at a steady pace, a reflection of the buoyant residential housing market and increased spending on infrastructure by state and local governments. In contrast, manufacturing employment continued to trend down, as cutbacks in industries that produce wood products, 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

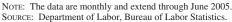




NOTE: The data are monthly and extend through June 2005. SOURCE: Department of Labor, Bureau of Labor Statistics.



Labor force participation rate

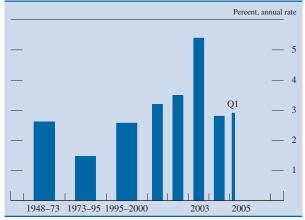


participation rate in June, at 66 percent, remained well below the high of 671/4 percent reached in early 2000. To some extent, both the high level of the participation rate in 2000 and the more recent decline are likely related to cyclical developments in the economy: The tight labor markets of the 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 contrast 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 $2\frac{1}{2}$ percent over the year ending in the first quarter of 2005, down from the $5\frac{1}{2}$ 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

Change in output per hour



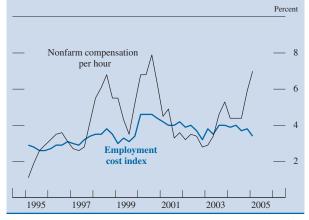
NOTE: Nonfarm business sector. SOURCE: Department of Labor, Bureau of Labor Statistics.

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

Measures of change in hourly compensation

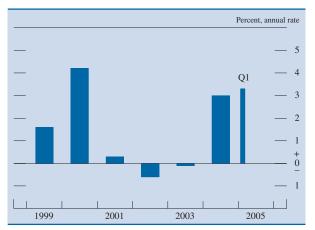


Note: The data are quarterly and extend through 2005:Q1. For nonfarm compensation, change is over four quarters; for the employment cost index (ECI), change is over the twelve months ending in the last month of each quarter. Nonfarm compensation is for the nonfarm business sector; the ECI is for private industry excluding farm and household workers.

SOURCE: Department of Labor, Bureau of Labor Statistics.

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 31/2 percent over the twelve months ending in March 2005, about 1/2 percentage point less than the increases over the preceding two years. The wages and salaries component of the ECI was up just 21/2 percent over the twelve months ending in March, a pace similar to that in the preceding year, while employer costs for benefits increased 5³/₄ 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 definedbenefit 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 $7\frac{1}{2}$ 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 4¹/₄ 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



NOTE: Nonfarm business sector. The change in unit labor costs is defined as the increase in nonfarm compensation per hour less the growth in labor productivity.

SOURCE: Department of Labor, Bureau of Labor Statistics.

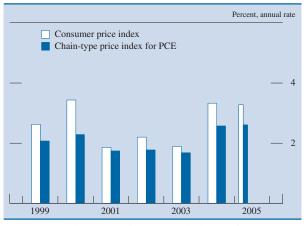
Change in unit labor costs

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 chaintype 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





Note: For 2005, the change for the PCE price index is from 2004:Q4 to May 2005; for the consumer price index, it is from 2004:Q4 to 2005:Q2. SOURCE: For consumer price index, Department of Labor, Bureau of Labor Statistics; for chain-type measure, Department of Commerce, Bureau of Economic Analysis.

Alternative measures of price change

Percent

D :	2002 . 2004	2004 . 2005
Price measure	2003 to 2004	2004 to 2005
$C_{1} = (0, 1, 1, 0, 1)$		
Chain-type (Q1 to Q1) Gross domestic product (GDP)	17	2.4
Gross domestic product (GDT)	1.7	2.4
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
Fixed-weight ($Q2$ to $Q2$)		
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. SOURCE: For chain-type measures, Department of Commerce, Bureau of Economic Analysis; for fixed-weight measures, Department of Labor, Bureau of Labor Statistics.

2 percent, from $1\frac{1}{2}$ 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 $1\frac{1}{4}$ percent in the three months ending in June after having increased at a $3\frac{1}{4}$ 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 $2\frac{1}{2}$ 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 fourthquarter 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 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 $3\frac{1}{2}$ 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 1¹/₄ 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 longerterm expectations 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 $3\frac{1}{4}$ 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 $2\frac{1}{2}$ 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 Trea-

sury 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.

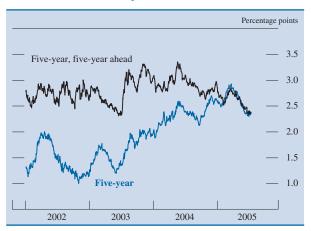
Several potential explanations have been offered for the decline in long-term yields and distant-horizon forward rates in the United States since mid-2004. Among these is the possibility that long-term inflaInterest rates on selected Treasury securities



NOTE: The data are daily and extend through July 13, 2005. SOURCE: Department of the Treasury.

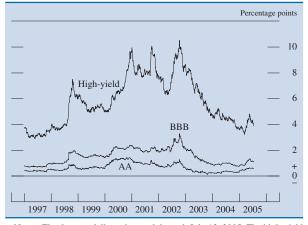
tion expectations have fallen and become more firmly anchored. Indeed, longer-term inflation compensation, measured by the spread between the yields on ten-year Treasury inflation-protected securities and their nominal counterparts, has fallen about 30 basis points over this period. A second possible 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





Note: The data are daily and extend through July 13, 2005. Based on a comparison of the yield curve for Treasury inflation-protected securities (TIPS) to the nominal off-the-run Treasury yield curve.

SOURCE: Federal Reserve Board calculations based on data provided by the Federal Reserve Bank of New York and Barclays.



Spreads of corporate bond yields over comparable off-the-run Treasury yields



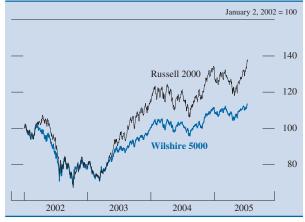
save for retirement, and apparently diminished investment prospects in many industrialized and developing economies.

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; speculativegrade bond spreads are now about 50 basis points higher than at the start of the year.

Equity Markets

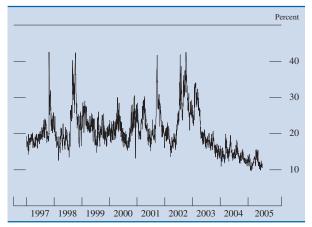
Broad equity price indexes fell modestly in the first quarter, but they rebounded and are now little changed, on net, since the start of 2005. Thus far this year, stock prices have been buoyed by continued strong profits and low long-term interest rates, but higher oil prices and a few high-profile earnings 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.

Stock price indexes



NOTE: The data are daily and extend through July 13, 2005 SOURCE: Frank Russell Company; Dow Jones Indexes.

Implied S&P 500 volatility

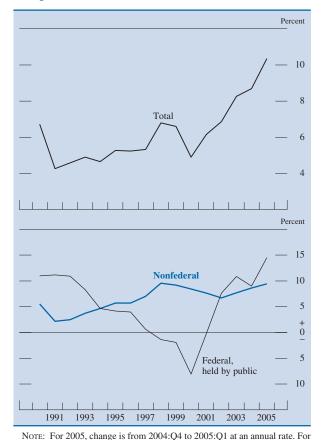


NOTE: The data are daily and extend through July 13, 2005. The series shown is the implied thirty-day volatility of the S&P 500 stock price index as calculated from a weighted average of options prices. SOURCE: Chicago Board Options Exchange.

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 nonfinancial sectors expanded at an annual rate of about 10 percent in the first quarter of 2005, up from an 8¹/₄ 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



earlier years, the data are annual and are computed by dividing the annual flow for a given year by the level at the end of the preceding year. The total

consists of nonfederal debt and federal debt held by the public. Nonfederal

debt consists of the outstanding credit market debt of state and local governments, households, nonprofit organizations, and nonfinancial businesses.

Federal debt held by the public excludes securities held as investments of

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

Commercial bank credit expanded at an annual rate of 13 percent in the first quarter of 2005. Financing

SOURCE: Federal Reserve Board, flow of funds data.

firms' need for external financing.

federal government accounts.

Change in domestic nonfinancial debt

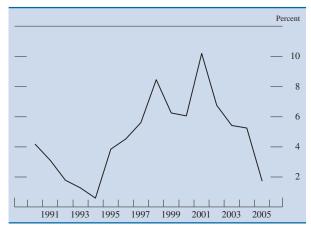
runoffs, accelerated to a 15 percent annual rate of growth in the first quarter of 2005, supported in part by strong demand for short-term financing to fund rising accounts receivable, inventories, and merger and acquisition activity.

Credit market assets held by governmentsponsored 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 $2\frac{1}{2}$ percent annual rate-probably slower than nominal GDP and down from a $5\frac{1}{4}$ 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.

M2 growth rate



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 creditrisk-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

Note: For 2005, growth is estimated using monthly data through May; for earlier years, the data are annual averages. M2 consists of currency, traveler's checks, demand deposits, other checkable deposits, savings deposits (including money market deposit accounts), small-denomination time deposits, and balances in retail money market funds.

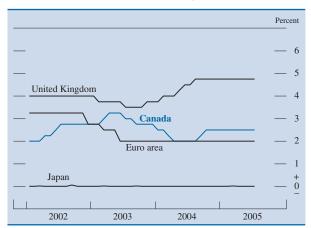
SOURCE: Federal Reserve Statistical Release H.6, "Money Stock Measures."

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.

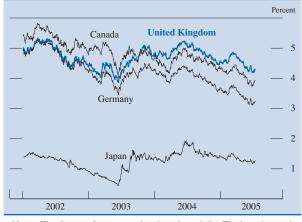
After having edged up during the first three months of this year, long-term interest rates in the major foreign industrial economies have fallen and now stand below their levels at the start of the year. As in



Official interest rates in selected foreign industrial countries

NOTE: The data are as of month-end; the last observation for each series is for July 13, 2005. The data shown are the call money rate for Japan, the overnight rate for Canada, the refinancing rate for the euro area, and the repurchase rate for the United Kingdom.

Yields on benchmark government bonds in selected foreign industrial countries

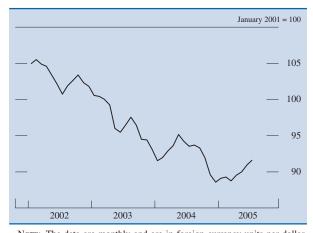


NOTE: The data are for ten-year bonds and are daily. The last observation is for July 13, 2005.

SOURCE: Bloomberg L.P.

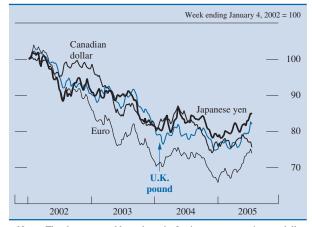
the United States, the decline in foreign long-term interest rates continues a trend that began in mid-2004. However, long-term rates in the major foreign industrial economies have fallen more than rates in the United States this year. The decline in European long-term rates occurred amid weak economic 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

U.S. dollar nominal exchange rate, broad index



NOTE: The data are monthly and are in foreign currency units per dollar. The last observation is the average of trading days from July 1, 2005, through July 13, 2005. The broad index is a weighted average of the foreign exchange values of the U.S. dollar against the currencies of a large group of major U.S. trading partners. The index weights, which change over time, are derived from U.S. export shares and from U.S. and foreign import shares. SOURCE: Federal Reserve Board.

U.S. dollar exchange rate against selected major currencies



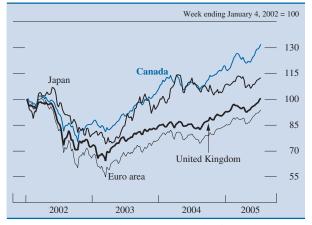
NOTE: The data are weekly and are in foreign currency units per dollar. The last observation for each series is the average of July 11, 2005, through July 13, 2005.

SOURCE: Bloomberg L.P.

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.

Equity indexes in selected foreign industrial countries



NOTE: The data are weekly. The last observation for each series is the average of July 11, 2005, through July 13, 2005. SOURCE: Bloomberg L.P.

Equity indexes in selected emerging-market economies



Note: The data are weekly. The last observation for each series is the average of July 11, 2005, through July 13, 2005. The Asian emerging-market economies are China, Hong Kong, India, Indonesia, Malaysia, Pakistan, the Philippines, Singapore, South Korea, Taiwan, and Thailand; the index weight for each of these economies is its market capitalization as a share of the group's total.

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

SOURCE: For Asian emerging-market economies, Morgan Stanley Capital International (MSCI) index; for others, Bloomberg L.P.

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 $1\frac{1}{2}$ 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 emergingmarket 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 1¹/₄ 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. \Box