## Prefatory Note

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[1] In some cases, original copies needed to be photocopied before being scanned into electronic format. All scanned images were deskewed (to remove the effects of printer- and scanner-introduced tilting) and lightly cleaned (to remove dark spots caused by staple holes, hole punches, and other blemishes caused after initial printing).

[2] A two-step process was used. An advanced optical character recognition computer program (OCR) first created electronic text from the document image. Where the OCR results were inconclusive, staff checked and corrected the text as necessary. Please note that the numbers and text in charts and tables were not reliably recognized by the OCR process and were not checked or corrected by staff.

Content last modified 5/20/2009.

# Part 2

March 13, 2003

# CURRENT ECONOMIC
# AND FINANCIAL CONDITIONS

## Recent Developments

Prepared for the Federal Open Market Committee
by the staff of the Board of Governors of the Federal Reserve System

Confidential (FR) Class III FOMC

March 13, 2003

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# Domestic Nonfinancial Developments

# Domestic Nonfinancial Developments

## Overview

The economy appears to be expanding at a subpar pace again this quarter. The labor market has worsened markedly in recent months, and spending looks set to post only a moderate gain in the current quarter. Consumer outlays on goods and services appear to have slowed in recent months, in part because of snowstorms in mid-February. Moreover, although orders and shipments of capital goods moved up in January, business investment spending overall remains quite sluggish. In contrast, housing markets have continued to be robust, and federal government outlays are likely to ratchet up again in the current quarter. Although core consumer price inflation has changed little over the past year, overall price inflation has been pushed up recently by steep increases in energy prices.

## Labor Market Developments

On balance, the employment data indicate that the labor market has softened considerably over the past several months. Payroll declines have averaged close to 100,000 per month since November, and initial claims for unemployment insurance and other available indicators point to ongoing job losses in March.

Private nonfarm payrolls dropped 321,000 in February following an upward-revised gain of 174,000 in January. We suspect that the magnitude of last month's drop may have been amplified by bad weather, reserve call-ups, and seasonal adjustment difficulties. Still, the widespread nature of the declines suggests that the underlying demand for labor is weak.

Employment in the retail trade sector—which includes the volatile eating and drinking establishments category—fell 92,000 last month. More surprisingly, the service sector slashed 86,000 jobs after having added an average of 48,000 jobs per month over the past year. Within this category, many industries lost jobs, and employment in sectors that had been growing over the past year—including health, social, legal, and educational services—was flat. Although the construction sector shed 48,000 jobs in February, the BLS indicated that some of the slide may have been attributable to bad weather during the survey week. Manufacturers trimmed 53,000 jobs from their rosters, on par with the average pace of job cuts over the past year. The transportation industry posted a loss of 29,000 jobs in February, led by declines in the trucking and air transportation industries, both of which have likely been affected by rising fuel costs.

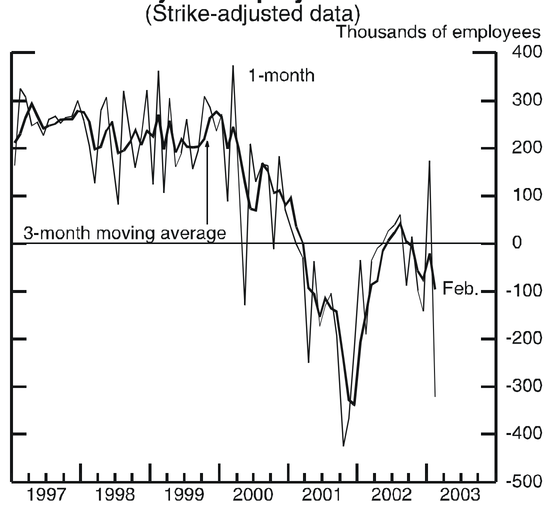
The average workweek of production or nonsupervisory workers dropped 0.2 hour, to 34.1 hours, in February; a large—and likely weather-induced—decline in the construction workweek accounted for about half of the drop. Aggregate hours fell 1 percent in February following an upward-revised gain of

CHANGES IN EMPLOYMENT
(Thousands of employees; based on seasonally adjusted data)

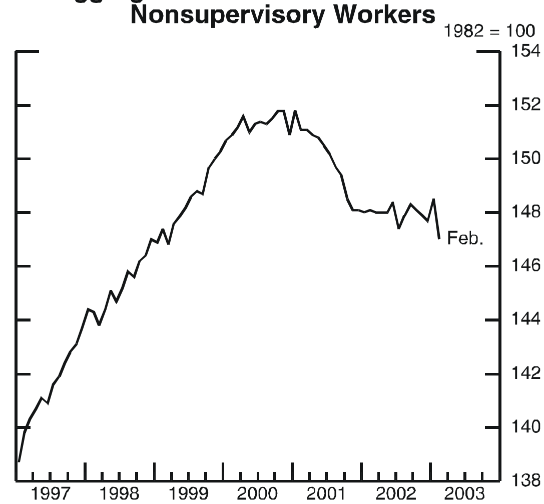
| | | 2002 | | | 2002 | 2003 | |
|---|---|---|---|---|---|---|---|
| | 2002 | Q2 | Q3 | Q4 | Dec. | Jan. | Feb. |
| | -Average monthly change- | | | | | | |
| Nonfarm payroll employment[1] | -18 | 12 | 31 | -53 | -147 | 185 | -308 |
| *Previous* | *-19* | *12* | *31* | *-56* | *-156* | *143* | *...* |
| Private | -38 | 7 | 4 | -75 | -142 | 174 | -321 |
| Mining | -1 | -2 | -1 | 0 | 2 | -3 | -3 |
| Manufacturing | -51 | -22 | -39 | -62 | -83 | -4 | -53 |
| Construction | -8 | -15 | 2 | -4 | 1 | 26 | -48 |
| Transportation and utilities | -14 | -8 | -22 | -13 | -35 | -2 | -41 |
| Retail trade | -14 | -8 | -6 | -46 | -95 | 116 | -92 |
| Wholesale trade | -5 | 0 | -6 | -9 | -6 | 1 | -1 |
| Finance, insurance, real estate | 6 | -2 | 13 | 14 | 9 | -4 | 3 |
| Services | 49 | 63 | 61 | 44 | 65 | 44 | -86 |
| Help supply services | 7 | 36 | -11 | -1 | 28 | 10 | 3 |
| Total government | 20 | 5 | 27 | 22 | -5 | 11 | 13 |
| Total employment (household survey) | 31 | 80 | 310 | -291 | -103 | 1097 | -128 |
| Memo: | | | | | | | |
| Aggregate hours of private production workers (percent change)[1,2] | -0.2 | 0.3 | -0.7 | 0.1 | -0.1 | 0.5 | -1.0 |
| Average workweek (hours)[1] | 34.2 | 34.2 | 34.1 | 34.2 | 34.1 | 34.3 | 34.1 |
| Manufacturing (hours) | 40.8 | 41.0 | 40.8 | 40.7 | 40.9 | 40.8 | 40.8 |

Note. Average change from final month of preceding period to final month of period indicated.
1. Survey of establishments.
2. Annual data are percent changes from Q4 to Q4. Quarterly data are percent changes from preceding quarter at an annual rate. Monthly data are percent changes from preceding month.
... Not applicable.

**Private Payroll Employment Growth**
(Strike-adjusted data)




**Aggregate Hours of Production or Nonsupervisory Workers**



0.5 percent in January. On net, the level of hours in January and February averaged about 1/2 percent (at an annual rate) below the average in the fourth quarter.

In the household survey, the unemployment rate edged up 0.1 percentage point, to 5.8 percent, in February, only slightly above the level a year ago. Given the weakness in employment, the small rise in the jobless rate over the past year is somewhat puzzling. We suspect that one contributing factor may be the decision by some individuals to withdraw from the labor force altogether rather than remain unemployed in a difficult job market. However, an alternative measure of the unemployment rate, the potential worker rate—which includes unemployed workers as well as individuals who are not in the labor force but still want a job—also has not moved up significantly in the past year.

Still, other labor market indicators from the household survey suggest that job prospects have not been good: Over the past twelve months, the labor force participation rate has declined 0.4 percentage point to its lowest level in nearly ten years. In addition, the proportion of the workforce working part time because of economic conditions moved up appreciably in January and February. The number of recent job losers as a share of employment, which provides an estimate of the layoff rate, remained near its average level over 2002, and the number of long-term unemployed moved back up last month, suggesting that finding a job remains difficult.

The most recent readings on initial claims for unemployment insurance suggest that labor market conditions have remained soft in March. The four-week moving average of initial claims stood at 420,000 for the week ended March 8, a level consistent with continued job losses. Some of the recent rise in claims probably reflects weather-related layoffs, as filings of claims were disproportionately high in states hit hard by storms. Insured unemployment has also moved up of late, in line with rising claims. The four-week moving average for the week ended March 1 stood at 3.4 million, up about 100,000 from the most recent low point reached in early February.

Other indicators of labor market activity are consistent with the picture of weakening demand for labor and sagging confidence among workers. According to a survey by Manpower, a temporary help agency, fewer firms, on net, are planning to expand their payrolls in the second quarter than in the first quarter.[1] In addition, the National Federation of Independent Businesses recently reported that the hiring plans of small businesses dropped in February

1. Historical patterns suggest that Manpower's second-quarter plans are most useful for predicting employment growth from February through April.

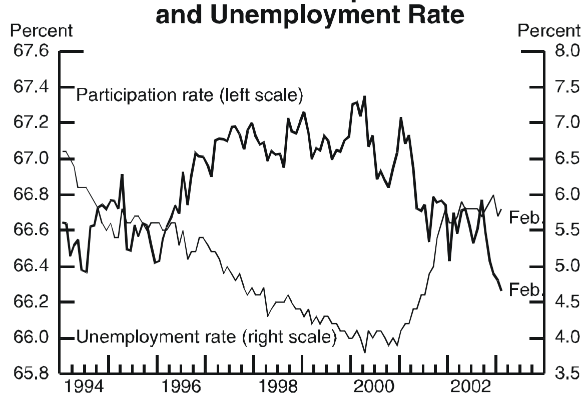
SELECTED UNEMPLOYMENT AND LABOR FORCE PARTICIPATION RATES

(Percent; based on seasonally adjusted data)

| | | 2002 | | | | 2003 | |
|---|---|---|---|---|---|---|---|
| | 2002 | Q1 | Q2 | Q3 | Q4 | Jan. | Feb. |
| Civilian unemployment rate (16 years and older) | 5.8 | 5.6 | 5.9 | 5.8 | 5.9 | 5.7 | 5.8 |
| Teenagers | 16.5 | 16.3 | 16.9 | 16.7 | 16.1 | 16.8 | 17.2 |
| 20-24 years old | 9.7 | 9.7 | 9.5 | 9.6 | 9.9 | 9.3 | 9.3 |
| Men, 25 years and older | 4.7 | 4.5 | 4.8 | 4.7 | 4.9 | 4.9 | 4.9 |
| Women, 25 years and older | 4.6 | 4.4 | 4.8 | 4.6 | 4.6 | 4.2 | 4.5 |
| Labor force participation rate | 66.6 | 66.6 | 66.7 | 66.6 | 66.5 | 66.3 | 66.3 |
| Teenagers | 47.4 | 47.7 | 47.6 | 47.6 | 46.8 | 46.0 | 45.5 |
| 20-24 years old | 76.4 | 76.5 | 76.7 | 76.6 | 75.8 | 76.1 | 75.6 |
| Men, 25 years and older | 75.9 | 75.9 | 76.1 | 76.0 | 75.6 | 75.2 | 75.5 |
| Women, 25 years and older | 59.4 | 59.3 | 59.4 | 59.3 | 59.4 | 59.6 | 59.5 |
| Potential worker rate[1] | 8.7 | 8.7 | 8.8 | 8.6 | 8.8 | 8.7 | 8.7 |

1. The potential worker rate equals the number of civilian unemployed plus those who are not in the labor force and want a job as a percentage of the civilian labor force plus those who are not in the labor force and want a job.

**Labor Force Participation Rate and Unemployment Rate**




**Persons Working Part-Time for Economic Reasons**

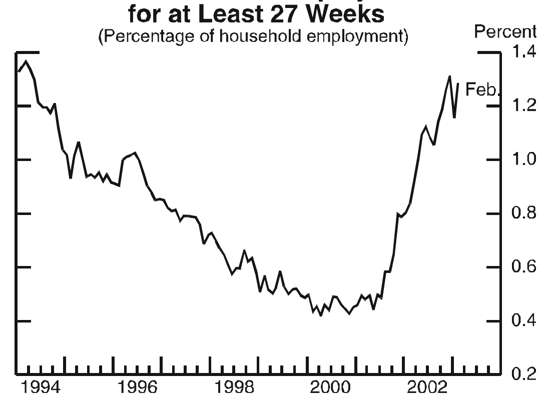
(Percentage of household employment)


**Job Losers Unemployed for Less Than 5 Weeks**

(Percentage of household employment)

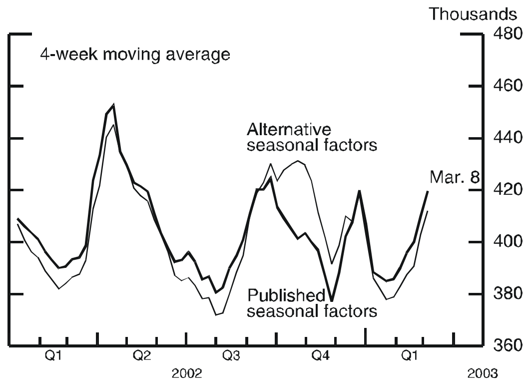

**Job Losers Unemployed for at Least 27 Weeks**

(Percentage of household employment)



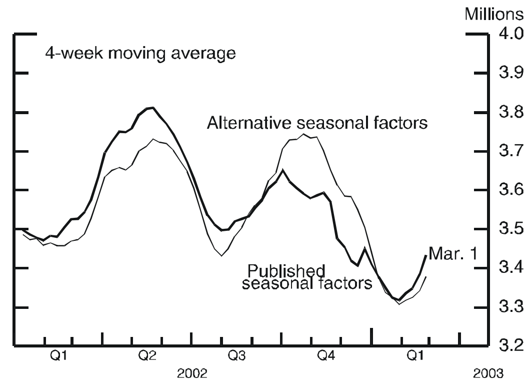
# Labor Market Indicators

## Initial Claims



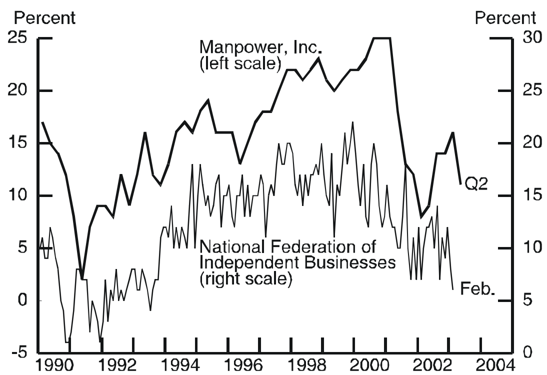

Note. Alternative seasonal factors are computed excluding data from 2001, when the rise in claims following the September 11 attacks likely distorted published seasonal factors.

## Insured Unemployment



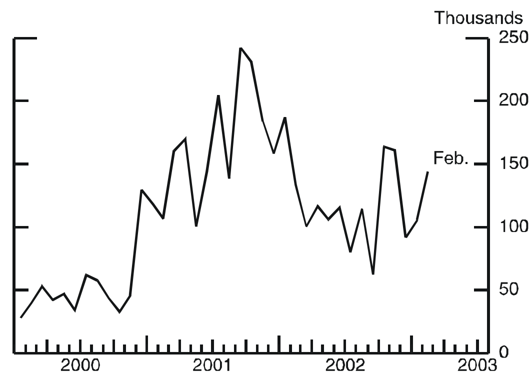

Note. Alternative seasonal factors are computed excluding data from 2001, when the rise in claims following the September 11 attacks likely distorted published seasonal factors.

## Net Hiring Strength



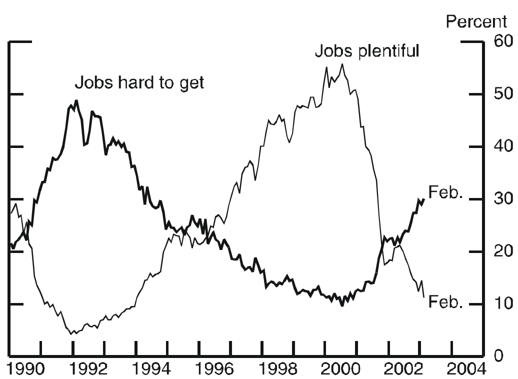

Note. Percent planning an increase in employment minus percent planning a reduction.

## Layoff Announcements



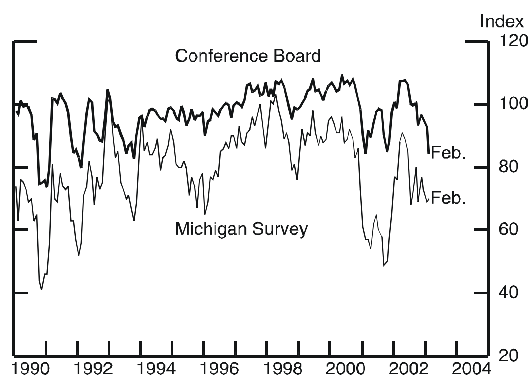

Note. Seasonally adjusted by FRB staff.
Source. Challenger, Gray and Christmas, Inc.

## Current Employment Conditions




Source. Conference Board.

## Expected Employment Conditions




Note. The proportion of households expecting employment to rise, minus the proportion expecting it to fall, plus 100.

and are now at the low end of the range seen since the fall of 2001. Meanwhile, layoff announcements, compiled by the outplacement firm Challenger, Gray, and Christmas, and seasonally adjusted by Board staff, increased in February and are now above their average level in 2002. In the Conference Board survey, workers' perceptions of current employment conditions worsened in February, and in both the Conference Board and Michigan surveys, respondents' views of expected labor market conditions were more pessimistic than they were, on average, late last year.

**Output per Hour**
(Percent change from preceding period at compound annual rate; based on seasonally adjusted data)

| Sector | 2001[1] | 2002[1] | 2002 | | |
|---|---|---|---|---|---|
| | | | Q2 | Q3 | Q4 |
| Nonfarm businesses | | | | | |
| All persons[2] | 1.9 | 4.1 | 1.7 | 5.5 | 0.8 |
| All employees[3] | 2.0 | 4.3 | 1.7 | 6.6 | 1.9 |
| Nonfinancial corporations[4] | 3.4 | n.a. | 5.9 | 5.5 | n.a. |

1. Change is from fourth quarter of the preceding year to fourth quarter of the year shown.
2. Includes non-employees (published definition).
3. Assumes that the growth rate of hours of all persons equals the growth rate of hours of all employees.
4. The nonfinancial corporate sector consists of all corporations doing business in the United States with the exception of banks, stock and commodity brokers, and finance and insurance companies. The sector accounts for about two-thirds of business employment.

The BLS estimates that output per hour for all persons in the nonfarm business sector increased at an annual rate of 0.8 percent in the fourth quarter. However, this figure was held down by a sharp increase in the reported hours of self-employed workers, a series that is quite volatile from quarter to quarter.[2] Excluding the hours of self-employed workers, which account for about 10 percent of total hours, productivity in the fourth quarter posted a gain of 1.9 percent. Over the four quarters of 2002, productivity for all persons moved

2. Self-employed hours may also complicate our interpretation of the productivity data in the first quarter: The incorporation of new population estimates and the conversion of the Current Population Survey to the North American Industry Classification System (NAICS) introduced a one-time break in the employment and hours of self-employed workers in the private nonfarm business sector between December 2002 and January 2003. The BLS has not yet decided how to adjust measures of self-employed hours to account for this break; the method of adjustment could have a large effect on the estimated change in self-employed hours—and thus nonfarm business productivity—in the first quarter.

up 4.1 percent, the largest increase over any four-quarter period since 1992; productivity excluding the hours of self-employed workers rose a similar 4.3 percent over the past year.

**Industrial Production**

The available data indicate that total industrial production (IP) edged up in February.[3] The output of motor vehicles fell, reversing about half of the gain in January. However, indicators of high-tech production suggest that output in these industries continued to firm in February after having declined in the final month of 2002. Apart from motor vehicles and high-tech, the available data are consistent with little change in manufacturing output.

Weekly data show that the return of temperatures to seasonal norms boosted electricity generation for a second month in February. Excluding motor vehicle assemblies and electricity generation, the components of IP for which we have weekly physical product data are on track to make a slight negative contribution to the change in total IP. Although drilling activity, crude oil extraction, and the output of refineries jumped in response to the sharp increases in petroleum and petroleum product prices, coal production declined significantly, and iron and steel production fell further last month.

The slower pace of motor vehicle production and the accompanying decline in the output of motor vehicle parts appear to have held down IP by nearly 0.2 percentage point last month. Elsewhere in transportation, the output of commercial aircraft continued to decline in January and February. However, the contraction in this sector appears to have slowed; in the fourth quarter of 2002, production dropped, on average, nearly 3 percent per month.[4]

In the high-tech sector, the latest data from the Semiconductor Industry Association suggest that the output of semiconductors advanced at a brisk pace early this year after having declined in December. A pickup in demand for chips used in cellular handsets appears to be responsible for much of the turnaround. In addition, Intel's revised revenue expectations for the first quarter of 2003 are consistent with a moderate gain in real microprocessor unit (MPU) output, the largest category of domestic semiconductor production.

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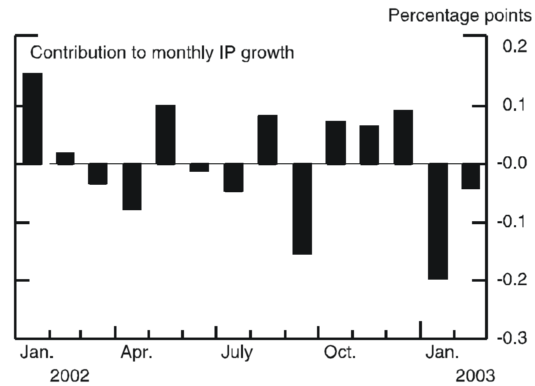
3. Snowstorms in the East and ice storms in Texas apparently exerted only a minimal drag on production in February.

4. Boeing plans to deliver about 280 airplanes in 2003, a level well below the 381 aircraft delivered in 2002. Given the considerable lead times for these deliveries, however, the step down to a lower production rate has been essentially completed; going forward, therefore, the output of commercial aircraft will likely flatten out.

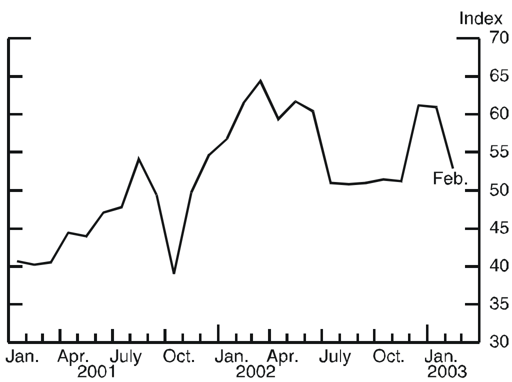
## Indicators of Manufacturing Activity

Motor Vehicle Assemblies


Weekly Physical Product Data ex. Motor Vehicles and Electricity Generation

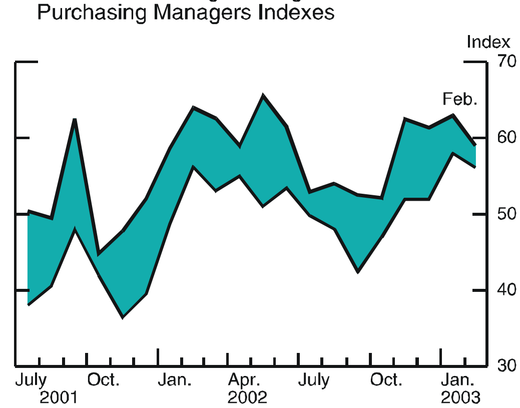



ISM New Orders



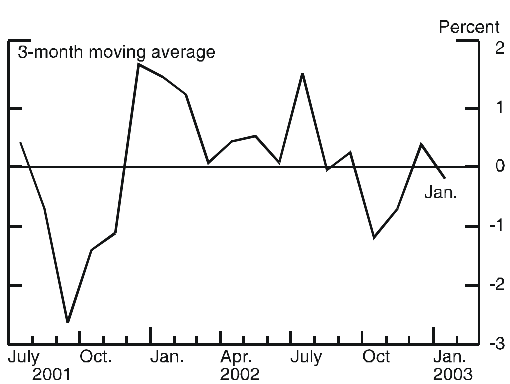

Note. The ISM index equals 50 plus half the difference between the percentage of respondents reporting increases versus decreases of new orders.

New Orders: Range of Regional Purchasing Managers Indexes

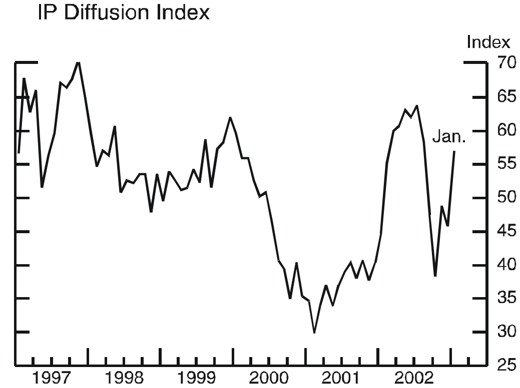



Note. The regional purchasing managers index equals 50 plus half the difference between the percentage of respondents reporting increases versus decreases of new orders.
Source. Reports from Chicago, New York, Philadelphia, and Richmond.

Change in Real Adjusted Durable Goods Orders

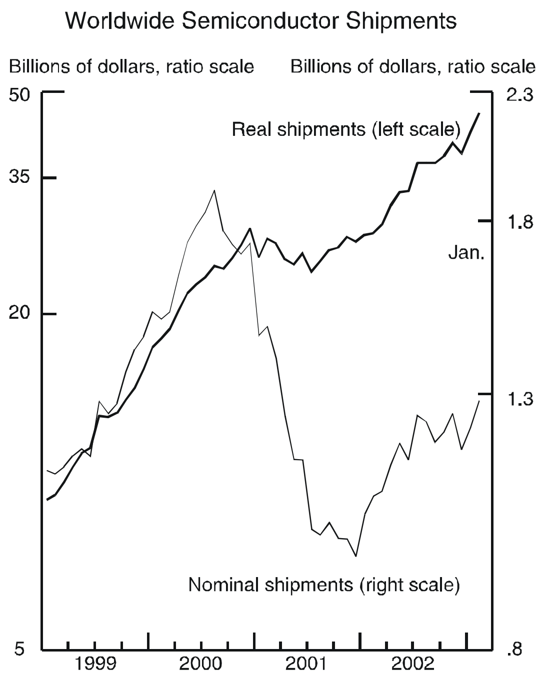



IP Diffusion Index

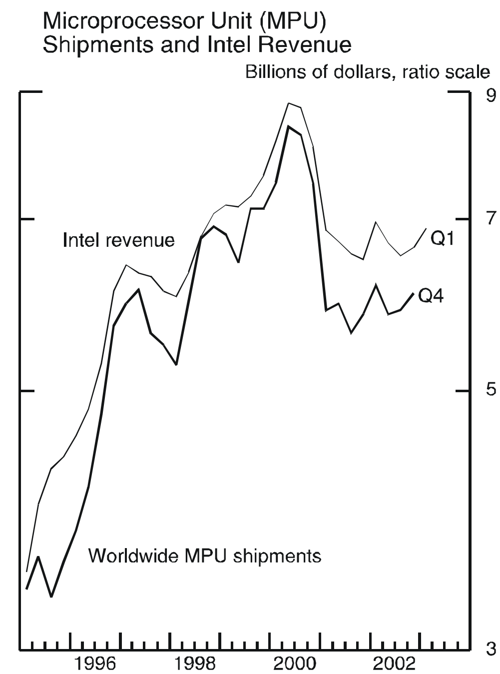



Note. The IP diffusion index equals the percentage of IP series that increased over three months plus one-half the percentage that were unchanged.

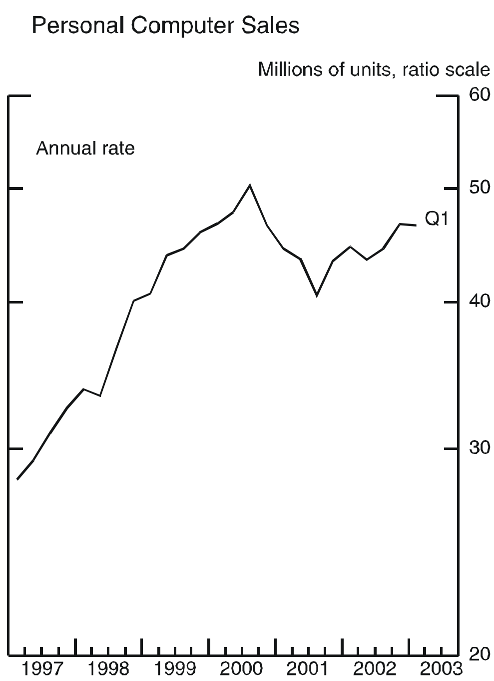
# Indicators of High-Tech Manufacturing Activity



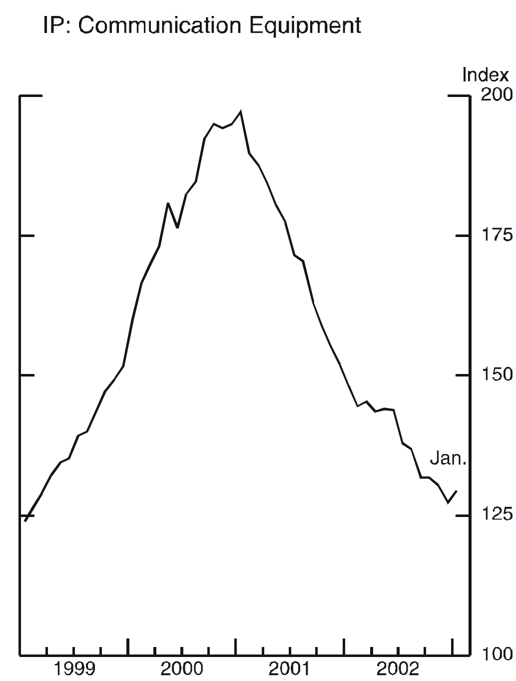

Source. Semiconductor Industry Association and FRB staff estimates.




Note. Q1 is the midpoint of Intel's guidance as of March 6, 2003.
Source. Intel and Semiconductor Industry Association.




Note. FRB seasonals. Includes notebooks. Value for Q1 is a Dataquest forecast.
Source. Dataquest.



Downstream, the output of computers and peripheral equipment has continued to expand at a moderate pace. The production of personal computers for consumer use jumped substantially during the fourth quarter, apparently in response to sales that were boosted by aggressive rebate programs. In the first quarter, industry analyst Gartner/Dataquest expects unit shipments of PCs to be about flat, a development consistent with sizable gains in real output. In contrast, the data on production-worker hours suggest that the output of communications equipment fell in February after having risen in January. On balance, the declines in this category appear to have slowed since mid-2002.

Most forward-looking indicators of activity point to small but positive gains in output excluding high-tech and transportation. The diffusion index of new orders from the Institute of Supply Management (ISM)—an indicator that has predicted manufacturing IP well in the past year—fell sharply in February, although its level remained consistent with a slow rate of increase in production. The regional diffusion indexes of new orders also generally edged down in February but were more optimistic than the ISM survey. Real adjusted durable goods orders moved up 3 percent in January; even with the most recent increase, however, this series has only recovered to about its level last October.

**Motor Vehicles**

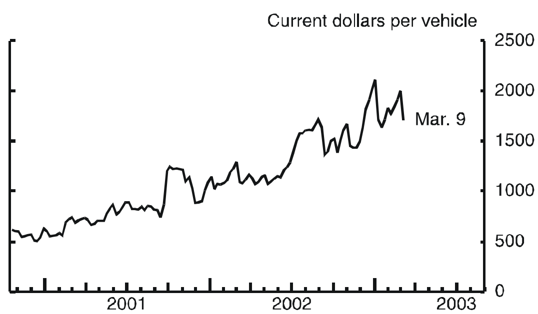
Sales of light motor vehicles tumbled to an annual rate of 15.3 million units in February, nearly 800,000 units below the sales pace in January. Several industry sources reported that sales were held down by the snowstorms that pummeled the East and parts of the South over the Presidents' Day weekend. Although estimates of its impact varied considerably, some firms assigned the snowstorms responsibility for as many as 500,000 units in lost sales. But some of the decline also may have owed to increased consumer pessimism. Indeed, the Michigan survey index of car-buying attitudes dropped sharply in February; many respondents cited negative assessments of current gasoline prices and geopolitical uncertainty. In addition, the automakers have reported that they are concerned that price incentives are becoming less effective: In February, the average incentive per vehicle was about $1,850, little changed from January's level and up a bit from the average in December, when light vehicle sales totaled more than 18 million units. Looking ahead to March, the noticeable step down in incentives through the first week of the month is consistent with recent reports from the automakers, which indicated a further slackening in demand.

## Sales of Automobiles and Light Trucks
(Millions of units at an annual rate, FRB seasonals)

| | 2002 | 2002 H1 | 2002 Q3 | 2002 Q4 | 2002 Dec. | 2003 Jan. | 2003 Feb. |
|---|---|---|---|---|---|---|---|
| Total | 16.7 | 16.3 | 17.6 | 16.5 | 18.2 | 16.1 | 15.3 |
| Autos | 8.1 | 8.0 | 8.5 | 7.9 | 8.4 | 8.1 | 7.3 |
| Light trucks | 8.6 | 8.4 | 9.1 | 8.6 | 9.8 | 8.0 | 8.0 |
| North American[1] | 13.5 | 13.1 | 14.3 | 13.3 | 14.8 | 12.8 | 12.1 |
| Autos | 5.9 | 5.8 | 6.2 | 5.7 | 6.1 | 5.9 | 5.2 |
| Light trucks | 7.6 | 7.3 | 8.1 | 7.6 | 8.7 | 6.9 | 6.9 |
| Foreign-produced | 3.3 | 3.3 | 3.4 | 3.2 | 3.4 | 3.3 | 3.2 |
| Autos | 2.2 | 2.2 | 2.3 | 2.2 | 2.3 | 2.2 | 2.1 |
| Light trucks | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| Memo: | | | | | | | |
| Medium and heavy trucks | .40 | .39 | .43 | .41 | .39 | .37 | n.a. |

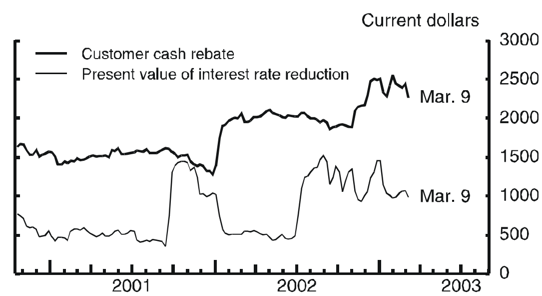
Note. Components may not sum to totals because of rounding. Data on sales of trucks and imported autos for the most recent month are preliminary and subject to revision.
1. Excludes some vehicles produced in Canada that are classified as imports by the industry.

**Average Value of Incentives on Light Vehicles**



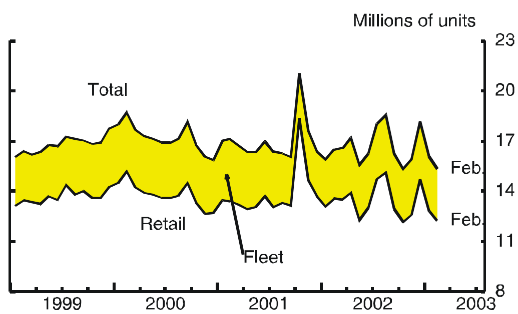

Note. Weighted average of customer cash rebate and interest rate reduction.
Source. J.D. Power and Associates.

**Average Value of Cash and Financing Incentives for Vehicles with Incentives**



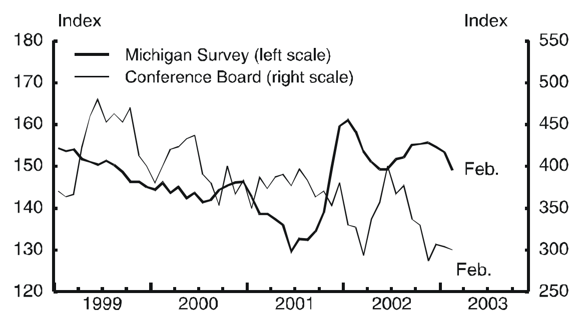

Note. Seasonally adjusted with FRB seasonals.
Source. J.D. Power and Associates.

**Fleet and Retail Sales of Light Vehicles**




Note. Annual rate; FRB seasonals.

**Buying Attitudes for New Vehicles**

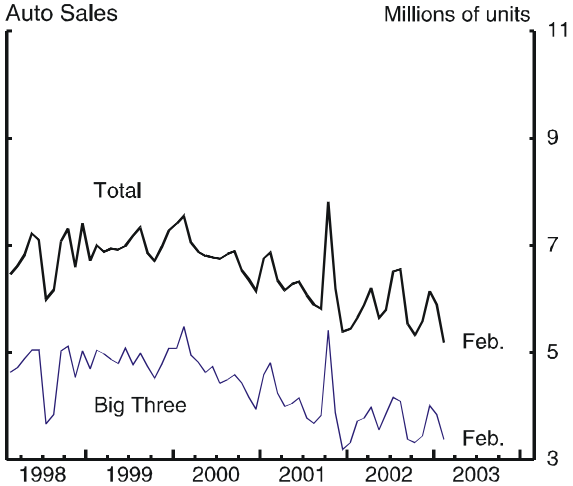



Note. 3-month moving average.

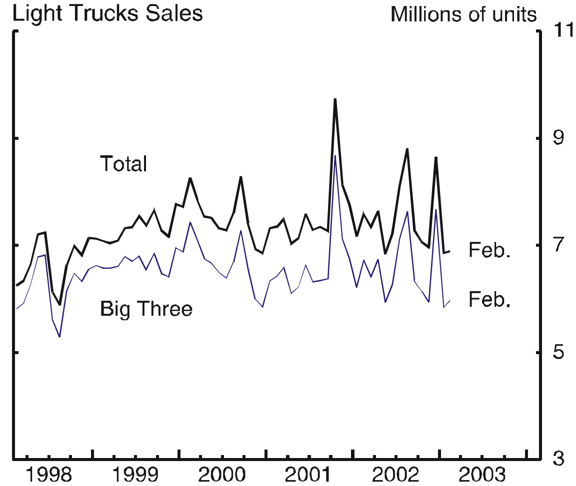
## Sales and Inventories of Domestic Light Vehicles

(Seasonally adjusted data; FRB seasonals)

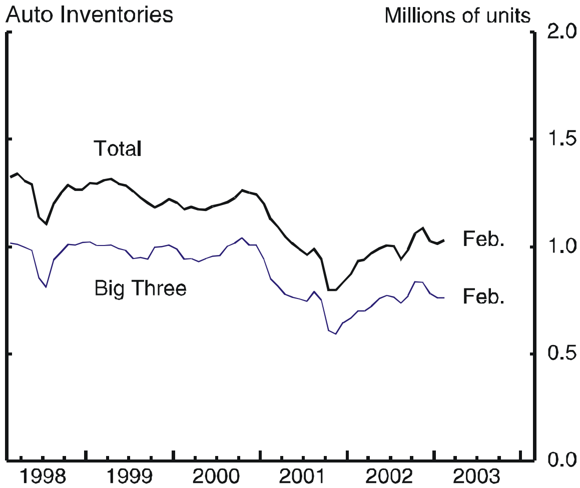
Auto Sales



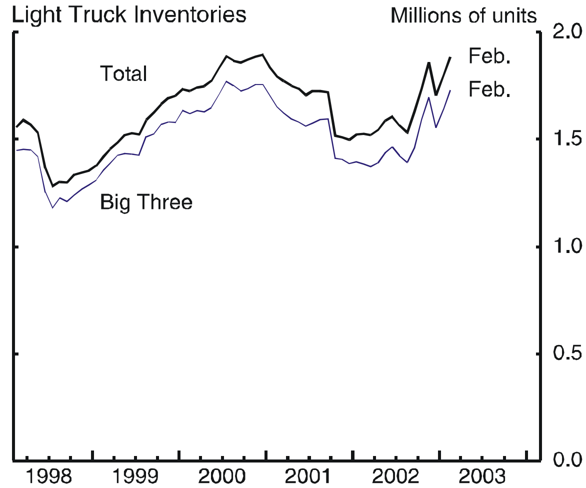

Light Trucks Sales



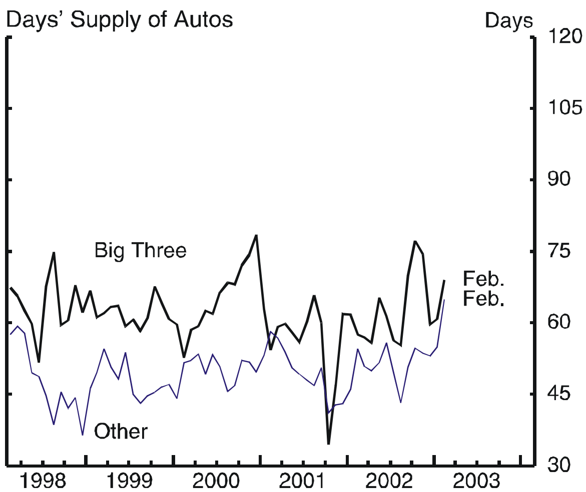

Auto Inventories



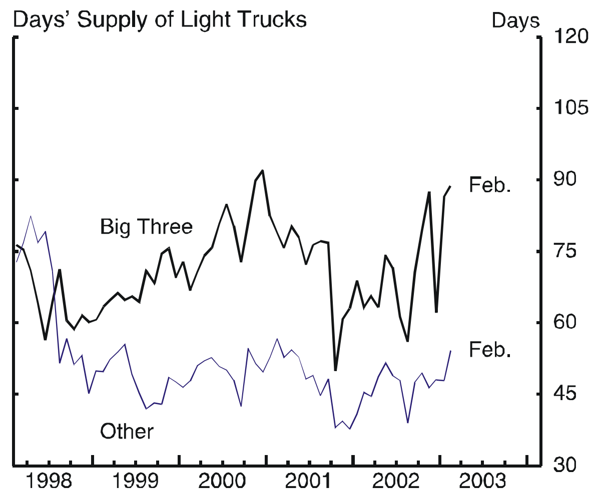

Light Truck Inventories




Days' Supply of Autos




Days' Supply of Light Trucks



Total motor vehicle production dropped to an annual rate of 12.3 million units in February, 600,000 units below the exceptionally strong rate in January.[5] Even with the decline in assemblies, inventories of light vehicles surged 100,000 units (not at an annual rate), and days' supply increased to almost 74 days last month, well above manufacturers' targeted range. Although production schedules for March call for assemblies to remain near their current pace, the automakers have announced plans to slash production to 11.7 million units in the second quarter in an effort to reduce their bloated inventories.

**Production of Domestic Autos and Trucks**
(Millions of units at an annual rate except as noted; FRB seasonal basis)

| Item | 2002 | | 2003 | | 2002 | 2003 | | |
|---|---|---|---|---|---|---|---|---|
| | H1 | Q4 | Q1[1] | Q2[1] | Dec. | Jan. | Feb. | Mar.[1] |
| U.S. production | 12.3 | 12.4 | 12.4 | 11.7 | 11.9 | 12.9 | 12.3 | 12.2 |
| Autos | 5.2 | 4.9 | 4.7 | 4.6 | 4.6 | 5.2 | 4.5 | 4.5 |
| Trucks | 7.1 | 7.5 | 7.7 | 7.2 | 7.4 | 7.7 | 7.8 | 7.7 |
| Total days' supply[2] | 61.3 | 63.1 | n.a. | n.a. | 56.5 | 67.6 | 73.9 | n.a. |
| Inventories[3] | 2.61 | 2.73 | n.a. | n.a. | 2.73 | 2.81 | 2.91 | n.a. |

Note. Components may not sum to totals because of rounding.
1. Production rates reflect Ward's Communications' latest schedules for March and Q2.
2. Semiannual and quarterly figures calculated using end-of-period stocks and average reported sales.
3. End-of-period stocks; excludes medium and heavy trucks (classes 3-8).
n.a. Not available.

## Consumer Spending

After a sizable jump in December, consumer spending moved down in both January and February, largely reflecting the fall in motor vehicle sales. Apart from motor vehicles, spending advanced at a brisk pace in January but edged lower in February. At least part of the weakness last month was due to the snowstorms that kept many consumers at home. Nevertheless, economic fundamentals may also have been at work: Although increases in nominal income have been well maintained in recent months, rising energy prices have eaten into some of these gains, and both consumer sentiment and net worth have deteriorated noticeably.

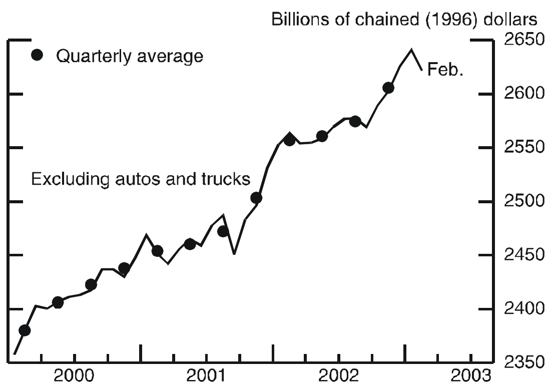
5. Weather in February is estimated to have had little effect on motor vehicle production. Available data suggest that the snowstorms shaved less than 100,000 units at an annual rate from the month's output.

## Retail and Food Services Sales
(Percent change; seasonally adjusted)

| Expenditure | 2002 H1 | 2002 Q3 | 2002 Q4 | 2002 Dec. | 2003 Jan. | 2003 Feb. |
|---|---|---|---|---|---|---|
| Total sales | .1 | 1.6 | .2 | 1.5 | .3 | -1.6 |
| Previous estimate | ... | ... | .4 | 2.0 | -.9 | ... |
| Retail control[1] | 2.7 | .4 | 1.3 | .5 | 1.1 | -.2 |
| Previous estimate | ... | ... | 1.3 | .3 | 1.0 | ... |
| GAF[2] | 2.4 | .0 | 1.2 | .2 | .2 | -.4 |
| Gasoline stations | 6.6 | 1.5 | 4.0 | 1.7 | 3.8 | 2.7 |
| Food services | 4.0 | -.2 | 2.3 | 1.6 | -.4 | -.5 |
| Other retailers[3] | 1.6 | .8 | .6 | .0 | 1.7 | -.6 |

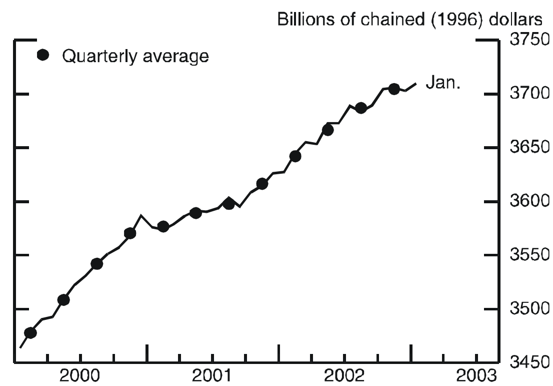
1. Total retail trade and food services less sales at building material and supply stores and automobile and other motor vehicle dealers.
2. Furniture and home furnishing stores; electronics and home appliance stores; clothing and accessories stores; sporting goods, hobby, book and music stores; and general merchandise stores.
3. Health and personal care stores, food and beverage stores, electronic shopping and mail order houses, miscellaneous other retailers.
... Not applicable.

### Real PCE Goods

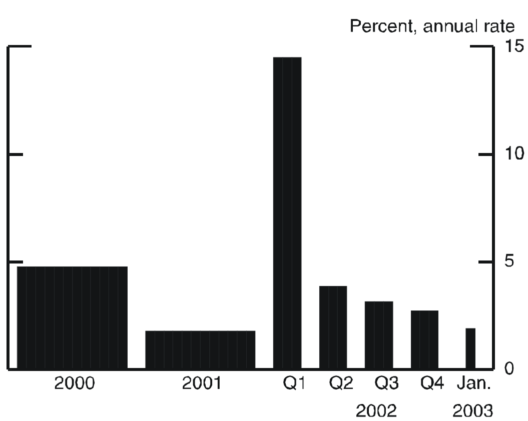



Note. February is a staff estimate.

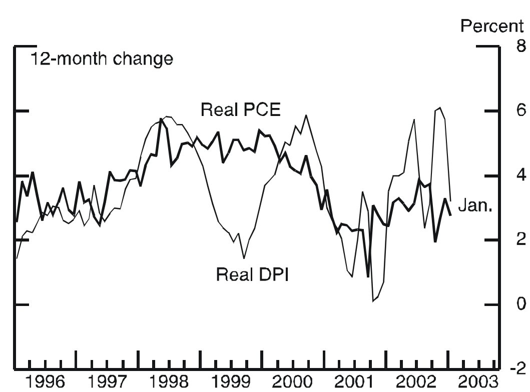
### Real PCE Services



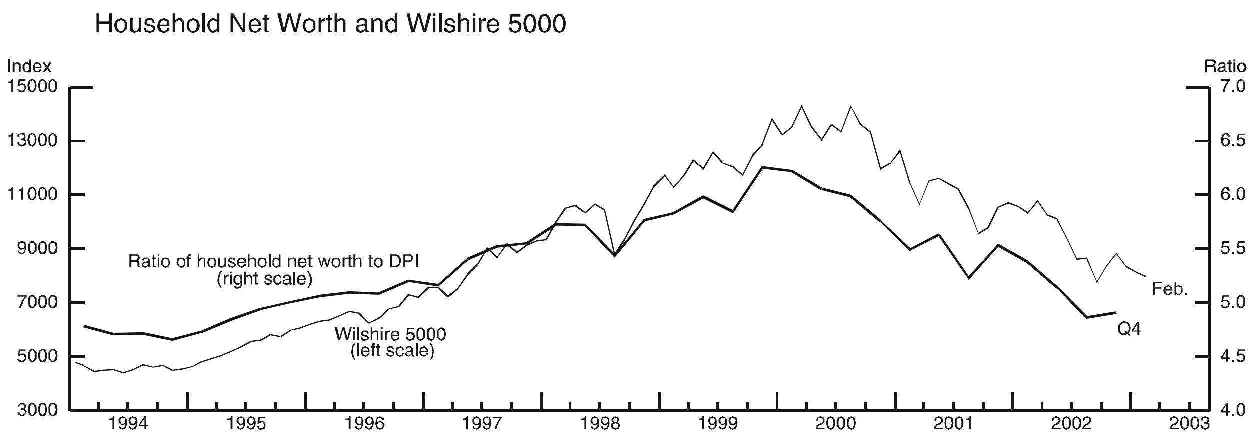

### Change in Real DPI

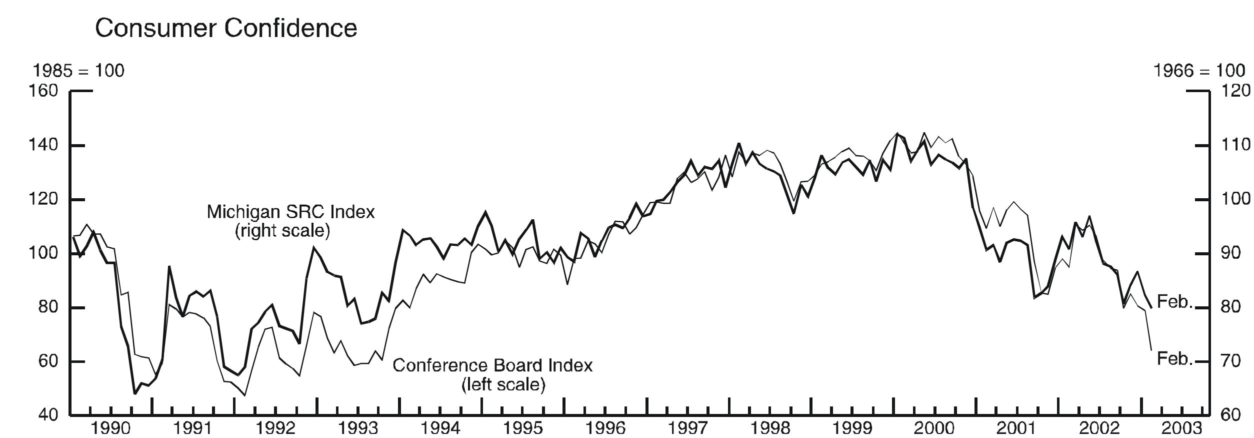



### Real Consumer Spending and Income



# Household Indicators

Nominal retail sales in the control category of stores, which excludes auto dealers and building material and supply stores, fell 0.2 percent in February. Strong sales at gasoline stations, buoyed by a spike in gas prices, were more than offset by declining sales in most other categories, particularly at clothing outlets and furniture stores. Indeed, we estimate that real PCE for items in the control category dropped 0.7 percent in February after having surged at an average monthly rate of 0.7 percent in the previous four months.

Real outlays on services advanced 0.2 percent in January (the latest available data) after having declined a touch in December. A drop in temperatures from the unusually warm December led to a rebound in spending on energy services in January, while expenditures on other services advanced at a moderate pace. In February, energy services likely posted another weather-induced increase.

The determinants of consumption have been lackluster of late. Real disposable personal income increased 0.2 percent in January, a bit shy of the gains posted over the last three months of 2002. Pay raises for federal civilian and military personnel provided a boost to incomes in January, but private wage and salary disbursements decreased a shade. The substantial drop in hours in February suggests that wages and salaries also declined last month. Furthermore, gains in real income in the first two months of the year were held down by the run-up in energy prices. With income rising and expenditures moving down in January, the personal saving rate jumped 0.4 percentage point, to 4.3 percent. The increase in the saving rate over the past year is consistent with the erosion in household net worth over the past three years.

Both the Michigan Survey Research Center's overall index of consumer sentiment and the Conference Board's index of consumer expectations fell sharply in February. Consumers' assessments of both current and expected conditions moved down in both indexes, and each index now stands at its lowest level since 1993. The current values of the indexes are below what might be expected given economic fundamentals, which suggests that a potential war with Iraq or other non-economic factors are likely weighing on household sentiment.

**Housing Markets**

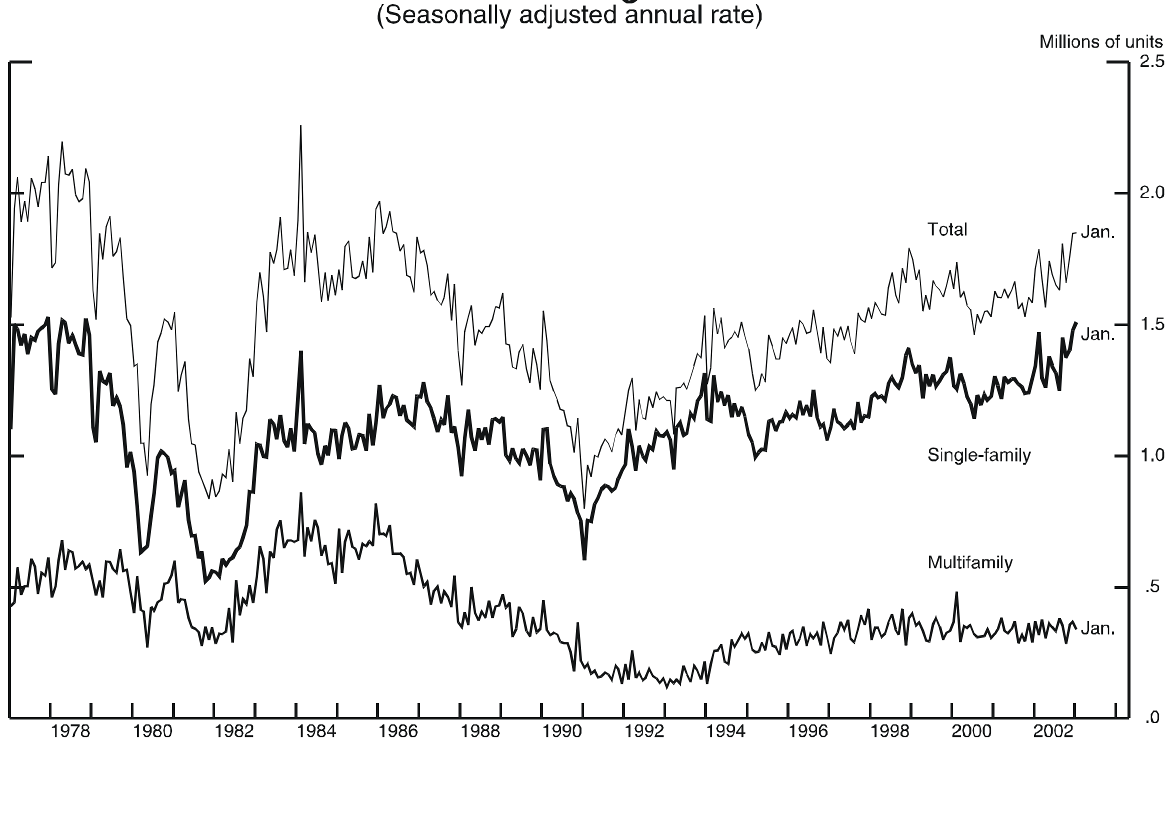
With low mortgage rates continuing to support demand, construction of single-family homes remained strong at the beginning of the year. Single-family starts rose in January to an annual rate of 1.51 million units, the highest level since 1978. In view of the exceptionally dry weather in January and the lower level of permit issuance, this starts figure likely overstated the underlying pace of activity; nevertheless, even some drop-back in February would leave starts well above their levels in 2002.

## Private Housing Activity
(Millions of units; seasonally adjusted annual rate)

| | | 2002 | | | | | 2003 |
|---|---|---|---|---|---|---|---|
| | 2002 | Q2 | Q3 | Q4[r] | Nov.[r] | Dec.[r] | Jan.[p] |
| *All units* | | | | | | | |
| Starts | 1.71 | 1.67 | 1.70 | 1.76 | 1.76 | 1.85 | 1.85 |
| Permits | 1.73 | 1.67 | 1.70 | 1.80 | 1.74 | 1.89 | 1.78 |
| *Single-family units* | | | | | | | |
| Starts | 1.36 | 1.33 | 1.34 | 1.42 | 1.40 | 1.48 | 1.51 |
| Permits | 1.32 | 1.27 | 1.31 | 1.38 | 1.37 | 1.41 | 1.42 |
| Adjusted permits[1] | 1.36 | 1.31 | 1.35 | 1.42 | 1.41 | 1.46 | 1.45 |
| New home sales | .98 | .95 | 1.02 | 1.04 | 1.04 | 1.08 | .91 |
| Existing home sales | 5.57 | 5.50 | 5.40 | 5.77 | 5.64 | 5.91 | 6.09 |
| *Multifamily units* | | | | | | | |
| Starts | .35 | .34 | .36 | .34 | .36 | .37 | .34 |
| Permits | .41 | .40 | .40 | .42 | .37 | .48 | .37 |
| *Mobile homes* | | | | | | | |
| Shipments | .17 | .18 | .17 | .15 | .15 | .14 | .14 |

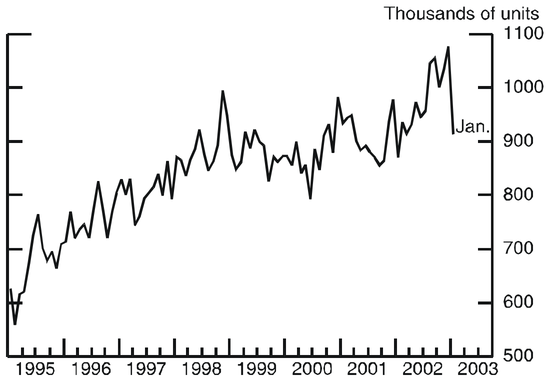
1. Adjusted permits equals permit issuance plus total starts outside of permit-issuing areas.
p Preliminary. r Revised. n.a. Not available.

## Private Housing Starts
(Seasonally adjusted annual rate)



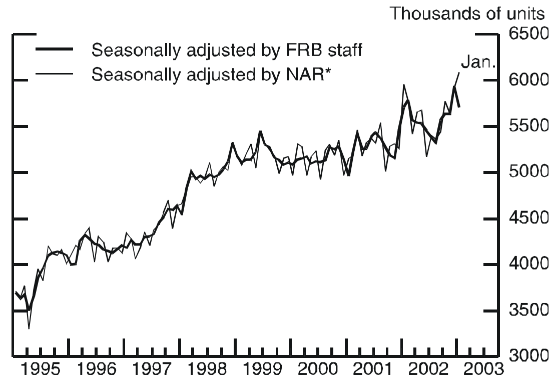
# Housing Indicators

## New Home Sales



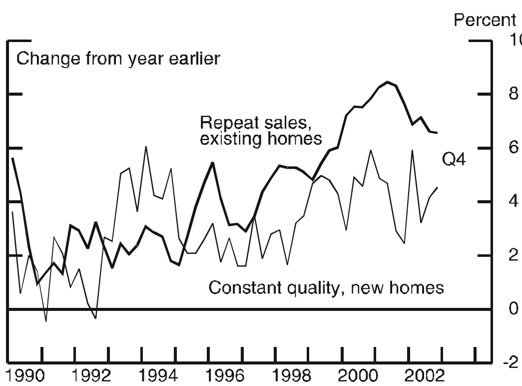

Source. Census Bureau.

## Existing Home Sales



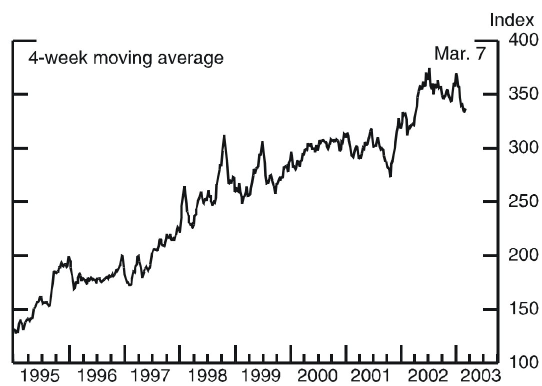

*National Association of Realtors.

## House Prices

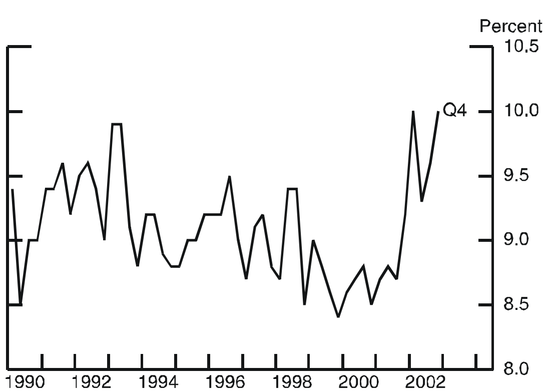



Source. Census Bureau (new); Fannie Mae and Freddie Mac (existing).

## MBA Index of Purchase Applications

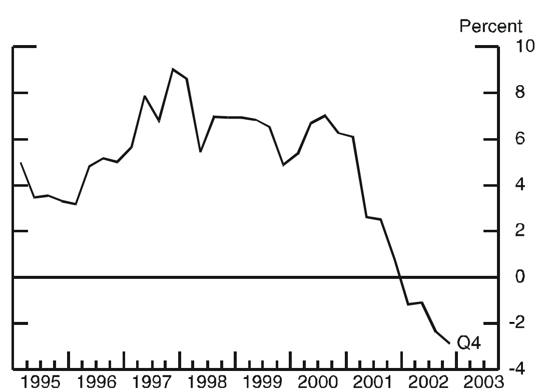



## Multifamily Vacancy Rate




Source. Census Bureau.

## Change in Rent for Multifamily Housing




Source. National Real Estate Index.

New home sales fell to an annual rate of 914,000 units in January, although they remained well within the elevated range observed over the past several years.[6] Sales of existing homes (using FRB seasonal factors, which include an adjustment for trading-day variation across months) edged down 3.8 percent in January but also remained at a high level.[7]

More timely indicators of housing demand have also been robust. The Michigan Survey's measure of homebuying attitudes stayed at one of the highest levels in four years in February, with a sizable proportion of respondents mentioning low mortgage rates as a contributing factor. Furthermore, even though the number of applications for mortgages associated with home purchases has fallen, on net, this year, it has remained quite high by historical standards.

Reflecting the strength in demand, house prices (adjusted for shifts in the characteristics of the units sold) moved up further in the fourth quarter of 2002. The increase in the constant-quality index of new home prices—4.6 percent over the four quarters of 2002—was close to the average rate of increase over the previous four years. However, the year-over-year change in the repeat-sales index of existing home prices edged down to 6.6 percent, the lowest rate in three years.

In the multifamily sector, housing starts decreased 7.6 percent in January to an annual rate of 340,000 units, about the same as the average pace recorded over the past three years. The vacancy rate for multifamily rental units reached one of the highest levels on record in the fourth quarter (latest data), and rents declined further, continuing the downward trend that began at the end of 2001.

**Equipment and Software**

Real spending on equipment and software increased at an annual rate of 6-1/2 percent in the fourth quarter, buoyed by a jump in outlays for aircraft and small gains in purchases in other major categories. A rise in shipments of nontransportation equipment in January suggests that prospects in this area may be improving, a view that is consistent with the continued gains in business output and the declining cost of capital. However, anecdotal indicators, including reports from the Beige Book and our business contacts, as well as surveys of securities analysts, imply that firms remain cautious about undertaking new investment projects.

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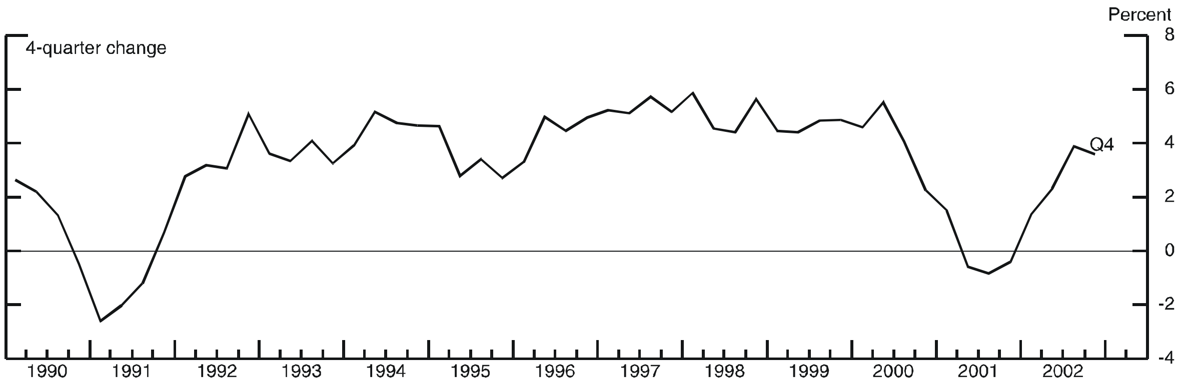
6. The data on new home sales are quite volatile on a monthly basis, owing in particular to the difficulty of imputing the number of units sold prior to the issuance of building permits.

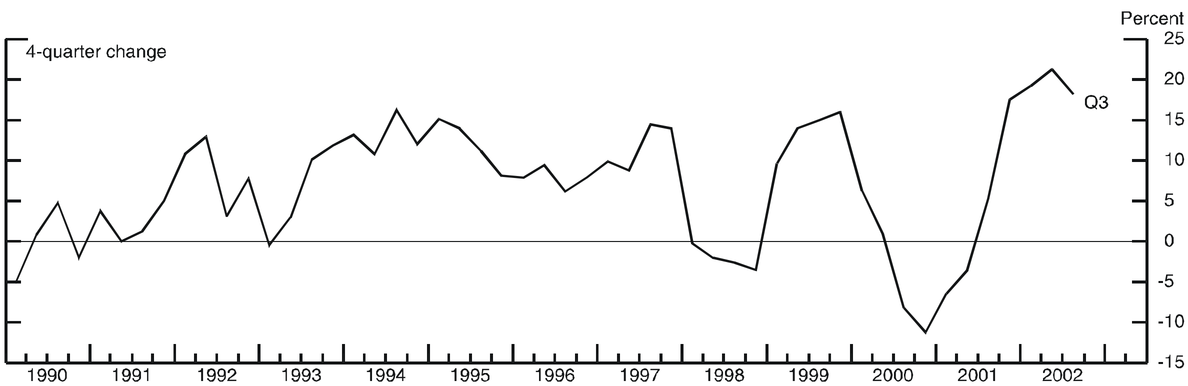
7. The National Association of Realtors (NAR) recently revised its estimates of existing home sales over the past three years to adjust for trading-day variation; however, analysis by FRB staff suggests that the NAR adjustment is incomplete.

## Equipment and Software Investment Fundamentals

### Business Output

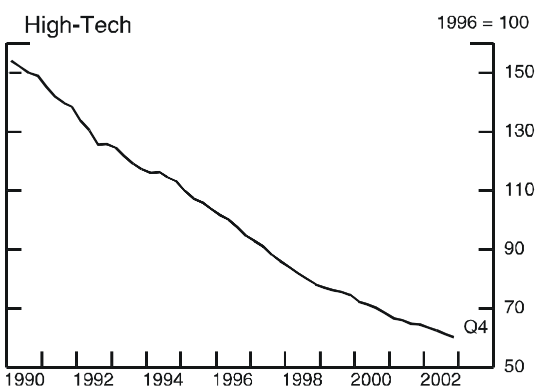



### Real Corporate Cash Flow

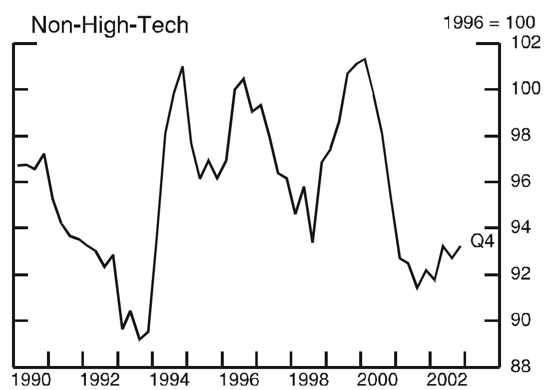



### User Cost of Capital*

High-Tech




Non-High-Tech

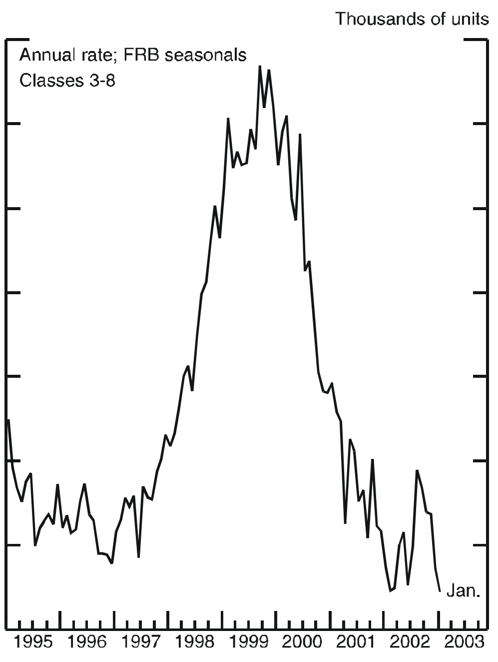



*Excludes the effects of the partial expensing tax incentive.

EQUIPMENT AND SOFTWARE SPENDING INDICATORS
(Percent change from preceding comparable period;
based on seasonally adjusted data, in current dollars)

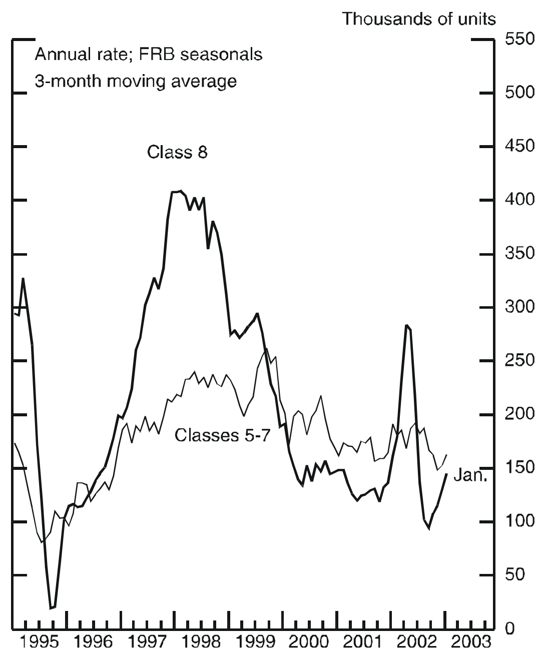
| | 2002 Q3 | 2002 Q4 | 2002 Nov. | 2002 Dec. | 2003 Jan. |
|---|---|---|---|---|---|
| | -Annual rate- | | - - -Monthly rate - - | | |
| Shipments of nondefense capital goods | 0.9 | -7.2 | -1.8 | -1.4 | 1.2 |
| Excluding aircraft | 1.5 | -6.4 | -1.4 | -1.3 | 3.2 |
| Computers and peripherals | 26.1 | -8.6 | -6.1 | -3.8 | 20.5 |
| Communications equipment | -25.9 | -12.6 | 6.9 | -5.9 | 9.6 |
| All other categories | 2.1 | -5.3 | -1.5 | -0.3 | -0.2 |
| Shipments of complete aircraft | -14.7 | -33.7 | -4.6 | -13.4 | -8.5 |
| Medium & heavy truck sales (units) | 35.5 | -15.7 | -0.3 | -7.8 | -3.5 |
| Orders for nondefense capital goods | 21.0 | -7.9 | -1.2 | 2.4 | 1.2 |
| Excluding aircraft | -0.6 | -1.4 | -3.0 | -0.6 | 4.5 |
| Computers and peripherals | 45.9 | 5.4 | -6.2 | 10.0 | 2.0 |
| Communications equipment | -61.5 | 26.3 | -2.1 | -15.0 | 35.8 |
| All other categories | 4.5 | -5.0 | -2.5 | -0.6 | 1.8 |

### Sales of Medium and Heavy Trucks




Source. Ward's Communications

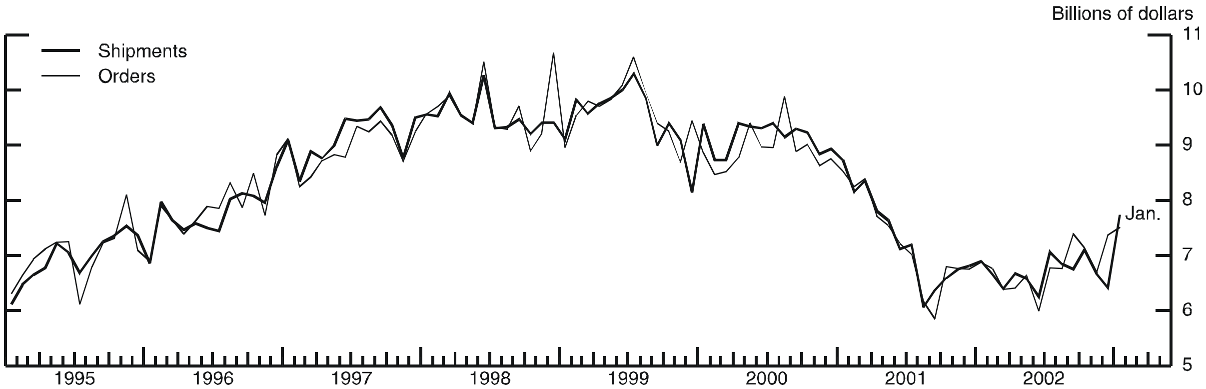
### Net New Orders of Trucks



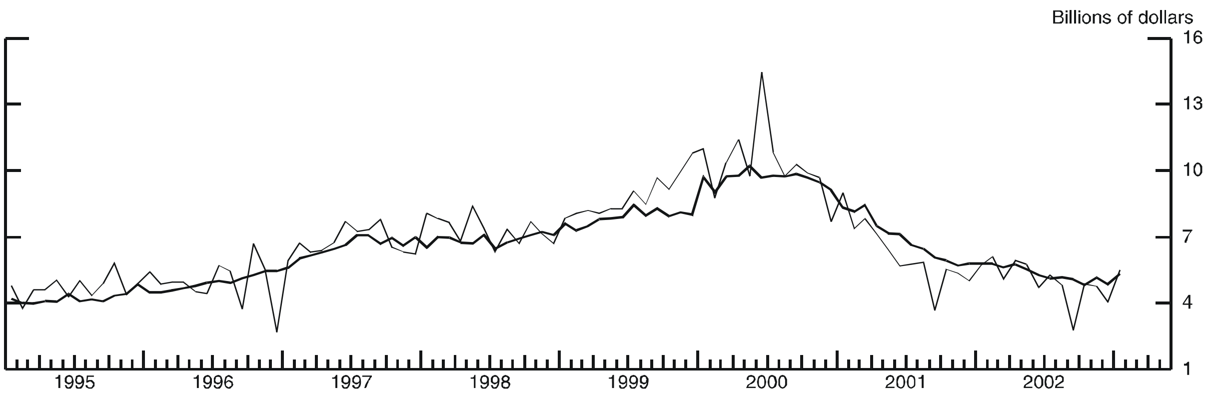

Note. Net orders are less cancellations.
Source. ACT Research Co.

# Recent Data on Orders and Shipments

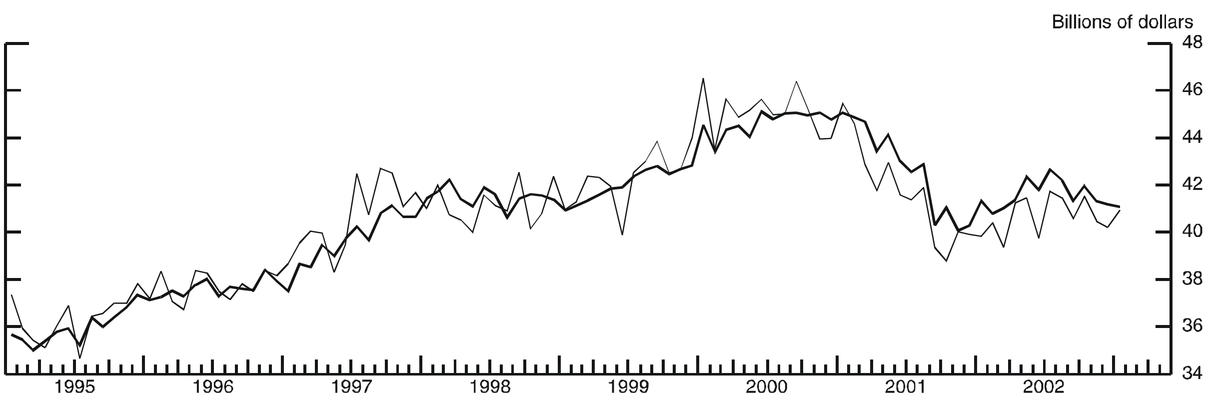
Computers and Peripherals




Communications Equipment




Other Equipment (Total Ex. Transportation, Computers, Communications)



In the high-tech sector, nominal shipments of computing equipment surged at a monthly rate of more than 20 percent in January, the largest increase in the eleven-year period for which comparable data exist. Communications shipments also jumped, although some of the outsized gains in both of these categories will likely prove to be transitory. Still, with prices for these types of goods falling, real high-tech spending appears to be on a steep upward trajectory in the current quarter. Outside of the high-tech sector, shipments edged down in January, with a pronounced drop in the measuring and controlling devices subcategory more than accounting for the decline.

The orders data for January depicted more broad-based strength than the shipments data. Bookings for computers and peripherals moved up, in line with the upward trend that began in the middle of last year. Although communications orders jumped, this series has been particularly volatile recently, at least partially reflecting unstable seasonal patterns. Smoothing through the month-to-month variation, these orders have risen moderately in recent months. Excluding high-tech and aircraft, nondefense capital goods orders rose 1.8 percent in January. Nevertheless, the pattern of orders and shipments over the past few months points to listless spending in this category in the current quarter.

In the transportation sector, fleet sales of autos and light trucks fell in January and February, while medium and heavy truck sales moved down for the fourth straight month in January. Although demand for trucks has generally trended lower since the peak in 1999, a noticeable increase in net new orders for large commercial trucks suggests that the slide may be coming to an end. Business spending on aircraft rose dramatically in the fourth quarter, with part of the increase reflecting a surprising jump in imported regional jets. On balance, however, the gain in the fourth quarter reversed only a small fraction of the considerable declines in aircraft investment that have occurred since the beginning of last year. In January, domestic shipments and imports of aircraft moved back down.

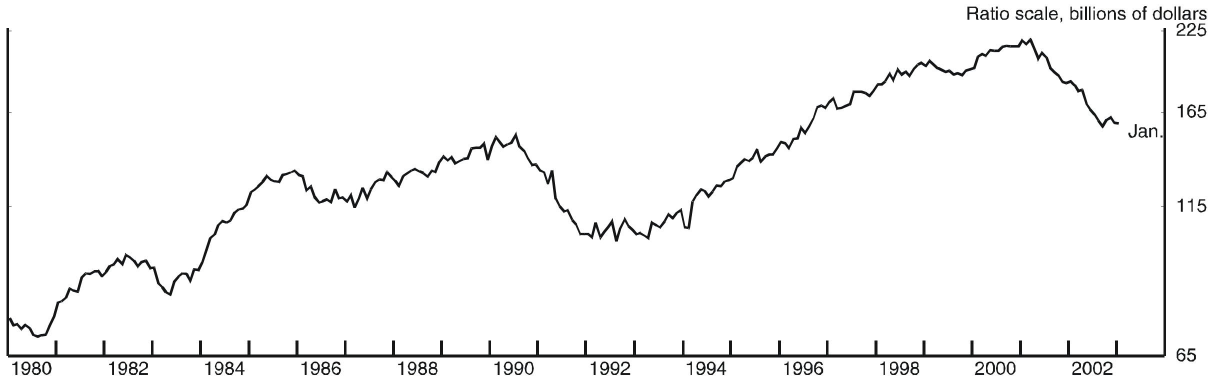
**Nonresidential Construction**

The downtrend in investment in nonresidential structures continued in the fourth quarter of last year, with most categories recording sizable declines in spending. Real spending for the buildings component of nonresidential structures decreased at an annual rate of 10 percent in January and was down 17 percent from the year-ago level. Only institutional construction showed a net increase in expenditures over the twelve months ended in January.

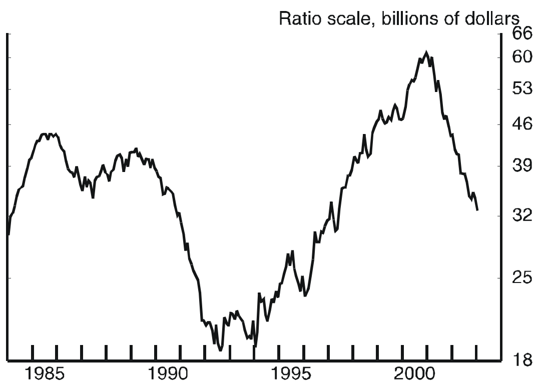
Most indicators of market conditions in this sector have deteriorated. Vacancy rates for office buildings in both suburban and downtown locations rose in the

## Nonresidential Construction
(Seasonally adjusted, annual rate)

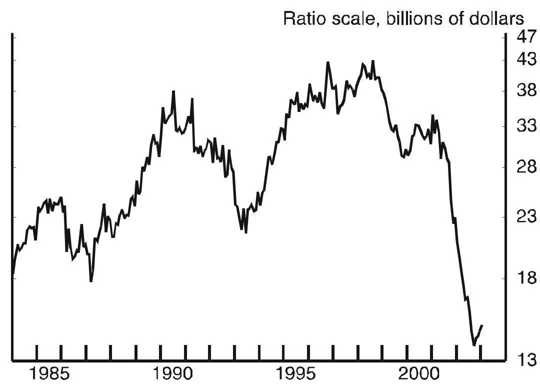
### Total Building



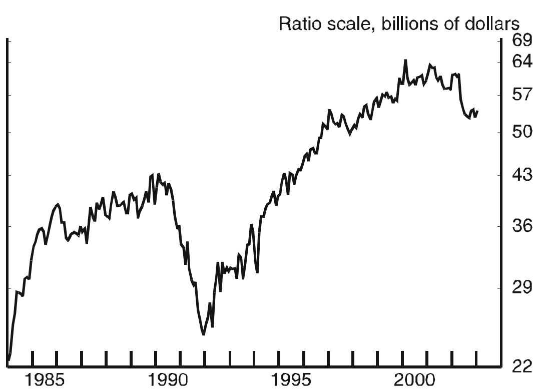

### Office



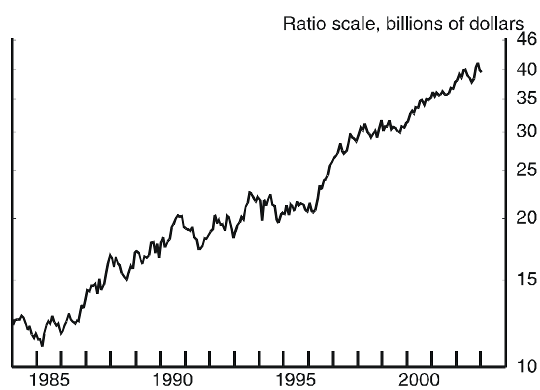

### Industrial




### Other Commercial



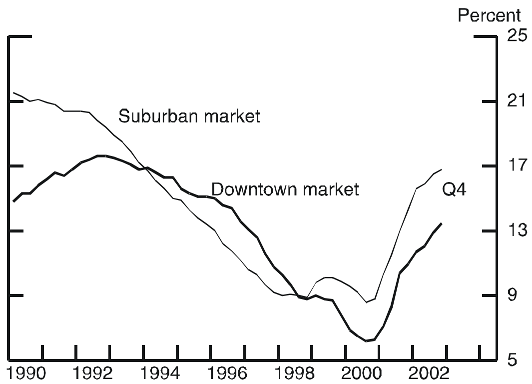

### Institutional



# Indicators of Nonresidential Construction

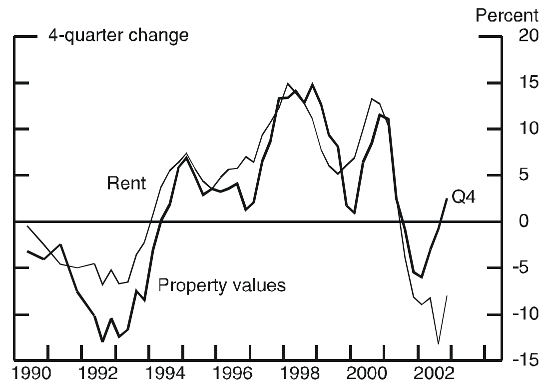
## Office Buildings

### Vacancy Rate




Source. CB Richard Ellis.

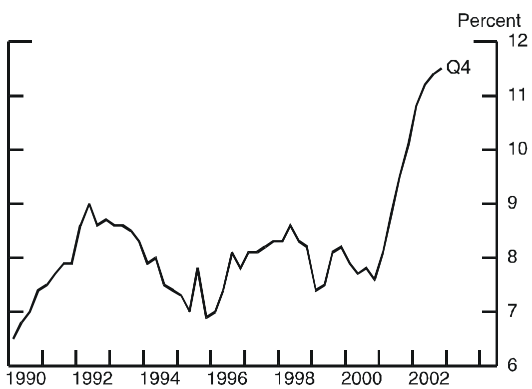
### Property Values and Rent




Source. National Real Estate Index.

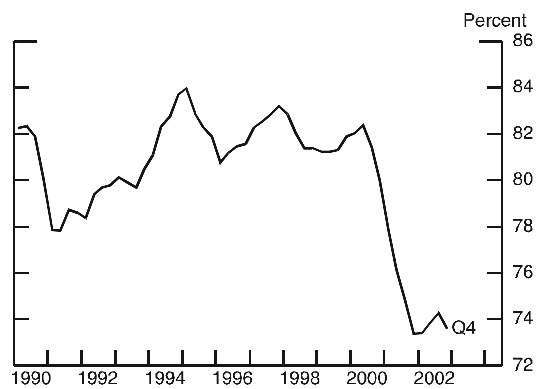
## Industrial

### Vacancy Rate



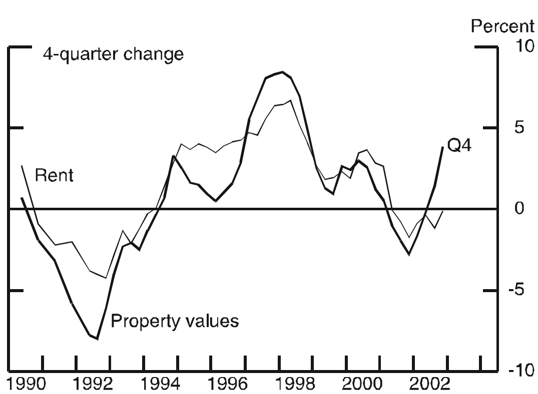

Source. CB Richard Ellis.

### Manufacturing Capacity Utilization




## Retail Space

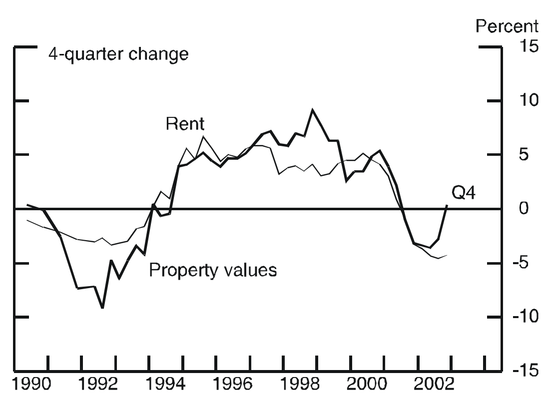
### Property Values and Rent




Source. National Real Estate Index.

## Warehouses

### Property Values and Rent




Source. National Real Estate Index.

fourth quarter, though they were still below their peaks in the late 1980s and early 1990s. Vacancy rates for industrial buildings moved up to a record high. Office and warehouse rents continued to shrink; however, an upturn in property values for these structures suggests that some investors may believe that rents will turn up later this year. For retail space, rents were flat in the fourth quarter, while property values increased slightly.

Expenditures for drilling and mining dropped at an annual rate of 38 percent in the fourth quarter after a decline of 4-1/2 percent in the third quarter. In the current quarter, increases in the prices of natural gas and crude oil have led to a jump in the number of drilling rigs in use, a development that suggests that spending in this category may be starting to recover.

**Business Inventories**

Real nonfarm inventories excluding motor vehicles accumulated at a modest pace in the fourth quarter after a similar increase in the third quarter. The fourth-quarter buildup was concentrated in December, when the book value of manufacturing and trade inventories excluding motor vehicles jumped roughly $90 billion (annual rate). Partial data for January suggest some run-off in inventories, and inventory stocks appear to be fairly lean.

In January, manufacturing inventories declined, as stocks of durable goods resumed their long-running downward trend and stocks of nondurable goods edged up. Book-value wholesale inventories excluding motor vehicles also fell in January, owing in part to a sizable liquidation at machinery distributors. With oil prices having moved up substantially in January, real wholesale inventories likely posted an even larger decline, as distributors of petroleum and gas products drew from the large stocks accumulated in December.

With sizable gains in shipments and sales in January, book-value inventory-sales ratios moved down after having ticked up in December. Firms have been successful at lowering these ratios from the high levels recorded in mid-2001. According to data from the staff's flow-of-goods inventory measurement system, which tracks inventories by type of product wherever they are held in the production and distribution channel, days' supply excluding motor vehicles edged down for a third consecutive month in January and is well below its elevated 2001 readings. Few imbalances are evident across industries.

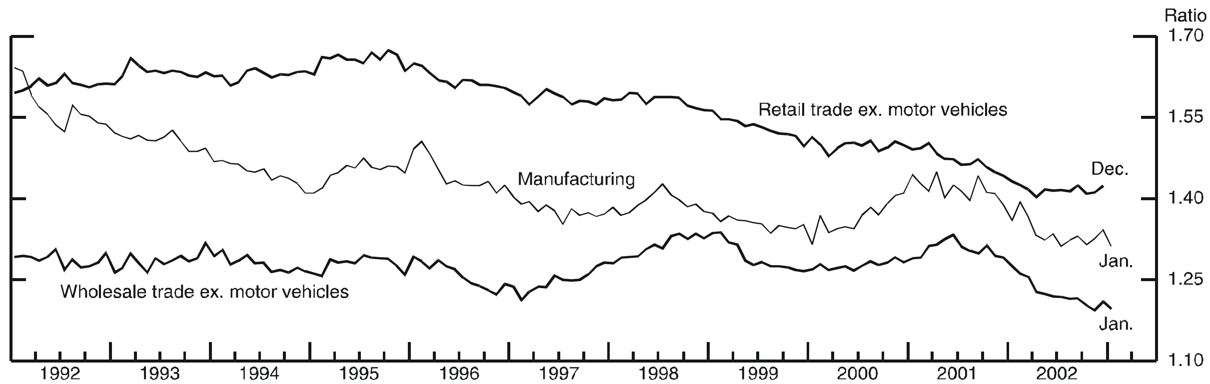
**Federal Government**

The outlook for the Federal budget continues to deteriorate. Since January, the Congressional Budget Office (CBO) has revised up its estimate of the unified deficit $50 billion for the current fiscal year. This update reflected weaker incoming receipts data, higher defense spending, and the omnibus

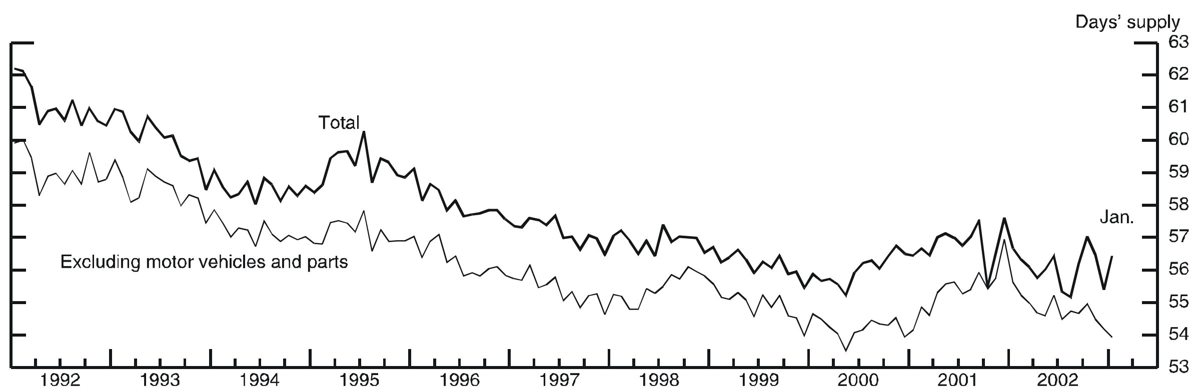
Changes in Manufacturing and Trade Inventories
(Billions of dollars, seasonally adjusted book value, annual rate)

| Category | 2002 Q2 | 2002 Q3 | 2002 Q4 | 2002 Nov. | 2002 Dec. | 2003 Jan. |
|---|---|---|---|---|---|---|
| Manufacturing and trade | 12.6 | 50.5 | 47.5 | 41.1 | 87.6 | n.a. |
| Less wholesale and retail motor vehicles | -11.5 | 27.8 | 20.9 | 10.4 | 90.3 | n.a. |
| Manufacturing | -12.8 | 4.6 | 6.3 | -10.2 | 32.8 | -1.8 |
| Less aircraft | -10.7 | 10.2 | 4.4 | -5.9 | 20.2 | -5.1 |
| Merchant wholesalers | -5.6 | 12.2 | 7.0 | 11.0 | 26.8 | -7.5 |
| Less motor vehicles | -7.7 | 10.1 | 3.5 | 4.5 | 30.6 | -5.2 |
| Retail trade | 31.0 | 33.7 | 34.3 | 40.3 | 28.0 | n.a. |
| Automotive dealers | 22.0 | 20.6 | 23.1 | 24.2 | 1.0 | n.a. |
| Less automotive dealers | 9.0 | 13.1 | 11.1 | 16.1 | 27.0 | n.a. |

**Book Value Inventories Relative to Shipments and Sales: Manufacturing and Trade**




**Inventory-Consumption Ratios, Flow-of-Goods System**



## Federal Government Outlays and Receipts

(Unified basis; billions of dollars)

| Function or source | January 2002 | January 2003 | January Percent change | 12 months ending in January 2002 | 12 months ending in January 2003 | 12 months ending in January Percent change |
|---|---|---|---|---|---|---|
| Outlays | 159.7 | 176.8 | 10.7 | 1,918.0 | 2,062.5 | 7.5 |
| Financial transactions[1] | 1.2 | 0.2 | ... | -0.5 | -3.2 | ... |
| Payment timing[2] | -11.3 | 0.0 | ... | -0.6 | 11.4 | ... |
| Adjusted outlays | 169.8 | 176.6 | 4.0 | 1,919.1 | 2,054.2 | 7.0 |
| Receipts | 203.5 | 187.9 | -7.6 | 1,979.6 | 1,799.1 | -9.1 |
| Payment timing[3] | 13.0 | 0.0 | ... | 0.0 | 0.0 | ... |
| Adjusted receipts | 190.5 | 187.9 | -1.3 | 1,979.6 | 1,799.1 | -9.1 |
| Surplus/deficit(-) | 43.7 | 11.1 | ... | 61.6 | -263.4 | ... |
| | Selected components of adjusted outlays and receipts | | | | | |
| Adjusted outlays | 169.8 | 176.6 | 4.0 | 1,919.1 | 2,054.2 | 7.0 |
| Net interest | 15.1 | 13.6 | -10.0 | 193.0 | 166.7 | -13.7 |
| Non-interest | 154.7 | 163.0 | 5.3 | 1,726.0 | 1,887.6 | 9.4 |
| National defense | 27.8 | 31.1 | 11.8 | 316.8 | 364.7 | 15.1 |
| Social security | 37.4 | 39.2 | 4.8 | 440.5 | 463.9 | 5.3 |
| Medicare | 19.8 | 20.7 | 4.4 | 222.5 | 239.9 | 7.8 |
| Medicaid | 12.6 | 13.2 | 4.8 | 136.7 | 150.9 | 10.4 |
| Income security | 25.7 | 27.0 | 4.9 | 276.0 | 321.8 | 16.6 |
| Agriculture | 2.7 | 3.9 | 41.6 | 29.6 | 23.5 | -20.8 |
| Other | 28.6 | 27.9 | -2.4 | 303.8 | 322.8 | 6.3 |
| Adjusted receipts | 190.5 | 187.9 | -1.3 | 1,979.6 | 1,799.1 | -9.1 |
| Individual income and payroll taxes | 173.1 | 172.1 | -0.6 | 1,636.4 | 1,498.6 | -8.4 |
| Withheld + FICA | 122.0 | 127.5 | 4.5 | 1,403.6 | 1,367.1 | -2.6 |
| Nonwithheld + SECA | 52.5 | 48.4 | -7.9 | 417.7 | 315.5 | -24.5 |
| Refunds (-) | 1.4 | 3.9 | 167.2 | 184.8 | 183.9 | -0.5 |
| Corporate[3] | 3.3 | 1.2 | -63.3 | 155.2 | 117.3 | -24.5 |
| Gross | 6.3 | 4.9 | -22.7 | 198.5 | 185.1 | -6.7 |
| Refunds (-) | 3.1 | 3.7 | 20.2 | 43.2 | 67.8 | 56.9 |
| Other | 14.1 | 14.6 | 4.0 | 187.9 | 183.2 | -2.5 |
| Adjusted surplus/deficit(-) | 20.6 | 11.3 | ... | 60.5 | -255.1 | ... |

Note. Components may not sum to totals because of rounding.

1. Financial transactions consist of deposit insurance, spectrum auctions, and sales of major assets.

2. A shift in payment timing occurs when the first of the month falls on a weekend or holiday, or when the first three days of a month are nonworking days. Outlays for defense, social security, Medicare, income security, and "other" have been adjusted to account for these shifts.

3. Individual income, corporate income, and excise tax collections were boosted in January 2002 owing to a temporary shift in filing deadlines for those affected by the 2001 terrorist attacks.

... Not applicable.

appropriations bill. The CBO also noted that additional funding for military action in the Middle East would boost the deficit further. Separately, the Administration unveiled its fiscal 2004 budget. This proposal included projected deficits of $300 billion in fiscal years 2003 and 2004.

January receipts, adjusted for changes in filing deadlines, were 1 percent below their year-ago level. Consistent with the rise in wages and salaries seen over the past year, withheld income tax and social insurance collections posted a 4-1/2 percent gain. In contrast, nonwithheld income tax and social insurance taxes registered an 8 percent decline, which likely owed to lower capital income and capital gains realizations. More recent daily Treasury data indicated further weakness in receipts, with individual income tax refunds through March 7 running 6 percent above last year. An increase in the number of returns processed earlier in the tax season because of electronic filing can explain only part of the recent refunds data. Indeed, overall incoming receipts data appear weaker than income growth would imply. Accordingly, the CBO knocked down its estimate of receipts by $30 billion.

Outlays in January (adjusted for regular payment timing shifts) were up 4 percent from the year-earlier level, led by a 12 percent increase in defense spending. The Administration recently stated that the Department of Defense is spending $1-1/2 billion per month on preparations for a potential conflict in the Middle East and antiterrorism activities that were not included in the fiscal 2003 defense budget. As a consequence, defense spending during the first four months of the fiscal year was well above the budgeted pace, and a significant supplemental appropriations bill is now widely anticipated.

In mid-February, the Congress passed an omnibus appropriations bill that provided budget authority for the programs normally funded by the eleven outstanding regular nondefense appropriations acts as well as additional monies for defense and some mandatory programs. CBO estimates that the bill will boost fiscal 2003 outlays $13 billion above the target that the Congress and the President agreed upon in early January, including an additional $6 billion for defense, a boost in Medicare reimbursement rates for doctors that amounts to $4 billion on a full year basis, and $3 billion in disaster assistance for farmers and ranchers.

The Administration also released its fiscal 2004 budget in February. The budget proposal calls for numerous tax cuts, an expansion of Medicare to include some prescription drug coverage, and an increase of 4 percent in both defense and nondefense discretionary spending in fiscal 2004. The Administration estimates that its tax polices and spending proposals would lead to unified budget deficits of roughly $300 billion in fiscal 2003 and fiscal 2004. By fiscal 2008, the

## Administration Budget Projections and Economic Assumptions

| Item | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|---|---|---|---|---|---|---|
| **Budget projections (fiscal years)** | Billions of dollars | | | | | |
| *Current proposal* | | | | | | |
| Total surplus | -304 | -307 | -208 | -201 | -178 | -190 |
| On-budget | -468 | -482 | -407 | -412 | -406 | -433 |
| Off-budget | 163 | 175 | 199 | 211 | 228 | 243 |
| *Current services baseline* | | | | | | |
| Total surplus | -264 | -158 | -40 | 5 | 29 | 51 |
| On-budget | -425 | -330 | -237 | -207 | -199 | -192 |
| Off-budget | 160 | 172 | 197 | 211 | 228 | 243 |
| **Economic assumptions (calendar years)** | Percent change, fourth quarter to fourth quarter | | | | | |
| Real GDP | 3.4 | 3.6 | 3.4 | 3.3 | 3.1 | 3.1 |
| GDP price index | 1.4 | 1.5 | 1.6 | 1.7 | 1.8 | 1.8 |
| CPI-U | 2.0 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 |
| | Percent, annual average | | | | | |
| Unemployment rate | 5.7 | 5.5 | 5.2 | 5.1 | 5.1 | 5.1 |
| Treasury yields | | | | | | |
| Three-month | 1.6 | 3.3 | 4.0 | 4.2 | 4.2 | 4.3 |
| Ten-year | 4.2 | 5.0 | 5.3 | 5.4 | 5.5 | 5.6 |

Note. The on-budget surplus excludes social security and the Postal Service (which are off-budget). The current services baseline assumes that budget authority for discretionary spending grows at the rate of inflation after 2003.

Source. Office of Management and Budget, *Budget of the U.S. Government: Fiscal Year 2004* (February 2003).

estimated deficit would decline to $190 billion, compared with a surplus of $51 billion projected under current services.

**State and Local Governments**

Employment at state and local governments rose in January and February. Nevertheless, the pace of hiring has eased over the past year, as efforts to balance budgets have included hiring freezes and some layoffs. Spending on infrastructure moved up 1.1 percent in January, a somewhat larger increase than the modest gains posted through most of last year; however, part of the rise was likely the result of favorable weather that month, which boosted construction of both highways and educational facilities.

In a recent survey by the National Conference of State Legislatures, thirty-six states reported budgetary gaps through the middle of fiscal 2003, which ends June 30. To close these gaps, many states are again cutting expenditures on a variety of programs, including education, Medicaid, corrections, and aid to local governments. In addition, some states are raising fees and tapping rainy-day, tobacco, and other state funds. States have also begun planning their fiscal 2004 budgets, and once again, many expect revenues to fall short of spending. It appears that more states will be looking to raise receipts next year through higher taxes, mainly on cigarettes and alcohol, and through a broad range of other revenue-enhancing strategies.

At the local level, survey data recently released by the National Association of Counties indicate that 72 percent of responding counties are facing budgetary shortfalls, with most respondents citing a reduction in state aid as the primary cause. Many counties reported that they plan to exhaust previous years' reserves and scale back services; 45 percent indicated that they are considering tax hikes.

**Prices and Labor Costs**

Most measures of labor costs and core consumer prices have been decelerating over the past year. However, the recent jump in crude oil prices has pushed up overall consumer price inflation early this year, and as a result, January's year-over-year changes in the CPI and PCE price indexes were 1 to 1-1/2 percentage points greater than a year earlier. Rising energy prices have also contributed to recent increases in intermediate and spot commodity price indexes.

The CPI for energy rose 4 percent in January, mainly reflecting the effects of the sharp run-up in crude oil prices on gasoline and heating oil prices. In addition, unusually cold weather in the Midwest and on the Atlantic seaboard led to an acute shortage of heating oil inventories last month. With wholesale heating oil margins even higher than those for gasoline, refiners tilted their production processes toward heating oil in the second half of February. Cold weather

RECENT PRICE INDICATORS
(Percent)

| | From 12 months earlier | | From 3 months earlier | | 2003 | |
|---|---|---|---|---|---|---|
| | Jan. 2002 | Jan. 2003 | Oct. 2002 | Jan. 2003 | Dec. | Jan. |
| | | | -Annual rate- | | -Monthly rate- | |
| CPI | | | | | | |
| Total | 1.1 | 2.6 | 2.5 | 2.2 | 0.1 | 0.3 |
| Food | 2.9 | 1.0 | 1.1 | 0.9 | 0.2 | -0.2 |
| Energy | -15.7 | 14.1 | 8.3 | 12.9 | -0.4 | 4.0 |
| Ex. food and energy | 2.6 | 1.9 | 2.3 | 1.5 | 0.2 | 0.1 |
| Ex. tobacco | 2.5 | 1.8 | 2.3 | 1.5 | 0.2 | 0.1 |
| Core commodities | -0.8 | -1.4 | -0.3 | -3.0 | -0.1 | -0.3 |
| Core services | 3.9 | 3.4 | 3.3 | 3.3 | 0.3 | 0.3 |
| Current-methods total | 1.1 | 2.6 | 2.5 | 2.2 | 0.1 | 0.3 |
| Ex. food and energy | 2.6 | 1.9 | 2.3 | 1.5 | 0.2 | 0.1 |
| Ex. tobacco | 2.5 | 1.8 | 2.3 | 1.5 | 0.2 | 0.1 |
| Chained CPI (NSA) | 0.8 | 2.2 | -- | -- | -- | -- |
| Ex. food and energy | 2.0 | 1.5 | -- | -- | -- | -- |
| PCE Prices | | | | | | |
| Total | 0.8 | 1.9 | 2.2 | 1.1 | 0.1 | 0.1 |
| Food | 2.9 | 1.0 | 1.2 | 0.9 | 0.2 | -0.2 |
| Energy | -16.1 | 14.7 | 12.3 | 14.4 | -0.4 | 4.3 |
| Ex. food and energy | 1.5 | 1.5 | 1.9 | 0.5 | 0.1 | -0.0 |
| Ex. tobacco | 1.5 | 1.4 | 1.9 | 0.5 | 0.1 | -0.0 |
| Core commodities | -1.4 | -1.6 | -0.2 | -3.4 | -0.3 | -0.3 |
| Core services | 2.9 | 2.8 | 2.8 | 2.2 | 0.2 | 0.1 |
| Core market-based | 1.5 | 1.0 | 1.7 | -0.1 | 0.0 | -0.1 |
| Core nonmarket-based | 1.8 | 3.2 | 2.7 | 2.6 | 0.1 | 0.2 |
| PPI | | | | | | |
| Total finished goods | -2.7 | 2.8 | 4.1 | 4.7 | -0.1 | 1.6 |
| Food | 1.8 | 0.4 | -2.0 | 10.2 | 0.4 | 1.6 |
| Energy | -20.5 | 17.0 | 26.2 | 12.9 | 0.2 | 4.8 |
| Ex. food and energy | 0.4 | 0.5 | 1.6 | 1.1 | -0.5 | 0.9 |
| Ex. tobacco | 0.1 | 0.3 | 1.7 | 1.1 | -0.5 | 0.9 |
| Core consumer goods | 0.8 | 1.0 | 1.8 | 1.5 | -0.4 | 0.9 |
| Capital equipment | -0.2 | -0.1 | 0.9 | 0.9 | -0.4 | 0.7 |
| Intermediate materials | -4.7 | 4.5 | 6.7 | 4.4 | -0.2 | 1.3 |
| Ex. food and energy | -1.8 | 1.9 | 2.4 | 1.5 | -0.1 | 0.3 |
| Crude materials | -40.0 | 29.3 | 22.9 | 78.1 | 2.2 | 6.9 |
| Ex. food and energy | -8.9 | 13.0 | -0.9 | 9.8 | 0.5 | 1.0 |

through mid-February and the resulting demand for space heating also drove natural gas inventories down to about half of their typical levels for the season. Consequently, spot prices of natural gas doubled in February, although they have eased some since. All told, these developments, as well as survey data for February, point to another large increase in energy prices in the next CPI report.

Consumer prices for food fell 0.2 percent in January, with declines in prices for many animal products, fruits and vegetables, and food away from home. The drop in the price of food away from home was its first decrease in more than forty years. For the twelve months ended in January, food prices rose 1 percent, a deceleration of nearly 2 percentage points from the previous year.

The CPI excluding food and energy rose 1.9 percent over the twelve months ended in January, 3/4 percentage point less than the pace a year earlier.[8] Prices of both core goods and core services have decelerated noticeably over the past twelve months. The increase in core PCE prices over the twelve months ended in January was 1.5 percent, about the same as in the preceding period. A 1/2 percentage point deceleration in prices for market-based components of the core PCE index was offset by a pickup in prices for nonmarket-based items.

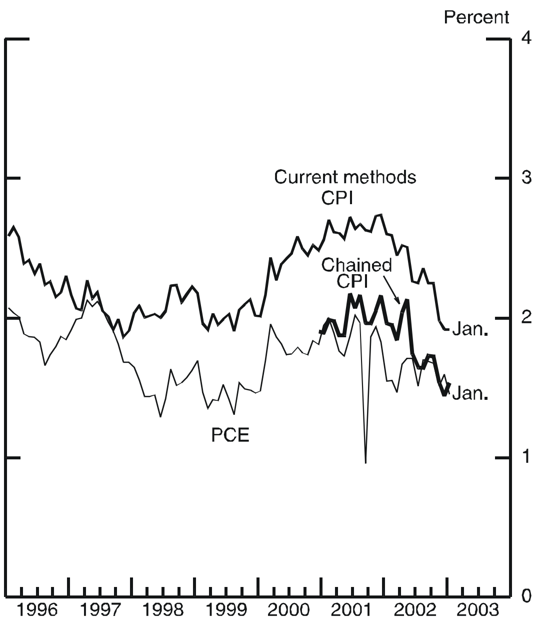
Prices for capital equipment, as measured by the producer price index, rose 0.7 percent in January, roughly reversing their decline over the preceding two months. Substantial swings in prices for cars and light trucks have accounted for much of this see-saw movement. For the twelve months ended in January, capital equipment prices ticked down 0.1 percent.

Prices at earlier stages of processing have been moving up significantly, reflecting the recent run-up in energy prices and substantial increases in prices for some industrial supplies. The PPI for intermediate materials jumped 1.3 percent in January, and the index was up 4.5 percent from a year earlier, compared with a decline of 4.7 percent the preceding year. A smaller, but still pronounced, swing occurred in the PPI for intermediate materials excluding food and energy, which includes energy-intensive items such as plastic resins, nitrogenates, and industrial chemicals. In addition to the acceleration in energy prices, the recent run-up in core intermediate goods prices likely reflects some firming of industrial demand and the larger increases in import prices over the same period.

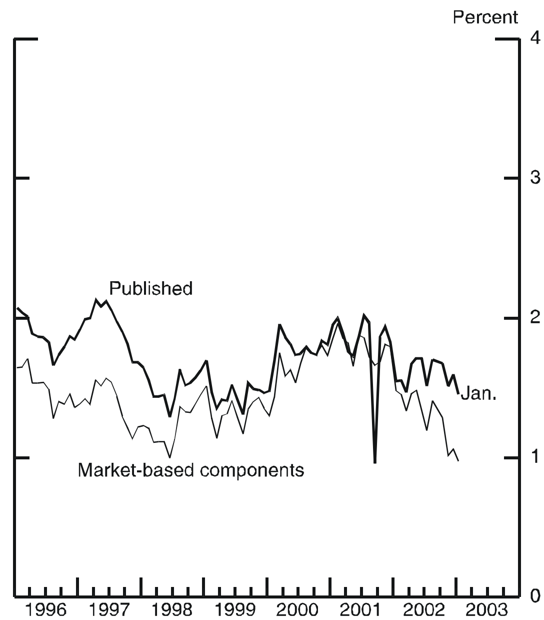
8. The deceleration in core prices is a little less pronounced when measured by the core portion of the chained CPI, which uses a superlative aggregation formula that takes into account substitution by consumers in response to changes in relative prices. This index rose 1/2 percentage point less than in the preceding year.

## Measures of Core Consumer Price Inflation
(12-month change)

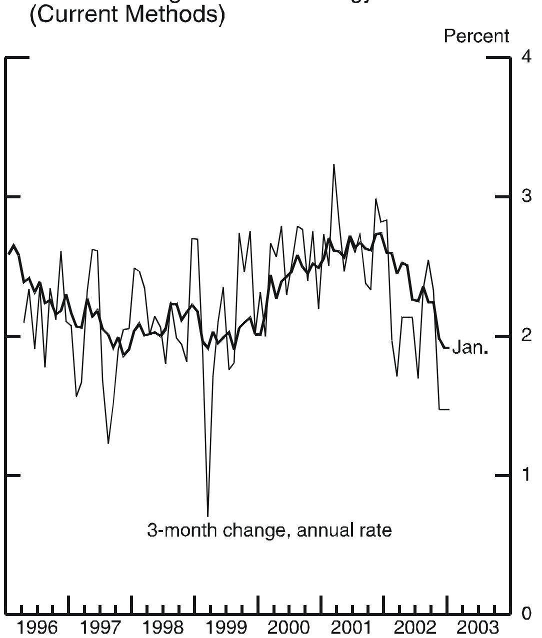
CPI and PCE excluding Food and Energy



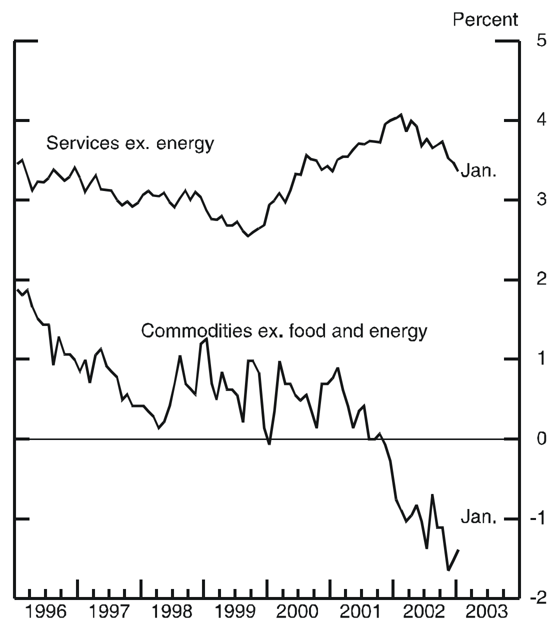

PCE excluding Food and Energy




CPI excluding Food and Energy
(Current Methods)

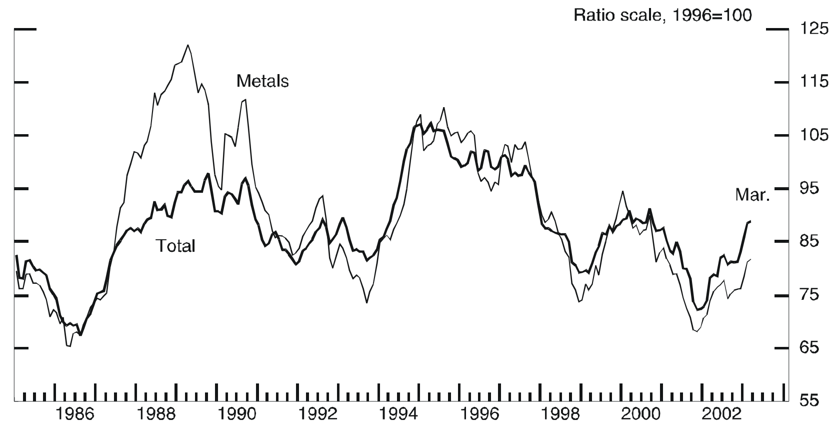


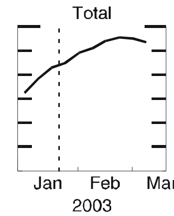

CPI Services and Commodities

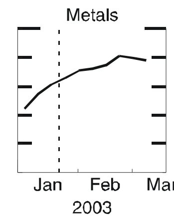


# Commodity Price Measures

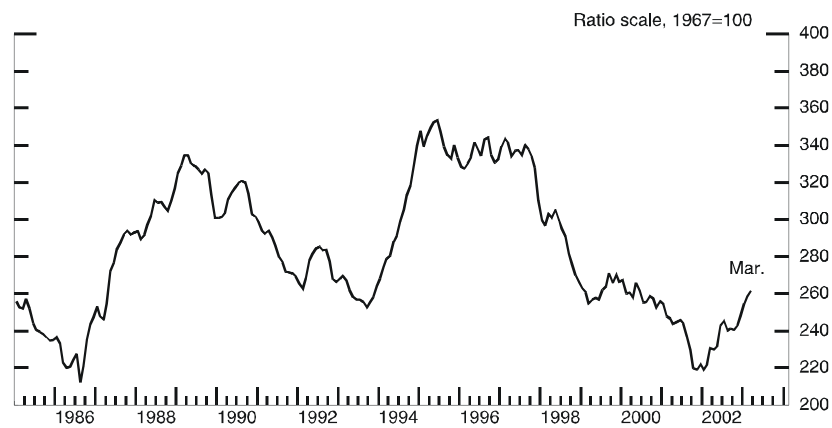
## Journal of Commerce Index

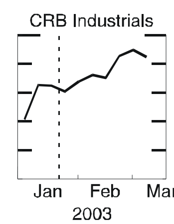


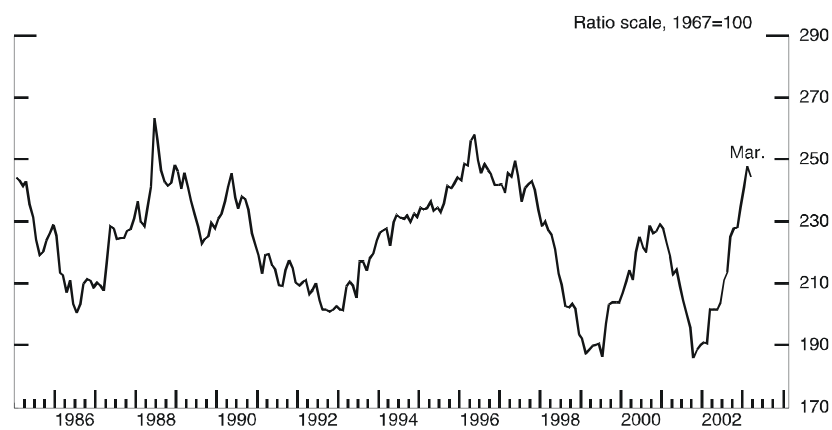



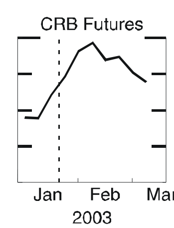

## CRB Spot Industrials




## CRB Futures




Note. Larger panels show monthly average of weekly data through last available week. Smaller panels show weekly data, Tuesdays. Vertical lines on small panels indicate week of last Greenbook. The Journal of Commerce index is based almost entirely on industrial commodities, with a small weight given to energy commodities, and the Commodity Research Board (CRB) spot price index consists entirely of industrial commodities, excluding energy. The CRB futures index gives about a 60 percent weight to food commodities and splits the remaining weight roughly equally among energy commodities, industrial commodities, and precious metals. Copyright for Journal of Commerce data is held by CIBCR, 1994.

SPOT PRICES OF SELECTED COMMODITIES

| | Current price (dollars) | Percent change[1] 2001 | 2002 | Dec. 31 to Jan. 21[2] | Jan. 21[2] to Mar. 11 | Memo: Year earlier to date |
|---|---|---|---|---|---|---|
| Metals | | | | | | |
| Copper (lb.) | 0.780 | -22.0 | 2.8 | 8.2 | -1.3 | 0.0 |
| Steel scrap (ton) | 120.667 | -17.7 | 49.2 | 11.0 | 12.1 | 46.6 |
| Aluminum, London (lb.) | 0.639 | -14.3 | 0.7 | 2.9 | 1.8 | -0.2 |
| Precious metals | | | | | | |
| Gold (oz.) | 348.700 | 1.2 | 24.7 | 2.6 | -1.4 | 18.8 |
| Silver (oz.) | 4.695 | -3.5 | 3.0 | 0.5 | -2.5 | 3.5 |
| Forest products[3] | | | | | | |
| Lumber (m. bdft.) | 207.000 | 25.0 | -13.0 | 3.5 | 0.0 | -29.8 |
| Plywood (m. sqft.) | 294.000 | 3.2 | -0.3 | 2.4 | -0.7 | -16.7 |
| Petroleum | | | | | | |
| Crude oil (barrel) | 33.790 | -16.3 | 65.8 | 0.1 | 5.5 | 46.2 |
| Gasoline (gal.) | 1.035 | -28.0 | 54.6 | 2.0 | 19.9 | 47.2 |
| Fuel oil (gal.) | 1.164 | -42.6 | 57.4 | 3.0 | 30.6 | 84.5 |
| Livestock | | | | | | |
| Steers (cwt.) | 76.500 | -19.7 | 12.9 | 9.6 | -3.2 | 4.8 |
| Hogs (cwt.) | 37.000 | -9.9 | -18.9 | 16.7 | 5.7 | 2.8 |
| Broilers (lb.) | 0.575 | 3.7 | 7.4 | -3.6 | -0.3 | 11.0 |
| U.S. farm crops | | | | | | |
| Corn (bu.) | 2.330 | -4.1 | 19.2 | -2.4 | 4.0 | 19.5 |
| Wheat (bu.) | 3.833 | -8.9 | 30.4 | -3.6 | -4.3 | 20.7 |
| Soybeans (bu.) | 5.640 | -13.4 | 35.6 | -2.2 | 2.9 | 25.5 |
| Cotton (lb.) | 0.537 | -45.7 | 53.8 | -0.1 | 12.3 | 64.2 |
| Other foodstuffs | | | | | | |
| Coffee (lb.) | 0.445 | -35.3 | 1.1 | 11.8 | -10.6 | -11.0 |
| Memo: | | | | | | |
| JOC Industrials | 88.700 | -17.1 | 16.2 | 3.2 | 2.4 | 13.0 |
| JOC Metals | 81.700 | -17.0 | 9.5 | 4.5 | 3.2 | 10.1 |
| CRB Futures | 243.910 | -16.3 | 23.0 | 3.2 | 0.7 | 20.0 |
| CRB Spot Industrials | 261.160 | -14.6 | 14.4 | 3.1 | 2.0 | 13.3 |

1. Changes, if not specified, are from the last week of the preceding year to the last week of the period indicated.
2. Week of the January Greenbook.
3. Reflects prices on the Friday before the date indicated.

The PPI for core crude materials rose 1.0 percent in January, and the twelve-month change in this index was 13 percent. Broad-based spot commodity indexes have also moved up recently, extending the sizable advances they posted last year. The Journal of Commerce industrial price index has been boosted by its substantial energy component, and both it and the Commodity Research Bureau index of spot industrial prices have been driven higher by rising prices for a range of other commodities. In particular, recent reports have noted a pickup in foreign demand for industrial metals—especially steel scrap. The Commodity Research Bureau index of futures prices, which is heavily weighted toward agricultural commodities, is up modestly since the last Greenbook but has increased almost 30 percent over the past twelve months. A large part of last year's increase reflects the drought-induced run-up in grain prices, but prices for cotton have also increased sharply of late.

Near-term inflation expectations from the Michigan survey edged up in February: The median expected rate of inflation for the next year, which had inched down from 2-3/4 percent last spring to 2-1/2 percent late last year, popped back up to 2.7 percent last month. The February reading on median expectations of inflation over the next five to ten years also was 2.7 percent, in line with the typical response for the past year.

The incoming data on labor costs have sent mixed signals regarding recent patterns in compensation, but our sense is that compensation growth remains on a downtrend. Over the twelve months ended in December 2002, the employment cost index (ECI) for hourly compensation in private industry increased 3.2 percent, 1 percentage point less than in the preceding period. The deceleration was apparent in both the wages and salaries component, which slowed a touch more than a percentage point, and the benefits component, which eased about 1/2 percentage point. In contrast, the four-quarter change in compensation per hour in the nonfarm business sector, which was running far below changes in the ECI a year ago, accelerated sharply over the course of 2002 and increased 4.2 percent for last year as a whole. Although these two compensation measures differ in many ways, we believe that a major contributor to the disparate swings over the past couple of years was proceeds from the exercise of stock options, which are included in the compensation per hour measure but not in the ECI.

So far this year, the available compensation data are limited to readings on average hourly earnings of production or nonsupervisory workers on private nonfarm payrolls. This measure of wages rose 0.7 percent in February after having edged down 0.1 percent in January. Looking past the monthly volatility, average hourly earnings were up 3.2 percent from the level a year earlier, a bit lower than the rate of increase posted in the previous twelve months. The

BROAD MEASURES OF INFLATION
(4-quarter percent change)

| | 1999 Q4 | 2000 Q4 | 2001 Q4 | 2002 Q4 |
|---|---|---|---|---|
| Product prices | | | | |
| GDP chain price index | 1.6 | 2.3 | 2.0 | 1.3 |
| Less food and energy | 1.6 | 2.1 | 1.8 | 1.4 |
| Nonfarm business chain price index[1] | 1.4 | 1.9 | 1.5 | 0.6 |
| Expenditure prices | | | | |
| Gross domestic purchases chain price index | 1.9 | 2.5 | 1.3 | 1.6 |
| Less food and energy | 1.4 | 2.0 | 1.7 | 1.4 |
| PCE chain price index | 2.0 | 2.5 | 1.5 | 1.8 |
| Less food and energy | 1.5 | 1.8 | 1.9 | 1.6 |
| PCE chain price index, market-based components | 2.1 | 2.6 | 1.3 | 1.5 |
| Less food and energy | 1.4 | 1.8 | 1.8 | 1.2 |
| CPI | 2.6 | 3.4 | 1.8 | 2.2 |
| Less food and energy | 2.0 | 2.6 | 2.7 | 2.1 |
| Current-methods CPI | 2.6 | 3.4 | 1.8 | 2.2 |
| Less food and energy | 2.1 | 2.5 | 2.7 | 2.1 |
| Median CPI | 2.2 | 3.1 | 3.8 | 3.0 |
| Trimmed mean CPI | 1.8 | 2.8 | 2.6 | 2.1 |

1. Excluding housing.

SURVEYS OF (CPI) INFLATION EXPECTATIONS
(Percent)

| | Actual inflation[1] | University of Michigan: 1 year Mean[2] | University of Michigan: 1 year Median[2] | University of Michigan: 5 to 10 years Mean[3] | University of Michigan: 5 to 10 years Median[3] | Professional forecasters (10-year)[4] |
|---|---|---|---|---|---|---|
| 2001-Q2 | 3.4 | 3.9 | 3.1 | 3.6 | 3.0 | 2.5 |
| Q3 | 2.7 | 3.1 | 2.7 | 3.5 | 2.9 | 2.5 |
| Q4 | 1.9 | 1.5 | 1.1 | 3.1 | 2.8 | 2.6 |
| 2002-Q1 | 1.3 | 2.6 | 2.2 | 3.1 | 2.8 | 2.5 |
| Q2 | 1.3 | 3.1 | 2.7 | 3.4 | 2.9 | 2.5 |
| Q3 | 1.6 | 2.8 | 2.6 | 3.2 | 2.7 | 2.5 |
| Q4 | 2.2 | 2.7 | 2.5 | 3.3 | 2.8 | 2.5 |
| 2003-Q1 | | | | | | 2.5 |
| July | 1.5 | 2.7 | 2.6 | 3.2 | 2.8 | |
| Aug. | 1.8 | 2.6 | 2.6 | 3.5 | 2.9 | |
| Sept. | 1.5 | 3.1 | 2.5 | 3.0 | 2.5 | 2.5 |
| Oct. | 2.0 | 2.9 | 2.5 | 3.3 | 2.8 | |
| Nov. | 2.2 | 2.5 | 2.4 | 3.3 | 2.8 | |
| Dec. | 2.4 | 2.7 | 2.5 | 3.2 | 2.8 | 2.5 |
| 2003-Jan. | 2.6 | 2.7 | 2.5 | 3.1 | 2.7 | |
| Feb. | | 3.2 | 2.7 | 3.1 | 2.7 | |
| Mar. | | | | | | 2.5 |

1. CPI; percent change from the same period in the preceding year.
2. Responses to the question: By about what percent do you expect prices to go up, on the average, during the next 12 months?
3. Responses to the question: By about what percent per year do you expect prices to go up, on the average, during the next 5 to 10 years?
4. Compiled by the Federal Reserve Bank of Philadelphia.

EMPLOYMENT COST INDEX OF HOURLY COMPENSATION
FOR PRIVATE INDUSTRY WORKERS

| | 2001 | 2002 | | | |
|---|---|---|---|---|---|
| | Dec. | Mar. | June | Sept. | Dec. |
| | -----Quarterly percent change------- (Compound annual rate) | | | | |
| Total hourly compensation[1] | 4.2 | 3.6 | 4.4 | 2.5 | 2.8 |
| Wages and salaries | 3.7 | 3.7 | 3.9 | 1.5 | 1.8 |
| Benefit costs | 5.2 | 4.4 | 5.6 | 4.0 | 5.0 |
| By industry | | | | | |
| Construction | 4.8 | 2.6 | 1.6 | 3.1 | 5.5 |
| Manufacturing | 4.0 | 4.2 | 3.6 | 3.3 | 4.3 |
| Trans., comm., and public utilities | 6.7 | 3.9 | 3.9 | 4.6 | 3.5 |
| Wholesale trade | 1.8 | 7.2 | 9.7 | 0.0 | 1.5 |
| Retail trade | 8.5 | -1.0 | 5.3 | 1.0 | 1.5 |
| FIRE | 1.0 | 10.0 | 5.2 | 1.7 | 1.2 |
| Services | 3.6 | 3.5 | 2.7 | 2.5 | 2.2 |
| By occupation | | | | | |
| White collar | 4.9 | 3.3 | 4.5 | 2.2 | 2.7 |
| Blue collar | 3.8 | 3.7 | 3.7 | 2.9 | 3.9 |
| Service occupations | 5.6 | 4.7 | 2.3 | 4.4 | 2.0 |
| Memo: | | | | | |
| State and local governments | 2.6 | 2.9 | 3.4 | 6.2 | 3.8 |
| | -----Twelve-month percent change---- | | | | |
| Total hourly compensation | 4.2 | 3.9 | 4.0 | 3.7 | 3.2 |
| Excluding sales workers | 4.2 | 3.9 | 4.0 | 3.6 | 3.3 |
| Wages and salaries | 3.8 | 3.5 | 3.6 | 3.2 | 2.7 |
| Excluding sales workers | 3.9 | 3.6 | 3.5 | 3.2 | 2.7 |
| Benefit costs | 5.1 | 4.8 | 5.1 | 4.8 | 4.7 |
| By industry | | | | | |
| Construction | 4.3 | 4.0 | 3.3 | 3.0 | 3.2 |
| Manufacturing | 3.5 | 3.5 | 3.6 | 3.8 | 3.8 |
| Trans., comm., and public utilities | 4.9 | 4.5 | 4.3 | 4.8 | 4.0 |
| Wholesale trade | 3.3 | 4.4 | 5.4 | 4.6 | 4.5 |
| Retail trade | 4.5 | 3.2 | 3.9 | 3.4 | 1.7 |
| FIRE | 3.6 | 4.6 | 4.9 | 4.4 | 4.5 |
| Services | 4.5 | 3.9 | 3.7 | 3.1 | 2.7 |
| By occupation | | | | | |
| White collar | 4.2 | 4.0 | 4.1 | 3.7 | 3.2 |
| Sales | 3.5 | 3.5 | 4.6 | 4.3 | 3.3 |
| Nonsales | 4.4 | 4.0 | 3.9 | 3.6 | 3.1 |
| Blue collar | 3.8 | 3.6 | 3.9 | 3.5 | 3.6 |
| Service occupations | 4.5 | 4.3 | 4.0 | 4.2 | 3.2 |
| Memo: | | | | | |
| State and local governments | 4.2 | 3.9 | 3.6 | 3.8 | 4.1 |

1. Seasonally adjusted by the BLS.

slowdown in wages has been fairly widespread among industries, with all sectors except the retail trade and finance, insurance, and real estate categories seeing a deceleration in hourly earnings over the year.

LABOR COSTS
(Percent change, annual rate; based on seasonally adjusted data)

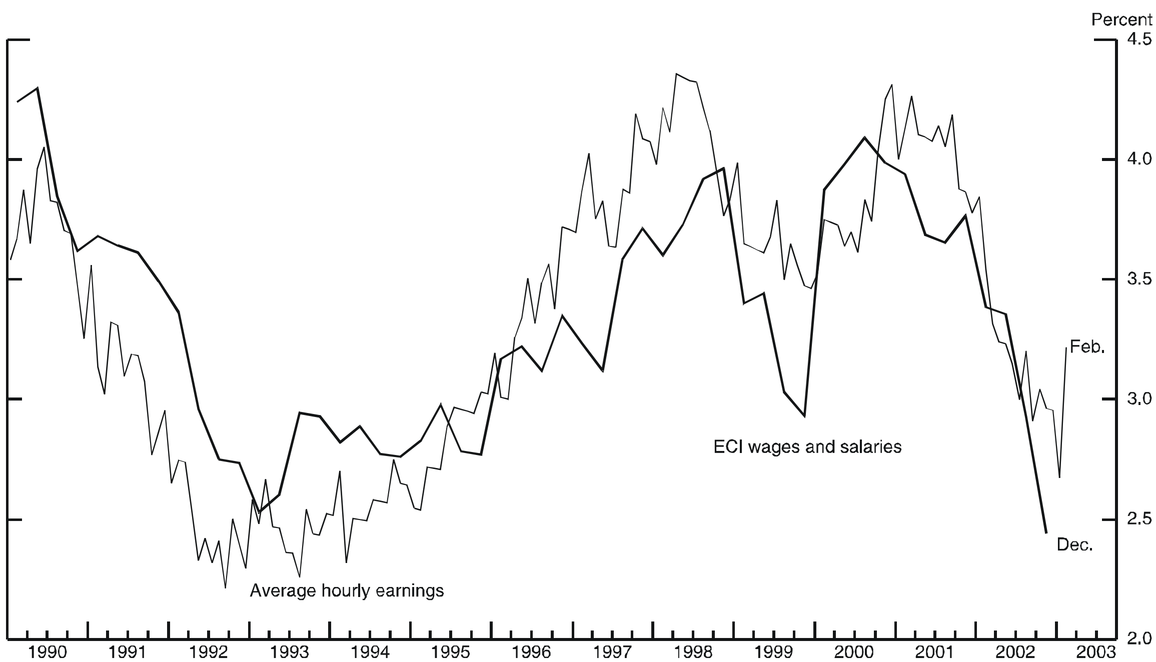
| | 2001 | 2002 | 2002 Q1 | 2002 Q2 | 2002 Q3 | 2002 Q4 |
|---|---|---|---|---|---|---|
| Compensation per hour | | | | | | |
| Total business | 1.5 | 4.3 | 3.0 | 4.3 | 5.7 | 4.2 |
| Nonfarm business | 1.4 | 4.2 | 2.9 | 4.0 | 5.4 | 4.6 |
| Nonfinancial corporations | 1.4 | n.a. | 3.5 | 4.5 | 6.1 | n.a. |
| Unit labor costs | | | | | | |
| Total business | -0.4 | 0.3 | -4.9 | 2.4 | 0.0 | 3.9 |
| Nonfarm business | -0.5 | 0.1 | -5.3 | 2.3 | -0.1 | 3.8 |
| Nonfinancial corporations | -1.8 | n.a. | -1.2 | -1.3 | 0.6 | n.a. |

## Measures of Compensation per Hour
(4-quarter change)

AVERAGE HOURLY EARNINGS
(Percent change; based on seasonally adjusted data)

| | 12-month percent change | | | Percent change to Feb 2003 from month indicated | | Percent change | |
|---|---|---|---|---|---|---|---|
| | Feb. 2001 | Feb. 2002 | Feb. 2003 | Aug. 2002 | Nov. 2002 | Jan. 2003 | Feb. 2003 |
| | - - - - - - - - Annual rate- - - - - - - - - | | | | | -Monthly rate- | |
| Total private nonfarm | 4.1 | 3.5 | 3.2 | 3.4 | 3.8 | -0.1 | 0.7 |
| Manufacturing | 2.8 | 3.8 | 2.7 | 3.2 | 3.7 | 0.3 | 0.3 |
| Construction | 3.6 | 2.5 | 2.3 | 2.2 | 2.3 | -0.6 | 0.5 |
| Transportation and public utilities | 3.5 | 3.3 | 3.1 | 4.2 | 3.0 | -0.2 | 1.3 |
| Finance, insurance, and real estate | 4.6 | 3.3 | 4.2 | 4.1 | 1.2 | 0.2 | 0.0 |
| Retail trade | 3.9 | 2.5 | 3.0 | 2.6 | 3.2 | -0.3 | 0.7 |
| Wholesale trade | 4.9 | 3.5 | 2.0 | 2.8 | 4.7 | -0.1 | 0.9 |
| Services | 5.2 | 4.5 | 4.1 | 4.6 | 5.0 | 0.0 | 1.0 |

**Average Hourly Earnings for Production or Nonsupervisory Workers**
(12-month change)



# Domestic Financial Developments

III-T-1

## Selected Financial Market Quotations

(One-day quotes in percent except as noted)

| Instrument | 2000 June 26 | 2001 Sept. 10 | 2003 Jan. 29 | 2003 Mar. 11 | Change to Mar. 11 from selected dates (percentage points): 2000 June 26 | 2001 Sept. 10 | 2003 Jan. 29 |
|---|---|---|---|---|---|---|---|
| *Short-term* | | | | | | | |
| FOMC intended federal funds rate | 6.50 | 3.50 | 1.25 | 1.25 | -5.25 | -2.25 | .00 |
| Treasury bills [1] | | | | | | | |
| 3-month | 5.66 | 3.19 | 1.16 | 1.08 | -4.58 | -2.11 | -.08 |
| 6-month | 5.94 | 3.13 | 1.18 | 1.05 | -4.89 | -2.08 | -.13 |
| Commercial paper (A1/P1 rates) | | | | | | | |
| 1-month | 6.56 | 3.42 | 1.24 | 1.19 | -5.37 | -2.23 | -.05 |
| 3-month | 6.56 | 3.24 | 1.23 | 1.14 | -5.42 | -2.10 | -.09 |
| Large negotiable CDs [1] | | | | | | | |
| 1-month | 6.64 | 3.46 | 1.26 | 1.23 | -5.41 | -2.23 | -.03 |
| 3-month | 6.73 | 3.26 | 1.26 | 1.17 | -5.56 | -2.09 | -.09 |
| 6-month | 6.89 | 3.24 | 1.26 | 1.11 | -5.78 | -2.13 | -.15 |
| Eurodollar deposits [2] | | | | | | | |
| 1-month | 6.63 | 3.41 | 1.26 | 1.20 | -5.43 | -2.21 | -.06 |
| 3-month | 6.69 | 3.26 | 1.26 | 1.17 | -5.52 | -2.09 | -.09 |
| Bank prime rate | 9.50 | 6.50 | 4.25 | 4.25 | -5.25 | -2.25 | .00 |
| *Intermediate- and long-term* | | | | | | | |
| U.S. Treasury [3] | | | | | | | |
| 2-year | 6.54 | 3.59 | 1.77 | 1.39 | -5.15 | -2.20 | -.38 |
| 10-year | 6.35 | 5.14 | 4.30 | 3.82 | -2.53 | -1.32 | -.48 |
| 30-year | 6.22 | 5.55 | 5.12 | 4.83 | -1.39 | -.72 | -.29 |
| U.S. Treasury 10-year indexed note | 4.09 | 3.26 | 2.18 | 1.62 | -2.47 | -1.64 | -.56 |
| Municipal revenue (Bond Buyer) [4] | 5.99 | 5.25 | 5.17 | 5.06 | -.93 | -.19 | -.11 |
| Private instruments | | | | | | | |
| 10-year swap | 7.38 | 5.62 | 4.43 | 3.98 | -3.40 | -1.64 | -.45 |
| 10-year FNMA [5] | 7.19 | 5.68 | 4.67 | 4.19 | -3.00 | -1.49 | -.48 |
| 10-year AA [6] | 7.64 | 6.30 | 5.28 | 4.71 | -2.93 | -1.59 | -.57 |
| 10-year BBB [6] | 8.40 | 7.11 | 6.67 | 6.07 | -2.33 | -1.04 | -.60 |
| High-yield [7] | 12.30 | 12.72 | 11.58 | 11.23 | -1.07 | -1.49 | -.35 |
| Home mortgages (FHLMC survey rate) [8] | | | | | | | |
| 30-year fixed | 8.14 | 6.89 | 5.91 | 5.67 | -2.47 | -1.22 | -.24 |
| 1-year adjustable | 7.22 | 5.64 | 3.93 | 3.76 | -3.46 | -1.88 | -.17 |

| Stock exchange index | Record high: Level | Record high: Date | 2001 Sept. 10 | 2003 Jan. 29 | 2003 Mar. 11 | Change to Mar. 11 from selected dates (percent): Record high | 2001 Sept. 10 | 2003 Jan. 29 |
|---|---|---|---|---|---|---|---|---|
| Dow-Jones Industrial | 11,723 | 1-14-00 | 9,606 | 8,111 | 7,524 | -35.82 | -21.67 | -7.23 |
| S&P 500 Composite | 1,527 | 3-24-00 | 1,093 | 864 | 801 | -47.58 | -26.71 | -7.36 |
| Nasdaq (OTC) | 5,049 | 3-10-00 | 1,695 | 1,358 | 1,271 | -74.82 | -25.00 | -6.38 |
| Russell 2000 | 606 | 3-9-00 | 441 | 375 | 347 | -42.75 | -21.26 | -7.42 |
| Wilshire 5000 | 14,752 | 3-24-00 | 10,104 | 8,194 | 7,610 | -48.41 | -24.68 | -7.12 |

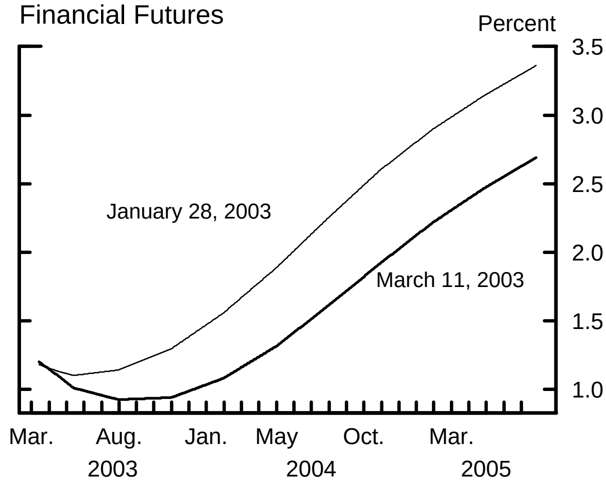
1. Secondary market.
2. Bid rates for eurodollar deposits collected around 9:30 a.m. Eastern time.
3. Derived from a smoothed Treasury yield curve estimated using off-the-run securities.
4. Most recent Thursday quote.
5. Constant maturity yields estimated from Fannie Mae domestic non-callable coupon securities.
6. Derived from smoothed corporate yield curves estimated using Merrill Lynch bond data.
7. Merrill Lynch Master II high-yield bond.
8. For week ending Friday previous to date shown.

NOTES:
June 26, 2000, is the day before the FOMC meeting that ended the most recent period of policy tightening.
September 10, 2001, is the day before the terrorist attacks.
January 28, 2003, is the day before the most recent FOMC meeting.

BA:DAM

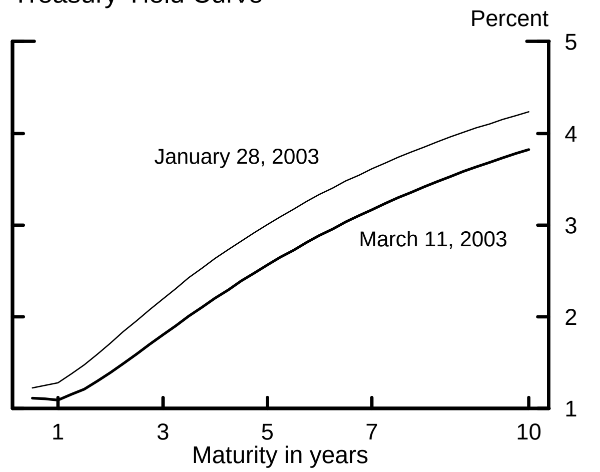
# Selected Interest Rates

### Expected Federal Funds Rates Estimated from Financial Futures



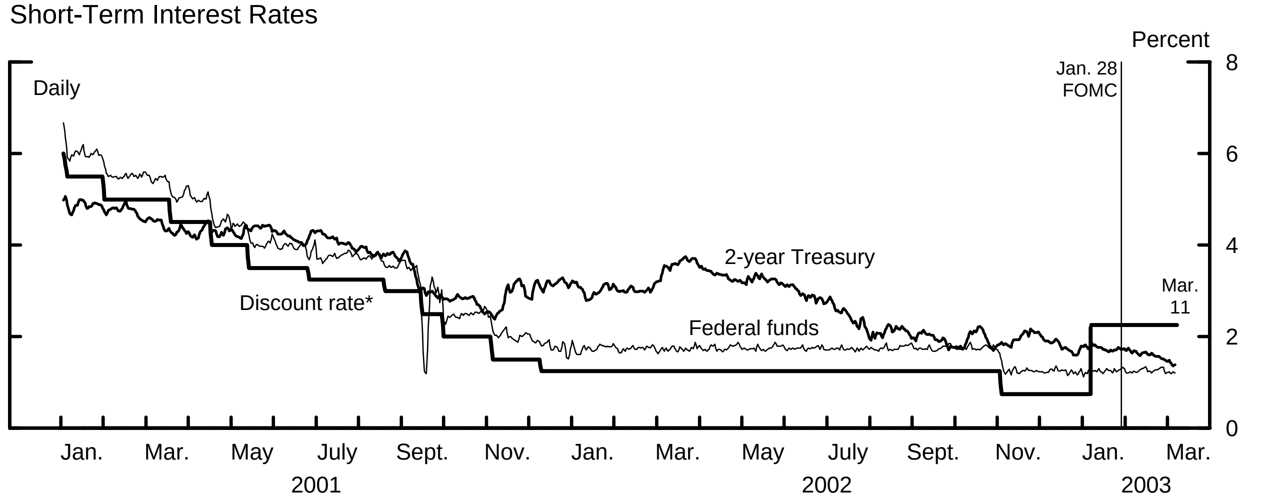

Note. Estimates from federal funds and eurodollar futures rates with an allowance for term premia and other adjustments.

### Treasury Yield Curve



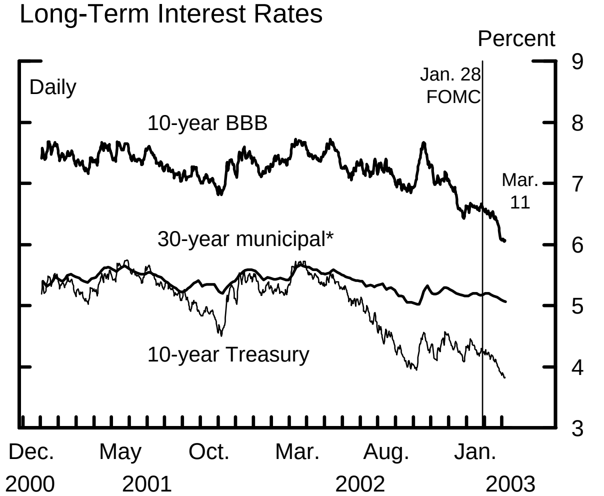

Note. Smoothed yield curve estimated using off-the-run Treasury coupon securities. Yields shown are those on notional par Treasury securities with semiannual payments.

### Short-Term Interest Rates



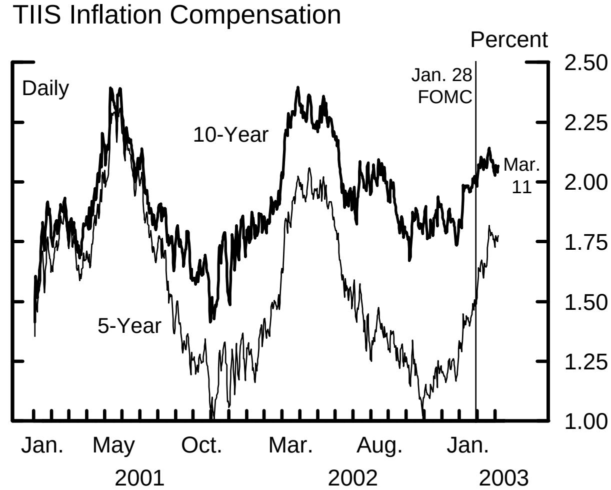

* On Jan. 9, 2003, the primary credit rate replaced the adjustment credit rate.

### Long-Term Interest Rates




*Bond Buyer Revenue, weekly Thursday frequency.

### TIIS Inflation Compensation




Note. Measured as the inflation rate at which the price of the indexed security equals the value of a portfolio of zero-coupon securities that replicates its payments.

# Domestic Financial Developments

**Overview**
Heightened global uncertainties and economic data that suggested growth remains sluggish seemed to reinforce a sense of caution among investors, bolstering the demand for Treasury and other fixed-income securities at the expense of equities. Against this backdrop, the expected path for monetary policy shifted down considerably, and investors now place significant odds on a policy easing at the upcoming meeting, with no reversal before year-end.

Despite this greater degree of caution, financial markets operated relatively smoothly. Borrowing by nonfinancial businesses continued at a moderate pace last month and was again focused on longer-term markets. Household borrowing appears to have remained brisk, and municipal borrowing has maintained its robust pace so far this year. Although federal deficits pushed the quantity of debt outstanding to the statutory debt ceiling, the Treasury has resorted to tried and true accounting devices to avoid disruptions to its regular auctions with no adverse reaction in financial markets.

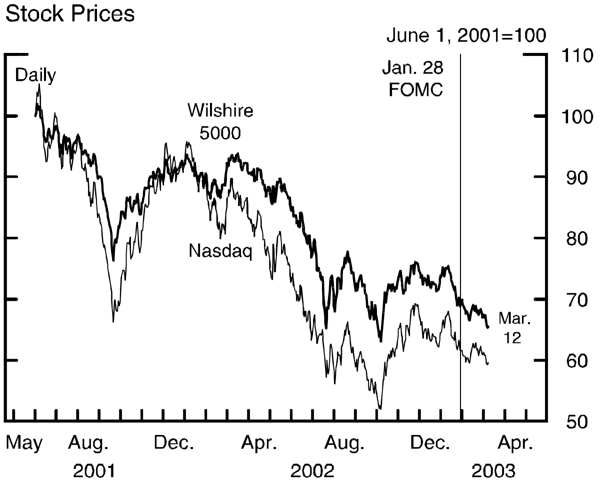
**Policy Expectations, Interest Rates, and Stock Prices**
The stunning contraction in employment that was published on March 7 led market participants to change their expectations about near-term monetary policy. Federal funds futures quotes now imply a significant probability of a policy easing at the upcoming meeting, and recent survey data suggest that most market participants expect the FOMC will retain a neutral balance of risk assessment, though the number that expect a shift toward economic weakness rose sharply. Policy expectations beyond the March meeting had already been moving lower, evidently as investors concluded that heightened global tensions and the still-tenuous economic recovery would incline the Committee to keep any move toward policy tightening on hold until next year at the earliest.

Consistent with the perception of economic softness, most measures of inflation expectations were subdued over the period. Surveys suggested that longer-term inflation expectations were little changed and ten-year TIIS inflation compensation edged up only a few basis points. At the five-year mark, TIIS inflation compensation rose about 30 basis points, but that likely owed in part to the recent runup in oil prices and possible supply pressures on nominal five-year Treasury yields from an announced increase in issuance.

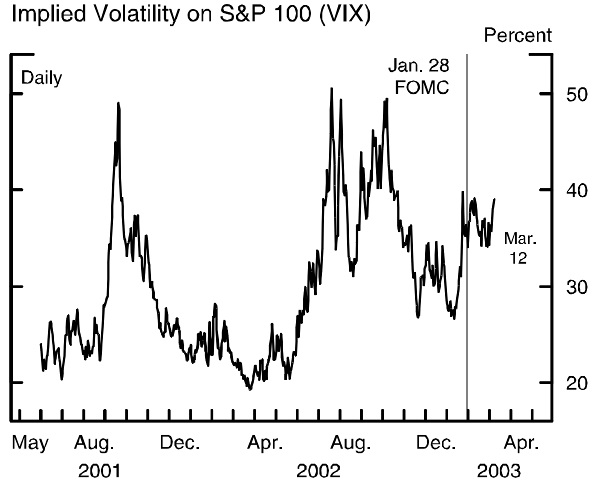
Broad stock price indexes have declined about 6 percent since the last FOMC meeting and 8 percent from the time of the January Greenbook. One reading on the equity risk premium—the spread between the forward earnings-price ratio and real Treasury yields—widened over the intermeeting period, and, on balance, the implied volatility on the S&P 100 (VIX) increased a notch.

# Stock Prices and Corporate Risk Spreads

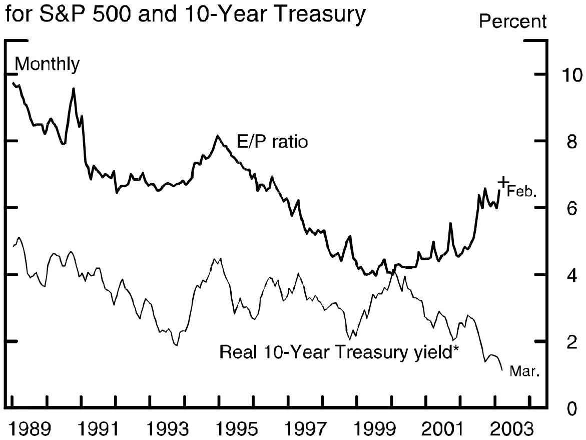
Stock Prices




Implied Volatility on S&P 100 (VIX)

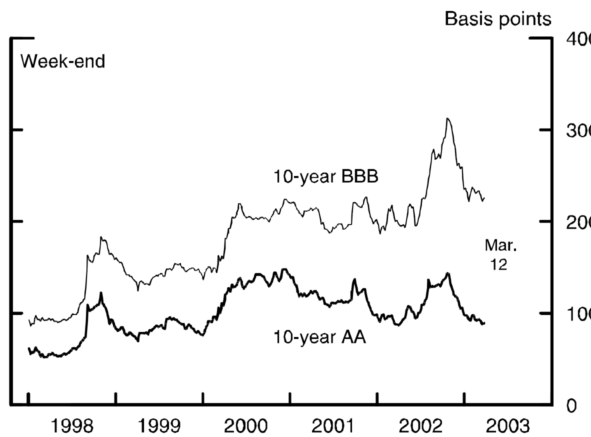



12-Month Forward Earnings-Price Ratio
for S&P 500 and 10-Year Treasury

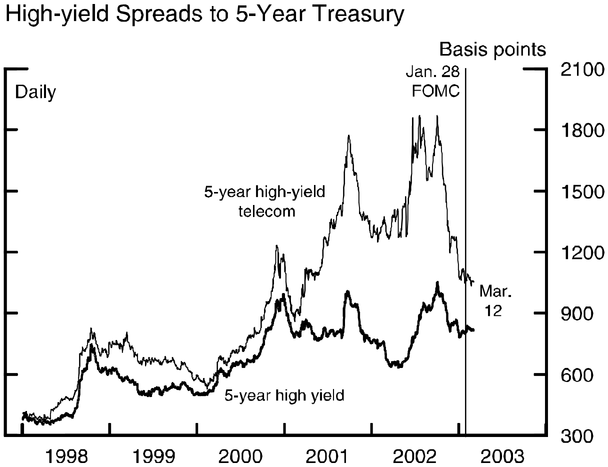



* 10-year Treasury yield minus Philadelphia Fed 10-year expected inflation.
+ Denotes the latest observation using daily prices and latest earnings data from I/B/E/S.

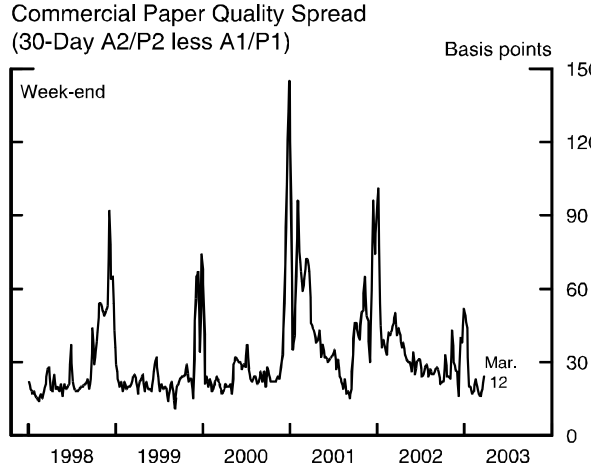
Investment-grade Spreads to 10-Year Treasury




High-yield Spreads to 5-Year Treasury




Commercial Paper Quality Spread
(30-Day A2/P2 less A1/P1)



Although rising oil prices boosted the share prices of large oil companies, prices fell for nearly all other industry groups. The telecom sector significantly underperformed the broader market, partly reflecting the effect on the Baby Bells of the FCC's surprise vote for continued regulation of local phone service.

Despite the fall in stock prices, yields on most high-grade corporate bonds fell a bit more than those on Treasury securities, leaving risk spreads slightly narrower. Market participants attribute the contraction in spreads to a shift from equities to fixed-income securities, and especially to corporates, possibly because of their higher yields. The shift in investor sentiment toward fixed income was also reflected in large outflows from equity mutual funds and even larger inflows to bond funds during the first two months of the year. Risk spreads for a few troubled firms, including Ford Motor Credit, which has a substantial quantity of bonds, rose sharply, and bid-asked spreads reportedly have been somewhat wider than normal. Spreads on speculative-grade bonds increased a bit as well.

**Business Finance**

Gross issuance of corporate bonds by nonfinancial firms moderated in February from a fairly strong pace in January. Firms continued to take advantage of low bond yields, and a sizable chunk of issuance has been used to pay down short-term debt. Also, some corporate treasurers have reported accelerating deals prior to a possible war. The issuance of junk bonds was well maintained in the first two months of the year, and a goodly number of junk deals are on the calendar of upcoming issues. After accounting for retirements, net debt financing by nonfinancial firms appears to have risen, on average, in January and February from the fourth quarter of last year, reflecting both increased net bond issuance and a slower pace of contraction in commercial paper and C&I loans.

Gross equity issuance has continued to be weak, likely held back by soft stock prices. There have been no initial public offerings for nonfinancial firms since the start of the year, and very few are anticipated over the next several months. Seasoned offerings in January continued at their modest fourth-quarter pace, but then dropped back in February; in both months, most proceeds were used to pay down short-term debt. With regard to equity retirements, share repurchases are likely to have fallen this quarter, as a number of firms announced they would begin paying dividends. At the same time, equity retirements from cash-financed mergers picked up a little from the depressed level in the fourth quarter. On balance, net equity issuance this quarter will probably be a shade more negative than it was last quarter.

# Business Finance

**Gross Issuance of Securities by U.S. Corporations**

(Billions of dollars; monthly rates, not seasonally adjusted)

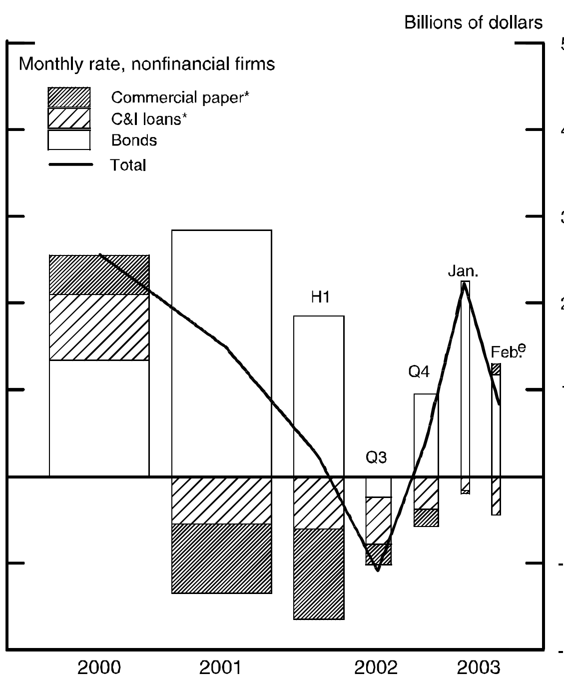
| Type of security | 2000 | 2001 | 2002 H1 | 2002 Q3 | 2002 Q4 | 2002 Dec. | 2003 Jan. | 2003 Feb. [e] |
|---|---|---|---|---|---|---|---|---|
| *Nonfinancial corporations* | | | | | | | | |
| Stocks [1] | 9.9 | 6.5 | 7.4 | 1.7 | 4.1 | 4.2 | 3.7 | 2.2 |
| Initial public offerings | 4.4 | 2.1 | 1.2 | 0.1 | 0.5 | 0.4 | 0.0 | 0.0 |
| Seasoned offerings | 5.5 | 4.4 | 6.3 | 1.6 | 3.6 | 3.8 | 3.7 | 2.2 |
| Bonds | 22.6 | 39.1 | 31.4 | 14.2 | 21.7 | 25.0 | 33.4 | 25.8 |
| Investment grade [2] | 13.2 | 27.5 | 19.8 | 11.3 | 11.9 | 10.5 | 21.3 | 17.2 |
| Speculative grade [2] | 4.6 | 8.9 | 6.4 | 1.6 | 5.0 | 6.6 | 6.5 | 4.4 |
| Other (sold abroad/unrated) | 4.8 | 2.7 | 5.3 | 1.4 | 4.8 | 7.9 | 5.6 | 4.2 |
| *Memo* | | | | | | | | |
| Net issuance of commercial paper [3] | 4.5 | -8.0 | -10.4 | -2.4 | -2.0 | -4.2 | -0.4 | 1.3 |
| Change in C&I loans at commercial banks [3] | 7.6 | -5.5 | -6.1 | -5.4 | -3.8 | -11.8 | -1.6 | -4.4 |
| *Financial corporations* | | | | | | | | |
| Stocks [1] | 1.4 | 4.2 | 4.2 | 3.6 | 4.1 | 2.7 | 3.3 | 2.9 |
| Bonds [4] | 57.9 | 80.2 | 89.8 | 81.3 | 86.5 | 100.5 | 90.7 | 82.0 |

Note. Components may not sum to totals because of rounding. These data include bonds issued privately under Rule 144A. All other private placements are excluded. Total reflects gross proceeds rather than par value of original discount bonds.

1. Excludes equity issues associated with equity-for-equity swaps that have occurred in restructurings.
2. Bonds sold in U.S. categorized according to Moody's bond ratings, or to Standard & Poor's if unrated by Moody's.
3. End-of-period basis, seasonally adjusted.
4. Excludes mortgage-backed and asset-backed bonds.

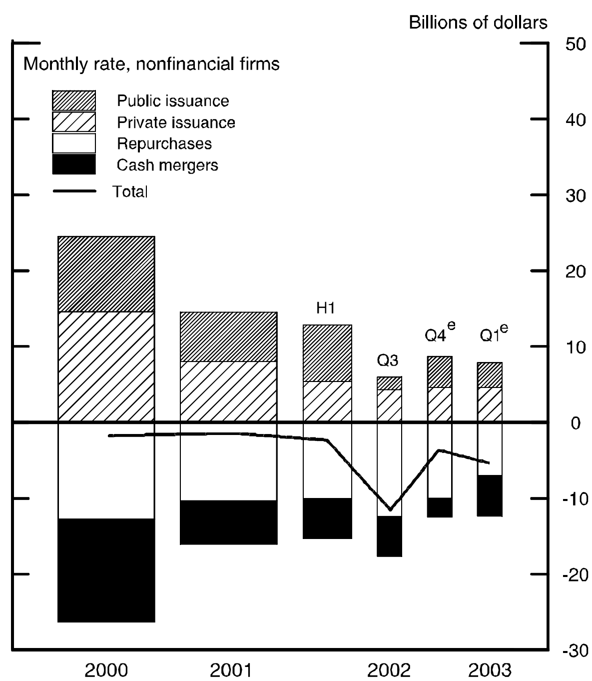
e Staff estimate.

**Components of Net Debt Financing**




* Seasonally adjusted.

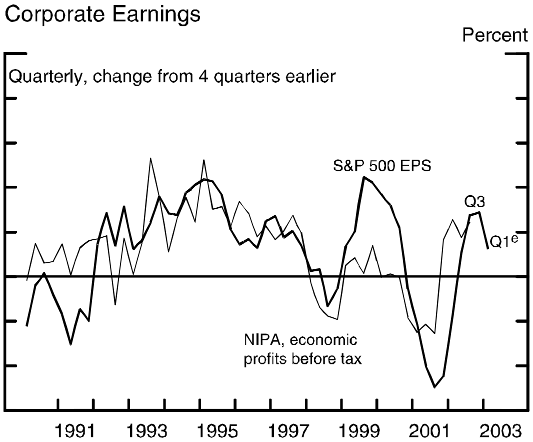
**Components of Net Equity Issuance**




e Staff estimate.

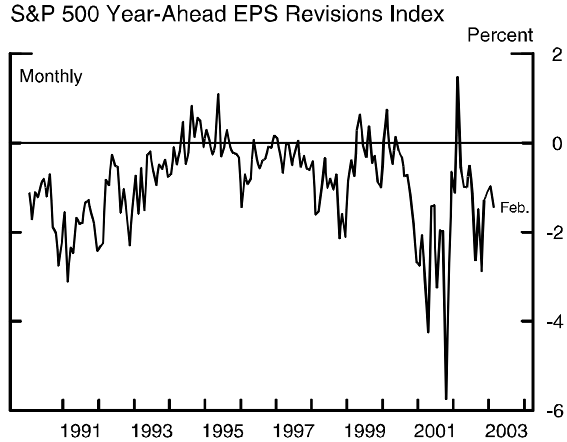
# Corporate Credit Quality and Earnings

Corporate Earnings



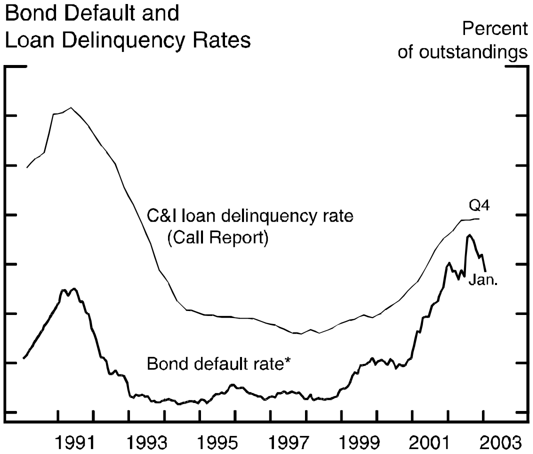

e Analysts' estimate as of Mar. 7.
Source. I/B/E/S for S&P 500 EPS.

S&P 500 Year-Ahead EPS Revisions Index



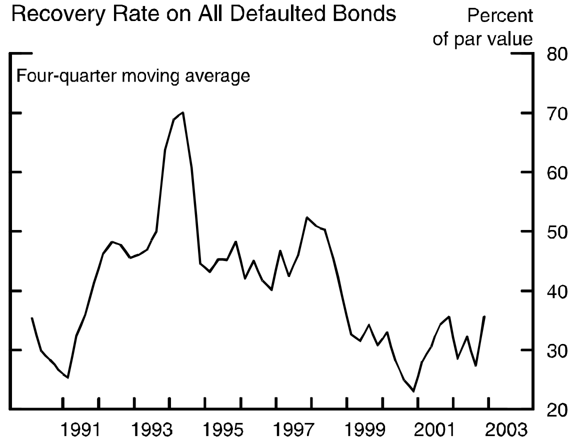

Source. I/B/E/S.

Bond Default and
Loan Delinquency Rates



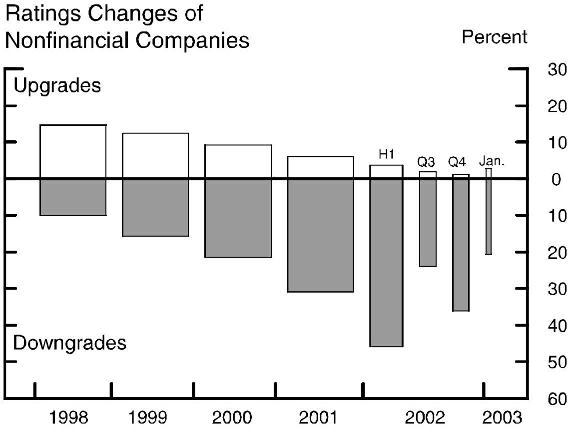

*12-month moving average, from Moody's Investors Service.

Recovery Rate on All Defaulted Bonds



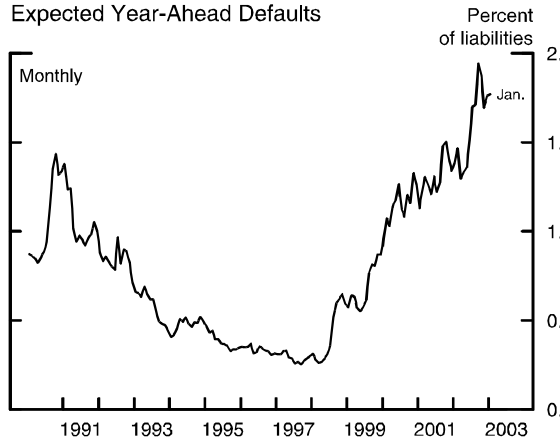

Note. Weighted-average market price at default.
Source. Moody's Investors Service.

Ratings Changes of
Nonfinancial Companies




Note. Data are at an annual rate. Debt upgrades (downgrades) as a percentage of par value of all bonds outstanding.
Source. Moody's Investors Service.

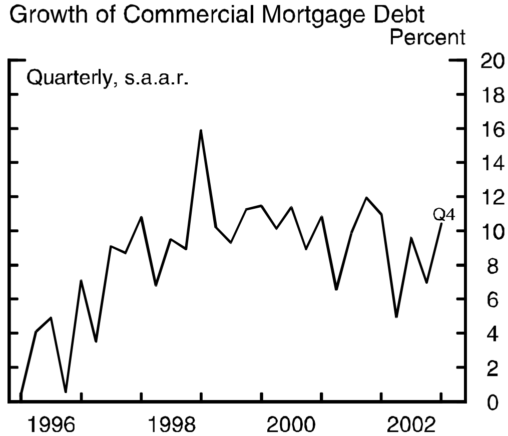
Expected Year-Ahead Defaults



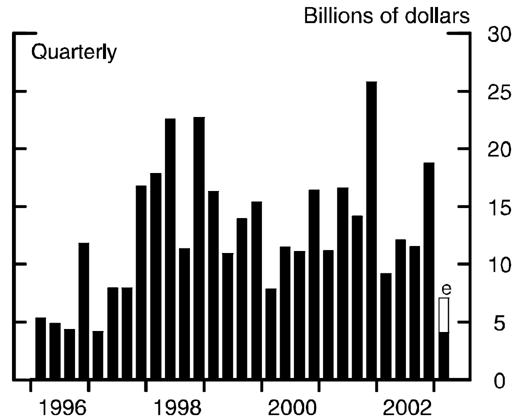

Note. Firm-level estimates of default weighted by firm liabilities as a percent of total liabilities.
Source. KMV Corporation.

## Commercial Real Estate

Growth of Commercial Mortgage Debt

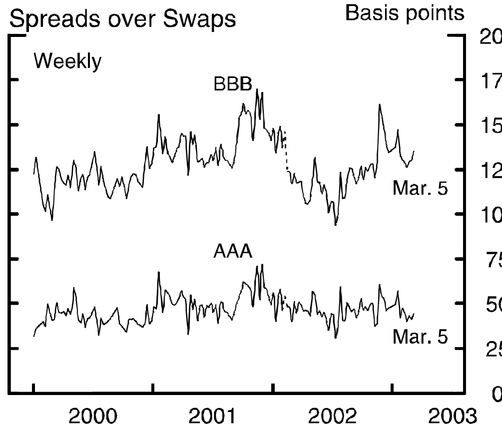



Total CMBS Gross Issuance



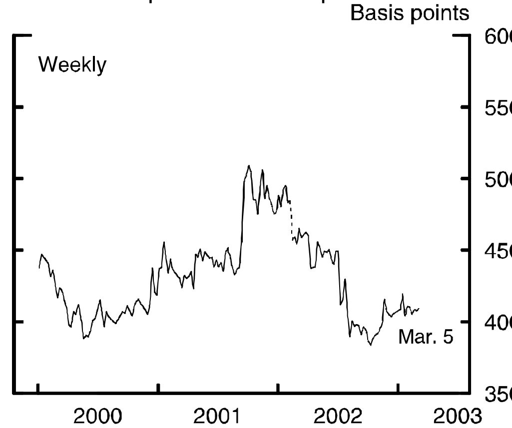

Source. Commercial Mortgage Alert.
e Staff Estimate.

Investment-Grade CMBS Spreads over Swaps



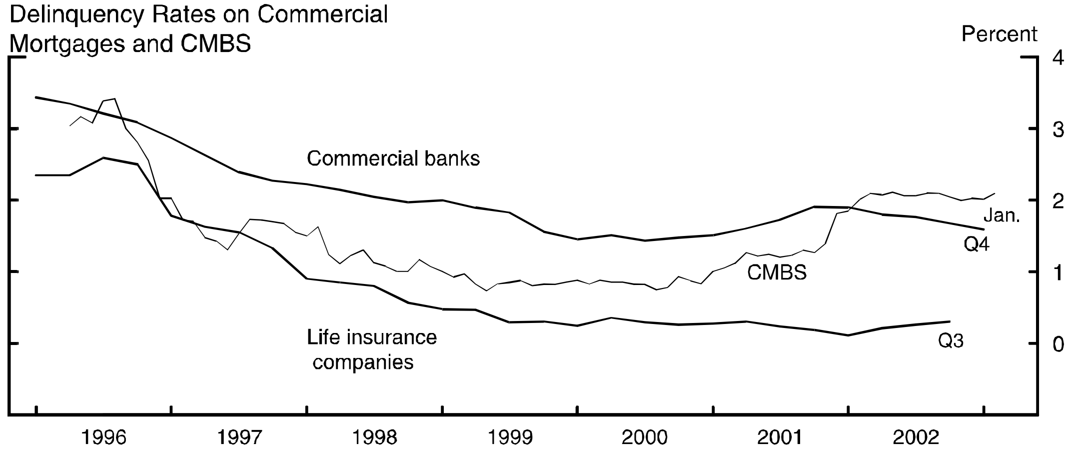

Note. Yield indexes were rebalanced on Feb. 1, 2002.
Source. Morgan Stanley.

BB CMBS Spread over Swap




Note. Yield indexes were rebalanced on Feb. 1, 2002.
Source. Morgan Stanley.

Delinquency Rates on Commercial Mortgages and CMBS




Source. Call Report, ACLI, Morgan Stanley.

**Corporate Earnings and Credit Quality**

Since the January Greenbook, the four-fifths of companies in the S&P 500 that had not yet reported earnings for the fourth quarter of last year released their results. For the index as a whole, earnings per share were up 14-1/2 percent from a year earlier, implying a decline from the third quarter of 4 percent at a quarterly rate. For the first quarter, analysts currently anticipate that earnings will just reverse the decline in the previous quarter. Of that amount, though, three large oil companies account for most of the expected increase, implying that earnings expectations for other sectors are quite lackluster.

Measures of business credit quality continue to suggest that many firms are still under financial stress. The bond default rate moved down a bit further in January but remained quite elevated, while the C&I loan delinquency rate held at a relatively high level in the fourth quarter of last year. Ratings downgrades of corporate bonds by Moody's continued to exceed upgrades in January, albeit by a smaller margin than in the fourth quarter. The aggregate year-ahead expected default frequency based on data from KMV remained at its elevated level in January, and—given the decline in equity prices in February—we are guessing that this forward-looking measure edged up last month.

**Commercial Real Estate**

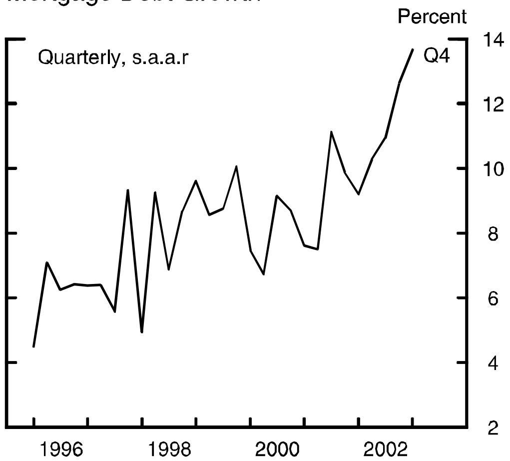
Commercial mortgage debt increased about 11 percent at an annual rate in the fourth quarter as firms borrowed against the value of commercial real estate to take advantage of low interest rates. However, weak CMBS issuance in the current quarter may indicate that a slowing is in train. Despite the high vacancy rates in many markets, CMBS investors do not appear to be particularly concerned about credit loss. Spreads on different ratings tranches of CMBS over swaps remain in the lower half of the ranges observed over the past few years, and delinquency rates on these securities have been stable for more than a year at a moderate level. Even more favorably, delinquencies on commercial mortgages held at commercial banks have been declining since mid-2001. Legislation passed late last year required companies to offer terrorism insurance, but to date, anecdotal reports suggest very little demand for this coverage.

**Household Finance**

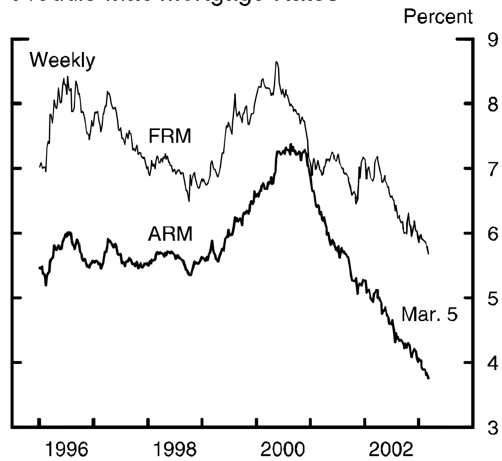
Household debt continued to increase rapidly, supported by declining mortgage rates. Mortgage debt, which represents about 70 percent of total household debt, expanded in the fourth quarter at the fastest pace in sixteen years, fueled by refinancing activity. Refinancing activity appears to have moved up again in the first quarter. In contrast, consumer credit stalled in the fourth quarter, perhaps as

# Household Liabilities

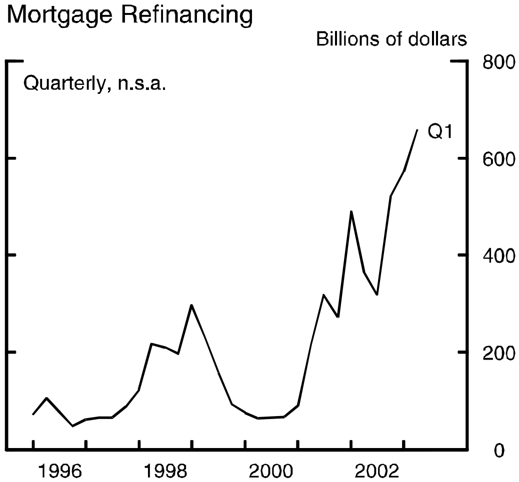
Mortgage Debt Growth




Freddie Mac Mortgage Rates

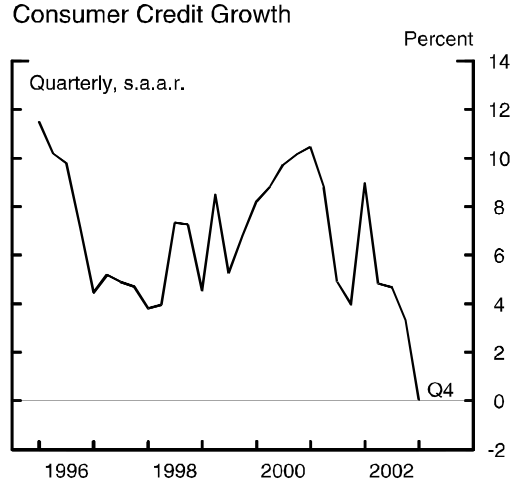



Mortgage Refinancing

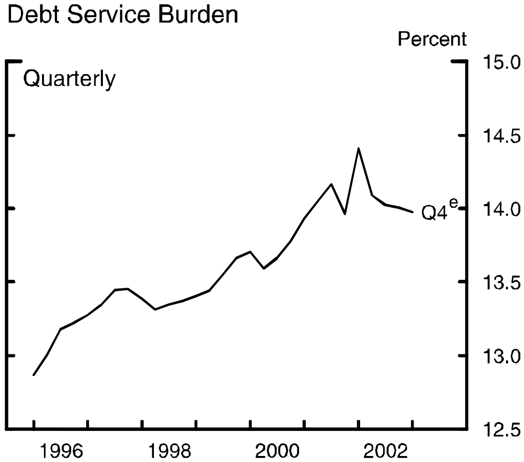



Source. Staff estimates based on Home Mortgage Disclosure Act records (1996-2001) and on the MBA applications index (since 2001).

Consumer Credit Growth

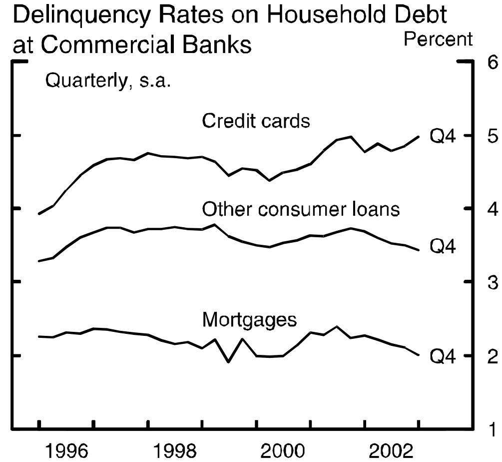



Debt Service Burden




e Staff estimate.

Delinquency Rates on Household Debt at Commercial Banks




Source. Call reports.

households used cash extracted through refinancings to pay down more expensive consumer debt.[1]

The household sector appears to have remained on generally solid financial footing through year-end. Declines in the interest rates paid on household debt and a lengthening of debt maturities led to a downtick in the debt-service burden in the fourth quarter, and delinquency rates on both mortgages and consumer loans at commercial banks fell a bit. In contrast, delinquency rates on credit card accounts held at commercial banks edged up for the second quarter in a row, and the bankruptcy rate remains at a high level.

Household assets relative to disposable income rose slightly last quarter, driven by a small rebound in stock prices and continued increases in house prices. The recent slump in equity prices, however, has likely caused this ratio to drop back somewhat in the current quarter. With stock prices down, household portfolios, as measured by flows to mutual funds, have been shifting strongly toward fixed-income investments.

**State and Local Government Finance**

Although gross issuance of long-term municipal bonds slowed in January and February from the extraordinary pace in the fourth quarter of last year, it nevertheless continued to be robust, particularly for education-related capital expenditures. In conjunction with its maneuvering to stay under the debt ceiling, the Treasury temporarily suspended the issuance of state and local government securities (SLGS)—nonmarketable Treasury securities in which municipalities invest the proceeds of bond sales to comply with arbitrage rules—but this measure apparently caused few problems.

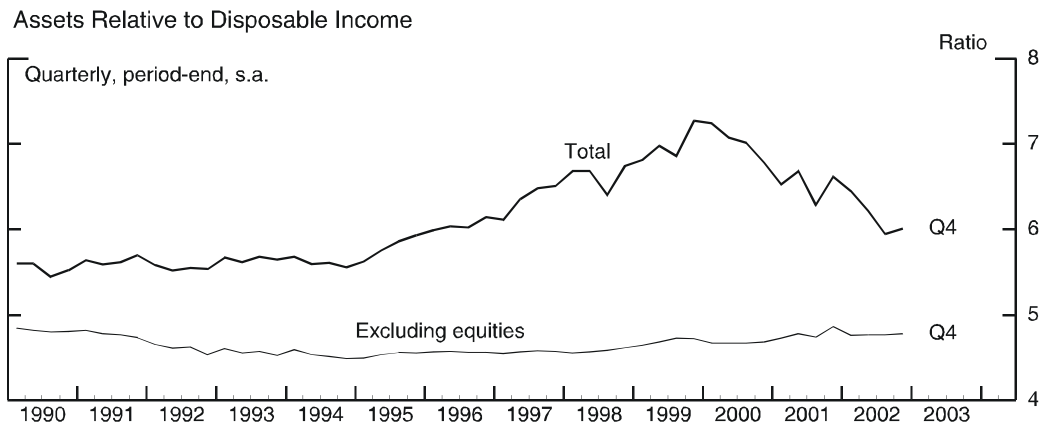
State and local governments remain under severe fiscal stress, though credit quality does not appear to have worsened in recent months. The yield spread between AAA-rated and BBB-rated revenue bonds stayed at a high level, and the number of bonds downgraded by S&P has only slightly outpaced upgrades so far this year.

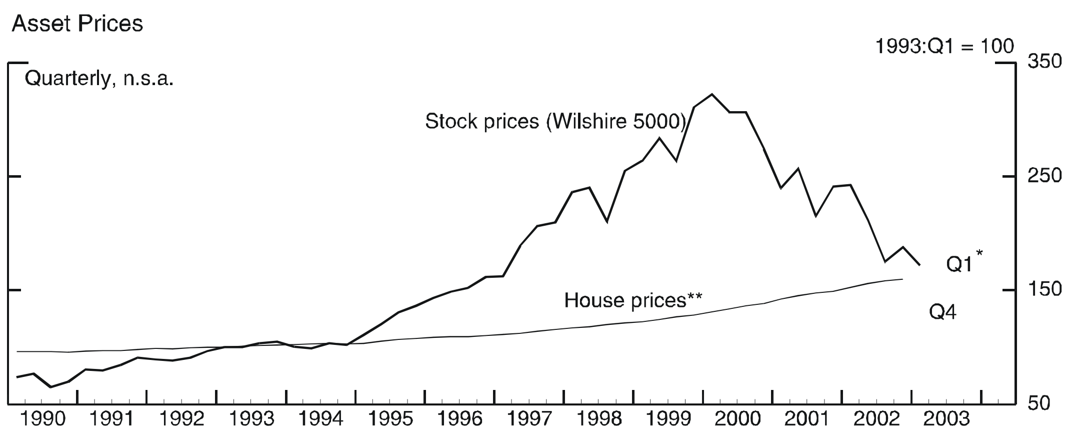
**Treasury and Agency Finance**

The federal deficit rose in February, boosted in part by income tax refunds that have been running ahead of last year's pace. As expected, the statutory federal debt limit was reached last month, and Treasury Secretary Snow announced in a letter to the Congress that, beginning February 19, the Treasury would not

1. In January, consumer credit appears to have reversed course and expanded at a robust rate. However, because these monthly numbers are often subject to revision, the January figure should be regarded as quite tentative.

## Household Assets




* Period to date.
** From the Office of Federal Housing Enterprise Oversight.

## Net Flows into Long-Term Mutual Funds
(Billions of dollars, monthly rate)

| | 2000 | 2001 | 2002 | | | 2003 | | Assets |
|---|---|---|---|---|---|---|---|---|
| | | | H1 | Q3 | Q4 | Jan. | Feb. e | Jan. |
| **Total long-term funds** | **18.5** | **10.8** | **21.0** | **-5.2** | **4.3** | **16.4** | **8.0** | **4,060** |
| **Equity funds** | **25.2** | **2.8** | **9.1** | **-23.9** | **-3.0** | **-1.0** | **-14.3** | **2,597** |
| Domestic | 21.3 | 4.6 | 7.9 | -21.3 | -2.3 | -2.2 | -12.8 | 2,250 |
| International | 3.9 | -1.8 | 1.2 | -2.6 | -0.6 | 1.1 | -1.5 | 347 |
| **Hybrid funds** | **-2.6** | **0.7** | **2.2** | **-1.6** | **0.1** | **0.4** | **0.1** | **324** |
| **Bond funds** | **-4.0** | **7.3** | **9.7** | **20.3** | **7.1** | **17.1** | **22.2** | **1,138** |
| High-yield | -1.0 | 0.6 | 0.9 | -0.4 | 2.1 | 2.3 | 3.5 | 104 |
| Other taxable | -1.8 | 5.7 | 7.6 | 17.4 | 5.3 | 13.9 | 16.4 | 708 |
| Municipals | -1.2 | 1.0 | 1.3 | 3.3 | -0.4 | 0.9 | 2.3 | 327 |

Note. Excludes reinvested dividends.
Source. Investment Company Institute.
e Staff estimates based on confidential ICI weekly data.

# State and Local Government Finance

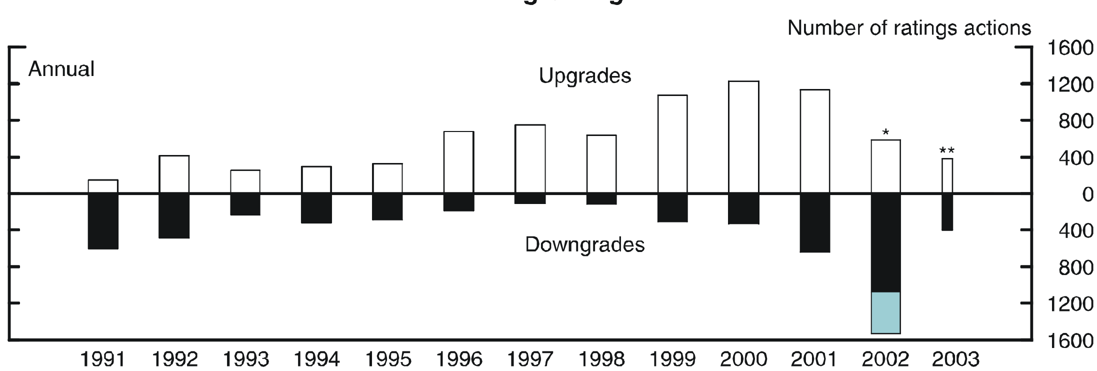
## Gross Offerings of Municipal Securities

(Billions of dollars; monthly rate, not seasonally adjusted)

| | | | 2002 | | | 2003 | |
|---|---|---|---|---|---|---|---|
| | 2000 | 2001 | H1 | Q3 | Q4 | Jan. | Feb. |
| Total | 17.9 | 28.7 | 33.0 | 35.2 | 42.9 | 27.6 | 30.4 |
| Long-term [1] | 15.0 | 24.1 | 27.8 | 29.1 | 35.3 | 25.6 | 28.7 |
| Refundings [2] | 2.2 | 7.5 | 9.4 | 10.5 | 10.7 | 7.0 | 8.5 |
| New capital | 12.9 | 16.6 | 18.4 | 18.6 | 24.6 | 18.5 | 20.1 |
| Short-term | 2.8 | 4.7 | 5.2 | 6.1 | 7.5 | 2.1 | 1.7 |
| Memo: Long-term taxable | 0.7 | 1.4 | 1.4 | 1.7 | 2.1 | 1.2 | 1.2 |

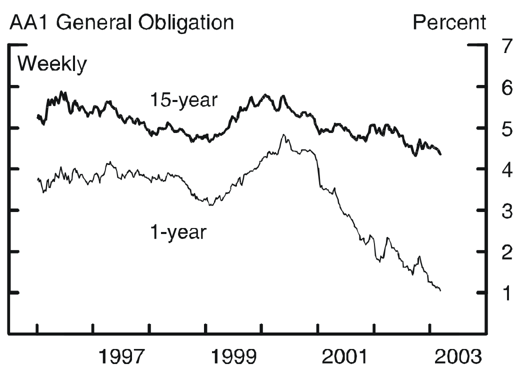
1. Includes issues for public and private purposes.
2. All issues that include any refunding bonds.

## Bond Rating Changes



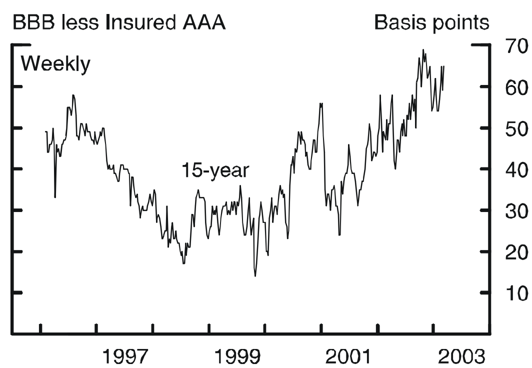

* Lightly shaded region shows a staff estimate of the number of downgrades related to downgrades of financial institutions that provided financial support for the bonds.
** Data through March 5 at an annual rate.
Source. S&P's Credit Week Municipal and Ratings Direct.

## Municipal Bond Yields




Note. Last observation is for week of March 6.
Source. Bloomberg.

## Revenue Bond Spread

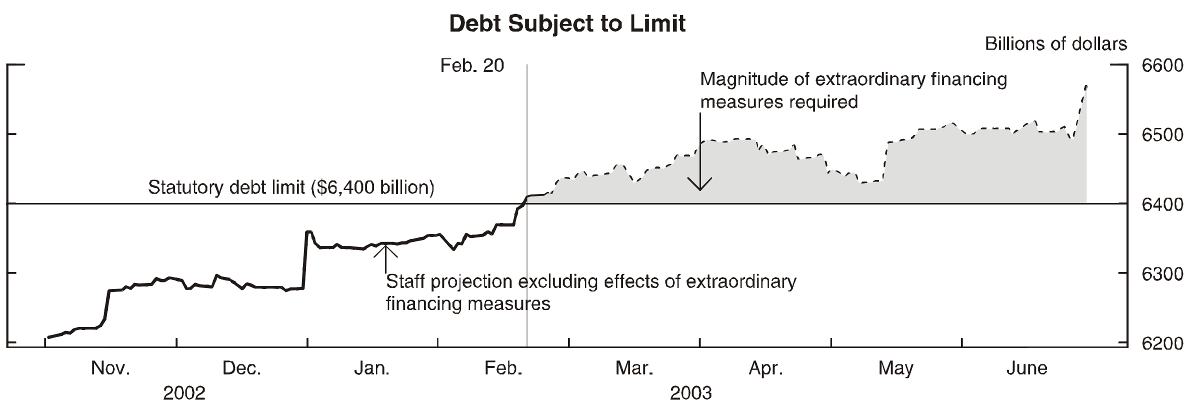


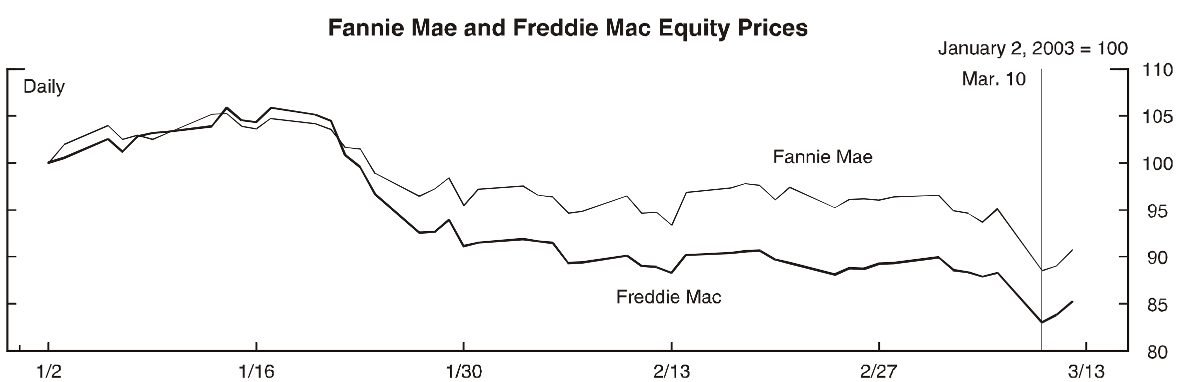

Note. Last observation is for week of March 6.
Source. Bloomberg.

## Treasury Financing
(Billions of dollars)

| Item | 2002 | | 2003 | 2002 | 2003 | |
|---|---|---|---|---|---|---|
| | Q3 | Q4 | Q1 e | Dec. | Jan. | Feb. e |
| **Total surplus, deficit (−)** | **-41.5** | **-108.3** | **n.a** | **4.4** | **11.1** | **n.a.** |
| Means of financing deficit | | | | | | |
| Net borrowing | 89.4 | 96.9 | 112.9 | .2 | -10.9 | 79.2 |
| Nonmarketable | 6.7 | 14.9 | .3 | 1.4 | -2.6 | 1.4 |
| Marketable | 82.8 | 82.0 | 112.6 | -1.1 | -8.3 | 77.8 |
| Bills | 44.4 | 20.0 | 72.5 | -13.2 | -19.6 | 50.4 |
| Coupons[1] | 38.4 | 62.0 | 40.0 | 12.0 | 11.3 | 27.4 |
| Debt buybacks | .0 | .0 | .0 | .0 | .0 | .0 |
| Decrease in cash balance | -21.3 | 27.9 | 14.1 | -2.1 | 1.8 | 22.6 |
| Other[2] | -26.7 | -16.4 | n.a | -2.5 | -2.0 | n.a. |
| MEMO | | | | | | |
| Cash balance, end of period | 60.9 | 33.0 | 18.9 | 33.0 | 31.2 | 8.6 |

NOTE. Components may not sum to totals because of rounding.
1. Does not include Treasury debt buybacks.
2. Direct loan financing, accrued items, checks issued less checks paid, and other transactions.
e Estimated.
n.a. Not available.



continue to invest fully the Thrift Savings Fund (the G-fund). Even with this and other extraordinary financing measures at its disposal, the Treasury warned that it may run out of operating room in early April if the limit is not raised.

In its mid-quarter refunding announcement, the Treasury described changes for its auction schedule in light of current and projected federal deficits. Beginning with the May auction, the three-year note will be reintroduced. In addition, the five-year note will be reopened regularly, one month following each quarterly auction, reducing Treasury's dependence on short-dated securities.

Comments made by President Poole on March 10 about the risks Freddie Mac and Fannie Mae pose to financial markets caused their stock prices to fall sharply, but they have risen a bit since. Yield spreads on their debt widened somewhat after the statement, but then largely reversed course. Market participants reportedly focused on the specificity of President Poole's assertions that the agencies appear to be undercapitalized and that an adverse shock "in the absence of robust contingency arrangements" could result in a financial market crisis and damage the housing industry and the U.S. economy.

**Money and Bank Credit**

M2 growth rebounded in January after a brief slowdown in December. Growth in February was even stronger as liquid deposits were swelled by tax refunds and by escrow accounts associated with the elevated level of mortgage refinancings. Smoothing through the monthly fluctuations and abstracting from these special factors, M2 growth appears to have picked up from its pace in the fourth quarter. The non-M2 portion of M3 was little changed in February; the continued runoff in institutional money funds was offset by an acceleration in large time deposits.

Bank credit grew at a rapid pace in February, as low interest rates prompted further robust mortgage and home equity borrowing. In addition, commercial banks substantially increased their holdings of mortgage-backed securities in February, another significant component of the increase in bank credit. Lending to businesses slumped, however, as many firms have been meeting their limited need for funds through bond financing. This runoff in C&I loans has occurred exclusively at large banks, as business lending at smaller banks has continued to expand.

According to the February Survey of Terms of Business Lending, the average spread on large C&I loans over comparable-maturity market rates declined notably, mostly reversing the sharp increase that was recorded in the November survey. The spread on small C&I loans was little changed.

## Monetary Aggregates

(Based on seasonally adjusted data)

| Aggregate or component | 2002 | 2002 Q3 | 2002 Q4 | 2002 Dec. | 2003 Jan. | 2003 Feb. (p) | Level ($ billions) Feb. 03 (p) |
|---|---|---|---|---|---|---|---|
| *Aggregate* | Percent change (annual rate)[1] | | | | | | |
| 1. M2[2] | 6.9 | 9.1 | 7.1 | 3.2 | 6.1 | 11.2 | 5,880.1 |
| 2. M3[3] | 6.4 | 7.7 | 7.5 | 7.5 | -.7 | 7.7 | 8,560.6 |
| *Components of M2*[4] | | | | | | | |
| 3. Currency | 8.2 | 7.4 | 5.0 | 7.1 | 6.7 | 9.9 | 635.4 |
| 4. Liquid deposits[5] | 16.4 | 16.1 | 15.5 | 8.3 | 15.3 | 20.6 | 3,434.3 |
| 5. Small time deposits | -9.9 | -8.3 | -8.2 | -6.7 | -7.2 | -7.9 | 872.9 |
| 6. Retail money market funds | -4.1 | 4.7 | -4.4 | -8.0 | -14.6 | -3.7 | 929.9 |
| *Components of M3* | | | | | | | |
| 7. M3 minus M2[6] | 5.3 | 4.5 | 8.2 | 16.9 | -15.2 | .1 | 2,680.5 |
| 8. Large time deposits, net[7] | 3.7 | 2.8 | -2.0 | -25.5 | 14.3 | 15.7 | 820.1 |
| 9. Institutional money market funds | 2.1 | -.7 | 1.9 | 25.0 | -35.3 | -20.1 | 1,176.7 |
| 10. RPs | 19.6 | 27.5 | 44.9 | 77.7 | -23.8 | 34.0 | 472.3 |
| 11. Eurodollars | 3.4 | .2 | 14.7 | 7.9 | 10.1 | -19.0 | 211.4 |
| *Memo* | | | | | | | |
| 12. Monetary base | 7.2 | 6.9 | 5.0 | 7.5 | 6.8 | 10.0 | 691.3 |
| | Average monthly change (billions of dollars)[8] | | | | | | |
| *Selected managed liabilities at commercial banks* | | | | | | | |
| 13. Large time deposits, gross | 2.3 | -3.0 | -6.2 | -12.8 | 7.4 | 12.8 | 1,011.5 |
| 14. Net due to related foreign institutions | -3.2 | 1.2 | 10.9 | 28.0 | 1.0 | -8.2 | 143.1 |
| 15. U.S. government deposits at commercial banks | -1.0 | 3.4 | -.2 | -3.8 | -11.1 | -1.5 | 8.8 |

1. For the years shown, Q4 to Q4 percent change. For the quarters shown, based on quarterly averages.
2. Sum of currency, liquid deposits (demand, other checkable, savings), small time deposits, retail money market funds, and non-bank travelers checks.
3. Sum of M2, net large time deposits, institutional money market funds, RP liabilities of depository institutions, and eurodollars held by U.S. addressees.
4. Non-bank travelers checks not listed.
5. Sum of demand deposits, other checkable deposits, and savings deposits.
6. Sum of large time deposits, institutional money funds, RP liabilities of depository institutions, and eurodollars held by U.S. addressees.
7. Net of holdings of depository institutions, money market mutual funds, U.S. government and foreign banks and official institutions.
8. For the years shown, "average monthly change" is the Q4 to Q4 dollar change divided by 12. For the quarters shown, it is the quarter-to-quarter dollar change divided by 3.

p Preliminary.

## Commercial Bank Credit

(Percent change, annual rate, except as noted; seasonally adjusted)

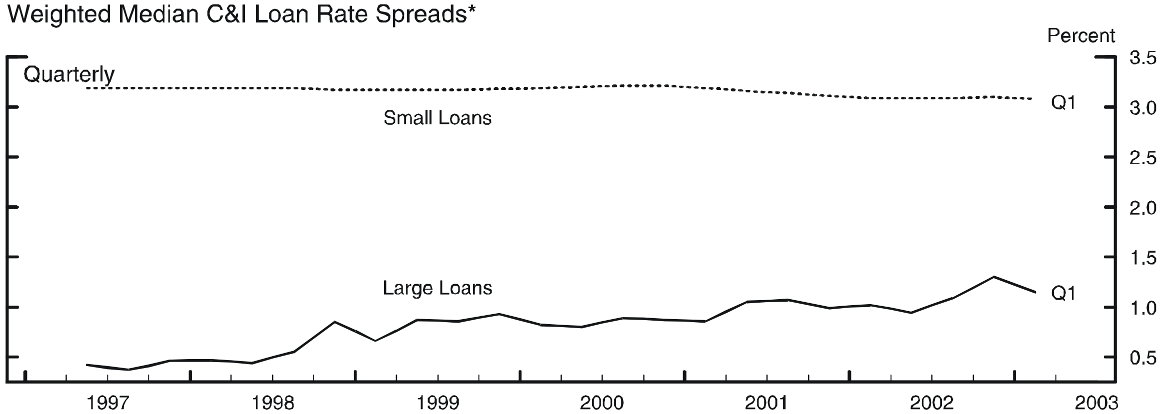
| Type of credit | 2002 | Q3 2002 | Q4 2002 | Dec. 2002 | Jan. 2003 | Feb.p 2003 | Level, Feb. 2003p ($ billions) |
|---|---|---|---|---|---|---|---|
| **Total** | | | | | | | |
| **1. Adjusted[1]** | **6.7** | **8.8** | **11.1** | **9.0** | **-1.0** | **13.6** | **5,741** |
| 2. Reported | 7.0 | 12.2 | 11.6 | 10.1 | 1.1 | 15.7 | 5,970 |
| *Securities* | | | | | | | |
| 3. Adjusted[1] | 12.4 | 11.4 | 13.1 | 15.8 | -2.5 | 26.9 | 1,540 |
| 4. Reported | 13.0 | 23.4 | 14.4 | 18.8 | 5.1 | 32.4 | 1,769 |
| 5. Treasury and agency | 18.4 | 23.1 | 22.4 | 13.2 | .9 | 28.5 | 1,038 |
| 6. Other[2] | 6.1 | 23.6 | 3.4 | 27.1 | 11.3 | 37.7 | 731 |
| *Loans[3]* | | | | | | | |
| 7. Total | 4.8 | 7.9 | 10.4 | 6.5 | -.5 | 8.8 | 4,201 |
| 8. Business | -7.0 | -8.6 | -4.7 | -2.4 | -6.3 | -8.9 | 954 |
| 9. Real estate | 12.8 | 18.7 | 19.9 | 12.4 | 10.6 | 17.0 | 2,068 |
| 10. Home equity | 36.2 | 39.9 | 22.7 | 26.6 | 25.4 | 28.8 | 222 |
| 11. Other | 10.6 | 16.4 | 19.5 | 10.6 | 8.9 | 15.6 | 1,846 |
| 12. Consumer | 5.3 | 3.7 | 8.1 | 2.9 | 11.9 | 4.7 | 595 |
| 13. Adjusted[4] | 3.8 | 1.3 | 4.6 | 3.1 | 14.0 | 8.9 | 951 |
| 14. Other[5] | 1.1 | 6.7 | 7.1 | 4.8 | -40.3 | 13.3 | 585 |

Note. All data are adjusted for breaks caused by reclassifications. Monthly levels are pro rata averages of weekly (Wednesday) levels. Quarterly levels (not shown) are simple averages of monthly levels. Annual levels (not shown) are levels for the fourth quarter. Growth rates are percentage changes in consecutive levels, annualized but not compounded. The conversion from a thrift to a commercial bank charter added approximately $37 billion to the assets and liabilities of domestically chartered commercial banks in the week ending May 8, 2002.

1. Adjusted to remove effects of mark-to-market accounting rules (FIN 39 and FIN 115).
2. Includes private mortgage-backed securities, securities of corporations, state and local governments, and foreign governments and any trading account assets that are not Treasury or agency securities, including revaluation gains on derivative contracts.
3. Excludes interbank loans.
4. Includes an estimate of outstanding loans securitized by commercial banks.
5. Includes security loans and loans to farmers, state and local governments, and all others not elsewhere classified. Also includes lease financing receivables.

p Preliminary.

Weighted Median C&I Loan Rate Spreads*




* Small loans are those less than $1 million ($1996); large loans are those greater than $1 million ($1996). The spread is over the market interest rate on an instrument of comparable maturity.
Source: Survey of Terms of Business Lending.

# International Developments

# International Developments

## U.S. International Transactions

### Trade in Goods and Services

The U.S. international trade deficit in January was $41.1 billion, much smaller than recorded in December, as exports rebounded and imports declined.

**Net Trade in Goods and Services**
(Billions of dollars, seasonally adjusted)

| | 2002 | Annual rate 2002 | | | Monthly rate 2002 | | 2003 |
|---|---|---|---|---|---|---|---|
| | | Q2 | Q3 | Q4 | Nov. | Dec. | Jan. |
| *Real NIPA*[1] | | | | | | | |
| Net exports of G&S | -487.4 | -487.4 | -488.0 | -527.6 | ... | ... | ... |
| *Nominal BOP* | | | | | | | |
| Net exports of G&S | -435.7 | -437.8 | -441.0 | -481.4 | -40.2 | -44.9 | -41.1 |
| Goods, net | -484.5 | -490.6 | -491.4 | -529.6 | -44.3 | -48.5 | -44.8 |
| Services, net | 48.8 | 52.8 | 50.4 | 48.2 | 4.1 | 3.6 | 3.7 |

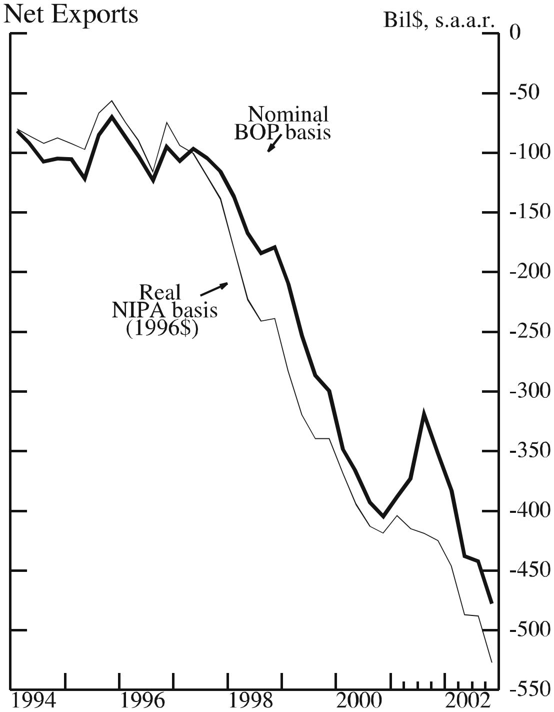
1. Billions of chained (1996) dollars.
Source: U.S. Department of Commerce, Bureaus of Economic Analysis and Census.
n.a. Not available. ... Not applicable.

Exports of goods and services rose 1.6 percent in January following a large decline in December. Goods exports jumped 2.5 percent in January, reversing more than half of the drop in December. Broadly-based increases in core goods and a rise in computers were only partly offset by a decline in semiconductors. Nonetheless, the level of exported goods in January was below the average for the fourth quarter of 2002. Services receipts edged off slightly in January after rising steadily for four months.

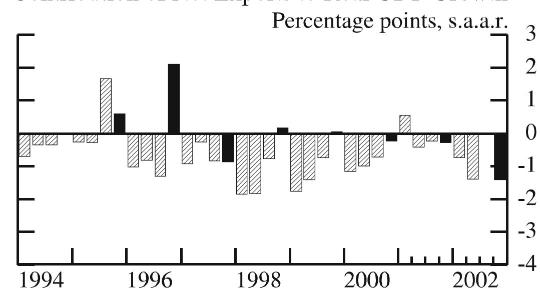
Imports of goods and services declined 2 percent in January from the high levels recorded in November and December, but were still well above the average for the fourth quarter. The decrease in January came largely from core goods, especially consumer goods, automotive products from Europe and Japan, and industrial supplies—categories of trade that had risen during the previous two months. Partly offsetting these declines were strong increases in imports of computers and oil. The increase in the value of imported oil resulted from a sharp increase in price that more than offset a moderate decline in quantity. Services payments declined only slightly in January from a high recorded in December.

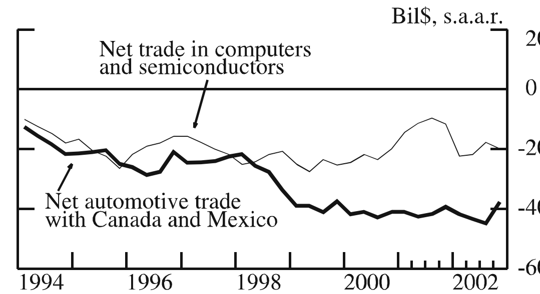
# U.S. International Trade in Goods and Services

Net Exports

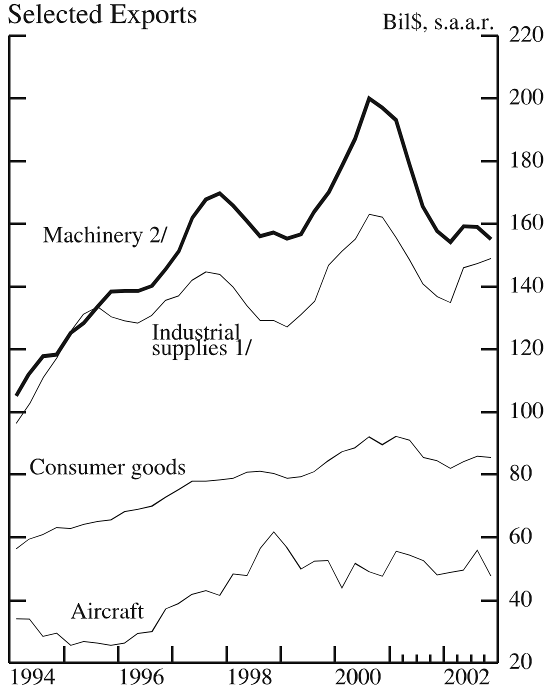



Contribution of Net Exports to Real GDP Growth



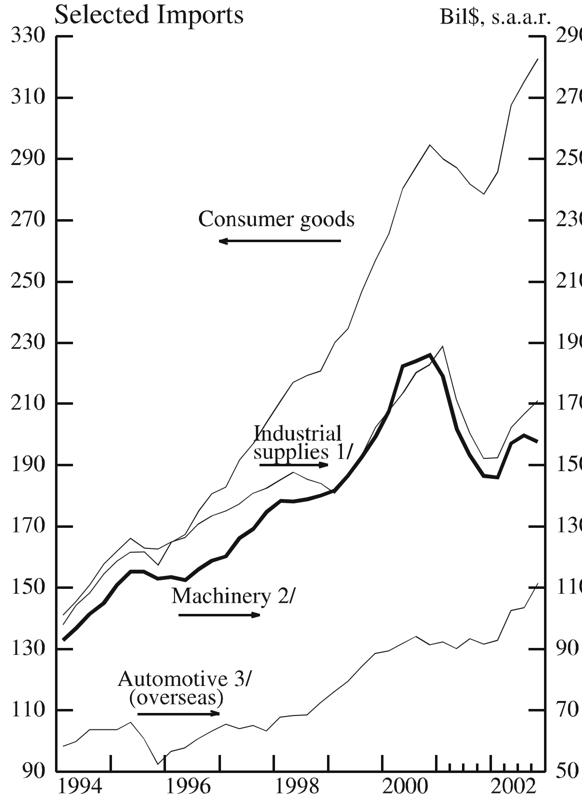




Selected Exports




1. Excludes agriculture and gold.
2. Excludes computers and semiconductors.

Selected Imports




1. Excludes oil and gold.
2. Excludes computers and semiconductors.
3. Excludes Canada and Mexico.

## U.S. Exports and Imports of Goods and Services
(Billions of dollars, s.a.a.r., BOP basis)

| | Levels | | | | Amount Change[1] | | | |
|---|---|---|---|---|---|---|---|---|
| | 2002 | | 2002 | 2003 | 2002 | | 2002 | 2003 |
| | Q3 | Q4 | Dec. | Jan. | Q3 | Q4 | Dec. | Jan. |
| **Exports of G&S** | **995.7** | **982.2** | **967.5** | **982.9** | **18.7** | **-13.5** | **-28.2** | **15.4** |
| Goods exports | 701.5 | 682.0 | 664.5 | 681.2 | 12.9 | -19.5 | -29.6 | 16.7 |
| Gold | 3.6 | 3.8 | 4.1 | 4.4 | 0.1 | 0.2 | 0.3 | 0.3 |
| Other goods | 697.9 | 678.1 | 660.4 | 676.8 | 12.7 | -19.8 | -29.8 | 16.4 |
| Aircraft & parts | 55.9 | 47.6 | 39.4 | 40.5 | 6.3 | -8.3 | -9.0 | 1.1 |
| Computers & accessories | 37.8 | 38.9 | 38.2 | 39.9 | -0.8 | 1.1 | -1.3 | 1.7 |
| Semiconductors | 45.8 | 40.0 | 40.1 | 38.8 | 2.0 | -5.9 | 0.8 | -1.3 |
| Other capital goods | 161.5 | 157.8 | 147.7 | 152.9 | 0.1 | -3.7 | -17.8 | 5.2 |
| Automotive | 82.4 | 77.3 | 76.9 | 78.3 | 2.0 | -5.1 | 1.2 | 1.4 |
| to Canada | 46.9 | 44.0 | 44.8 | 45.8 | 2.9 | -2.9 | 2.4 | 1.0 |
| to Mexico | 14.6 | 14.8 | 10.9 | 12.8 | -2.5 | 0.2 | -5.1 | 1.9 |
| to ROW | 20.9 | 18.5 | 21.2 | 19.7 | 1.7 | -2.4 | 3.9 | -1.5 |
| Agricultural | 53.4 | 55.2 | 58.3 | 57.7 | -0.7 | 1.8 | 1.4 | -0.7 |
| Ind supplies (ex. ag, gold) | 147.3 | 148.9 | 150.7 | 154.6 | 1.3 | 1.6 | 0.3 | 3.9 |
| Consumer goods | 85.8 | 85.5 | 83.2 | 88.9 | 1.7 | -0.4 | -3.5 | 5.7 |
| All other goods | 28.0 | 27.0 | 25.8 | 25.3 | 0.8 | -1.0 | -1.6 | -0.6 |
| Services exports | 294.2 | 300.2 | 303.0 | 301.6 | 5.8 | 6.0 | 1.4 | -1.3 |
| **Imports of G&S** | **1436.7** | **1463.6** | **1506.0** | **1476.3** | **21.9** | **26.9** | **28.4** | **-29.8** |
| Goods imports | 1192.9 | 1211.5 | 1246.6 | 1219.0 | 13.7 | 18.7 | 21.3 | -27.6 |
| Petroleum | 110.8 | 118.0 | 111.3 | 123.5 | 2.6 | 7.2 | -4.4 | 12.2 |
| Gold | 3.0 | 2.9 | 2.2 | 2.4 | -0.4 | -0.1 | -0.7 | 0.2 |
| Other goods | 1079.0 | 1090.6 | 1133.1 | 1093.1 | 11.5 | 11.5 | 26.3 | -40.0 |
| Aircraft & parts | 22.2 | 26.6 | 29.6 | 25.6 | -2.7 | 4.4 | 5.0 | -4.1 |
| Computers & accessories | 74.6 | 74.3 | 75.3 | 80.7 | -1.9 | -0.3 | -5.2 | 5.4 |
| Semiconductors | 26.8 | 24.5 | 24.2 | 23.9 | -0.9 | -2.3 | -0.2 | -0.3 |
| Other capital goods | 161.5 | 159.3 | 166.3 | 162.0 | 2.4 | -2.3 | 3.5 | -4.3 |
| Automotive | 209.9 | 207.9 | 212.5 | 202.2 | 2.5 | -2.0 | 2.5 | -10.4 |
| from Canada | 64.2 | 55.7 | 52.7 | 57.0 | 3.1 | -8.4 | -3.8 | 4.3 |
| from Mexico | 42.2 | 40.9 | 33.3 | 36.2 | -1.3 | -1.4 | -9.6 | 2.9 |
| from ROW | 103.5 | 111.3 | 126.5 | 109.0 | 0.8 | 7.8 | 16.0 | -17.5 |
| Ind supplies (ex. oil, gold) | 166.6 | 171.2 | 181.4 | 172.2 | 4.4 | 4.6 | 12.7 | -9.2 |
| Consumer goods | 315.2 | 323.1 | 335.5 | 322.5 | 7.8 | 7.8 | 2.3 | -12.9 |
| Foods, feeds, bev. | 50.2 | 51.9 | 55.2 | 54.3 | 0.9 | 1.7 | 2.4 | -0.9 |
| All other goods | 52.0 | 51.8 | 53.1 | 49.8 | -1.0 | -0.1 | 3.3 | -3.3 |
| Services imports | 243.8 | 252.0 | 259.4 | 257.3 | 8.2 | 8.2 | 7.1 | -2.2 |
| *Memo:* | | | | | | | | |
| Oil quantity (mb/d) | 11.89 | 12.54 | 12.17 | 11.85 | -0.43 | 0.65 | -0.48 | -0.32 |
| Oil import price ($/bbl) | 25.55 | 25.76 | 25.04 | 28.54 | 1.47 | 0.22 | 0.00 | 3.50 |

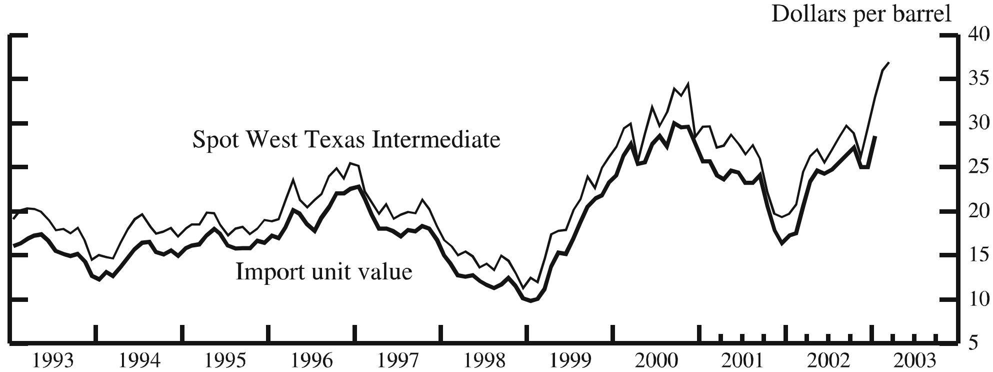
1. Change from previous quarter or month.
Source: U.S. Department of Commerce, Bureaus of Economic Analysis and Census.

## Prices of U.S. Imports and Exports
(Percentage change from previous period)

| | Annual rates | | | Monthly rates | | |
|---|---|---|---|---|---|---|
| | 2002 | | | 2002 | | 2003 |
| | Q2 | Q3 | Q4 | Nov. | Dec. | Jan. |
| | ------------- BLS prices (2000 weights)------------- | | | | | |
| **Merchandise imports** | 10.2 | 2.9 | 0.7 | -0.9 | 0.6 | 1.5 |
| Oil | 157.3 | 28.8 | 4.5 | -8.2 | 6.2 | 12.4 |
| Non-oil | 1.5 | 0.3 | 0.4 | -0.1 | 0.2 | 0.2 |
| Core goods* | 1.7 | 1.2 | 1.5 | -0.1 | 0.3 | 0.3 |
| Cap. goods ex comp & semi | -1.9 | 1.4 | -0.8 | -0.1 | 0.2 | 0.1 |
| Automotive products | 0.4 | 0.8 | 1.2 | -0.3 | 0.1 | -0.2 |
| Consumer goods | -1.2 | 0.1 | -0.7 | -0.2 | 0.1 | 0.2 |
| Foods, feeds, beverages | 7.1 | 5.8 | 9.2 | -0.1 | 0.2 | 0.7 |
| Industrial supplies ex oil | 13.0 | 2.8 | 5.8 | 0.2 | 0.6 | 1.4 |
| Computers | -1.5 | -5.9 | -9.8 | -0.1 | -0.5 | -0.4 |
| Semiconductors | 1.8 | -6.5 | -4.6 | 0.0 | -0.6 | -0.8 |
| **Merchandise exports** | 2.2 | 2.2 | 0.7 | 0.1 | -0.2 | 0.4 |
| Core goods* | 3.4 | 4.1 | 1.3 | 0.2 | -0.2 | 0.5 |
| Cap. goods ex comp & semi | 0.7 | 0.1 | 0.7 | 0.1 | -0.1 | 0.4 |
| Automotive products | 0.1 | 0.8 | 1.5 | 0.0 | 0.0 | 0.0 |
| Consumer goods | -0.9 | 0.9 | 0.4 | -0.1 | 0.0 | 0.0 |
| Agricultural products | 2.3 | 25.3 | 8.1 | 2.0 | -0.6 | 0.3 |
| Industrial supples ex ag | 10.8 | 7.1 | 1.4 | -0.4 | -0.2 | 1.3 |
| Computers | -5.9 | -8.7 | -5.7 | -0.6 | 0.3 | 0.2 |
| Semiconductors | -1.3 | -8.9 | -2.8 | 0.0 | -0.8 | -0.6 |
| **Chain price index** | ---Prices in the NIPA accounts (1996 weights)--- | | | | | |
| Imports of goods & services | 11.1 | 4.4 | 0.8 | ... | ... | ... |
| Non-oil merchandise | 2.0 | 0.5 | 0.6 | ... | ... | ... |
| Core goods* | 2.1 | 1.2 | 1.6 | ... | ... | ... |
| Exports of goods & services | 3.0 | 3.5 | 0.8 | ... | ... | ... |
| Total merchandise | 2.3 | 3.4 | 0.9 | ... | ... | ... |
| Core goods* | 3.5 | 4.4 | 1.7 | ... | ... | ... |

*/ Excludes computers and semiconductors.
n.a. Not available. ... Not applicable.

## Oil Prices



**Prices of Internationally Traded Goods**

**Non-oil imports.** In both December and January, the price of imported non-oil goods and the price of imported core goods increased, by 0.2 and 0.3 percent respectively. Rates of increase this large have not occurred since April 2002. Within core goods, the largest price increase was observed in non-oil industrial supplies, which rose 1.4 percent, prompted to a large extent by a higher price for natural gas, but also by a higher price for non-monetary gold. Prices also moved up in foods, feeds and beverages, which rose 0.7 percent, led by higher prices for coffee and for vegetables. Prices in other major categories were generally little changed. The January level of core import prices was about 2 percent, at an annual rate, above the fourth quarter level.

**Oil.** The BLS price of imported oil rose 12.4 percent in January after rising a revised 6.2 percent in December. The spot price of West Texas intermediate (WTI) crude oil also rose in January, averaging nearly $33 per barrel, more than $3 per barrel higher than in December. The spot price of WTI has remained elevated, averaging nearly $36 per barrel in February and is currently around $37 per barrel. The recent increase in oil prices reflects the market’s perception that military action in Iraq may occur soon, increased oil demand resulting from unusually cold weather in the United States and the temporary shutdown of nuclear reactors in Japan, and low oil inventories. Reduced oil supplies from Venezuela also continue to keep upward pressure on oil prices.

**Exports.** In January, the price of exported total goods and the price of exported core goods increased 0.4 and 0.5 percent, respectively. Within core goods, the largest price movement in January was a 1.3 percent increase in the price of industrial supplies, driven largely by prices for petroleum-based products and non-monetary gold (as with imports). Prices also moved in capital goods, which rose 0.4 percent, prompted by higher machinery prices. Prices in other major categories were generally little changed. The January level of core goods export prices was about 1¾ percent (a.r.) above the fourth quarter level.

**U.S. International Financial Transactions**

Foreign private purchases of U.S. securities totaled $368 billion (net) in 2002, slightly below the record pace of 2001 (line 4 of the Summary of U.S. International Transactions table). By contrast, U.S. investors purchased only $2 billion (net) in foreign securities, the lowest amount in thirty years (line 5). Thus, U.S. net private portfolio inflows through securities amounted to $366 billion last year, well above the sizable net inflows recorded in recent years. In addition, net foreign official inflows totaled $91 billion for the year, compared with only $2 billion in 2001. In contrast, direct investment flows shifted from small net inflows in 2001 to outflows of $67 billion through the first three quarters of 2002. (Fourth-quarter balance of payments data will be released on March 14 and included in the Greenbook supplement.)

Foreign official assets held in the United States (line 1) increased $32 billion in the fourth quarter of 2002, . In January, foreign official inflows were a more moderate $5 billion. However, partial data from the Federal Reserve Bank of New York indicate a further increase of $28 billion in February, resulting primarily from increases for Korea, China, and Japan.

Foreign private net purchases of U.S. securities (line 4) totaled $27 billion in January, just under the robust monthly pace of last year. Net purchases of Treasury securities (line 4a) picked up in December, and for the second half of the year amounted to $66 billion, compared with net sales in the first six months and in the previous two years. In January, private foreigners again made moderate net sales of Treasury securities. Net purchases of agency securities (line 4b) remained strong in the fourth quarter and in January. Net purchases of corporate debt securities (line 4c) slowed in the third quarter but picked up markedly in the fourth quarter and even more so in January, reflecting the general pattern of corporate issuance. Foreign net acquisitions of U.S. equities (line 4d) remained modest in the fourth quarter and slipped to net sales in January. For 2002 as a whole, net purchases of equities were only $56 billion, less than half the average annual inflow recorded over the 1999-2001 period.

Following net purchases of $127 billion in 2000 and $95 billion in 2001, U.S. net acquisitions of foreign securities (line 5) totaled only $2 billion in 2002, as modest net sales through the first three quarters were offset by purchases of $13 billion in the fourth quarter. In January, net purchases of foreign securities totaled nearly $10 billion. Whereas U.S. residents were net sellers of foreign bonds for most of 2001 and 2002, they recorded net purchases of foreign bonds in December and in January.

Net banking flows (line 3) amounted to an inflow of $94 billion in 2002, with more than half this amount occurring in December. This marked a change from previous years when net flows on an annual basis had been fairly small. Banking flows are typically large and volatile at a monthly frequency and most often reflect swings in interbank funding activity. These monthly swings tend to be offsetting; and in January, net banking flows recorded a very large outflow of $45 billion.

## Summary of U.S. International Transactions

(Billions of dollars, not seasonally adjusted except as noted)

| | 2001 | 2002 | 2002 Q1 | 2002 Q2 | 2002 Q3 | 2002 Q4 | 2002 Dec. | 2003 Jan. |
|---|---|---|---|---|---|---|---|---|
| **Official financial flows** | **2.3** | **91.2** | **7.0** | **45.7** | **7.1** | **31.5** | **11.8** | **6.1** |
| 1. Change in foreign official assets in the U.S. (increase, +) | 7.2 | 94.9 | 6.6 | 47.5 | 8.5 | 32.3 | 12.8 | 4.8 |
| a. G-10 countries | -7.9 | 30.3 | 4.9 | 17.6 | 1.8 | 6.0 | 1.0 | 5.1 |
| b. OPEC countries | -1.9 | -6.4 | -6.6 | 1.1 | -1.3 | .5 | -1.5 | -2.1 |
| c. All other countries | 22.1 | 70.9 | 8.3 | 28.8 | 8.0 | 25.9 | 13.2 | 1.9 |
| 2. Change in U.S. official reserve assets (decrease, +) | -4.9 | -3.7 | .4 | -1.8 | -1.4 | -.8 | -1.0 | 1.2 |
| **Private financial flows** | **379.5** | **n.a.** | **80.6** | **27.6** | **165.4** | **n.a.** | **...** | **...** |
| Banks | | | | | | | | |
| 3. Change in net foreign positions of banking offices in the U.S.[1] | 11.0 | 94.2 | 5.2 | -27.6 | 65.7 | 51.0 | 50.9 | -44.9 |
| Securities[2] | | | | | | | | |
| 4. Foreign net purchases of U.S. securities (+) | 403.5 | 368.3 | 70.7 | 95.9 | 100.3 | 101.4 | 29.8 | 26.7 |
| a. Treasury securities | -5.5 | 58.7 | 1.5 | -9.0 | 53.2 | 13.0 | 8.5 | -2.1 |
| b. Agency bonds | 85.3 | 93.4 | 2.4 | 32.9 | 22.0. | 36.0 | 7.2 | 10.9 |
| c. Corporate and municipal bonds | 201.8 | 160.2 | 43.3 | 60.0 | 17.2 | 39.8 | 11.6 | 21.5 |
| d. Corporate stocks[3] | 121.9 | 56.0 | 23.4 | 12.1 | 8.0 | 12.6 | 2.4 | -3.5 |
| 5. U.S. net acquisitions (-) of foreign securities | -95.0 | -2.1 | 2.0 | -9.3 | 18.0 | -12.8 | -10.2 | -9.7 |
| a. Bonds | 12.4 | 17.3 | .6 | 10.4 | 5.7 | .6 | -6.3 | -3.0 |
| b. Stock purchases | -62.7 | -15.9 | 3.2 | -19.8 | 14.0 | -13.4 | -3.9 | -6.7 |
| c. Stock swaps[3] | -44.7 | -3.5 | -1.8 | .0 | -1.7 | .0 | .0 | .0 |
| Other flows (quarterly data, s.a.) | | | | | | | | |
| 6. U.S. direct investment (-) abroad | -127.8 | n.a. | -29.3 | -34.3 | -27.5 | n.a. | ... | ... |
| 7. Foreign direct investment in U.S. | 130.8 | n.a. | 16.2 | -2.7 | 11.0 | n.a. | ... | ... |
| 8. Foreign holdings of U.S. currency | 23.8 | n.a. | 4.5 | 7.2 | 2.6 | n.a. | ... | ... |
| 9. Other (inflow, + )[4] | 33.4 | n.a. | 11.3 | -1.6 | -4.8 | n.a. | ... | ... |
| **U.S. current account (s.a.)** | **-393.4** | **n.a.** | **-112.5** | **-127.6** | **-127.0** | **n.a.** | **...** | **...** |
| **Capital account balance (s.a.)[5]** | **.8** | **n.a.** | **.2** | **.2** | **.2** | **n.a.** | **...** | **...** |
| **Statistical discrepancy (s.a.)** | **10.7** | **n.a.** | **24.7** | **54.2** | **-45.6** | **n.a.** | **...** | **...** |

NOTE: The sum of official and private financial flows, the current account balance, the capital account balance, and the statistical discrepancy is zero. Details may not sum to totals because of rounding.

1. Changes in dollar-denominated positions of all depository institutions and bank holding companies plus certain transactions between broker-dealers and unaffiliated foreigners (particularly borrowing and lending under repurchase agreements). Includes changes in custody liabilities other than U.S. Treasury bills.

2. Includes adjustments BEA makes to account for incomplete coverage, but excludes adjustments for commissions and therefore does not match exactly the data on U.S. international transactions published by the Department of Commerce.

3. Includes (4d) or represents (5c) stocks acquired through mergers.

4. Transactions by nonbanking concerns and other banking and official transactions not shown elsewhere plus amounts resulting from adjustments made by the Department of Commerce and revisions in lines 1 through 5 since publication of the quarterly data in the Survey of Current Business.

5. Consists of transactions in nonproduced nonfinancial assets and capital transfers.

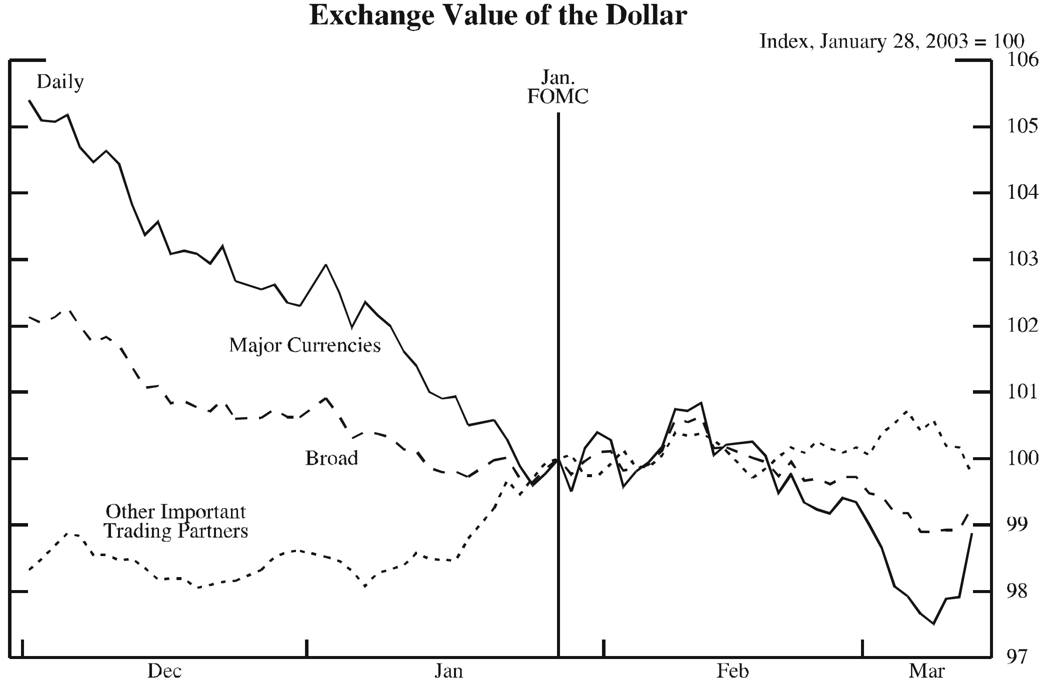
n.a. Not available. ... Not applicable.

## Foreign Exchange Markets

The exchange value of the dollar, as measured by the trade-weighted major currencies index, was little changed on balance through most of the intermeeting period as movements in individual currencies mostly offset each other. In late February, however, the dollar began to depreciate against other major currencies amid rising international political tensions. On net, the major currencies index fell 1.1 percent over the period.

The dollar depreciated 0.4 percent on balance against the yen. On January 31, the Japanese Ministry of Finance surprised markets by announcing that it had been intervening in foreign exchange markets, selling just under $6 billion equivalent of yen. Over the next few weeks the dollar appreciated on net against the yen. In late February, however, the dollar depreciated versus the yen following the announcement that Toshihiko Fukui would succeed Masaru Hayami as Governor of the Bank of Japan. The appointment reportedly diminished market expectations that the next head of the Bank of Japan might pursue radical quantitative easing measures. The appreciation of the yen prompted another round of covert intervention by Japanese authorities, and at the end of February the Bank of Japan reported that the Ministry of Finance had sold another ¥513 billion ($4.4 billion equivalent).

**Exchange Value of the Dollar**



The U.S. dollar depreciated 3.3 percent against the Canadian dollar. Market participants appear to expect the U.S.-Canadian interest rate differential to continue to favor the Canadian currency and to widen. The Bank of Canada raised its target for its key overnight interest rate 25 basis points to 3 percent on March 4. Late in the intermeeting period the dollar depreciated somewhat against the euro, in part as a result of comments by Treasury Secretary Snow in which he appeared to express a lack of concern about the dollar's recent fluctuations. On balance, the dollar has depreciated 0.4 percent against the euro. On March 6, the European Central Bank cut the minimum bid rate on its main refinancing operations 25 basis points, somewhat less than market participants had expected, to 2.5 percent, but this action had little effect on foreign exchange rates. The Bank of England surprised market participants by cutting its two-week repo rate 25 basis points to 3.75 percent on February 6. Over the intermeeting period, the dollar has appreciated 2 percent against sterling.

**Financial Indicators in Major Industrial Countries**

| | Three-month rate | | Ten-year yield | | Equities |
|---|---|---|---|---|---|
| Country | Mar. 13 (Percent) | Percentage Point Change | Mar. 13 (Percent) | Percentage Point Change | Percent Change |
| Canada | 3.19 | .29 | 4.89 | -.09 | -4.47 |
| Japan | .11 | .00 | .74 | -.04 | -7.44 |
| Euro area | 2.55 | -.27 | 3.96 | -.08 | -9.59 |
| United Kingdom | 3.55 | -.29 | 4.19 | -.05 | -1.68 |
| Switzerland | .20 | -.24 | 2.22 | -.17 | -11.19 |
| Australia | 4.79 | -.02 | 5.25 | .04 | -9.09 |
| United States | 1.16 | -.10 | 3.68 | -.32 | -5.00 |
| Memo: Weighted-average foreign | 2.09 | -.03 | 3.78 | -.07 | n.a. |

NOTE. Change is from January 28 to March 13 (10 a.m. EDT).
n.a. Not available.

European share prices have tumbled since the January FOMC meeting, more than giving up their early January gains and hitting new multi-year lows. In the euro area, earnings warnings by several large insurers and concerns about the effect of the euro's appreciation on the earnings of non-financial firms dragged share prices down 9.6 percent. Contributing to the declines, a large Dutch retailer admitted that it had improperly booked profits at its American subsidiary, reviving concerns about corporate malfeasance. Share price declines in the United Kingdom were less severe. The U.K. Financial Services Authority announced that it would allow insurers to seek waivers for the amount of cash reserves they need to hold, reducing pressure on the companies to sell shares in their portfolios. The TOPIX index of Japanese equity prices fell 7.4 percent to a 19-year low, driven by large declines in the share prices of banks.

Industrial country sovereign bond yields fell over the intermeeting period, especially on short-maturity issues. Actual and expected monetary policy easing in the euro area and in the United Kingdom led to a pronounced steepening of sovereign yield curves in Europe. Japanese government bond yields continued to fall from their already low levels, and on March 12, the yield on the ten-year benchmark JGB hit a new all-time low of 71 basis points.

**Financial Indicators in Latin America, Asia, and Russia**

| | Currency/ US dollar | | Short-term Interest rates[1] | | Dollar-denominated bond spread[2] | | Equity prices |
|---|---|---|---|---|---|---|---|
| Economy | Mar. 13 | Percent Change | Mar.12/13 (Percent) | Percentage Point Change | Mar.12/13 (Percent) | Percentage Point Change | Percent Change |
| Mexico | 10.79 | -1.00 | 9.25 | .82 | 3.04 | -.25 | -1.11 |
| Brazil | 3.43 | -5.85 | 24.50 | .35 | 10.89 | -3.20 | 2.18 |
| Argentina | 3.10 | -6.06 | n.a. | n.a. | 69.21 | 10.43 | 1.34 |
| Chile | 749.15 | 1.46 | 2.92 | -.12 | 4.16 | .33 | 2.49 |
| China | 8.28 | .00 | n.a. | n.a. | 2.06 | .06 | -2.40 |
| Korea | 1239.00 | 5.63 | 4.55 | .00 | ... | ... | -11.45 |
| Taiwan | 34.62 | -.23 | 1.57 | -.12 | ... | ... | -12.68 |
| Singapore | 1.75 | .92 | .69 | -.13 | ... | ... | -5.85 |
| Hong Kong | 7.80 | -.01 | 1.31 | -.08 | ... | ... | -5.77 |
| Malaysia | 3.80 | -.01 | 3.00 | .00 | 2.09 | -.10 | -6.58 |
| Thailand | 42.75 | .16 | 1.69 | -.13 | n.a. | n.a. | -5.68 |
| Indonesia | 8900.00 | .56 | 12.14 | -1.03 | 3.58 | .48 | -2.87 |
| Philippines | 54.87 | 2.27 | 7.56 | 1.13 | 5.70 | .52 | -3.39 |
| Russia | 31.36 | -1.31 | n.a. | n.a. | 3.85 | -.44 | 11.31 |

NOTE. Change is from January 28 to March 12/13.

1. One month interbank interest rate, except Chile: 30-day deposit rate; Korea: 1-week call rate. No reliable short-term interest rates exist for China or Russia.

2. Spread over similar maturity U.S. Treasury security yield. Mexico, Brazil, Argentina, Korea, the Philippines and Russia: EMBI+ yield. Chile and China: Global bond yield. Malaysia: Eurobond yield. Thailand and Indonesia: Yankee bond yield. Taiwan, Singapore, and Hong Kong do not have outstanding sovereign bonds denominated in dollars.

n.a. Not available. ... Not applicable.

In addition to the monetary policy changes noted above, on March 6 the Swiss National Bank lowered its target range for three-month Swiss franc LIBOR to a range from 0 percent to 0.75 percent, from the earlier range of 0.25 percent to 1.25 percent; the Danish central bank lowered its policy rate 25 basis points to 2.70 percent; and on March 5, the central bank of Norway eased its deposit rate 50 basis points to 5.50 percent.

The Bank of Mexico tightened policy on February 7 by raising the “corto”—the amount by which it leaves its domestic banking market short of reserves—to 625 million pesos from 550 million pesos. The twelve-month rate of inflation in Mexico, at 5.2 percent in January, is still well above the Bank of Mexico’s year-end target of 3 percent. The Mexican peso has appreciated 1 percent on balance against the dollar since the January FOMC meeting.

The Brazilian *real* appreciated 5.9 percent against the dollar over the intermeeting period and the spread over Treasury yields of Brazilian sovereign debt issued in dollars, as measured by the Brazil EMBI+ index, fell 320 basis points. Market participants were encouraged by news that Brazil’s primary fiscal surplus for 2002 was over 4 percent of GDP, well above the IMF-mandated target of 3.75 percent. Additionally, the central bank of Brazil raised its target overnight interest rate (the SELIC rate) by 1.00 percentage point to 26.50 percent.

The government of Venezuela announced on February 6 that it would lift the trading ban imposed on the bolivar in January and fix the currency’s bilateral exchange rate at 1,600 bolivars per dollar. Official trading has been limited; black market exchange rates are reportedly around 2,400 bolivars per dollar.

Geopolitical events had surprisingly little direct effect on emerging financial markets until late in the period. Turkish asset prices came under pressure briefly following the Turkish parliament’s decision not to allow U.S. troops to attack Iraq from Turkey in the event of a war. The Turkish lira depreciated 4 percent against the dollar following the vote, but on net the lira has appreciated 1.3 percent over the intermeeting period. Steadily increasing tension on the Korean peninsula has put downward pressure on South Korean asset prices. During the intermeeting period, the Korean won depreciated 5.6 percent, and South Korean share prices have fallen 11.5 percent.

. The Desk did not intervene during the period for the accounts of the System or the Treasury.

## Developments in Foreign Industrial Countries

Growth weakened to a sluggish pace in the fourth quarter in most of the foreign industrial nations, and recent data indicate that this slowdown has persisted in the current quarter. Real GDP growth in the fourth quarter held up better in Japan than in the other major foreign industrial economies, as softness in consumption was offset by a strong contribution from exports–though exports in January were flat, suggesting this strength may be waning. In the euro area, GDP growth slowed as investment declined for the eighth straight quarter. More recent data suggest that a recovery in investment is likely to be outweighed by continued weakness in consumer spending. Net exports held down the rate of both Canadian and British GDP growth in the last quarter. Signs of moderating growth in household spending imply a diminished pace of expansion in the United Kingdom in the current quarter, while recent data in Canada points to continued strong growth in domestic demand.

High energy prices have contributed to twelve-month rates of consumer-price inflation that are above the targets of most major foreign central banks. In the United Kingdom, rapid increases in housing prices have also added significantly to the rate of inflation. Japanese prices continue to fall at a rate of about ¾ percent per year.

Faced with slowing growth, both the European Central Bank (ECB) and the Bank of England have eased monetary policy rates 25 basis points since January. In contrast, the Bank of Canada recently raised interest rates 25 basis points, citing the country's above-target inflation rate.

In **Japan**, real GDP growth slowed to a revised 2.2 percent (s.a.a.r.) in the fourth quarter. Private consumption edged up only slightly, a significant slowing from earlier in the year. Net exports contributed 1.3 percentage points to growth, with a surge in exports outpacing a modest rise in imports. Business fixed investment rose almost 11 percent, while residential investment declined about 3 percent. Public investment fell nearly 5 percent. Inventories were a slight drag on growth, after contributing strongly in previous quarters.

Recent indicators point to a softening in net exports and household spending, which were sources of strength during much of last year. Exports declined and imports rose slightly in January compared with the fourth-quarter average, partly in response to a stronger yen and increased energy prices. After dropping sharply in December, household expenditures rose in January, but were flat compared with the fourth-quarter average. New car registrations were about unchanged in January and February on average from the fourth-quarter average. Industrial production rose 1½ percent in January from the previous month, but was only 0.6 percent above the fourth-quarter average. The broader all-industries index of output, a production-based proxy for GDP, declined 0.6 percent in December, and was down 1 percent during the fourth quarter on average. Core machinery orders, a leading indicator of business fixed investment, continued to recover, jumping 7 percent in January, but are still well below recent peaks in late 2000.

**Japanese Real GDP**
(Percent change from previous period, except as noted, s.a.a.r.)

| Component | 2001[1] | 2002[1] | 2002 | | | |
|---|---|---|---|---|---|---|
| | | | Q1 | Q2 | Q3 | Q4 |
| GDP | -2.4 | 2.8 | .4 | 5.5 | 3.1 | 2.2 |
| Total domestic demand | -1.8 | 1.8 | -1.6 | 3.8 | 4.2 | .9 |
| Consumption | 1.4 | 1.7 | 1.7 | 1.7 | 3.1 | .3 |
| Private investment | -10.6 | 3.4 | -3.9 | 5.3 | 4.5 | 8.1 |
| Public investment | -.7 | -5.3 | -.4 | -8.6 | -7.5 | -4.6 |
| Government consumption | 2.3 | 1.3 | 2.4 | .4 | 2.5 | -.2 |
| Inventories[2] | -.6 | .3 | -2.2 | 2.2 | 1.5 | -.5 |
| Exports | -11.0 | 17.5 | 23.6 | 30.5 | .5 | 17.6 |
| Imports | -7.1 | 8.9 | 3.0 | 14.6 | 11.7 | 6.7 |
| Net exports[2] | -.6 | 1.0 | 2.0 | 1.8 | -.9 | 1.3 |

1. Q4/Q4.
2. Percentage point contribution to GDP growth, s.a.a.r.

Labor market conditions remain very soft. The unemployment rate in January rose to 5.5 percent, matching the record-high rate registered in October. Employment in January was about 1 percent below year-earlier levels. The job-offers-to-applicants ratio, a key leading indicator of employment conditions, edged up to 0.60 in January, still a relatively low level.

Prices continue to fall. Core consumer goods prices in the Tokyo area (which exclude fresh food but include energy) fell marginally in February and were down 0.7 percent from a year ago. Wholesale prices for domestic goods fell 0.9 percent in the twelve months ending in February. Urban land prices were down 7 percent in September 2002 from a year earlier. The GDP deflator in the fourth quarter was 2.3 percent below its year-earlier level.

**Japanese Economic Indicators**
(Percent change from previous period, except as noted, s.a.)

| Indicator | 2002 | | | | | 2003 | |
|---|---|---|---|---|---|---|---|
| | Q2 | Q3 | Q4 | Nov. | Dec. | Jan. | Feb. |
| Industrial production[1] | 3.8 | 2.2 | -1.0 | -1.6 | -.4 | 1.5 | n.a. |
| All-industries index | .3 | .6 | -1.1 | -.8 | -.6 | n.a. | n.a. |
| Housing starts | .1 | -4.6 | 1.7 | -6.4 | .5 | 6.8 | n.a. |
| Machinery orders[2] | 7.1 | -1.7 | .3 | -.2 | 5.2 | 7.0 | n.a. |
| Machinery shipments[3] | 6.6 | 1.6 | .4 | -.3 | -1.0 | 4.8 | n.a. |
| New car registrations | 4.7 | 4.3 | -.9 | -1.5 | -2.3 | 3.4 | -.0 |
| Unemployment rate[4] | 5.4 | 5.4 | 5.4 | 5.3 | 5.3 | 5.5 | n.a. |
| Job offers ratio[5] | .52 | .54 | .57 | .57 | .59 | .60 | n.a. |
| Business sentiment[6] | -32 | -30 | -28 | ... | ... | ... | ... |
| CPI (Core, Tokyo area)[7] | -1.1 | -.9 | -.7 | -.7 | -.7 | -.6 | -.7 |
| Wholesale prices[7] | -2.2 | -1.9 | -1.3 | -1.2 | -1.2 | -1.0 | -.9 |

1. Mining and manufacturing.
2. Private sector, excluding ships and electric power.
3. Excluding ships and railway vehicles.
4. Percent.
5. Level of indicator.
6. Tankan survey, diffusion index.
7. Percent change from year earlier, n.s.a.

n.a. Not available. ... Not applicable.

On February 24, the government nominated Toshihiko Fukui as the next Governor of the Bank of Japan (BOJ), to succeed Masaru Hayami, whose term ends on March 19. Fukui, a former deputy governor of the BOJ, is currently chairman of the Fujitsu Research Institute, a private research company. Fukui's views on monetary policy are generally believed to be similar to those of Hayami, and his selection is unlikely to signal a major change in BOJ policy. In particular, Fukui is thought to be skeptical about the effectiveness of additional monetary easing and cautious about adopting unorthodox measures to combat deflation. Two deputy governors were also nominated: Toshiro Muto, former vice minister of finance, and Kazumasa Iwata, a senior official at the Cabinet Office and a professor at the University of Tokyo. Both are thought to favor more aggressive monetary easing.

On March 5, the BOJ announced a rise in its target range for outstanding balances of financial institutions at the BOJ to ¥17-22 trillion (an increase of ¥2 trillion) to take effect April 1. This is the same date from which the Japan Postal Corporation, a new public corporation that is being established to take over the services of the postal system, will be required to hold ¥2 trillion in deposits at the BOJ. In its announcement, the BOJ described the move as a technical adjustment rather than an effort to ease monetary policy.

**Euro-Area Real GDP**[1]
(Percent change from previous period, except as noted, s.a.a.r.)

| Component | 2001[2] | 2002[2] | 2002 | | | |
|---|---|---|---|---|---|---|
| | | | Q1 | Q2 | Q3 | Q4 |
| GDP | .5 | 1.3 | 1.6 | 1.3 | 1.6 | .7 |
| Total domestic demand | .0 | .8 | -.1 | .9 | .9 | 1.6 |
| Consumption | 1.6 | 1.0 | -.7 | 1.4 | 1.7 | 1.4 |
| Investment | -2.5 | -1.8 | -.8 | -5.2 | -.8 | -.3 |
| Government consumption | 1.6 | 2.6 | 3.0 | 3.9 | 1.4 | 2.2 |
| Inventories[3] | -.7 | .1 | -.1 | .4 | -.2 | .3 |
| Exports | -2.8 | 4.1 | .8 | 7.0 | 8.6 | .1 |
| Imports | -4.1 | 3.0 | -3.8 | 6.3 | 7.4 | 2.5 |
| Net exports[3] | .5 | .5 | 1.7 | .4 | .7 | -.8 |
| *Memo:* | | | | | | |
| France | .4 | 1.7 | 2.8 | 1.8 | 1.2 | .9 |
| Germany | .1 | .7 | 1.2 | .6 | 1.2 | -.1 |
| Italy | .7 | 1.0 | .0 | .8 | 1.3 | 1.7 |

1. Includes Greece as of 2001 Q1.
2. Q4/Q4.
3. Percentage point contribution to GDP growth, s.a.a.r.

**Euro-area** GDP growth slowed to 0.7 percent in the fourth quarter, as most of the gains in domestic demand were offset by a rise in imports. Consumption grew sluggishly in the fourth quarter, despite a 4.2 percent jump in Italian consumption driven in part by a temporary tax cut boosting auto sales. Consumption rose only 0.6 percent on average in 2002, its lowest average annual growth since 1991, when record keeping in the euro area began. Investment spending declined for the eighth consecutive quarter. German growth turned negative with stagnant consumer spending and a sizable negative contribution from net exports more than offsetting the first rise in investment in two years.

Incoming data suggest a moderate recovery in production in the first quarter from weakness late last year. February's euro-area purchasing managers' index (PMI) for manufacturing, thought to be the most timely indicator of production, rose just above the 50 level (the threshold for positive growth). Consistent with the PMI data, French and German industrial production for January rebounded from December's lows by 1.5 and 1.7 percent respectively. Germany's IFO Business Climate index improved in February. In contrast, the European Commission's measure of industrial confidence dropped again in February.

**Euro-Area Economic Indicators**
(Percent change from previous period except as noted, s.a.)

| Indicator | 2002 | | | | | 2003 | |
|---|---|---|---|---|---|---|---|
| | Q2 | Q3 | Q4 | Nov. | Dec. | Jan. | Feb. |
| Industrial production[1] | .6 | -.1 | .0 | .7 | -1.5 | n.a. | n.a. |
| Retail sales volume[2] | -.3 | .5 | -.5 | -.7 | -1.1 | n.a. | n.a. |
| Unemployment rate[3] | 8.2 | 8.3 | 8.5 | 8.5 | 8.5 | 8.6 | n.a. |
| Consumer confidence[4] | -8.3 | -10.0 | -14.0 | -14.0 | -16.0 | -18.0 | -19.0 |
| Industrial confidence[4] | -10.7 | -11.7 | -10.3 | -11.0 | -9.0 | -10.0 | -11.0 |
| Mfg. orders, Germany | 2.1 | -1.2 | .3 | 1.4 | -4.4 | n.a. | n.a. |
| CPI[5] | 2.1 | 2.1 | 2.3 | 2.3 | 2.3 | 2.2 | 2.3 |
| Producer prices[5] | -.8 | -.1 | 1.2 | 1.1 | 1.5 | 2.0 | n.a. |
| M3[5] | 7.3 | 7.2 | 6.8 | 7.0 | 6.8 | 7.4 | n.a. |

1. Excludes construction.
2. Excludes motor vehicles.
3. Percent. Euro area standardized to ILO definition. Includes Eurostat estimates in some cases.
4. Diffusion index based on European Commission surveys in individual countries.
5. Eurostat harmonized definition. Percent change from year earlier.
n.a. Not available.

Data on consumer expenditure is mixed. A 2.2 percent increase in German retail sales in January and a jump in euro-area retail confidence indicators in February does give some sign of improvement in euro-area consumer spending in the first quarter of 2003. However, euro-area consumer confidence slipped for the fifth straight month in February, falling to its lowest level since 1994, with consumer perceptions of the general economic situation and employment conditions continuing to deteriorate. Also, the euro-area services PMI has been declining for the past few months and is now below 50, indicating contraction.

The twelve-month rate of euro-area consumer price inflation remained above the ECB's target ceiling of 2 percent in February. Excluding energy and unprocessed food, twelve-month inflation fell to 2 percent in January, its lowest rate since August 2001. Twelve-month producer price inflation rose to 2 percent in January.

The ECB reduced its key policy rate 25 basis points on March 6 to 2.5 percent, citing increased evidence that inflationary pressures are easing, because of the subdued pace of economic growth and the appreciation of the euro.

**U.K. Real GDP**
(Percent change from previous period, except as noted, s.a.a.r.)

| Component | 2001[1] | 2002[1] | 2002 | | | |
|---|---|---|---|---|---|---|
| | | | Q1 | Q2 | Q3 | Q4 |
| GDP | 1.6 | 2.1 | .6 | 2.5 | 3.8 | 1.5 |
| Total domestic demand | 2.0 | 2.9 | 2.3 | -.1 | 3.7 | 5.7 |
| Consumption | 4.1 | 3.7 | 2.7 | 4.5 | 3.4 | 4.0 |
| Investment | -5.5 | -3.3 | -10.5 | 5.5 | -5.0 | -2.5 |
| Government consumption | 5.1 | 2.3 | 4.5 | -3.5 | 5.2 | 3.2 |
| Inventories[2] | -.5 | .6 | 1.6 | -3.6 | 1.5 | 3.0 |
| Exports | -5.2 | -.3 | 1.4 | 16.3 | -3.7 | -13.0 |
| Imports | -2.8 | 2.2 | 6.6 | 5.2 | -1.3 | -1.2 |
| Net exports[2] | -.7 | -1.0 | -2.1 | 3.0 | -.8 | -4.1 |

1. Q4/Q4.
2. Percentage point contribution to GDP growth, s.a.a.r.

In the **United Kingdom**, fourth-quarter real GDP growth was sluggish, after a robust third quarter. Growth in consumer spending remained strong. Inventories added 3 percentage points to growth, but gross fixed capital formation continued to decline as it has for seven of the past eight quarters. Net exports subtracted substantially from growth as exports tumbled while imports only dropped a bit.

Data for the first quarter suggest that the pace of activity will continue to be positive, but sluggish. Industrial production in January continued to decline, though manufacturing output rose slightly. In recent months, the manufacturing PMI has been sliding and is now below 50, indicating contraction. However, business confidence has remained relatively flat since declining in November, and remains well above its late 2001 low. January retail sales dropped after rising in December, and the leading survey of retail sales indicates that sales declined further in February. February's services PMI slumped to 50.2, barely indicating an expansion. Consumer sentiment has plummeted in the past couple months, mostly due to lower expectations of the general economic situation and now is at its lowest level since October 2001.

**U.K. Economic Indicators**

(Percent change from previous period except as noted, s.a.)

| Indicator | 2002 | | | | | 2003 | |
|---|---|---|---|---|---|---|---|
| | Q2 | Q3 | Q4 | Nov. | Dec. | Jan. | Feb. |
| Industrial production | .3 | .4 | -.8 | -.4 | -.2 | -.1 | n.a. |
| Retail sales volume[1] | 1.7 | .7 | 1.7 | .1 | 1.1 | -1.3 | n.a. |
| Unemployment rate[2] | | | | | | | |
| Claims-based | 3.2 | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 | n.a. |
| Labor force survey[3] | 5.2 | 5.2 | n.a. | 5.1 | n.a. | n.a. | n.a. |
| Business confidence[4] | 8.0 | 10.7 | 3.0 | 2.0 | -1.0 | 2.0 | -1.0 |
| Consumer confidence[5] | -4.0 | -3.0 | -3.0 | -1.0 | -6.0 | -9.0 | -10.0 |
| Retail prices[6] | 1.9 | 2.0 | 2.6 | 2.8 | 2.7 | 2.7 | n.a. |
| Producer input prices[7] | -5.9 | -2.3 | 1.4 | -.7 | 2.8 | 4.6 | 5.9 |
| Average earnings[7] | 3.9 | 3.8 | 3.7 | 4.0 | 3.6 | n.a. | n.a. |

1. Excludes motor vehicles.
2. Percent
3. Three-month average centered on month shown.
4. Percentage of firms expecting output to increase in the next four months less percentage expecting output to decrease.
5. Average of the percentage balance from consumers' expectations of their financial situation, general economic situation, unemployment, and savings over the next 12 months.
6. Excluding mortgage interest payments. Percent change from year earlier.
7. Percent change from year earlier.
... Not applicable. n.a. Not available.

Nationwide, Britain's largest building society, reported that monthly housing price inflation slowed to just 0.4 percent in February, down from 1.7 percent in January. Housing prices rose 24.8 percent in the twelve months ending in

February, amid widespread public concern that Britain is experiencing a housing price bubble. Price increases slowed somewhat in London, but prices continued to increase briskly in much of the rest of the nation. Borrowing to finance the purchase of homes remained robust in January.

Labor market conditions have remained tight. The official claims-based unemployment rate held steady at 3.1 percent in January, near a record low. The twelve-month rate of retail price inflation (excluding mortgage interest payments) remained at 2.7 percent in the January, above the Bank of England's 2½ percent target. The twelve-month growth rate of average earnings ebbed to 3.6 percent in November.

The Monetary Policy Committee (MPC) surprised markets by cutting the official repo rate 25 basis points to 3.75 percent in early February. This cut marks the first time the MPC has changed rates since November 2001. MPC minutes state that members were concerned about indications of a further weakening of the manufacturing sector and slowing consumption growth, while they felt that inflation increases in coming months would be largely the result of temporary factors.

**Canadian Real GDP**
(Percent change from previous period, except as noted, s.a.a.r.)

| Component | 2001[1] | 2002[1] | 2002 | | | |
|---|---|---|---|---|---|---|
| | | | Q1 | Q2 | Q3 | Q4 |
| GDP | .8 | 3.9 | 6.0 | 4.4 | 3.6 | 1.6 |
| Total domestic demand | .1 | 5.8 | 6.0 | 10.0 | 2.9 | 4.6 |
| Consumption | 2.2 | 3.4 | 3.2 | 4.3 | 1.6 | 4.4 |
| Investment | .5 | 4.8 | 6.5 | 4.7 | 6.2 | 2.1 |
| Government consumption | 2.1 | 2.5 | .1 | 3.6 | 3.0 | 3.5 |
| Inventories[2] | -1.6 | 2.1 | 2.5 | 5.2 | .1 | .8 |
| Exports | -6.1 | 2.0 | 4.7 | 2.6 | 9.4 | -8.0 |
| Imports | -9.2 | 7.2 | 4.5 | 19.8 | 6.5 | -1.0 |
| Net exports[2] | .9 | -1.7 | .3 | -5.5 | 1.5 | -3.1 |

1. Q4/Q4.
2. Percentage point contribution to GDP growth, s.a.a.r.

In **Canada**, real GDP increased 1.6 percent in the fourth quarter of 2002, following an upwardly revised 3.6 percent gain the third quarter. Growth was pulled down by a sizable drop in exports, especially in motor vehicle exports to the United States. Final domestic demand remained strong, as both consumption and residential construction climbed robustly. Firms also accumulated inventories at an increased rate, further supporting growth. In December, industrial production rebounded to its October level, fully recovering from November's decline, largely on account of gains in the mining and the oil and gas extraction sectors.

**Canadian Economic Indicators**
(Percent change from previous period except as noted, s.a.)

| Indicator | 2002 | | | | | 2003 | |
|---|---|---|---|---|---|---|---|
| | Q2 | Q3 | Q4 | Nov. | Dec. | Jan. | Feb. |
| GDP by industry | 1.1 | .9 | .5 | .0 | .1 | n.a. | n.a. |
| Industrial production | 1.3 | 1.1 | .0 | -.1 | .1 | n.a. | n.a. |
| New mfg. orders | 3.7 | .8 | -.8 | -1.5 | -.9 | n.a. | n.a. |
| Retail sales | .8 | .7 | 1.0 | -.5 | .2 | n.a. | n.a. |
| Employment | .9 | .9 | .8 | .3 | .3 | -.0 | .4 |
| Unemployment rate[1] | 7.6 | 7.6 | 7.5 | 7.5 | 7.5 | 7.4 | 7.4 |
| Consumer prices[2] | 1.3 | 2.3 | 3.8 | 4.3 | 3.9 | 4.5 | n.a. |
| Core Consumer Prices[2,3] | 2.0 | 2.2 | 3.1 | 3.2 | 3.4 | 3.4 | n.a. |
| Consumer attitudes[4] | 125.3 | 124.2 | 122.6 | ... | ... | ... | ... |
| Business confidence[4] | 145.2 | 129.7 | 136.0 | ... | ... | ... | ... |

1. Percent.
2. Percent change from year earlier, n.s.a.
3. Excluding food, energy, and indirect taxes.
4. Level of index, 1991 = 100.
n.a. Not available. ... Not applicable.

Indicators suggest that domestic demand remained strong in the first quarter, particularly residential construction. Following a dip in January, housing starts rebounded to a 13-year high in February, despite unseasonably cold weather. The labor market also exhibited renewed vigor in February, following a brief pause in January. Employment gains continued to be linked to the booming housing sector, with the wood product manufacturing and the real estate service sectors showing particular strength. The unemployment rate remained at 7.4 percent in

February, as an increase in the labor force offset employment gains. After a record-setting December, motor vehicle sales declined sharply in January, though preliminary reports suggest sales recovered somewhat in February. Exports, after falling in November and December, rebounded in January on higher energy and aircraft shipments.

In January, the twelve-month rate of headline CPI inflation rose to 4.5 percent from 3.9 percent in December, moving further above the ceiling of the Bank of Canada's 1 to 3 percent target band. This increase reflects higher energy prices and increases in tobacco taxes, as well as higher automobile insurance premiums. Twelve-month core inflation, excluding food and energy prices, as well as indirect taxes, remained flat at 3.4 percent in January.

On March 4, the Bank of Canada increased its targeted overnight rate (its key policy rate) and the Bank Rate 25 basis points each, to 3 percent and 3.25 percent, respectively. In announcing the hike, the Bank acknowledged continuing geopolitical and global economic uncertainties, but cited above-target inflation and an economy operating near capacity as motivating its action. Particularly, the Bank expressed concern that a prolonged period of high inflation would risk moving inflation expectations above their current position at the mid-point of the inflation target range.

The government released a new federal budget plan on February 18, outlining new spending initiatives for the next three fiscal years. Roughly 0.5 percent of GDP in new spending, primarily consisting of health care transfer payments to provincial governments, was announced for each of the next three years. Even with the increase in spending, the federal budget is expected to remain slightly in surplus.

**External Balances**
(Billions of U.S. dollars, s.a.a.r.)

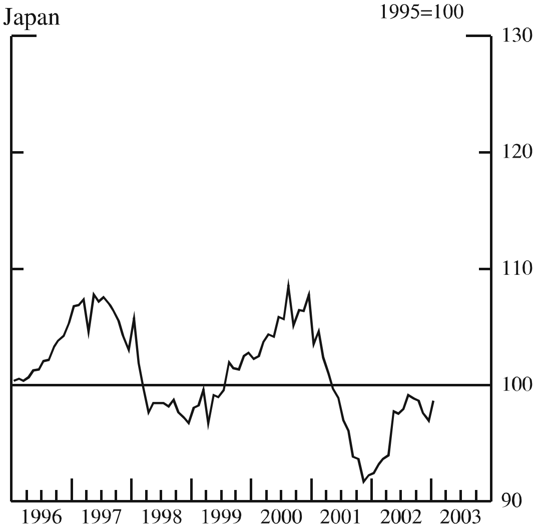
| Country and balance | 2002 | | | | | 2003 |
|---|---|---|---|---|---|---|
| | Q2 | Q3 | Q4 | Nov. | Dec. | Jan. |
| *Japan* | | | | | | |
| Trade | 86.1 | 73.9 | 89.3 | 103.7 | 77.3 | 69.7 |
| Current account | 118.7 | 112.3 | 105.3 | 105.4 | 102.1 | 100.6 |
| *Euro area* | | | | | | |
| Trade[1] | 90.1 | 128.0 | 106.2 | 115.7 | 90.3 | n.a. |
| Current account[1] | 11.8 | 99.4 | 88.8 | 123.8 | 99.1 | n.a. |
| *Germany* | | | | | | |
| Trade | 108.6 | 136.9 | 125.7 | 132.2 | 128.4 | 131.3 |
| Current account[1] | 43.7 | 42.6 | n.a. | 101.6 | n.a. | n.a. |
| *France* | | | | | | |
| Trade | 1.3 | 1.9 | 1.8 | .8 | 2.5 | 1.2 |
| Current account | 4.5 | 4.3 | 5.0 | 7.0 | 7.9 | n.a. |
| *Italy* | | | | | | |
| Trade | 11.2 | 8.1 | 7.2 | 6.1 | 7.9 | n.a. |
| Current account[1] | -16.0 | 12.1 | -16.2 | -17.8 | -22.9 | n.a. |
| *United Kingdom* | | | | | | |
| Trade | -38.1 | -55.1 | -68.3 | -79.4 | -57.9 | -64.4 |
| Current Account | -21.1 | -13.6 | n.a. | ... | ... | ... |
| *Canada* | | | | | | |
| Trade | 34.4 | 35.0 | 34.3 | 33.2 | 31.4 | 38.3 |
| Current Account | 11.2 | 10.8 | 8.4 | ... | ... | ... |

1. Not seasonally adjusted.
n.a. Not available. ... Not applicable.

## Industrial Production in Selected Industrial Countries

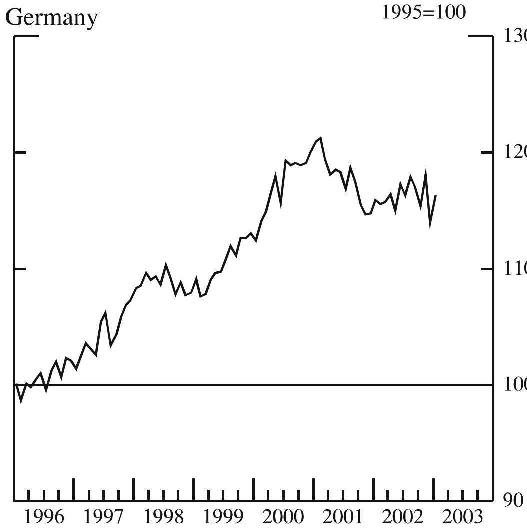
Japan

1995=100

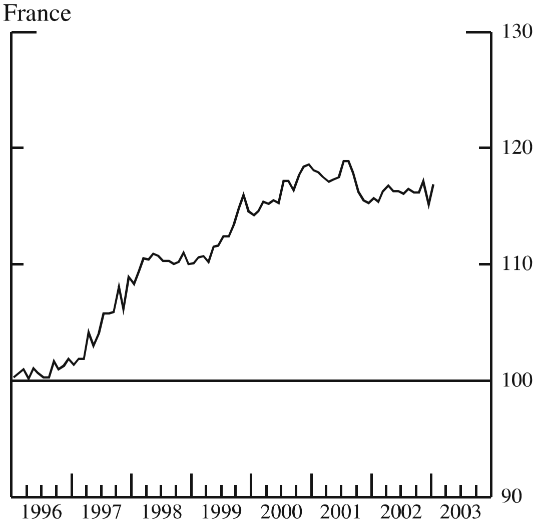



Germany

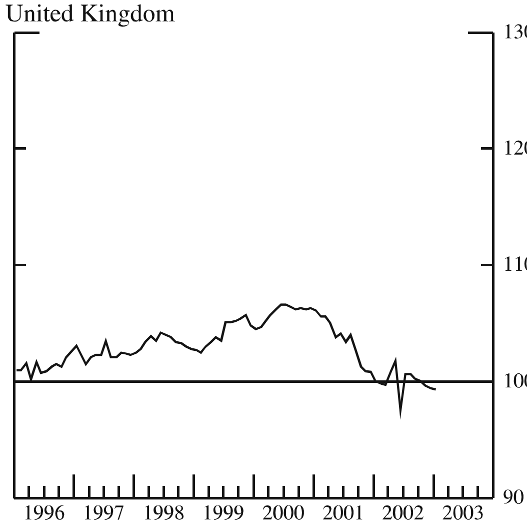
1995=100



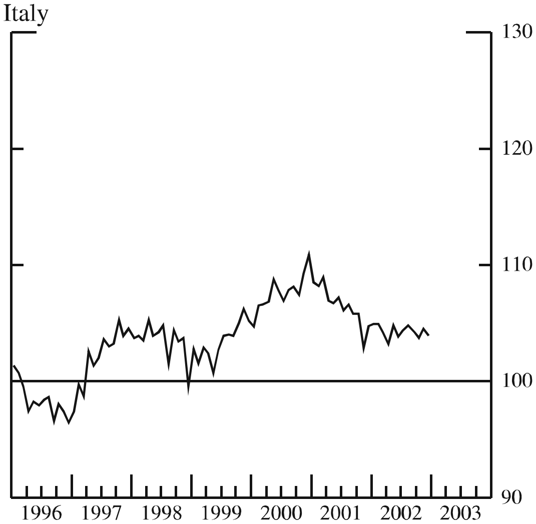

France



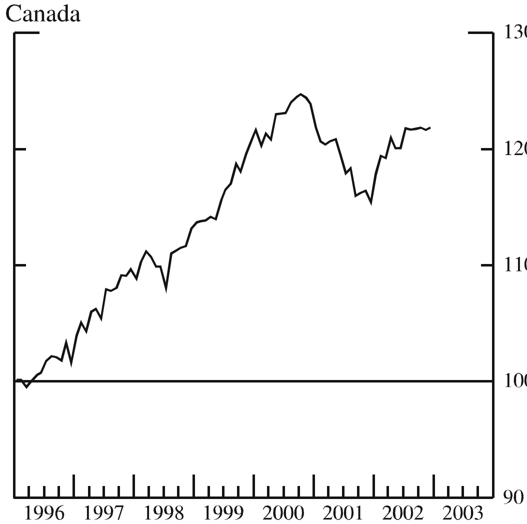

United Kingdom




Italy

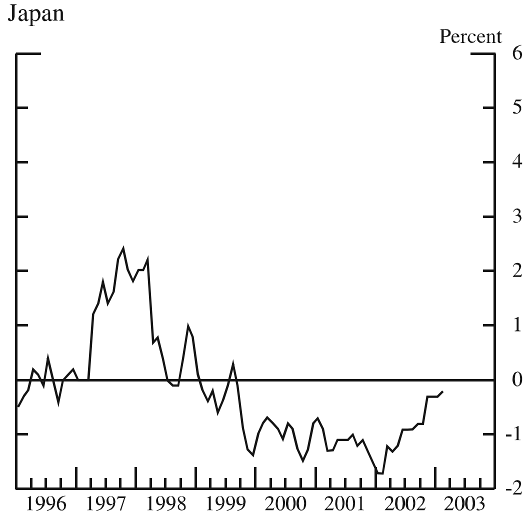



Canada

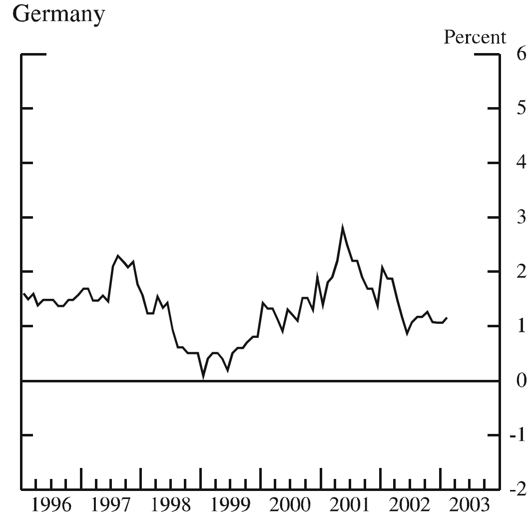


## Consumer Price Inflation in Selected Industrial Countries
(12-month change)

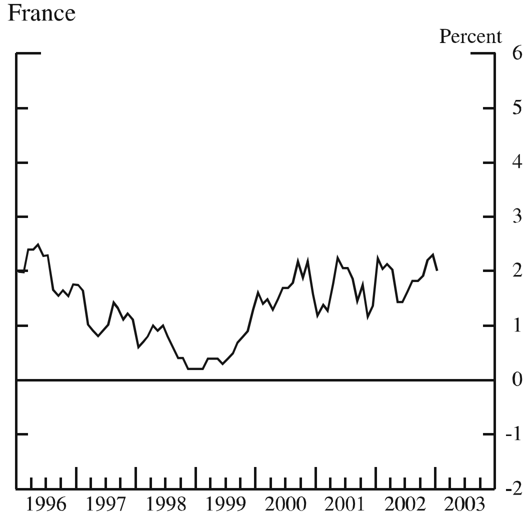
Japan



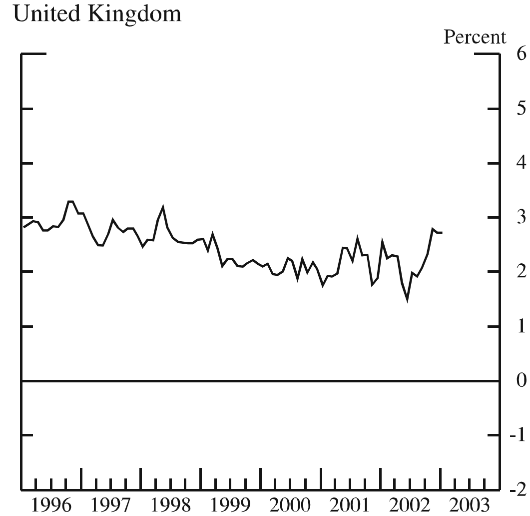

Germany



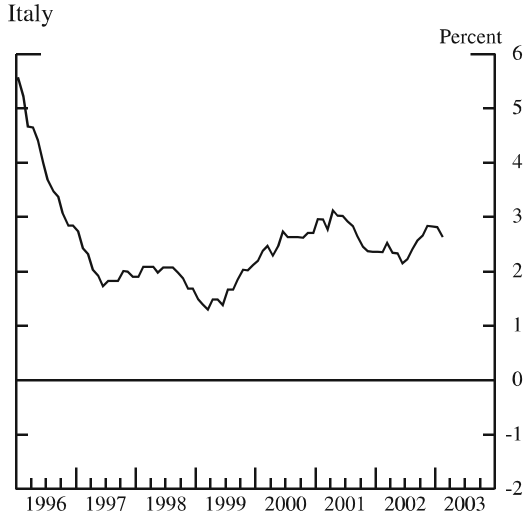

France



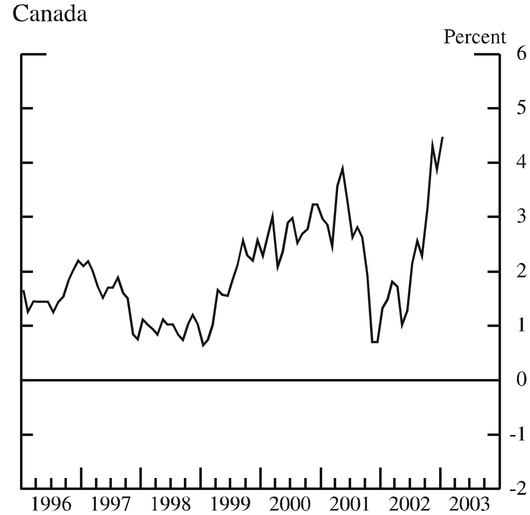

United Kingdom




Italy




Canada



## Economic Situation in Other Countries

Across the developing countries modest growth appears to be the rule, with the notable exception of Venezuela where a political crisis is taking its toll. The runup in oil prices is contributing to higher inflation in most countries, and trade balances are worsening for the oil importers.

In **Mexico**, output decelerated further in the fourth quarter, in line with weakness in U.S. industrial production. Preliminary GDP data and revisions to previous quarters now indicate that growth slowed from over 7 percent (s.a.a.r.) in the second quarter to ½ percent in the fourth quarter. Indicators available so far this year have been mixed; exports surged more than 3 percent (s.a.) in January, hinting at a revival of external demand, but business confidence, which has been falling since December, declined sharply in February. With exports improving and imports roughly flat, the trade deficit narrowed significantly in January.

**Mexican Economic Indicators**
(Percent change from previous period, s.a., except as noted)

| Indicator | 2001 | 2002 | 2002 | | | 2003 | |
|---|---|---|---|---|---|---|---|
| | | | Q3 | Q4 | Dec. | Jan. | Feb. |
| Real GDP[1] | -1.5 | 2.1 | 1.2 | .6 | ... | ... | ... |
| Overall economic activity | -.1 | .9 | .2 | .5 | .3 | n.a. | n.a. |
| Industrial production | -3.3 | -.1 | -.7 | -.3 | -.2 | n.a. | n.a. |
| Unemployment rate[2] | 2.5 | 2.7 | 2.9 | 2.6 | 2.5 | 2.6 | n.a. |
| Consumer prices[3] | 4.4 | 5.7 | 5.2 | 5.3 | 5.7 | 5.2 | 5.5 |
| Trade balance[4] | -10.0 | -8.0 | -8.4 | -6.1 | -5.9 | -.9 | n.a. |
| Imports[4] | 168.4 | 168.7 | 170.4 | 168.6 | 169.1 | 169.7 | n.a. |
| Exports[4] | 158.4 | 160.7 | 162.0 | 162.5 | 163.2 | 168.8 | n.a. |
| Current account[5] | -18.0 | -14.0 | -12.5 | -18.9 | ... | ... | ... |

1. Annual rate. Annual figures are Q4/Q4.
2. Percent; counts as unemployed those working one hour a week or less.
3. Percent change from year-earlier period, except annual figures, which are Dec./Dec.
4. Billions of U.S. dollars, annual rate.
5. Billions of U.S. dollars, n.s.a., annual rate.
n.a. Not available. ... Not applicable.

In early February, the Bank of Mexico implemented another round of monetary policy tightening, the fourth such move since the beginning of September. Nonetheless, twelve-month inflation has continued to hover around 5½ percent in recent months, and inflation expectations for end-2003 are still running slightly above the upper bound of the 2-4 percent target range for this year.

In late February, Mexico became the first major emerging market country to issue a global bond in New York with collective action clauses (CACs), which are aimed at facilitating debt restructuring in the event of default. The $1 billion, twelve-year bond issue had a spread of 310 basis points over comparable U.S. Treasuries. The market appears to have received the bond well, and it is difficult to isolate the component of the spread (if any) that may be due to the inclusion of CACs. The U.S. Treasury and the G-7 welcomed Mexico's action.

In **Brazil**, recent output growth has been surprisingly strong at 2.9 percent in the fourth quarter and 3.4 percent for the year as a whole. Last year's increase was partly a rebound from Brazil's domestic electricity crisis in 2001, but a sizeable rise in net exports also played an important role. The jump in net exports appears to reflect not just weak domestic demand but also gains in competitiveness from the currency's sizeable real depreciation in recent years. The improved trade balance has resulted in a significant narrowing of the current account deficit from 4.5 percent of GDP in 2001 to 2 percent of GDP in 2002.

Persistently high inflation has continued to dominate policy concerns. Twelve-month consumer price inflation in February was 14.6 percent, well above the 8.5 percent upper bound of the government's inflation target range. Moreover, measures of the average expected inflation rate for 2003 surpassed 12 percent in early March. In mid-February, the central bank raised the benchmark policy rate 100 basis points to 26.5 percent, following a 50 basis point increase in January. The central bank also raised the reserve requirement on demand deposits from 45 percent to 60 percent. Market reaction was cautiously positive to the upward revision in the government's 2003 target for the primary fiscal surplus from 3.75 percent to 4.25 percent of GDP.

**Brazilian Economic Indicators**
(Percent change from previous period, s.a., except as noted)

| Indicator | 2001 | 2002 | 2002 | | | 2003 | |
|---|---|---|---|---|---|---|---|
| | | | Q3 | Q4 | Dec. | Jan. | Feb. |
| Real GDP[1] | -.7 | 3.4 | 3.7 | 2.9 | ... | ... | ... |
| Industrial production | 1.6 | 2.4 | -.3 | 2.2 | -1.8 | n.a. | n.a. |
| Unemployment rate[2] | 6.2 | n.a. | 8.1 | n.a. | n.a. | n.a. | n.a. |
| Consumer prices[3] | 7.7 | 12.5 | 7.6 | 10.6 | 12.5 | 14.6 | n.a. |
| Trade balance[4] | 2.6 | 13.1 | 19.0 | 23.9 | 20.6 | 17.0 | 15.4 |
| Current account[5] | -23.2 | -7.6 | 4.1 | -1.4 | -1.3 | 1.9 | n.a. |

1. Annual rate. Annual figures are Q4/Q4.
2. Percent. "Open" unemployment rate.
3. Percent change from year-earlier period, except annual figures, which are Dec./Dec. Price index is IPC-A.
4. Billions of U.S. dollars, annual rate.
5. Billions of U.S. dollars, n.s.a., annual rate.

n.a. Not available. ... Not applicable.

In **Argentina**, recent data releases provide further evidence of recovery. Industrial production was up almost 1 percent in January and consumer and business confidence indicators also continued to recuperate. Monthly inflation in February was 0.4 percent, bringing the year-over-year increase to 36 percent, but continued to be limited by the suppression of some prices as well as by the low level of activity.

On March 5, the Supreme Court announced a precedent-setting decision that calls into question the constitutionality of the government's conversion to pesos of $9 billion in dollar-denominated bank deposits early last year. Because the Supreme Court's ruling did not apply to the dollar-denominated bank loans that were converted into pesos last year, the ruling may potentially deal yet another blow to the Argentine banking system. EMBI+ spreads rose sharply over the month of February, as expectations of the ruling mounted.

Political attention has been focused on the upcoming presidential elections. Infighting within the ruling Peronist party prompted the cancellation of the party's primary. Currently the presidential election is scheduled to be held on April 27, followed by runoff elections, if necessary. The next administration is scheduled to take office on May 25.

**Argentine Economic Indicators**
(Percent change from previous period, s.a., except as noted)

| Indicator | 2001 | 2002 | 2002 | | | 2003 | |
|---|---|---|---|---|---|---|---|
| | | | Q3 | Q4 | Dec. | Jan. | Feb. |
| Real GDP[1] | -10.3 | n.a. | 1.0 | n.a. | ... | ... | ... |
| Industrial production | -5.2 | -8.4 | .5 | 2.9 | 3.4 | .7 | n.a. |
| Unemployment rate[2] | 17.4 | 19.7 | n.a. | 17.8 | ... | ... | ... |
| Consumer prices[3] | -1.4 | 41.0 | 35.9 | 40.4 | 41.0 | 39.7 | 36.2 |
| Trade balance[4] | 7.5 | 16.4 | 17.0 | 17.6 | 15.4 | 19.5 | n.a. |
| Current account[5] | -4.4 | n.a. | 9.9 | n.a. | ... | ... | ... |

1. Annual rate. Annual figures are Q4/Q4.
2. Percent, n.s.a. Data are released for May and October only. Figures for Q4 reflect data for October.
3. Percent change from year-earlier period, except annual figures, which are Dec./Dec.
4. Billions of U.S. dollars, annual rate.
5. Billions of U.S. dollars, n.s.a., annual rate.
n.a. Not available. ... Not applicable.

The economic and political situation in **Venezuela** remains grim. Output plunged in the fourth quarter and inflation has soared so far this year. A nationwide strike, which began in early December, had petered out in all but the oil sector by February. In the oil sector, President Chavez has fired roughly 40 percent of the workforce, including most of the strikers. Oil production is gradually ramping up but is still well below pre-strike levels. Market pressures prompted the government to suspend foreign exchange trading for two weeks beginning in late January. In early February, the government announced a fixed exchange rate system and significant exchange and price controls. The new exchange system is still not fully operational, but is expected to limit severely the ability of businesses and individuals to gain access to foreign currency. Output in non-oil industries remains depressed, reflecting continued disruptions in the supply chain (exacerbated by the inability to import vital intermediate goods), uncertainty surrounding the extensive exchange and price controls, and unabated political tensions.

**Venezuelan Economic Indicators**
(Percent change from previous period, s.a., except as noted)

| Indicator | 2001 | 2002 | 2002 | | | 2003 | |
|---|---|---|---|---|---|---|---|
| | | | Q3 | Q4 | Dec. | Jan. | Feb. |
| Real GDP[1] | .9 | 16.7 | 19.2 | -41.3 | ... | ... | ... |
| Unemployment rate[2] | 13.3 | n.a. | 16.5 | n.a. | n.a. | n.a. | n.a. |
| Consumer prices[3] | 12.3 | 31.2 | 24.8 | 30.6 | 31.2 | 33.8 | 38.7 |
| Non-oil trade balance[4] | -12.2 | -7.4 | -5.5 | -5.5 | n.a. | n.a. | n.a. |
| Trade balance[4] | 9.3 | 13.9 | 16.7 | 14.8 | n.a. | n.a. | n.a. |
| Current account[5] | 3.9 | 7.6 | 15.1 | 8.3 | ... | ... | ... |

1. Annual rate. Annual figures are Q4/Q4.
2. Percent, n.s.a.
3. Percent change from year-earlier period, except annual figures, which are Dec./Dec.
4. Billions of U.S. dollars, annual rate.
5. Billions of U.S. dollars, n.s.a., annual rate.
n.a. Not available. ... Not applicable.

Recent indicators for **Korea** are mixed. Industrial production rose in December before falling back in January. Although difficulties in seasonal adjustment for the lunar holidays may play some role in this pattern, after smoothing through the two months, there is still some sign of a moderation in output growth. So far in the first quarter, indicators of consumer and investment demand have remained near recent lows and data on sales are on the weak side. Consumer price inflation neared 4 percent in February, reflecting the runup in fuel prices, and producer prices have climbed significantly more. The current account turned to deficit in January and February impacted by the greater value of oil imports and travel expenses abroad. However, exports, especially for electronics, jumped in January. President Roh Moo-hyun was inaugurated in the last week of February and his appointments so far have suggested no major break from the economic policies of the last administration. Korean financial indicators have softened somewhat since the last Greenbook, as tensions in Iraq and North Korea have intensified.

**Korean Economic Indicators**
(Percent change from previous period, s.a., except as noted)

| Indicator | 2001 | 2002 | 2002 | | | 2003 | |
|---|---|---|---|---|---|---|---|
| | | | Q3 | Q4 | Dec. | Jan. | Feb. |
| Real GDP[1] | 4.4 | n.a. | 5.1 | n.a. | ... | ... | ... |
| Industrial production | 1.0 | 7.4 | .7 | 2.7 | 1.3 | -1.1 | n.a. |
| Unemployment rate[2] | 3.8 | 3.1 | 3.1 | 3.0 | 3.0 | 3.1 | n.a. |
| Consumer prices[3] | 3.2 | 3.8 | 2.5 | 3.4 | 3.8 | 3.8 | 3.9 |
| Trade balance[4] | 13.5 | 14.2 | 10.9 | 15.5 | 4.3 | 21.4 | n.a. |
| Current account[5] | 8.2 | 6.1 | 3.7 | 7.9 | -7.8 | -4.2 | n.a. |

1. Annual rate. Annual figures are Q4/Q4.
2. Percent.
3. Percent change from year earlier, except annual changes, which are Dec./Dec.
4. Billions of U.S. dollars, annual rate.
5. Billions of U.S. dollars, n.s.a., annual rate.
n.a. Not available. ... Not applicable.

Economic conditions in the **ASEAN** region have remained weak with fourth-quarter real GDP growth generally lackluster. Output declined sharply in Indonesia, and the rate of growth slowed considerably in Malaysia. In both countries, the declines may be overstated due to seasonal adjustment issues surrounding the Ramadan holiday. Output was basically flat in Singapore over the fourth quarter while, in the Philippines, strong performance in the agriculture sector supported a surge in growth. Industrial production figures for January are mixed, with output falling in Malaysia but rising in Singapore and Thailand. High-tech production helped boost Singapore’s output but has shown signs of weakness in the other ASEAN economies. Higher commodity prices contributed to a widening of trade surpluses throughout the region. Despite the climb in oil prices, inflation in the region remained moderate, with twelve-month inflation in Indonesia moving into single-digits for the first time in nearly two years.

## ASEAN Economic Indicators: Growth

(Percent change from previous period, s.a., except as noted)

| Indicator and country | 2001 | 2002 | 2002 Q3 | 2002 Q4 | 2002 Nov. | 2002 Dec. | 2003 Jan. |
|---|---|---|---|---|---|---|---|
| *Real GDP*[1] | | | | | | | |
| Indonesia | 1.7 | 3.8 | 4.6 | -9.4 | ... | ... | ... |
| Malaysia | -.6 | 5.5 | 7.2 | 2.6 | ... | ... | ... |
| Philippines | 3.9 | 5.8 | -.4 | 12.7 | ... | ... | ... |
| Singapore | -6.0 | 3.0 | -6.6 | .4 | ... | ... | ... |
| Thailand | 2.3 | n.a. | 4.0 | n.a. | ... | ... | ... |
| *Industrial production*[2] | | | | | | | |
| Indonesia[3] | .7 | -1.1 | -1.2 | 1.4 | 2.2 | -1.8 | n.a. |
| Malaysia | -4.1 | 4.1 | 3.0 | -1.0 | -.8 | -.8 | -2.9 |
| Philippines | -5.7 | -6.0 | -3.2 | 2.7 | 3.1 | -2.4 | n.a. |
| Singapore | -11.6 | 8.3 | -4.5 | -2.1 | -4.5 | 7.9 | 6.2 |
| Thailand | 1.3 | 8.4 | 3.2 | 2.2 | 1.5 | .4 | 1.7 |

1. Annual rate. Annual figures are Q4/Q4.
2. Annual figures are annual averages.
3. Staff estimate.
n.a. Not available. ... Not applicable.

## ASEAN Economic Indicators: Trade Balance

(Billions of U.S. dollars, s.a.a.r.)

| Country | 2001 | 2002 | 2002 Q3 | 2002 Q4 | 2002 Nov. | 2002 Dec. | 2003 Jan. |
|---|---|---|---|---|---|---|---|
| Indonesia | 25.4 | 25.8 | 24.7 | 23.5 | 20.8 | 23.9 | 27.1 |
| Malaysia | 14.2 | 13.5 | 12.8 | 14.3 | 17.0 | 11.4 | 24.1 |
| Philippines | 2.6 | 1.6 | .2 | .8 | -1.5 | 3.4 | n.a. |
| Singapore | 5.8 | 8.7 | 12.0 | 10.7 | 15.3 | 13.0 | 30.9 |
| Thailand | 2.5 | 3.5 | 2.7 | 4.0 | 4.9 | 2.6 | 5.9 |

n.a. Not available.

**ASEAN Economic Indicators: CPI Inflation**
(Percent change from year earlier, except as noted)

| Country | 2001[1] | 2002[1] | 2002 Q3 | 2002 Q4 | 2002 Dec. | 2003 Jan. | 2003 Feb. |
|---|---|---|---|---|---|---|---|
| Indonesia | 12.5 | 10.0 | 10.4 | 10.3 | 10.0 | 8.7 | 7.3 |
| Malaysia | 1.2 | 1.7 | 2.1 | 1.8 | 1.7 | 1.7 | n.a. |
| Philippines | 4.1 | 2.6 | 2.8 | 2.6 | 2.6 | 2.7 | 3.1 |
| Singapore | -.6 | .4 | -.4 | .1 | .4 | .9 | n.a. |
| Thailand | .8 | 1.6 | .3 | 1.4 | 1.6 | 2.2 | 1.9 |

1. December/December.
n.a. Not available

**Chinese** authorities announced that real GDP rose 8 percent over the four quarters ended 2002:Q4. Output was boosted by strong exports, private investment, and government expenditure. Over the first two months of this year, Chinese industrial production continued to increase rapidly on a twelve-month basis. China recorded trade deficits in both January and February, its first deficits in over five years. Imports were up sharply due to rising oil prices and further tariff reductions stemming from China's WTO accession. Exports have increased only modestly. Higher energy prices in January lifted the consumer price index to its year ago level, putting an end, at least temporarily, to Chinese deflation.

**Chinese Economic Indicators**
(Percent change from previous period, s.a., except as noted)

| Indicator | 2001 | 2002 | 2002 Q3 | 2002 Q4 | 2002 Dec. | 2003 Jan. | 2003 Feb. |
|---|---|---|---|---|---|---|---|
| Real GDP[1] | 7.5 | 8.0 | 7.5 | 6.8 | ... | ... | ... |
| Industrial production[2] | 8.9 | 11.8 | 13.1 | 14.5 | 14.9 | 14.8 | 19.8 |
| Consumer prices[2] | -.3 | -.4 | -.8 | -.6 | -.4 | .0 | n.a. |
| Trade balance[3] | 23.1 | 30.3 | 14.3 | 45.6 | 93.7 | -29.8 | -6.7 |

1. Annual rate. Quarterly data estimated by staff from reported four-quarter growth rates. Annual figures are Q4/Q4.
2. Percent change from year earlier. Annual figures are year over year.
3. Billions of U.S. dollars, annual rate. Imports are c.i.f.
n.a. Not available. ... Not applicable.

In **Hong Kong**, both exports and imports rose more than 20 percent in January from a year earlier. The increases appear to reflect trade with China. The January unemployment rate remained near the highs reached last year. The pace of consumer price deflation is abating, reflecting recent increases in oil prices as well as reductions in government housing subsidies.

**Hong Kong Economic Indicators**
(Percent change from previous period, s.a., except as noted)

| Indicator | 2001 | 2002 | 2002 | | | | 2003 |
|---|---|---|---|---|---|---|---|
| | | | Q3 | Q4 | Nov. | Dec. | Jan. |
| Real GDP[1] | -1.4 | n.a. | 10.4 | n.a. | ... | ... | ... |
| Unemployment rate[2] | 4.9 | 7.3 | 7.4 | 7.2 | 7.1 | 7.2 | 7.2 |
| Consumer prices[3] | -3.5 | -1.6 | -3.5 | -2.9 | -3.6 | -1.6 | -1.7 |
| Trade balance[4] | -11.4 | -7.7 | -10.1 | -10.2 | -10.9 | -9.8 | -8.5 |

1. Annual rate. Annual figures are Q4/Q4.
2. Percent. Monthly numbers are averages of the current and previous two months.
3. Percent change from year-earlier period, except annual figures, which are Dec./Dec.
4. Billions of U.S. dollars, annual rate. Imports are c.i.f.
n.a. Not available. ... Not applicable.

Real GDP in **Taiwan** grew 3.7 percent in the fourth quarter. Much of the gain was due to surging exports to China. Industrial production declined in January, and production in the country's high-tech sector, which has been falling consistently since the middle of last year, has not shown any significant improvement. Consumer price inflation turned positive in December, largely due to rising oil prices. The trade balance for February posted a large surplus as an export contraction in January was more than reversed, and the oil-related rise in imports moderated.

**Taiwan Economic Indicators**
(Percent change from previous period, s.a., except as noted)

| Indicator | 2001 | 2002 | 2002 | | | 2003 | |
|---|---|---|---|---|---|---|---|
| | | | Q3 | Q4 | Dec. | Jan. | Feb. |
| Real GDP[1] | -1.8 | 4.1 | 3.0 | 3.7 | ... | ... | ... |
| Unemployment rate[2] | 4.6 | 5.2 | 5.1 | 5.1 | 5.1 | 5.2 | n.a. |
| Industrial production | -7.3 | 6.4 | .1 | 1.1 | 1.3 | -.7 | n.a. |
| Consumer prices[3] | -1.7 | .8 | -.2 | -.5 | .8 | n.a. | n.a. |
| Trade balance[4] | 15.6 | 18.0 | 15.0 | 19.5 | 15.8 | .6 | 22.0 |
| Current account[5] | 17.9 | 25.7 | 20.1 | 30.9 | ... | ... | ... |

1. Annual rate. Annual figures are Q4/Q4.
2. Percent.
3. Percent change from year-earlier period, except annual figures, which are Dec./Dec.
4. Billions of U.S. dollars, annual rate. Imports are c.i.f.
5. Billions of U.S. dollars, n.s.a., annual rate.
n.a. Not available. ... Not applicable.