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<sup>1</sup> 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).

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## **Part 2**

April 30, 2003

# **CURRENT ECONOMIC AND FINANCIAL CONDITIONS**

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## **Recent Developments**

April 30, 2003

## **Recent Developments**

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## **Domestic Nonfinancial Developments**

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## Domestic Nonfinancial Developments

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### Overview

The subpar pace of economic activity that has prevailed since last summer continued in the first quarter. The labor market, industrial production, and business investment remained anemic, while consumption and housing activity softened a little in recent months, albeit from relatively high levels. We have only scattered bits of information on activity since the apparent end of the war with Iraq, and we cannot yet discern whether the uncertainty that may have been restraining private spending has lifted. While consumer confidence and spending seem to have moved up in April, the most recent figures on unemployment insurance claims point to further job-trimming by businesses. Consistent with current levels of product- and labor-market slack, core consumer prices have continued to decelerate in recent months.

### Real Gross Domestic Product

According to the advance estimate prepared by the Bureau of Economic Analysis (BEA), real GDP increased at an annual rate of 1.6 percent in the first quarter, roughly in line with the lackluster pace of the fourth quarter. Final sales rose 2.1 percent in the first quarter, a percentage point faster than in the previous quarter, while the pace of inventory accumulation slowed. Among the components of final demand, real PCE increased slowly, and business spending on both nonresidential structures and equipment and software declined. Residential investment posted another solid gain, while government spending increased at a much slower pace than in the fourth quarter. In the external sector, both imports and exports declined, but because the decrease in imports was more substantial, the combined arithmetic influence of net exports was to add nearly a percentage point to first-quarter growth. Based on the small amount of data we have received since the release of this advance estimate, we do not yet anticipate any significant revisions to the GDP estimates for the first quarter.

### Labor Market Developments

The labor market continued to deteriorate in the first quarter. In March, private nonfarm payrolls dropped 68,000, roughly on par with the average monthly declines since the beginning of the fourth quarter. Job cuts in March were again concentrated in manufacturing, retail trade, and transportation and public utilities—industries that have been shedding workers for some time.<sup>1</sup> In addition, employment in services, a sector in which payrolls had been trending up since late 2001, fell for a second month in March. Meanwhile, aggregate

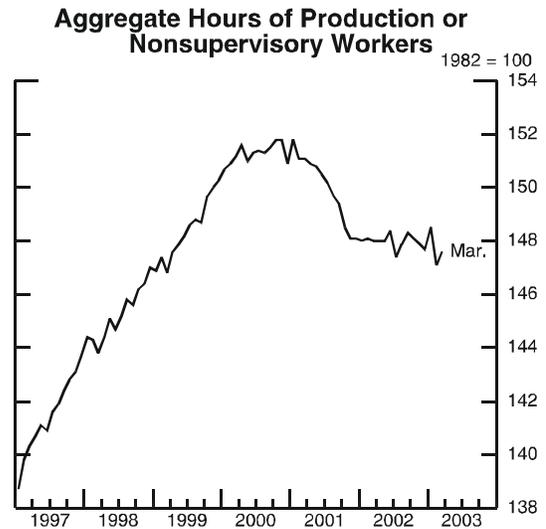
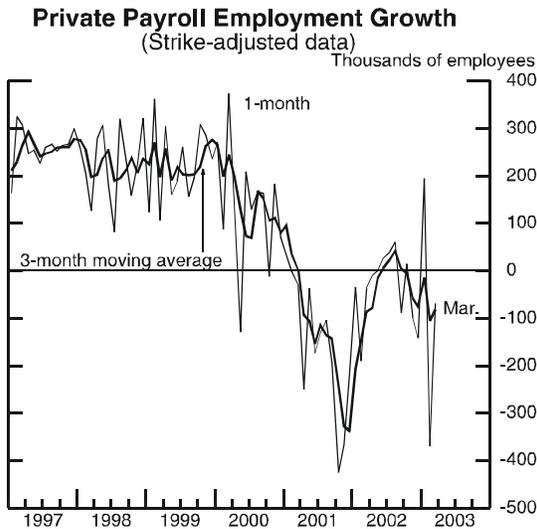
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1. From the middle of December to the middle of April, the number of active-duty reservists increased by an average of about 40,000 per month. Because not all reservists previously had jobs in the private nonfarm sector, and because employers may have hired replacements for some reservists called to active duty, the effect of reserve call-ups on the change in private nonfarm payroll employment is likely considerably less than 40,000 per month.

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

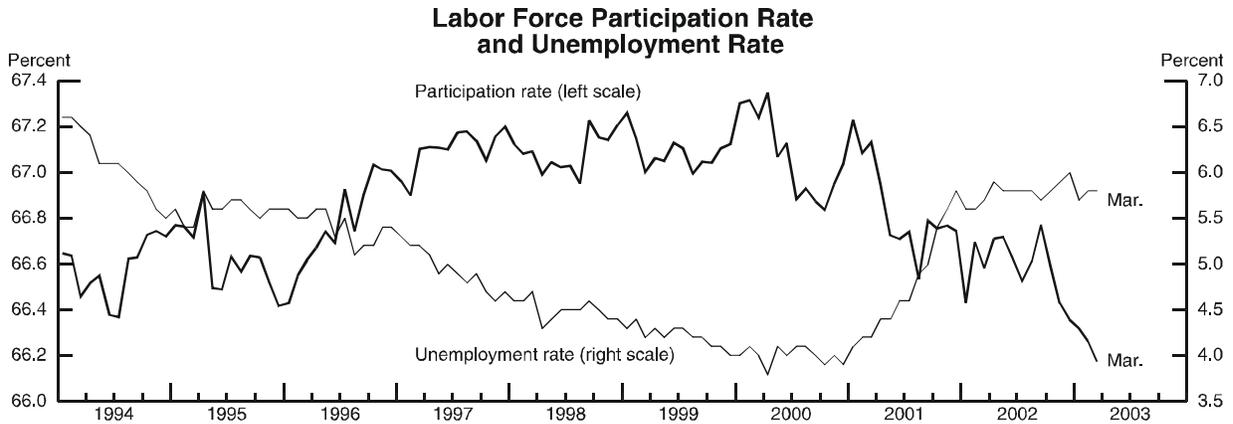
	2002	2002		2003	2003		
		Q3	Q4	Q1	Jan.	Feb.	Mar.
	<b>-Average monthly change-</b>						
Nonfarm payroll employment <sup>1</sup>	-18	31	-53	-87	203	-357	-108
<i>Previous</i>	-18	31	-53	...	185	-308	...
Private	-38	4	-75	-81	195	-370	-68
Mining	-1	-1	0	0	-1	0	1
Manufacturing	-51	-39	-62	-34	-7	-59	-36
Construction	-8	2	-4	-0	20	-42	21
Transportation and utilities	-14	-22	-13	-15	8	-41	-13
Retail trade	-14	-6	-46	-14	119	-117	-43
Wholesale trade	-5	-6	-9	1	2	1	0
Finance, insurance, real estate	6	13	14	7	1	9	12
Services	49	61	44	-26	53	-121	-10
Help supply services	7	-11	-1	-14	5	0	-48
Total government	20	27	22	-6	8	13	-40
Total employment (household survey)	31	310	-291	303	1097	-128	-60
<b>Memo:</b>							
Aggregate hours of private production workers (percent change) <sup>1,2</sup>	-0.2	-0.7	0.1	-0.4	0.5	-0.9	0.3
Average workweek (hours) <sup>1</sup>	34.2	34.1	34.2	34.2	34.3	34.1	34.3
Manufacturing (hours)	40.8	40.8	40.7	40.8	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.

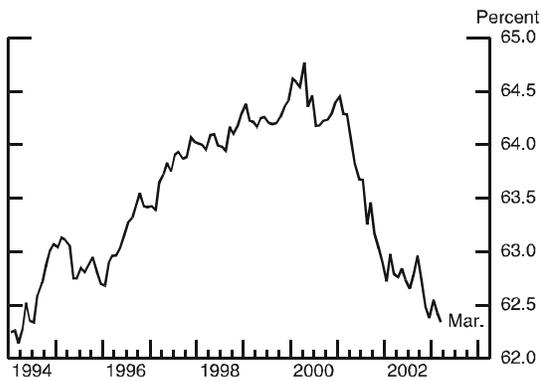


SELECTED UNEMPLOYMENT AND LABOR FORCE PARTICIPATION RATES  
(Percent; based on seasonally adjusted data)

	2002	2002		2003	2003		
		Q3	Q4	Q1	Jan.	Feb.	Mar.
Civilian unemployment rate (16 years and older)	5.8	5.8	5.9	5.8	5.7	5.8	5.8
Teenagers	16.5	16.7	16.1	17.2	16.8	17.1	17.7
20-24 years old	9.7	9.6	9.9	9.2	9.3	9.3	8.9
Men, 25 years and older	4.7	4.7	4.9	4.9	4.9	4.9	4.9
Women, 25 years and older	4.6	4.6	4.6	4.4	4.2	4.5	4.6
Labor force participation rate	66.6	66.6	66.5	66.3	66.3	66.3	66.2
Teenagers	47.4	47.6	46.8	45.2	46.0	45.5	44.1
20-24 years old	76.4	76.6	75.8	75.5	76.1	75.6	74.8
Men, 25 years and older	75.9	76.0	75.6	75.3	75.2	75.5	75.3
Women, 25 years and older	59.4	59.3	59.4	59.6	59.6	59.5	59.6



Employment-to-Population Ratio

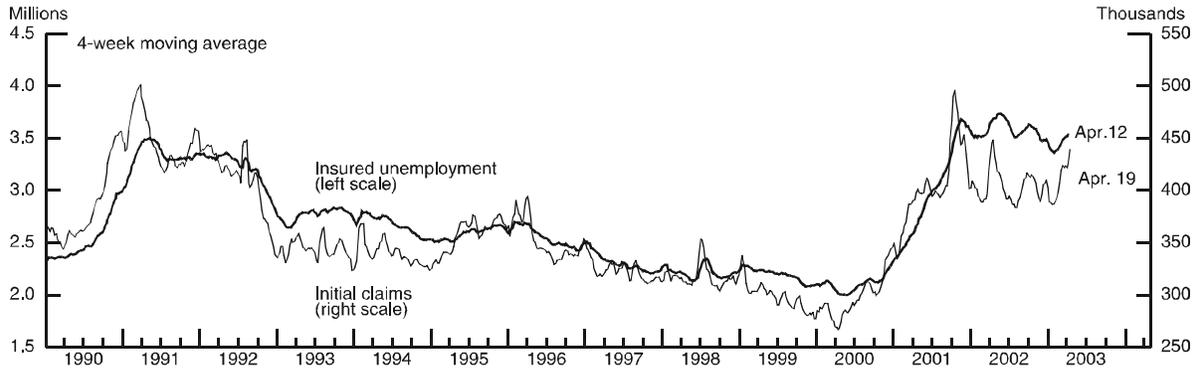


Persons Working Part-Time for Economic Reasons  
(Percentage of household employment)

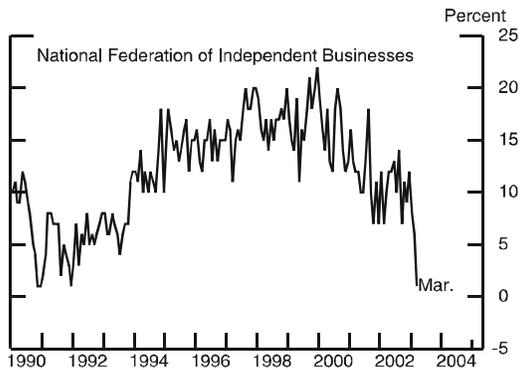


**Labor Market Indicators**

**Unemployment Insurance**

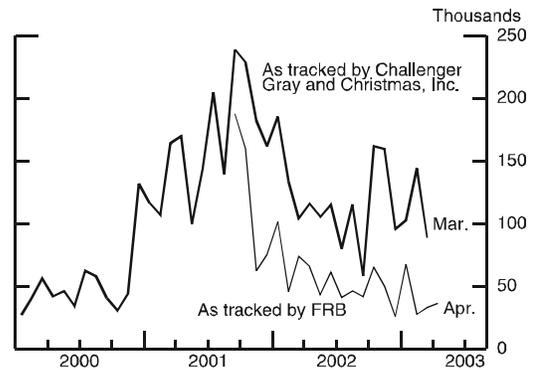


**Net Hiring Strength**



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

**Layoff Announcements**



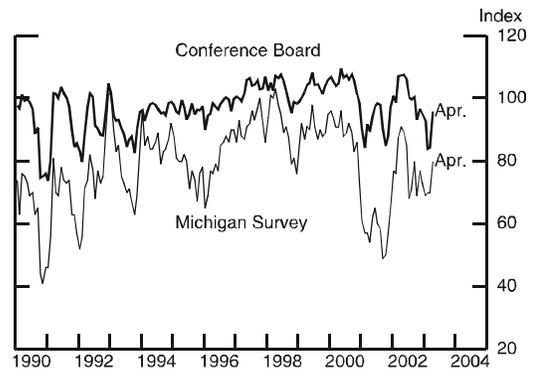
Note. Seasonally adjusted by FRB staff.

**Current Employment Conditions**



Source. Conference Board.

**Expected Labor Market Conditions**



Note. The proportion of households expecting labor market conditions to improve, minus the proportion expecting conditions to worsen, plus 100.

hours of production or nonsupervisory workers increased 0.3 percent in March, reflecting a bounceback in the workweek from its weather-depressed February level. For the first quarter as a whole, however, aggregate hours declined at an annual rate of 0.4 percent, extending the gradual decline evident since the middle of last year.

In the household survey, the unemployment rate held at 5.8 percent in March, unchanged on net since the third quarter. As we have noted previously, the lack of deterioration in the unemployment rate seems puzzling given the declines in payroll employment; moreover, other data (both from the household survey and elsewhere) appear in line with the worsening of conditions seen in the establishment survey. An important reason for the absence of any rise in the jobless rate is the decline in the labor force participation rate, which edged down a further 0.1 percentage point in March, bringing the overall drop since the third quarter to nearly 1/2 percentage point. This decline in participation likely reflects potential job seekers leaving the labor market in response to bleak employment prospects. Indeed, the employment-to-population ratio, which provides an alternative gauge of labor market conditions from the perspective of the household survey, has fallen noticeably since the third quarter. In addition, the percentage of employees working part-time for economic reasons has moved up sharply, on net, since the third quarter.

The most recent readings on initial claims for unemployment insurance suggest that job cuts continued well into April. The four-week moving average of initial claims stood at 439,000 for the week ended April 19, above both its level a month ago and its average since the beginning of the fourth quarter.<sup>2</sup> The four-week moving average of insured unemployment stood at 3.5 million for the week ended April 12 and has been increasing since the beginning of March.

Other labor market indicators have been mixed. The Conference Board's help-wanted index edged down further in March, while hiring plans of small businesses, as reported by the National Federation of Independent Businesses, dropped to their lowest level since 1991. Layoff announcements receded in March according to the outplacement firm Challenger, Grey, and Christmas, but they appear to have edged back up in April (as tracked by Board staff through April 29). In contrast, individuals responding to the Conference Board's survey of consumer confidence had a slightly better assessment of current employment

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2. The Employment and Training Administration has released revised seasonal factors for initial claims dating back to 1988. The new seasonal factors now control appropriately for the effect of the attacks of September 11, 2001, and incorporate another year of data. As a result, we no longer need to present initial claims and insured unemployment figures that have been adjusted with alternative seasonal factors.

conditions in April relative to March, while expectations of future labor-market conditions improved in both the Michigan and Conference Board surveys.

### Output per Hour

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

Sector	2001 <sup>1</sup>	2002 <sup>1,2</sup>	2002			2003
			Q2	Q3	Q4 <sup>2</sup>	Q1 <sup>2</sup>
Nonfarm businesses						
All persons <sup>3</sup>	1.9	4.0	1.7	5.4	.7	1.4
All employees <sup>4</sup>	2.0	4.3	1.5	6.7	1.8	1.4

1. Change is from fourth quarter of the preceding year to fourth quarter of the year shown.

2. Staff estimate.

3. Includes non-employees (published definition).

4. Assumes that the growth rate of hours of all persons equals the growth rate of hours of all employees.

On May 1, the Bureau of Labor Statistics will release its advance estimate of productivity for the first quarter. Based on the NIPA output data and the available data on hours, we estimate that output per hour in the nonfarm business sector increased at an annual rate of 1.4 percent in the first quarter, bringing the four-quarter change in this series to 2.3 percent, slightly below its average pace since the middle of 1995.<sup>3</sup>

Earlier this month, the BLS reported that multifactor productivity (MFP) decreased 1.0 percent in 2001, the first decline since 1991.<sup>4</sup> In contrast to labor productivity—which measures output per hour—multifactor productivity measures output per unit of total input, taking account of both labor and capital inputs. Because the BLS does not adjust these input measures for changes in utilization, measured MFP typically declines in recessions when factor

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3. In estimating hours worked by the self-employed, we have attempted to control for one-time jumps caused by the conversion of the Current Population Survey to the North American Industry Classification System (NAICS) and the introduction of new population weights in January 2003. Unfortunately, we are not yet able to mimic the adjustment that the BLS will be making to account for the series break. The BLS estimates are subject to change right up until publication and, as of Greenbook day, the modifications that it would be making were not finalized.

4. The BLS only reports these figures as annual averages, and hence the numbers cited here are percent changes in the annual averages.

utilization falls and measured inputs decline by less than actual inputs. From 1995 through 2000, multifactor productivity increased at an average rate of 1.1 percent per year.

**Productivity Growth and its Components**  
(Annual percent change except as noted)

Measure	1979-90	1990-95	1995-2000	1999 <sup>1</sup>	2000 <sup>1</sup>	2001
<b>Output per hour</b>	<b>1.4</b>	<b>1.6</b>	<b>2.5</b>	<b>2.4</b>	<b>2.9</b>	<b>1.2</b>
<i>Contribution</i>						
<i>(percentage points)</i>						
Capital deepening	.8	.5	1.1	1.2	1.5	1.7
Labor composition	.3	.4	.3	.4	.0	.6
Multifactor productivity	.3	.6	1.1	.7	1.4	-1.0

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

1. The BLS did not report the contribution of capital deepening and the contribution of changing labor composition for 1999 and 2000; the table shows staff estimates for these years that are based on the new BLS data.

The MFP release also showed that capital deepening—the increase in the quantity of capital services used per hour worked—contributed 1.7 percentage points to labor productivity growth in 2001 and 1.5 percentage points in 2000, somewhat larger contributions than we had anticipated. In addition, changes in the composition of labor toward more-skilled workers added 0.6 percentage point to labor productivity growth in 2001, double the average contribution from this source in the late 1990s. Layoffs of less-skilled workers generally rise disproportionately in recessions, but the jump in the contribution of labor composition exceeded our expectations.

This information has led us to alter somewhat our interpretation of the recent strength in labor productivity growth. In particular, we now believe that more of the recent growth in structural labor productivity owed to capital deepening rather than to the technological and organizational changes associated with the growth of structural MFP. In addition, we now ascribe somewhat less of the recent strength in the cyclical component of labor productivity to the effect of an uncertain business outlook on hiring and attribute somewhat more to a temporary change in the skill distribution of employed workers.

**Selected Components of Industrial Production**  
(Percent change from preceding comparable period)

Component	Proportion 2002 (percent)	2002 <sup>1</sup>	2002 <sup>2</sup>	2003 <sup>2</sup>	2003 <sup>3</sup>		
			Q4	Q1	Jan.	Feb.	Mar.
<b>Total</b>	<b>100.0</b>	<b>1.4</b>	<b>-3.4</b>	<b>.4</b>	<b>.8</b>	<b>-.1</b>	<b>-.5</b>
Previous	100.0	1.5	-3.1	...	.8	.1	...
Manufacturing	84.7	1.0	-3.7	-.7	.6	-.3	-.2
Ex. motor veh. and parts	78.3	.1	-3.5	-.9	.3	-.1	.0
Ex. high-tech industries	71.6	-.5	-4.3	-1.5	.2	-.1	-.1
Mining	6.3	-1.9	1.0	2.2	-1.5	.4	.6
Utilities	9.0	7.7	-3.3	10.3	4.0	1.3	-4.1
<i>Selected industries</i>							
High technology	6.6	7.1	6.7	6.9	.8	.8	1.6
Computers	1.3	19.9	25.5	19.0	1.2	1.4	2.0
Communications equipment	2.3	-16.6	-16.1	-.1	1.6	-.2	2.1
Semiconductors <sup>4</sup>	3.0	19.8	14.5	5.6	.1	1.1	1.0
Motor vehicles and parts	6.5	10.9	-5.6	1.0	4.4	-2.4	-1.8
<i>Market groups excluding energy and selected industries</i>							
Consumer goods	21.9	-1.3	-3.9	-1.3	.2	-.2	.1
Durables	3.5	.5	.1	-.1	.1	-.9	-.2
Nondurables	18.5	-1.6	-4.6	-1.5	.2	-.1	.1
Business equipment	7.8	-6.0	-7.7	-2.1	.7	-.1	-.6
Defense and space equipment	1.8	5.1	4.3	9.5	1.8	.1	.1
Construction supplies	6.6	.9	-4.2	-4.5	.3	-.4	-.3
Business supplies	7.4	.3	-2.5	.3	.1	.4	-.1
Materials	25.3	.9	-4.7	-2.3	.2	-.2	-.1
Durables	13.6	.6	-3.8	-1.5	.7	-.3	-.3
Nondurables	11.7	1.3	-5.6	-2.8	-.4	.0	.1

1. Fourth-quarter to fourth-quarter change.

2. Annual rate.

3. Monthly rate.

4. Includes related electronic components.

... Not applicable.

**Capacity Utilization**  
(Percent of capacity)

Sector	1972- 2002 average	1982 low	1990- 91 low	2002		2003		
				Q3	Q4	Q1	Feb.	Mar.
<b>Total industry</b>	<b>81.3</b>	<b>70.8</b>	<b>78.6</b>	<b>76.2</b>	<b>75.3</b>	<b>75.2</b>	<b>75.3</b>	<b>74.8</b>
Manufacturing	80.2	68.6	77.2	74.3	73.5	73.2	73.1	72.9
High-tech industries	79.3	75.6	74.6	62.2	62.2	61.8	61.7	62.1
Excluding high-tech industries	80.2	68.1	77.3	75.8	75.0	74.7	74.7	74.4
Mining	86.9	78.6	83.3	84.9	85.1	85.4	85.3	85.8
Utilities	86.7	77.2	84.2	88.2	86.0	86.9	88.5	84.5

### Industrial Production

Total industrial production, which fell 0.5 percent in March, has been volatile in recent months due to sharp swings in motor vehicle assemblies and weather-related fluctuations in output at utilities. Excluding motor vehicles and parts, manufacturing production was little changed in February and March. Since its trough in December 2001, manufacturing output has risen only a meager 0.9 percent. Consequently, despite only marginal increments to capacity since then, the factory operating rate stood at 72.9 percent in March, 0.1 percentage point below its December 2001 rate and the lowest rate since May 1983.

### New Orders for Durable Goods

(Percent change from preceding period except as noted; seasonally adjusted)

Component	Share, 2001: H1 (percent)	2002	2003			
		Q4	Q1	Jan.	Feb.	Mar.
<b>Total orders</b>	<b>100.0</b>	<b>-2.8</b>	<b>1.1</b>	<b>2.1</b>	<b>-1.5</b>	<b>2.0</b>
Adjusted orders <sup>1</sup>	76.2	-1.8	.3	2.7	-1.8	1.7
Computers	4.5	1.3	-3.4	.9	-12.7	1.3
Communication equipment	4.1	6.0	30.6	46.9	-.1	.6
Other capital goods	24.5	-1.3	1.1	1.8	-1.1	3.9
Other <sup>2</sup>	43.1	-2.8	-1.6	.9	-1.2	.6
MEMO						
Real adjusted orders	...	-1.6	.7	2.5	-1.3	1.4
Excluding high tech	...	-2.9	-.5	1.5	-1.2	1.3

1. Orders excluding defense capital goods, nondefense aircraft, and motor vehicle parts.

2. Primary metals, most fabricated metals, most stone, clay, and glass products, household appliances, scientific instruments, and miscellaneous durable goods.

... Not applicable.

Weekly physical product data and other indicators of production suggest that total industrial output will be down in April. Motor vehicle assemblies, which are scheduled to fall for a third consecutive month, will likely subtract 0.1 percentage point from the change in IP. In addition, the April readings on new orders from the FRB New York, FRB Philadelphia, and NAPM Chicago business surveys declined markedly, and, taken by themselves, suggest that production outside of the motor vehicle and high-tech sectors contracted further following small declines in February and March. By contrast, real adjusted durable goods orders, which are calculated from data collected by the Census Bureau, rose 1.4 percent in March (not at an annual rate) after having fallen by a

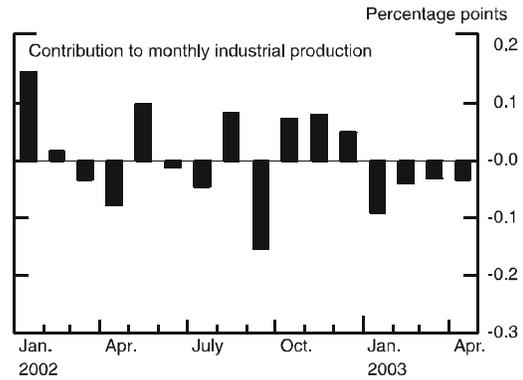
Indicators of Manufacturing Activity

Motor Vehicle Assemblies

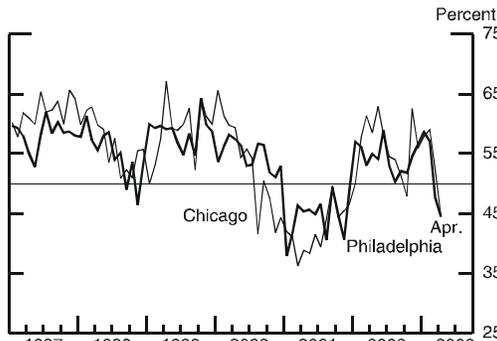


\* April value is based on weekly data.

Weekly Physical Product Data ex. Motor Vehicles and Electricity Generation



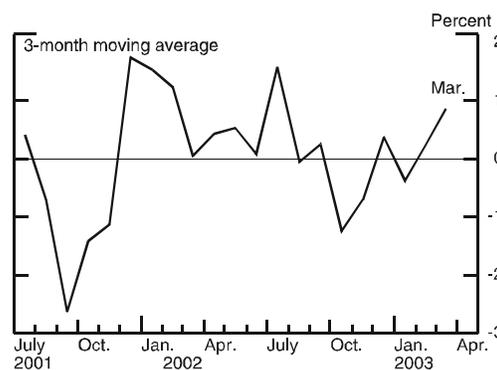
New Orders: Regional Diffusion Indexes



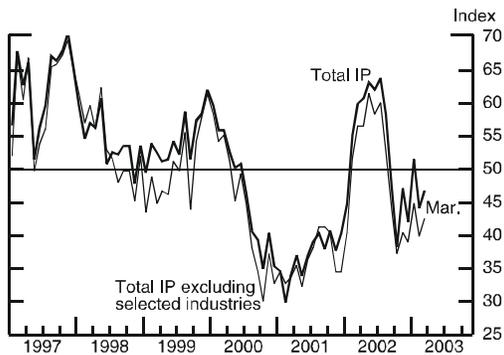
Note. The diffusion indexes equal 50 plus half the difference between the percentage of respondents reporting increases versus decreases of new orders.

Source: Reports from FRB Philadelphia and NAPM Chicago.

Change in Real Adjusted Durable Goods Orders

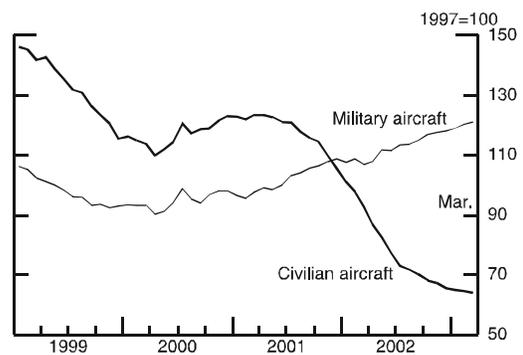


Industrial Production Diffusion Indexes



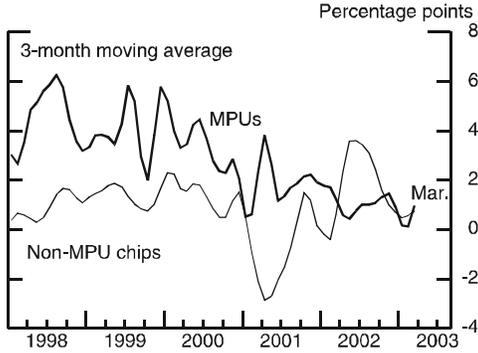
Note. The diffusion indexes equal the percentage of series that increased over three months plus one-half the percentage that were unchanged. The selected industries include energy, high-technology, and motor vehicles and parts.

Industrial Production: Military and Civilian Aircraft

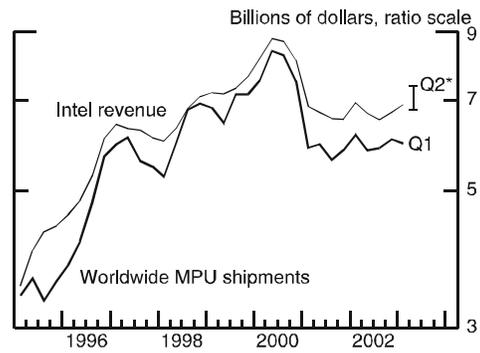


**Indicators of High-Tech Manufacturing Activity**

**Contribution to the Rate of Change in Semiconductor Industrial Production**

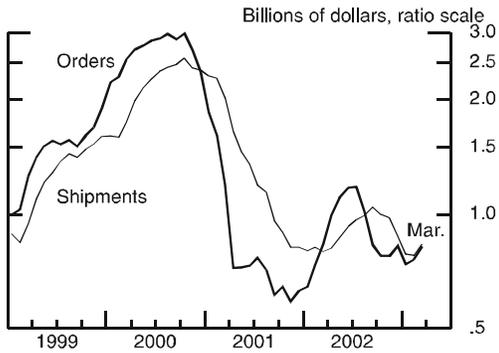


**Microprocessor Unit (MPU) Shipments and Intel Revenue**



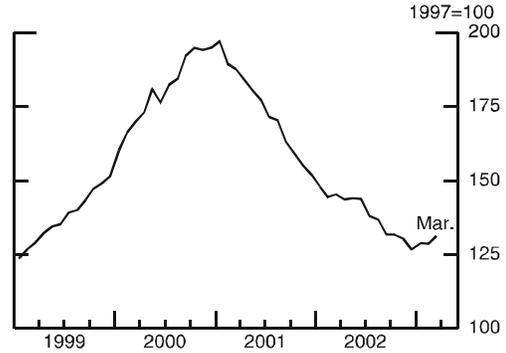
\* Q2 is the range of Intel's guidance as of April 15, 2003.  
Source. Intel and Semiconductor Industry Association.

**Semiconductor Manufacturing Equipment Orders and Shipments**

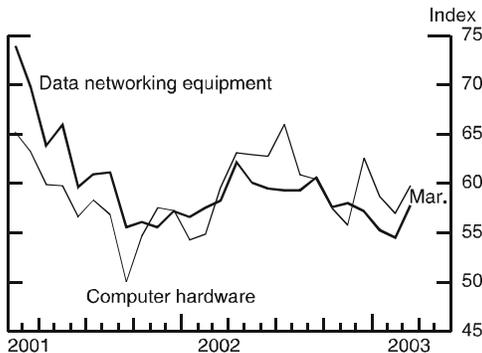


Source. Semiconductor Equipment and Materials International.

**Industrial Production: Communication Equipment**

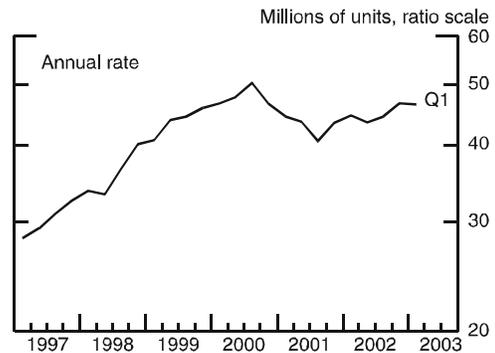


**CIO Magazine Future Spending Diffusion Index**



Note. The diffusion indexes equal the percentage of respondents planning to increase future spending plus one-half the number planning no change. The mean number of respondents per month from Feb. '01 to Mar. '03 was 275.  
Source. CIO Magazine.

**Personal Computer Sales**



Note. FRB seasonals. Includes notebooks.  
Source. Dataquest.

similar amount in February; on net, the three-month moving average of this orders series was up 0.9 percent in March.

Production in the high-tech sector increased at an annual rate of 6.9 percent in the first quarter, about the same as in the preceding quarter. Real output of semiconductors decelerated sharply in the first quarter, after having posted moderate gains for much of 2002. Looking ahead, semiconductor production is unlikely to approach the more substantial rates of increase recorded prior to the industry's downturn without a significant pickup in demand for microprocessor units (MPUs), the high-value chips used primarily in computers. In this regard, first-quarter earnings for Intel Corporation, which derives 80 percent of its revenue from MPUs and accounts for about 80 percent of worldwide MPU shipments, were boosted by a shift toward higher-margin MPUs for laptop computers, and the company's revenue guidance for the second quarter seems consistent with an acceleration in MPU output.<sup>5</sup>

Production of communications equipment was essentially unchanged in the first quarter, following an eight-quarter string of significant drops. Output jumped more than 2 percent in March, and recent indicators suggest moderate advances going forward. In particular, the three-month moving average of orders for communications equipment has been trending upward, and a monthly survey of chief information officers regarding planned spending on local area networking equipment (such as routers, switches, and hubs) improved notably in March. However, prospects for demand from telecommunications service providers remain dim; these firms plan further reductions in capital spending this year.

The output of computers increased in the first quarter, although at a slightly slower clip than in the fourth quarter of 2002, when the production of computers for consumer use rose sharply. According to a March survey of chief information officers, businesses seem to be upping their spending plans for computers. In addition, the NABE survey for April (which does not differentiate between computers and communications equipment spending) recorded a marked improvement in intended expenditures on high-tech equipment, putting the series' diffusion index back at its April 2002 level. However, industry sources indicate that the expected surge in computer production associated with the replacement of PCs that were purchased in advance of Y2K has been pushed back further and is now not expected to commence in earnest until late this year.

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5. Intel's revenue guidance for the second quarter had a wider than normal range, due to uncertainties surrounding events in Iraq, the severe acute respiratory syndrome (SARS), the delay of the introduction of a new computer chip, and the company's own efforts to regain market share for flash memory that was lost to other vendors when Intel tried to raise its flash memory prices in January beyond what the market would support.

Outside of energy, motor vehicles and parts, and the high-tech sector, production fell during the first quarter across nearly all major market groups; indeed, the three-month diffusion index for this category of industries remained well below 50 in March, indicating that the number of industries in which production was below the December level exceeded the number in which production rose over that period. One notable exception to the general pattern of weakness has been the output of defense and space equipment, which rose at an annual rate of 9-1/2 percent in the first quarter to a level nearly 7 percent above a year ago. Production of military aircraft, the largest component of defense and space equipment, has risen for eight straight quarters at an average annual rate of about 12 percent.

Turning to upstream market groups, the output of construction supplies and durable materials—which comprise about 20 percent of total IP—each fell at least 0.3 percent in both February and March. Available weekly data indicate that the output of iron and steel products was unchanged in April, despite a run-up in the inventory-sales ratio at steel service centers. The production of business supplies and nondurable materials, on the other hand, has changed little in recent months.

### **Motor Vehicles**

Light vehicle sales increased in March to an annual rate of 16.1 million units, retracing February's weather-related decline. In addition, industry contacts indicate that a stepped-up level of incentives—which have risen to a record \$2,200—boosted the pace of vehicle sales further in April. At the same time, the Michigan Survey index of car-buying attitudes recovered in April, with many respondents reporting good buys and low financing rates.

In contrast, incoming data suggest that business demand for vehicles has softened. Fleet sales of light vehicles fell 5 percent (not at an annual rate) in March, their third consecutive monthly decline. The step down in sales likely reflected, in part, weak demand from rental car companies in response to bleak conditions in the travel industry. Sales of medium and heavy trucks also declined in March to their lowest level since May 1994. Moreover, orders for new trucks dropped in February and March, an indication that truck sales volumes may remain weak over the next few months.

Although total motor vehicle production fell sharply in February and March, production averaged a robust annual rate of 12.3 million units for the first quarter as a whole, about the same pace as in the fourth quarter of last year. With the level of production running ahead of domestic sales, domestic inventories of light vehicles increased noticeably in the first three months of the year, pushing days' supply for light motor vehicles above 73 in both February

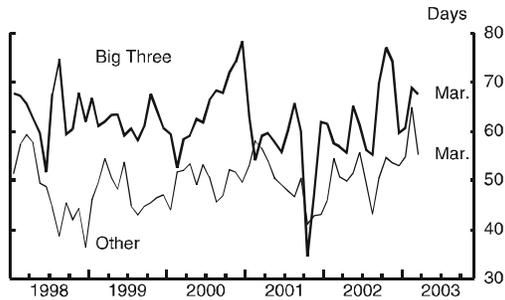
**Sales of Automobiles and Light Trucks**  
(Millions of units at an annual rate, FRB seasonals)

	2002	2002		2003	2003		
		Q3	Q4	Q1	Jan.	Feb.	Mar.
Total	16.7	17.6	16.5	15.8	16.1	15.3	16.1
Autos	8.1	8.5	7.9	7.7	8.1	7.3	7.7
Light trucks	8.6	9.1	8.6	8.1	8.0	8.0	8.3
North American <sup>1</sup>	13.5	14.3	13.3	12.5	12.8	12.1	12.5
Autos	5.9	6.2	5.7	5.5	5.9	5.2	5.5
Light trucks	7.6	8.1	7.6	6.9	6.9	6.9	7.0
Foreign-produced	3.3	3.4	3.2	3.4	3.3	3.2	3.5
Autos	2.2	2.3	2.2	2.2	2.2	2.1	2.2
Light trucks	1.1	1.1	1.1	1.2	1.1	1.1	1.3
Memo: Medium and heavy trucks	.40	.43	.41	.37	.37	.38	.36

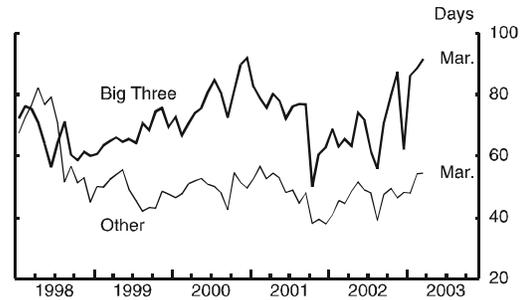
Note. Components may not sum to totals because of rounding. Data on sales of trucks and imported autos for the most recent month are preliminary and subject to revision.

1. Excludes some vehicles produced in Canada that are classified as imports by the industry.

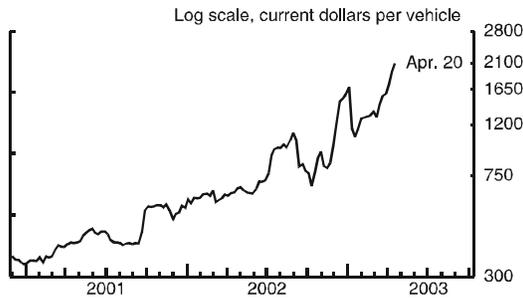
**Days' Supply of Autos**



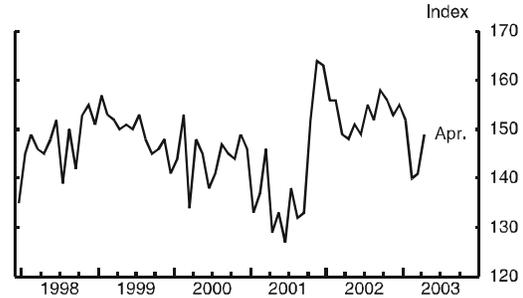
**Days' Supply of Light Trucks**



**Average Value of Incentives on Light Vehicles**



**Michigan Survey Index of Car-Buying Attitudes**



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

**Production of Domestic Autos and Trucks**

(Millions of units at an annual rate except as noted; FRB seasonal basis)

Item	2002		2003		2003			
	Q3	Q4	Q1	Q2 <sup>1</sup>	Jan.	Feb.	Mar.	Apr. <sup>1</sup>
U.S. production	13.0	12.4	12.3	11.6	12.9	12.3	11.9	11.6
Autos	5.2	4.9	4.7	4.5	5.2	4.5	4.4	4.4
Trucks	7.8	7.5	7.7	7.1	7.7	7.8	7.5	7.2
Total days' supply <sup>2</sup>	56.1	63.1	73.9	n.a.	67.6	74.0	73.4	n.a.
Inventories <sup>3</sup>	2.61	2.73	3.00	n.a.	2.81	2.91	3.00	n.a.

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

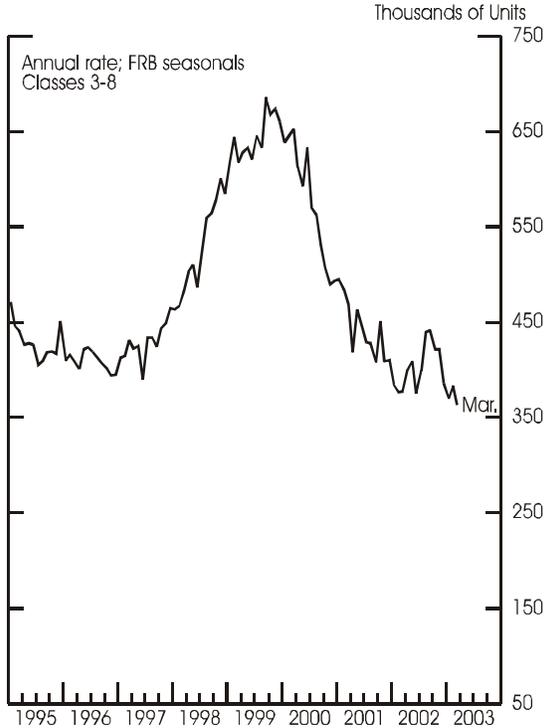
1. Production rates reflect Ward's Communications' latest schedules for Q2 and April.

2. Semiannual and quarterly figures calculated using end-of-period stocks and average reported sales.

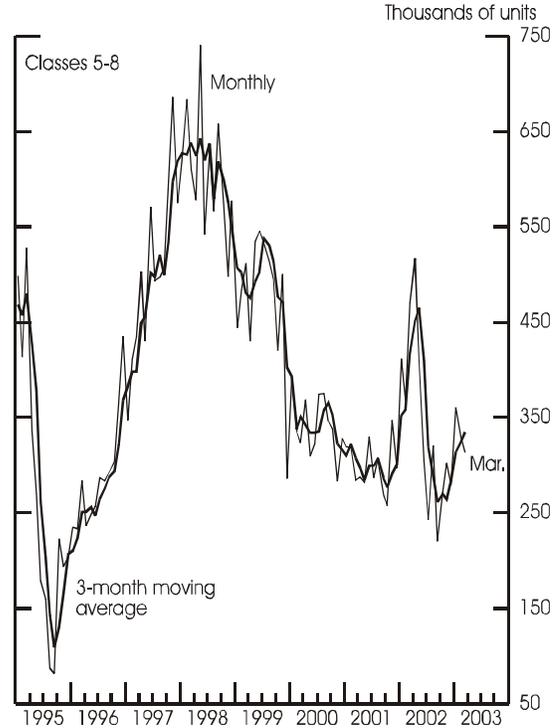
3. End-of-period stocks; excludes medium and heavy trucks (classes 3-8).

n.a. Not available.

**Sales of Medium and Heavy Trucks**



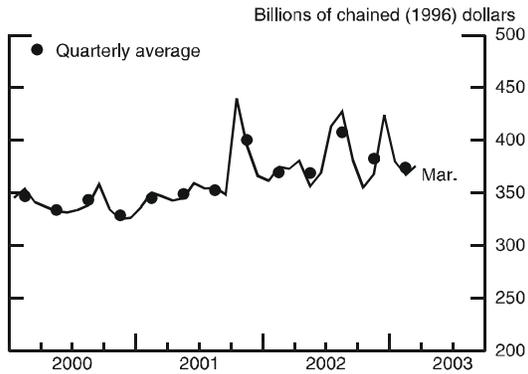
**Net New Orders of Trucks**



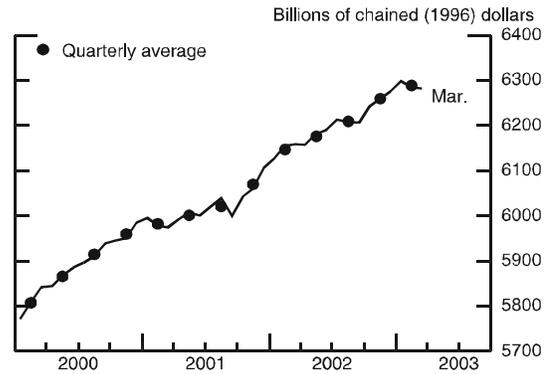
**Real Personal Consumption Expenditures**  
(Percent change from the preceding period)

Expenditure	2002			2003			
	H1	Q3	Q4	Q1	Jan.	Feb.	Mar.
	Annual rate			Monthly rate			
Total real PCE	2.4	4.2	1.7	1.4	-.3	-.4	.1
Durable goods	-2.3	22.8	-8.2	-1.1	-4.7	-1.5	1.6
Motor vehicles	-15.0	48.8	-22.2	-8.6	-10.6	-3.1	2.4
Excluding motor vehicles	9.0	6.0	4.4	4.9	.2	-.3	1.1
Nondurable goods	3.8	1.0	5.1	4.2	.9	-.7	-.2
Energy	4.1	2.7	3.6	-.6	.1	-2.1	-.3
Other	3.8	.9	5.2	4.7	1.0	-.5	-.2
Services	2.8	2.3	2.2	.5	.1	.0	-.1
Energy	5.3	6.3	22.8	-5.8	3.3	.5	-6.0
Transportation	1.4	-.8	.5	.4	-.2	-.2	-.3
Other	2.8	2.3	1.6	.8	.0	.0	.2
Memo: Real disposable personal income	5.9	1.8	2.4	1.1	.2	-.3	.0

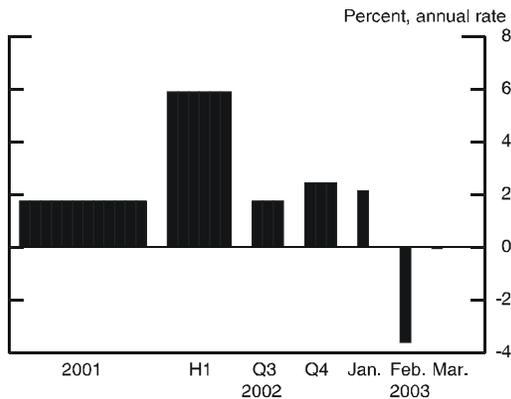
PCE Motor Vehicles



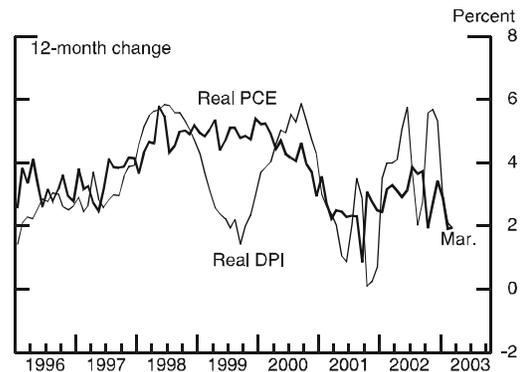
PCE Ex. Motor Vehicles



Change in Real DPI



Real Consumer Spending and Income



and March; meanwhile days' supply of medium and heavy trucks has also moved up to an uncomfortably high level. Reflecting their concerns about current inventory levels, vehicle manufacturers have lowered production schedules for the second quarter—through probably not by enough to resolve the present inventory situation by the end of the quarter.

### **Consumer Spending**

Real personal consumer expenditures increased a modest 1.4 percent (annual rate) in the first quarter, held down by a further decline in motor vehicle purchases and a drop in outlays for energy-related goods and services. Although the economic fundamentals underlying consumption were lackluster in the first quarter, recent rebounds in stock prices and consumer confidence, along with the sharp drop in energy prices currently in process, appear likely to support more sizable spending gains in coming months.

Real consumer outlays for durable goods excluding motor vehicles rose 1.1 percent in March after falling 0.3 percent in February. In contrast, outlays for nondurable goods declined in both months. Expenditures on energy services fell sharply in March, owing to unseasonably warm weather, while spending on non-energy services inched up, restrained somewhat by a drop in spending on airline transportation that may have been related to concerns about war and SARS. Although expenditures entered the second quarter on a weak trajectory, recent anecdotes from retailers, as well as weekly data on chain-store sales, suggest that spending at retail outlets likely rose at a moderate pace in April.

A weak labor market and rising energy prices damped the growth of real disposable income in the first quarter. In addition, household net worth appears to have changed little last quarter, and the wealth-to-income ratio edged down to its lowest level since the middle of 1995. Movements in stock prices and energy prices since late March should have a more favorable effect on consumer demand, although the weak labor market will likely continue to exert some restraint. The personal saving rate edged down to 3.7 percent in the first quarter but is still high relative to its average over the past several years, consistent with the erosion of household net worth during that period.<sup>6</sup>

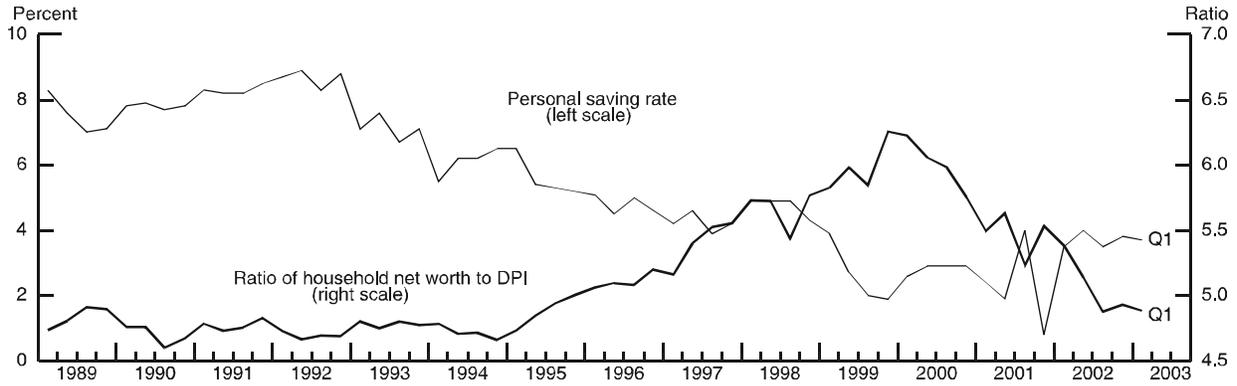
Both the Michigan Survey Research Center's index of consumer sentiment and the Conference Board's index of consumer confidence rebounded sharply in April after their declines in February and March. In both surveys, consumers'

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6. Relative to what was reported in the March Greenbook, the published saving rate has been revised down 0.3 to 0.4 percentage point over the past three quarters owing to the BEA's incorporation of wage and salary data from state unemployment insurance tax records for the third quarter of last year; these data were lower than assumed earlier.

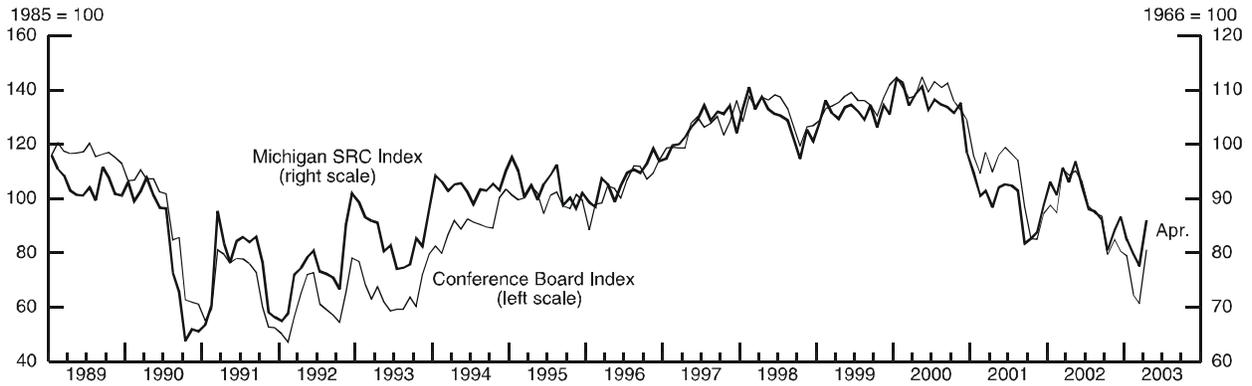
## Household Indicators

### Household Net Worth and Saving

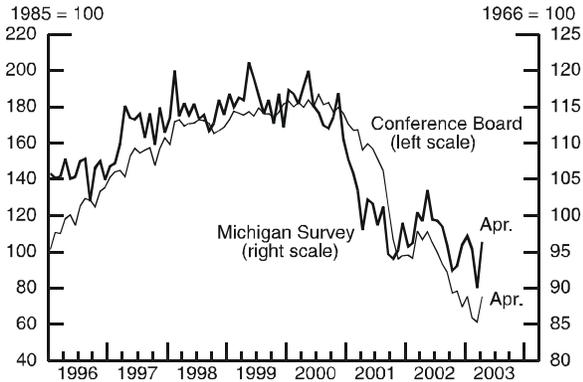


Note. The ratio of household net worth to DPI in 2003:Q1 is a staff estimate.

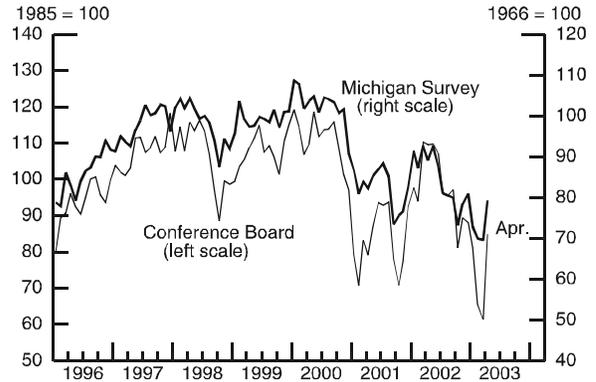
### Consumer Confidence



### Consumer Current Conditions



### Consumer Expectations



assessments of both current and expected conditions moved up. Both indexes are now broadly in line with recent economic fundamentals, suggesting that some of the non-economic factors that had been weighing on household sentiment may have subsided.

### **Housing Markets**

Although residential construction increased rapidly in the first quarter as mortgage rates dipped to new lows, there are some signs that a softening may be in train. In the single-family sector, unusually good weather in January and poor weather in February made for an erratic monthly pattern in starts, but for the quarter as a whole, new homes were started at an annual rate of 1.41 million units, equaling the fourth-quarter pace. However, new permit issuance—adjusted for activity in areas where permits are not required—fell to an annual rate of 1.37 million units in February and held at that lower level in March; this level of permits is consistent with somewhat fewer starts in coming months. In the multifamily sector, units were started at an annual rate of 340,000 in the first quarter, similar to the pace in the fourth quarter.

New home sales in the first quarter were below their fourth-quarter pace, strong sales in March notwithstanding. Existing home sales—adjusted by the staff to eliminate trading-day variation—were about unchanged in the first quarter from the fourth quarter's record high pace of about 5-3/4 million units (annual rate). All told, the BEA translated the available starts and sales data into a 12 percent increase in real spending in the first quarter. The latest data on home sales imply a small downward revision to this figure.

Other indicators of housing demand have been mixed. The Michigan Survey's measure of home-buying attitudes edged up in April but remains below its February level. The National Association of Homebuilders' index of builders' attitudes has turned down in recent months as well. However, the four-week moving average of the Mortgage Bankers Association index of purchase applications has moved up since late February and currently stands near its all-time high.

House prices decelerated in the first quarter. The quality-adjusted price of new homes sold last quarter was up about 2-1/2 percent from a year earlier, compared with a 6 percent gain during the comparable period four quarters earlier. The average price of existing homes sold was up 6-1/2 percent during the year ending last quarter, down from the 8-1/2 percent gain during the previous year but still a large increase; median prices followed a similar pattern.

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

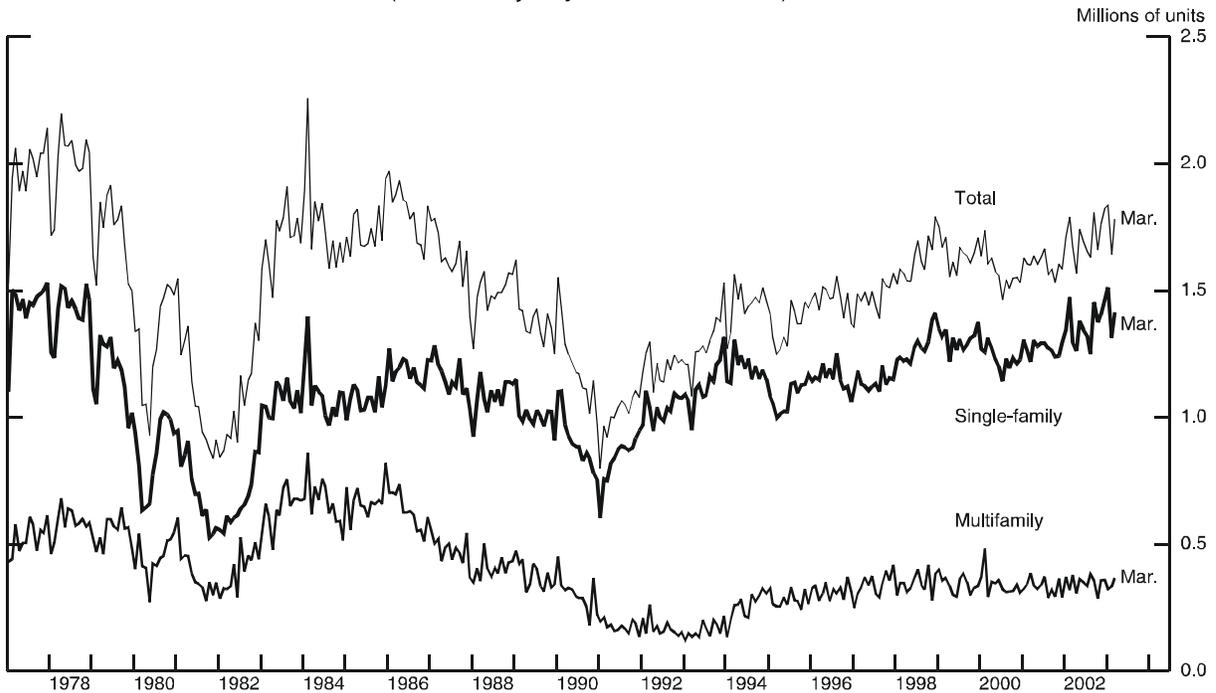
	2002			2003			
	2002	Q3	Q4	Q1 <sup>P</sup>	Jan. <sup>r</sup>	Feb. <sup>r</sup>	Mar. <sup>P</sup>
<i>All units</i>							
Starts	1.71	1.70	1.75	1.75	1.83	1.64	1.78
Permits	1.73	1.70	1.80	1.76	1.78	1.81	1.69
<i>Single-family units</i>							
Starts	1.36	1.34	1.41	1.41	1.51	1.31	1.41
Permits	1.32	1.31	1.38	1.35	1.41	1.32	1.31
Adjusted permits <sup>1</sup>	1.36	1.35	1.42	1.40	1.45	1.37	1.37
New home sales	0.97	1.02	1.03	0.98	0.98	0.94	1.01
Existing home sales s.a. by NAR	5.57	5.40	5.77	5.83	6.10	5.86	5.53
Existing home sales s.a. by FRB staff	5.57	5.43	5.75	5.74	5.74	5.76	5.72
<i>Multifamily units</i>							
Starts	0.35	0.36	0.33	0.34	0.32	0.33	0.37
Permits	0.41	0.40	0.42	0.41	0.37	0.49	0.38
<i>Mobile homes</i>							
Shipments	0.17	0.17	0.15	n.a.	0.14	0.13	n.a.

p Preliminary. r Revised. n.a. Not available.

1. Adjusted permits equals permit issuance plus total starts outside of permit-issuing areas.

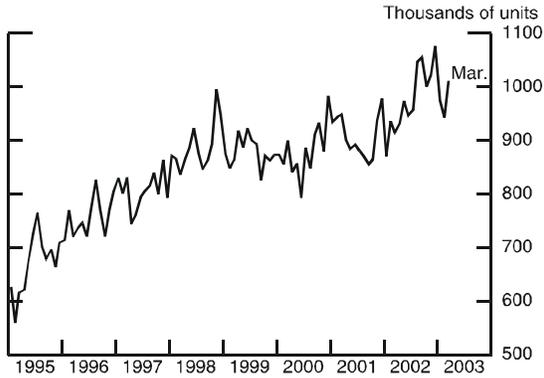
\* National Association of Realtors.

**Private Housing Starts**  
(Seasonally adjusted annual rate)



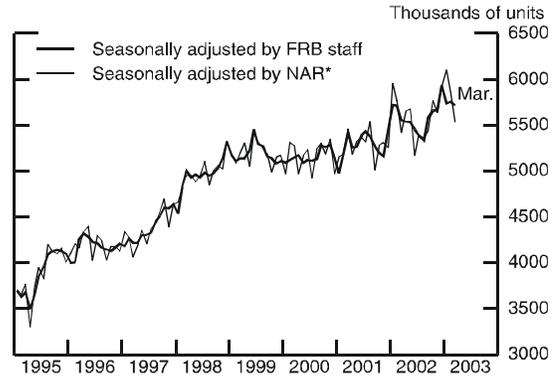
## Housing Indicators

New Home Sales



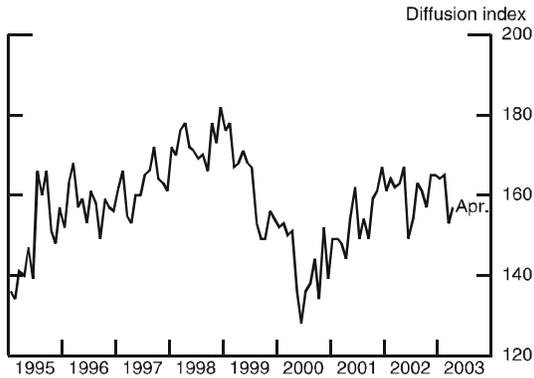
Source. Census Bureau.

Existing Home Sales



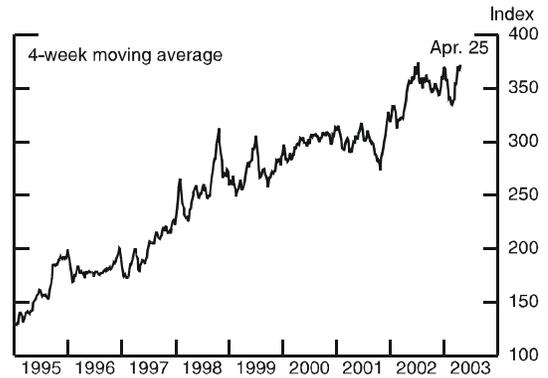
\*National Association of Realtors.

Perceived Homebuying Conditions

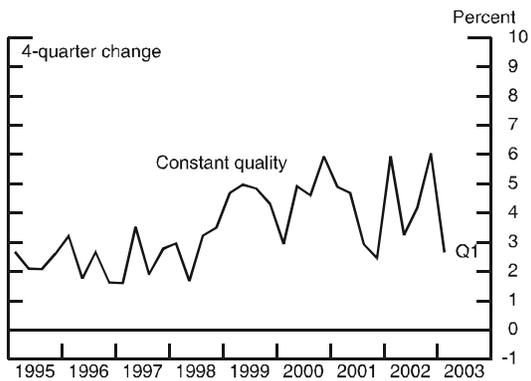


Source. Michigan Survey, not seasonally adjusted.

MBA Index of Purchase Applications

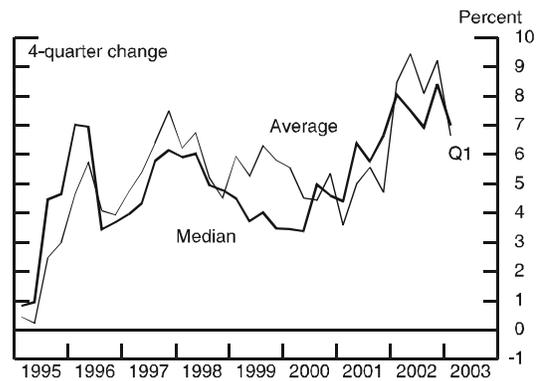


Prices of New Homes



Source. Census Bureau.

Prices of Existing Homes



Source. National Association of Realtors.

EQUIPMENT AND SOFTWARE EXPENDITURES  
(Percent change, annual rate)

	2002				2003
	Q1	Q2	Q3	Q4	Q1
Total E&S	-2.7	3.3	6.7	6.2	-4.4
High-tech E&S	6.0	11.6	15.0	1.5	10.7
Computer & peripherals	34.8	15.4	44.1	7.7	27.9
Software	-3.6	12.4	11.7	1.8	1.4
Communications	5.8	6.7	-0.6	-4.8	18.6
Transportation E&S	-32.5	-20.7	-4.3	31.9	-35.2
Motor vehicles	-30.2	21.8	26.0	7.6	-33.7
Aircraft	-39.3	-87.1	-87.1	539.2	-43.9
E&S excluding high-tech and transportation	5.1	6.6	3.8	2.1	-3.6

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

	2002	2003	2003		
	Q4	Q1	Jan.	Feb.	Mar.
	-Annual rate-		- - -Monthly rate - - -		
Shipments of nondefense capital goods	-7.2	-4.0	1.1	-1.4	1.2
Excluding aircraft	-6.4	-0.4	3.1	-3.5	1.5
Computers and peripherals	-8.6	9.9	19.7	-13.6	-4.3
Communications equipment	-12.6	25.2	8.3	-1.7	2.1
All other categories	-5.3	-4.8	-0.1	-1.8	2.4
Shipments of complete aircraft	-33.7	n.a.	-8.5	37.5	n.a.
Medium & heavy truck sales (units)	-15.7	-32.0	-3.5	2.2	-5.6
Orders for nondefense capital goods	-7.9	0.7	1.9	-5.0	1.8
Excluding aircraft	-1.4	12.8	5.2	-2.5	3.2
Computers and peripherals	5.4	-12.8	0.9	-12.7	1.3
Communications equipment	26.3	191.1	46.9	-0.1	0.6
All other categories	-5.0	4.4	1.8	-1.1	3.9

n.a. Not available.

**Business Fixed Investment**

**Equipment and software.** Real outlays on equipment and software fell at an annual rate of 4.4 percent in the first quarter of 2003, reversing much of the increase posted in the final quarter of 2002. A drop in business spending on motor vehicles and aircraft more than accounted for the first-quarter decline. Excluding transportation equipment, real spending advanced 3.0 percent last quarter, a moderate pickup from its pace in the fourth quarter. Although the fundamental drivers of investment—such as business output growth and real corporate cash flow—remain favorable, anecdotal reports from businesses continue to be downbeat.

In the high-tech area, real business purchases of computers and peripheral equipment surged at an annual rate of 27.9 percent in the first quarter, following a 7.7 percent gain in the fourth quarter. However, nominal shipments fell in both February and March, and orders have edged down on balance in recent months. Real outlays on communications equipment increased 18.6 percent in the first quarter after a poor showing in the second half of last year. Moreover, communications orders have trended upward over the past few months. In contrast to computers and communications spending, real purchases of software posted only a modest gain in the first quarter.

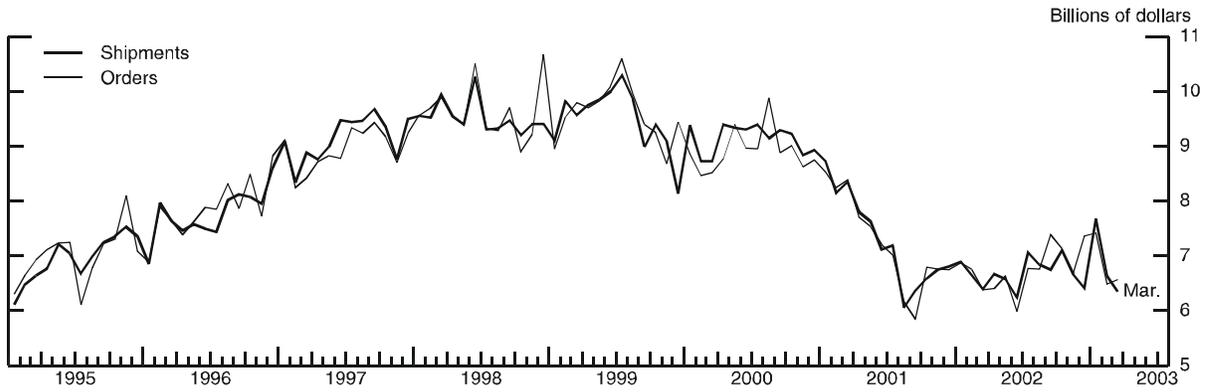
In the transportation category, business spending on motor vehicles dropped at an annual rate of 33.7 percent in the first quarter, largely reflecting the declines in fleet sales and truck sales reported above. Business investment in aircraft also decreased in the first quarter and is 50 percent below its level a year ago.

Real spending outside the high-tech and transportation categories dropped 3.6 percent at an annual rate in the first quarter, after a 2.1 percent rise in the preceding quarter. However, nominal shipments moved up in March, bucking the slide initiated in the middle of 2002. Orders also increased noticeably in March, with the 3.9 percent rise the largest since last summer.

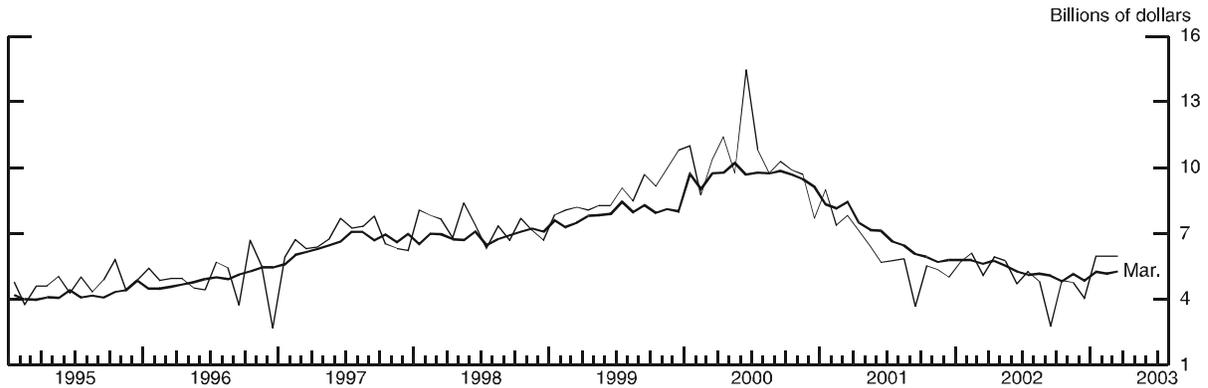
**Nonresidential construction.** The extended decline in real investment spending on nonresidential structures moderated further in the first quarter, with outlays falling at an annual rate of just 3.4 percent. Spending on office buildings was off roughly 30 percent (annual rate) in the first quarter and was down 50 percent from its peak at the end of 2000. The vacancy rate in this sector moved up again last quarter, though not by as much as it had a year earlier. Spending on industrial buildings decreased at an annual rate of about 3-1/4 percent in the first quarter after having dropped almost 40 percent over the four quarters of 2002; the extremely low level of capacity utilization in the manufacturing sector suggests that spending will likely fall still further.

### Recent Data on Orders and Shipments

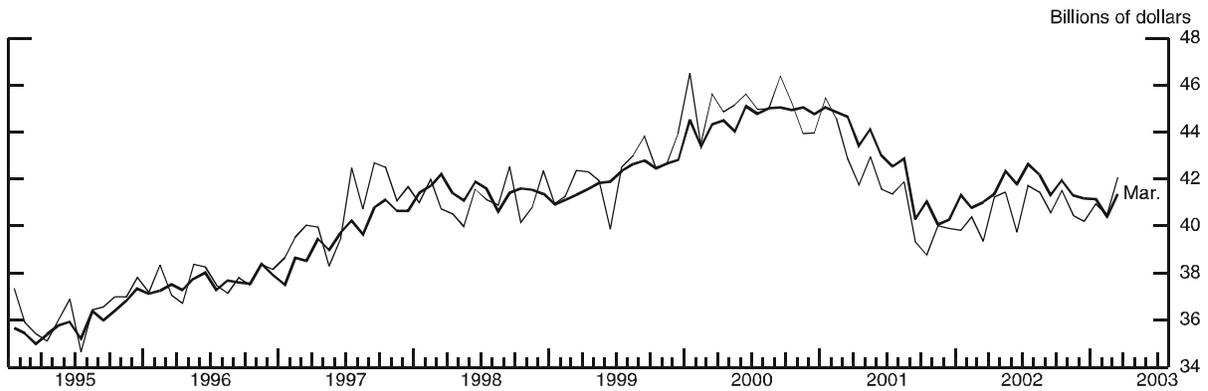
#### Computers and Peripherals



#### Communications Equipment

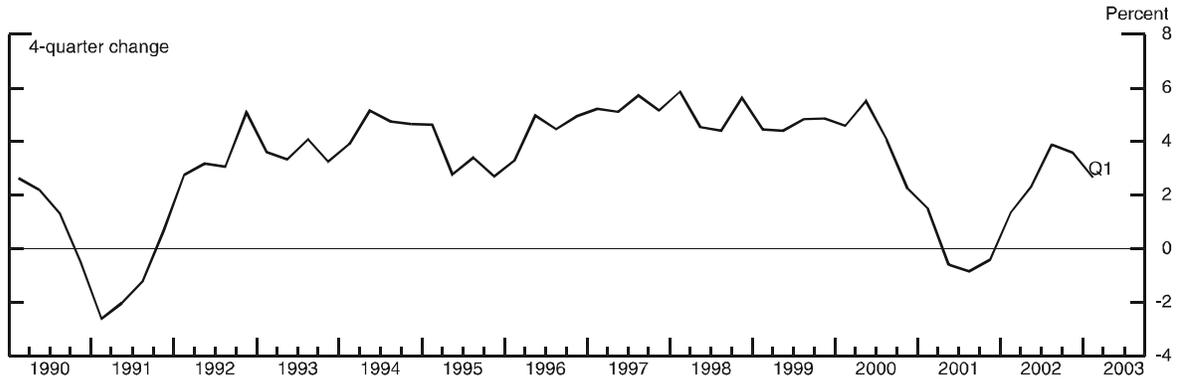


#### Other Equipment (Total Ex. Transportation, Computers, Communications)

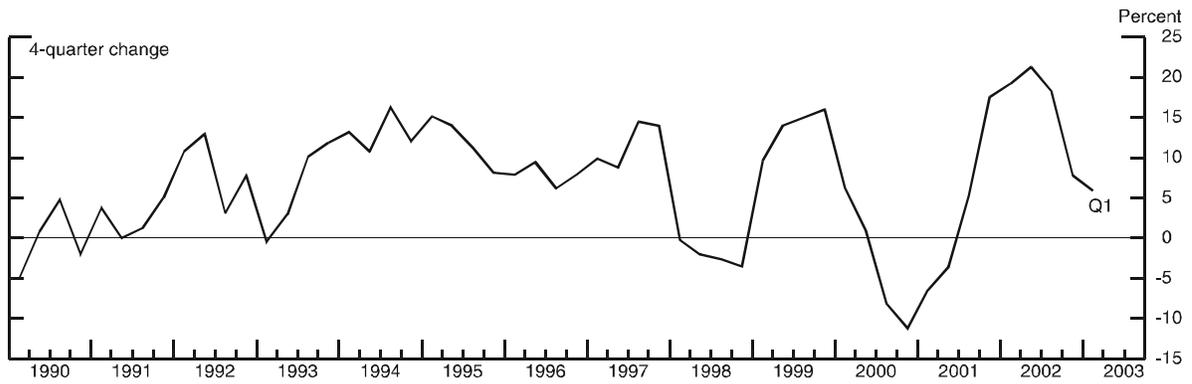


## Equipment and Software Investment Fundamentals

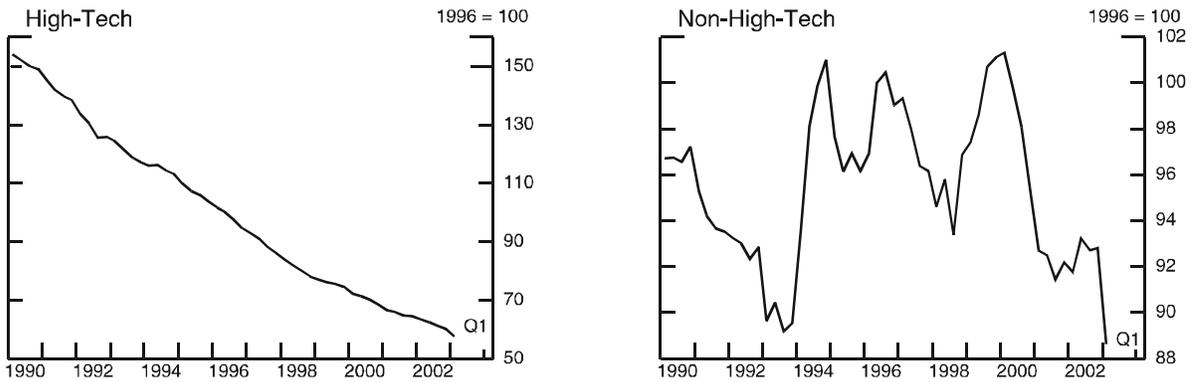
Business Output



Real Corporate Cash Flow



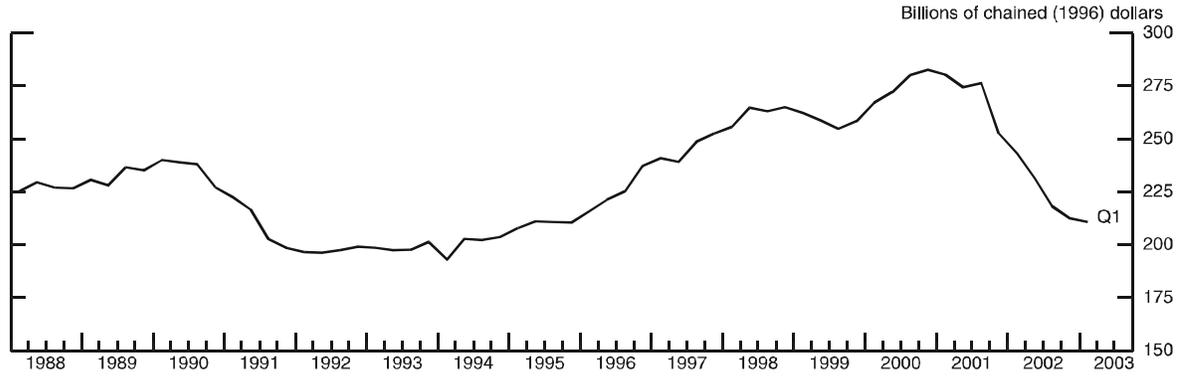
User Cost of Capital\*



\*Excludes the effects of the partial expensing tax incentive.

## Nonresidential Construction Total, Office, and Industrial

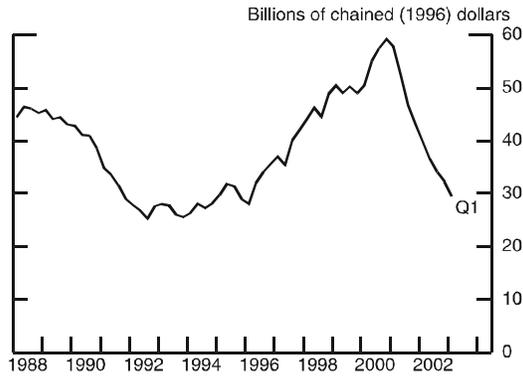
### Structures



Note. Seasonally adjusted, annual rate.

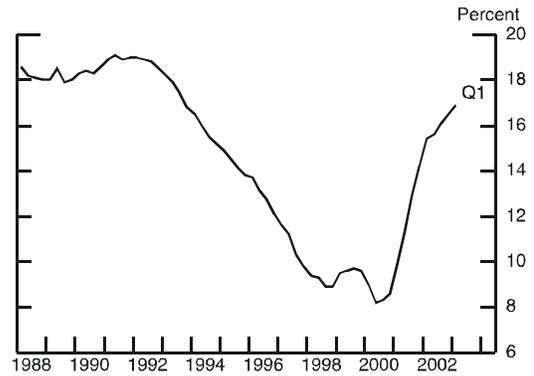
### Office

#### Expenditures



Note. Seasonally adjusted, annual rate.

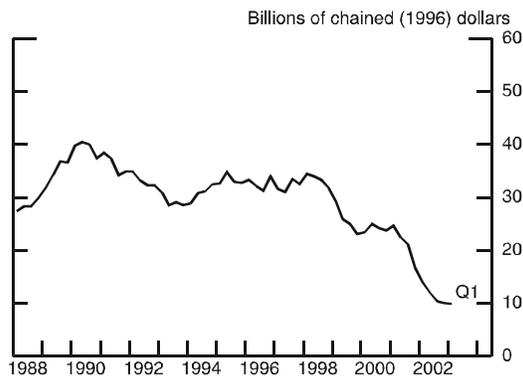
#### Vacancy Rate



Note. Seasonally adjusted.  
Source: Torto Wheaton Research.

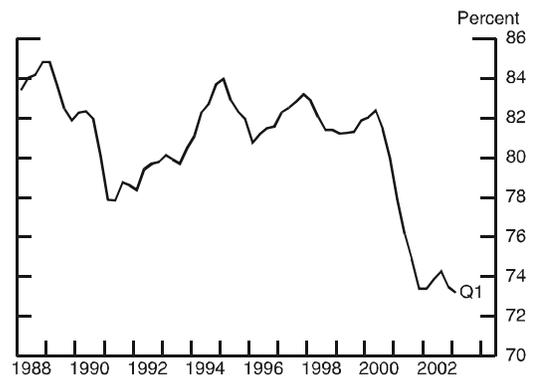
### Industrial

#### Expenditures



Note. Seasonally adjusted, annual rate.

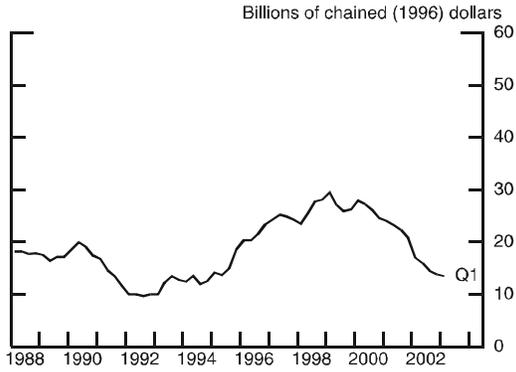
#### Manufacturing Capacity Utilization



Note. Seasonally adjusted.

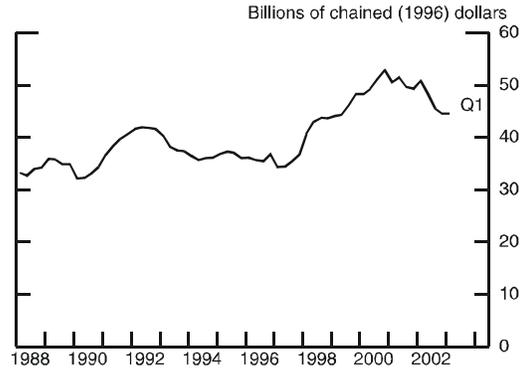
## Nonresidential Construction Other Categories

### Lodging and Miscellaneous Expenditures



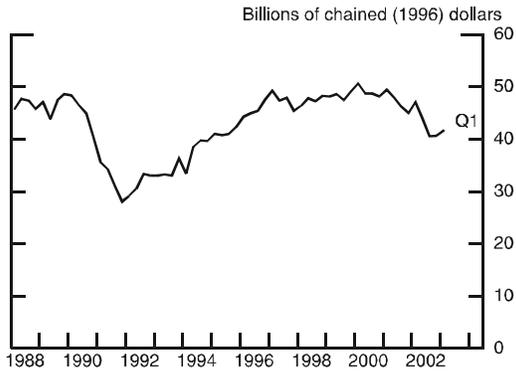
Note. Seasonally adjusted, annual rate.

### Public Utilities Expenditures



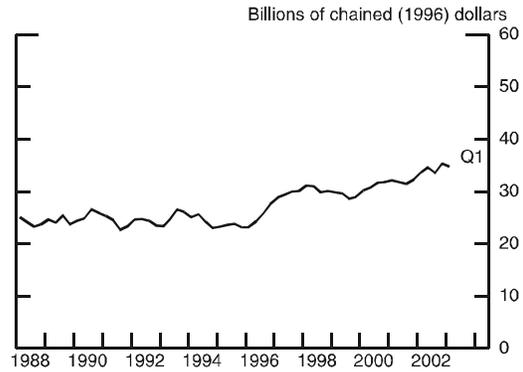
Note. Seasonally adjusted, annual rate.

### Other Commercial Expenditures



Note. Seasonally adjusted, annual rate.

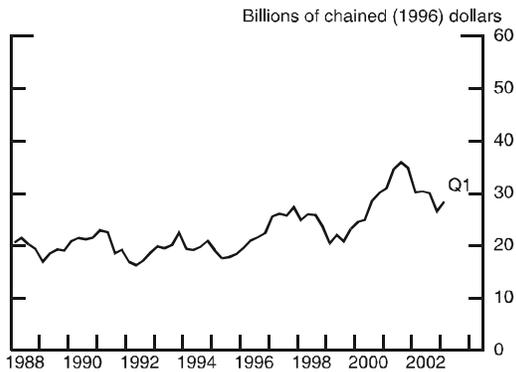
### Institutional Expenditures



Note. Seasonally adjusted, annual rate.

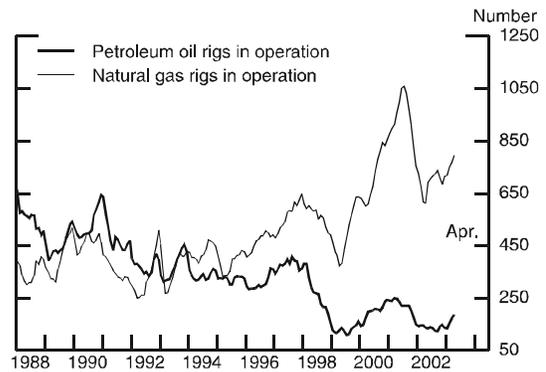
## Drilling and Mining

### Expenditures



Note. Seasonally adjusted, annual rate.

### Drilling Activity

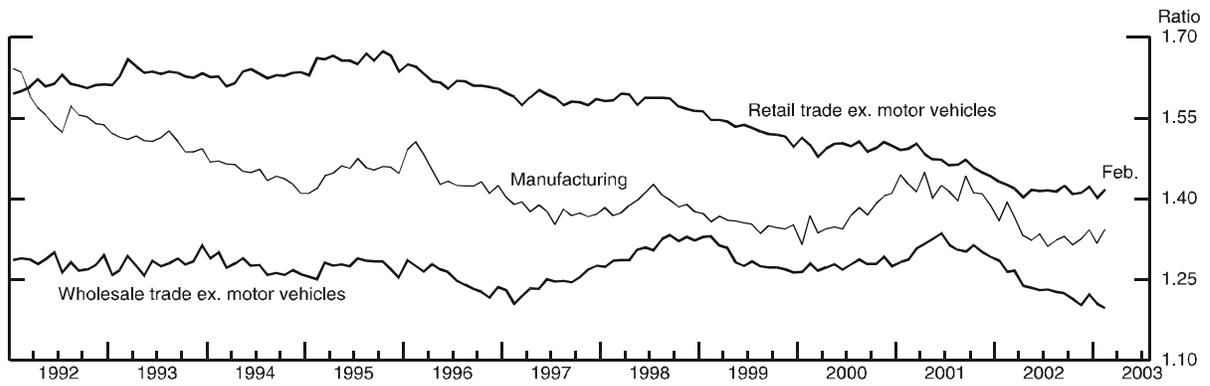


Note. April values are averages through April 25.  
Source. DOE/Baker Hughes.

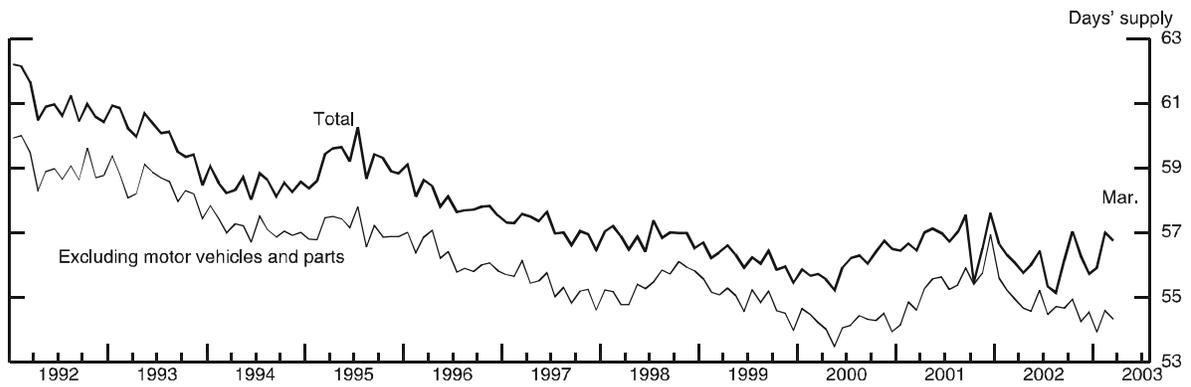
**Changes in Manufacturing and Trade Inventories**  
 (Billions of dollars, seasonally adjusted book value, annual rate)

Category	2002			2002	2003	
	Q2	Q3	Q4	Dec.	Jan.	Feb.
Manufacturing and trade	13.9	51.1	50.0	95.6	35.2	76.4
Less wholesale and retail motor vehicles	-10.0	28.4	22.2	93.5	3.4	42.5
Manufacturing	-12.8	4.6	6.3	32.8	4.3	19.8
Less aircraft	-10.7	10.2	4.4	20.2	1.5	26.3
Merchant wholesalers	-4.3	12.9	7.6	29.1	-1.7	10.1
Less motor vehicles	-6.3	10.7	4.2	31.9	0.7	6.4
Retail trade	31.0	33.7	36.2	33.7	32.5	46.5
Automotive dealers	22.0	20.6	24.4	4.8	34.1	30.2
Less automotive dealers	9.0	13.1	11.8	28.9	-1.6	16.4

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



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



Spending on lodging and miscellaneous buildings was down 10 percent in the first quarter, and spending in the public utility sector was unchanged.

A brighter picture is evident in some other categories of nonresidential construction. Spending on buildings in the other commercial sector, which includes buildings used for retail and wholesale trade, rose at an annual rate of almost 11 percent in the first quarter after having moved up a bit in the fourth. Institutional spending, which includes buildings used by private schools, hospitals, and religious groups, moved down 6-1/2 percent (annual rate) in the first quarter, but this decline followed an outsized gain of 24 percent in the fourth quarter.

In the drilling and mining sector, spending rose at an annual rate of about 32 percent in the first quarter after having fallen about 24 percent in 2002. Drilling activity increased further in April, suggesting that spending on oil and gas drilling structures entered the second quarter on solid footing.

### **Business Inventories**

Real nonfarm inventories excluding motor vehicles appear to have declined a little in the first quarter, after accumulating at an average \$14-1/2 billion rate in the previous two quarters. Including the change in motor vehicle stocks, the swing in inventory accumulation between the first and fourth quarters subtracted 1/2 percentage point from first-quarter GDP growth.<sup>7</sup> Relative to sales, non-auto inventory stocks in most sectors are fairly lean by recent standards.

In March, days' supply in the staff's flow-of-goods system—which measures inventories wherever held—retreated slightly from February's elevated level.<sup>8</sup> However, both the run-up and recent volatility in days' supply are attributable to

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7. The BEA's first-quarter estimate incorporates January and February book-value data for the manufacturing and trade sector, which showed an average accumulation excluding motor vehicles of \$23 billion (annual rate), as well as data on durable goods manufacturers' stocks in March. The discrepancy between the real and book-value changes in inventories is attributable primarily to the pass-through to various prices of the substantial increase in the cost of crude oil.

8. The FRB staff's flow-of-goods system measures changes in inventories by tracking the flow of goods in the economy. The system divides the output from the staff's industrial production indexes into more than sixty different product categories and, for each product category, estimates the supply of goods flowing into the economy—that is, domestic production plus imports—as well as how much of the supply flows out, whether as final demand, including exports, or as inputs for other goods. The difference between the amount flowing in and the amount flowing out represents the change in inventories (where accumulation occurs when inflows exceed outflows and liquidation occurs when outflows exceed inflows). The inventories are measured wherever held and valued at factory-gate prices. Each individual industry has a constant target month's supply level, so that long-run movements in aggregate inventory-consumption ratios primarily reflect shifts in industry composition.

**Federal Government Outlays and Receipts**  
(Unified basis; billions of dollars)

Function or source	January-March			12 months ending in March		
	2002	2003	Percent change	2002	2003	Percent change
<b>Outlays</b>	509.2	541.7	6.4	1,928.1	2,078.0	7.8
Financial transactions <sup>1</sup>	0.4	0.8	...	0.2	-1.9	...
Payment timing <sup>2</sup>	-11.4	-12.1	...	-10.7	-0.6	...
Adjusted outlays	520.1	553.0	6.3	1,938.6	2,080.4	7.3
<b>Receipts</b>	412.6	397.8	-3.6	1,948.2	1,799.8	-7.6
Payment timing <sup>3</sup>	13.0	0.0	...	0.0	0.0	...
Adjusted receipts	399.6	397.8	-0.5	1,948.2	1,799.8	-7.6
<b>Surplus/deficit(-)</b>	<b>-96.6</b>	<b>-143.9</b>	<b>...</b>	<b>20.2</b>	<b>-278.1</b>	<b>...</b>
Selected components of adjusted outlays and receipts						
<b>Adjusted outlays</b>	<b>520.1</b>	<b>553.0</b>	<b>6.3</b>	<b>1,938.6</b>	<b>2,080.4</b>	<b>7.3</b>
Net interest	43.9	40.2	-8.4	185.7	164.5	-11.4
Non-interest	476.2	512.8	7.7	1,752.9	1,915.9	9.3
National defense	86.8	94.6	9.0	324.7	369.3	13.7
Social security	114.1	117.5	2.9	445.5	465.5	4.5
Medicare	56.9	60.5	6.2	224.9	242.6	7.9
Medicaid	35.5	37.7	6.1	138.6	152.5	10.0
Income security	97.0	106.5	9.8	284.9	330.0	15.8
Agriculture	6.9	6.7	-2.0	29.7	22.2	-25.3
Other	79.0	89.3	13.1	304.7	333.9	9.6
<b>Adjusted receipts</b>	<b>399.6</b>	<b>397.8</b>	<b>-0.5</b>	<b>1,948.2</b>	<b>1,799.8</b>	<b>-7.6</b>
Individual income and payroll taxes	343.7	344.8	0.3	1,614.3	1,500.8	-7.0
Withheld + FICA	357.7	365.9	2.3	1,394.3	1,369.9	-1.8
Nonwithheld + SECA	63.8	57.5	-9.8	416.0	313.3	-24.7
Refunds (-)	77.8	78.7	1.1	195.9	182.4	-6.9
Corporate <sup>3</sup>	16.6	11.6	-30.4	149.4	114.3	-23.5
Gross	32.8	30.6	-6.5	194.4	184.4	-5.2
Refunds (-)	16.1	19.1	18.2	45.0	70.1	55.9
Other	39.3	41.4	5.3	184.5	184.7	0.1
<b>Adjusted surplus/deficit(-)</b>	<b>-120.5</b>	<b>-155.3</b>	<b>...</b>	<b>9.6</b>	<b>-280.6</b>	<b>...</b>

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.

stocks of motor vehicles and parts. Excluding motor vehicles and parts, days' supply has generally been trending down, and only a few imbalances are apparent at the industry level—the exceptions being textile mills and paper, where days' supply levels have risen notably in recent months, and communications equipment and electrical equipment, where days' supply remains elevated.

### **Government Sector**

**Federal sector.** On a rolling twelve-month basis, the federal unified budget deficit widened further to around \$280 billion for the twelve months ending in March. In addition, Congress passed the Supplemental Appropriations Act to Support Department of Defense Operations in Iraq for Fiscal Year 2003 and a budget resolution that allows for additional spending increases and tax cuts. The budget resolution projects a unified budget deficit of nearly \$400 billion in fiscal 2004.

Federal unified budget receipts edged down slightly in the first quarter relative to a year earlier as individual income and payroll taxes were about flat and corporate income taxes fell. Daily Treasury data through April 29 indicate that nonwithheld income tax payments in April are coming in lower than a year earlier, while IRS data show that refunds are running just a little higher than last year. These data, in conjunction with the available figures on withheld and estimated income tax collections, indicate that personal income tax liability fell substantially in calendar year 2002, despite a small increase in NIPA-based taxable income.<sup>9</sup> Net corporate income tax collections fell in the first quarter relative to a year earlier, likely reflecting the effects of partial expensing and other temporary corporate income tax provisions enacted in March 2002. According to daily Treasury data, corporate income tax payments in April (mostly estimated taxes on first-quarter earnings) were well above their previous (post tax-change) year's level.

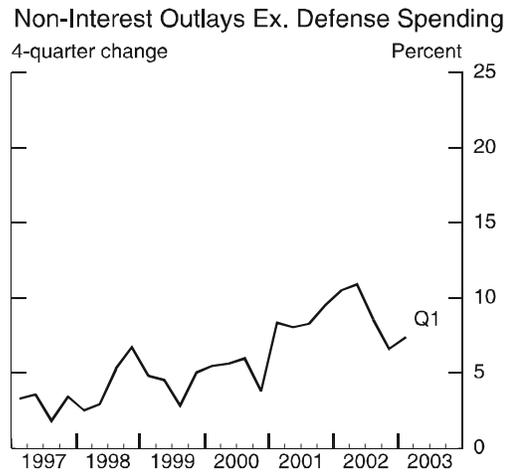
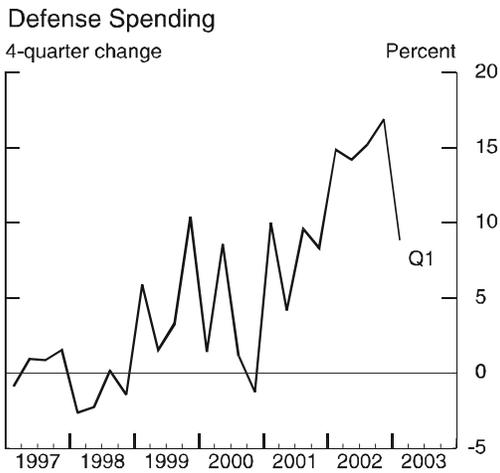
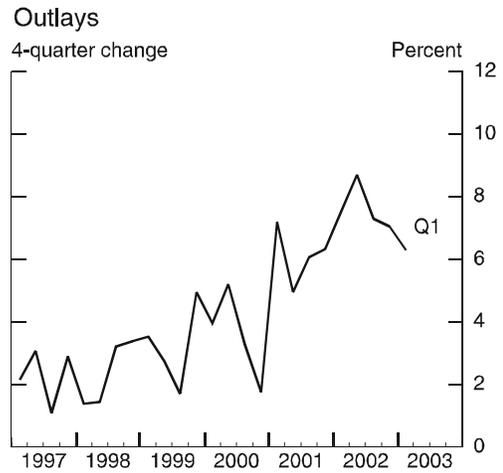
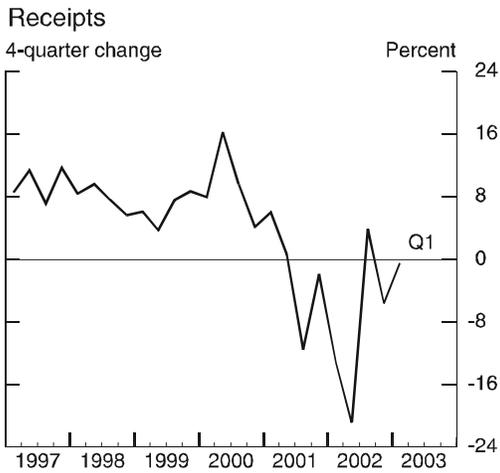
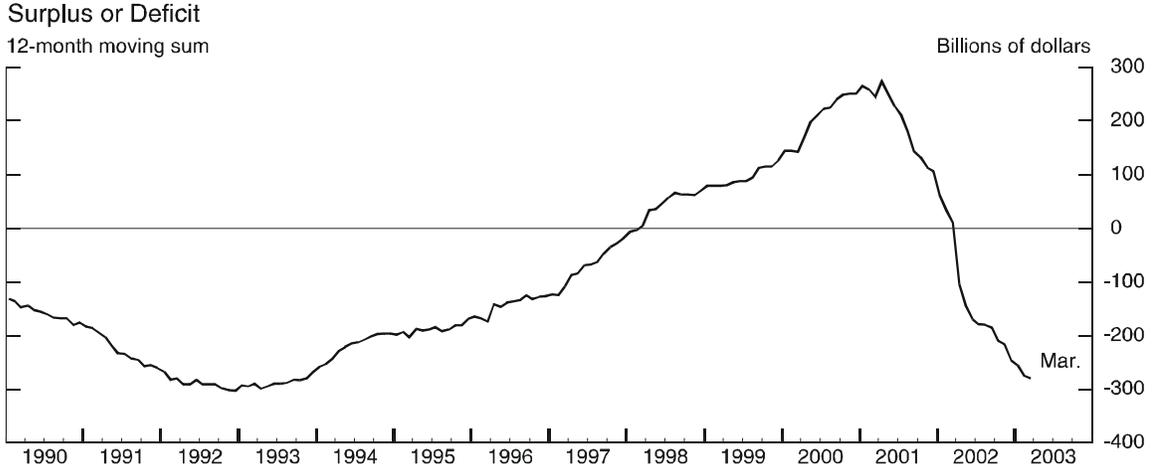
The Monthly Treasury Statement has shown a widespread slowing in the growth of nominal outlays in recent quarters, particularly in defense and the major entitlement programs. The BEA now estimates that real defense spending was virtually unchanged in the first quarter after having risen at an annual rate of 11 percent in the fourth quarter.

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9. We estimate that the effective tax rate, on a liability basis, fell from 11.9 percent in 2001 to 10.5 percent in 2002, with only 0.2 percentage point of the reduction due to changes in tax law. A portion of the remaining 1.2 percentage points may have resulted from another decline in capital gains realizations.

### Federal Sector Developments

(Unified budget, adjusted for payment timing shifts)



Congress enacted a \$79 billion supplemental appropriations bill for fiscal 2003 that included \$63 billion for the Department of Defense (DOD), \$8 billion in foreign aid and humanitarian assistance, \$4 billion for homeland security, and \$3 billion for assistance to the aviation industry (aid to airlines, airports, and aviation workers).<sup>10</sup> The Congressional Budget Office (CBO) has estimated that the supplemental bill will boost defense spending by \$34 billion and overall spending by \$42 billion in fiscal 2003, with the remainder spent in future years. Given the amount of defense spending that has occurred over the first six months of the fiscal year, the CBO estimates imply large increases during the second half of the fiscal year.

Congress also passed a budget resolution for fiscal 2004 that proposes to cut taxes by \$1.2 trillion over eleven years, boost Medicare spending by \$400 billion, adopt the Administration's discretionary spending totals for fiscal 2004, and balance the budget by 2012. In terms of taxes, the budget resolution assumes that a \$1.2 trillion tax cut will be enacted, but reconciliation instructions—which allow for expedited legislative procedures in the Senate—provide for considerably smaller amounts. The resolution stipulates that the House Ways and Means and Senate Finance committees shall report out of their committees by May 8 a reconciliation bill with a tax cut of up to \$550 billion over fiscal years 2003 to 2013, but that the reconciliation bill will be subject to a point of order in the Senate if the tax cut exceeds \$350 billion.<sup>11</sup>

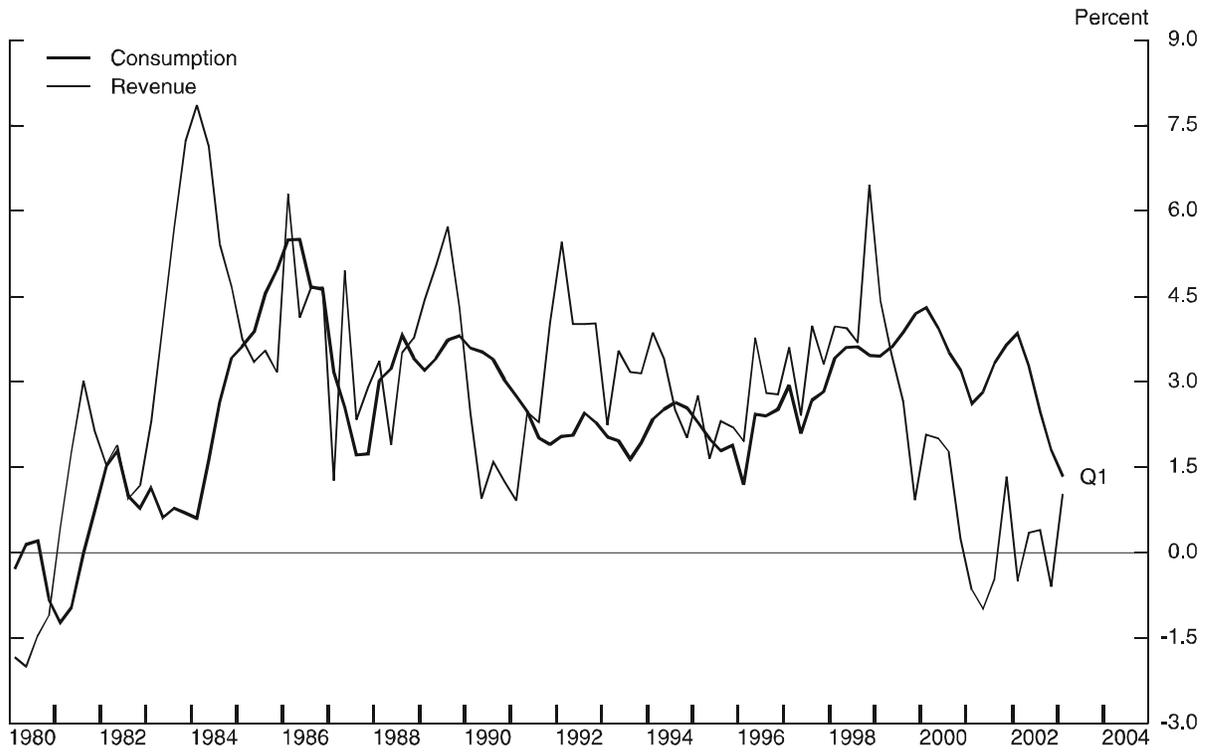
**State and local government sector.** Real purchases by state and local governments edged down in the first quarter. Real consumption expenditures increased at an annual rate of 0.6 percent, considerably below the 1.8 percent rise over the four quarters of last year. These outlays, which measure the sector's aggregate spending on current operations, have been decelerating since the second half of 2001. Real spending for gross investment fell at an annual rate of 2.7 percent in the first quarter, following a small increase last year. Meanwhile, on the revenue side, personal and indirect business tax collections—the major source of receipts for the sector—moved up in the first quarter after remaining largely unchanged over 2002.

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10. According to the President's submittal, the DOD money included \$58 billion for the war in Iraq (of which \$12 billion was for occupation costs through the end of this fiscal year) and \$5 billion for classified anti-terrorist activities, R&D programs, and other activities.

11. A tax cut above \$350 billion and below \$550 billion would need sixty votes in the Senate when the bill is initially considered, but, owing to some special language added to the resolution, the bill would need only fifty-one votes when the conference report is considered. However, in order to pass the budget resolution, some members of the Senate leadership agreed not to support a tax cut above \$350 billion in the conference report.

**State and Local Government Consumption Expenditures and Revenue**  
 (4-quarter change, 1996 dollars)



Note. Revenue includes indirect business and personal taxes, which make up 96% of own-source revenue. Data are deflated by the state and local consumption expenditure deflator.

With the end of the 2003 fiscal year now just two months away (the end of June for most governments), more than half the states are still working to close shortfalls in their general funds budgets. In the past few years, most budget-balancing strategies have centered on reductions in planned spending and increased borrowing, both from the market and from a variety of reserve funds. While legislatures are again likely to utilize these measures heavily, more governments are now also looking for ways to raise revenues. Roughly forty states and some large cities have either already increased or are considering raising taxes or fees. The mayor of New York City, for example, is pushing to reinstate a city commuter tax, which would raise \$1 billion in fiscal 2004.<sup>12</sup> Given the lateness in the year, many revenue actions will not take effect until fiscal 2004.

### **Prices**

A sharp run-up in energy prices in the first quarter pushed up overall consumer price inflation. Over the twelve months ending in March, the CPI rose 3 percent, up from about 1-1/2 percent during the comparable period one year earlier, while the PCE chain-type price index increased 2.4 percent, up from about 1 percent a year earlier. However, spot prices for crude oil have fallen by roughly one-fourth since the last Greenbook, and survey data through late April suggest that retail gasoline prices have already retraced part of their earlier jump.

Meanwhile, core inflation, which was already quite low, moved down further in the first quarter and—in light of the bias that is likely affecting the various published measures—is beginning to approach the upper bound of the range of values that could be viewed as consistent with zero actual inflation. The CPI excluding food and energy was about flat in March and increased just 1.7 percent from a year earlier, compared with an increase of 2.4 percent in the preceding year. The very low readings in recent months likely reflect some transitory factors.<sup>13</sup> However, the latest twelve-month change in the core CPI is only 3/4 percentage point above our point estimate of the bias in this measure and only about 1/4 percentage point above the upper bound of our range of bias estimates. Over the twelve months ending in March, core CPI commodity prices have fallen 1.4 percent, a slightly larger decline than in the previous year. Core services inflation came in at 3 percent over the year ending in March, down 0.9 percentage point from the year earlier period, largely reflecting smaller increases in residential rent.

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12. At 2.7 percent, this proposed commuter tax would be quite a bit larger than the 0.5 percent commuter tax that New York City abolished in the late 1990s.

13. In particular, the recent CPI estimates included unusually weak prices for erratic components like tobacco, lodging away from home, telephone services, and motor vehicles, and we would expect a portion of these declines to be reversed in the coming months.

RECENT PRICE INDICATORS  
(Percent)

	From 12 months earlier		From 3 months earlier		2003	
	Mar. 2002	Mar. 2003	Dec. 2002	Mar. 2003	Feb.	Mar.
			-Annual rate-		-Monthly rate-	
<u>CPI</u>						
Total	1.5	3.0	1.6	5.2	0.6	0.3
Food	2.6	1.4	2.1	2.7	0.7	0.2
Energy	-10.7	23.4	2.3	76.5	5.9	4.6
Ex. food and energy	2.4	1.7	1.5	0.8	0.1	0.0
Ex. tobacco	2.3	1.7	1.6	0.9	0.1	0.0
Core commodities	-1.1	-1.4	-2.5	-1.7	-0.1	-0.1
Core services	3.9	3.0	3.3	1.8	0.1	0.0
Current-methods total	1.4	3.0	1.6	5.2	0.6	0.3
Ex. food and energy	2.4	1.7	1.4	0.8	0.1	-0.0
Ex. tobacco	2.4	1.6	1.6	0.9	0.1	0.0
Chained CPI (NSA)	1.2	2.6	--	--	--	--
Ex. food and energy	1.8	1.2	--	--	--	--
<u>PCE Prices</u>						
Total	1.0	2.4	1.3	4.1	0.5	0.3
Food	2.6	1.4	2.0	2.0	0.5	0.2
Energy	-10.9	23.9	2.9	82.7	6.3	4.9
Ex. food and energy	1.5	1.5	1.1	1.0	0.1	0.1
Ex. tobacco	1.4	1.4	1.3	1.0	0.1	0.1
Core commodities	-1.4	-1.8	-3.1	-2.7	-0.2	-0.1
Core services	2.8	2.9	2.9	2.5	0.3	0.2
Core market-based	1.3	0.9	0.4	0.0	0.0	0.0
Core nonmarket-based	2.0	3.9	3.6	4.4	0.4	0.2
<u>PPI</u>						
Total finished goods	-1.6	4.2	1.2	17.4	1.0	1.5
Food	1.6	-0.6	5.0	9.2	0.6	0.1
Energy	-14.1	26.5	6.8	100.1	7.4	5.7
Ex. food and energy	0.4	0.9	-1.3	4.6	-0.5	0.7
Ex. tobacco	0.1	0.7	-1.4	4.9	-0.5	0.8
Core consumer goods	0.7	1.1	-0.8	4.4	-0.5	0.7
Capital equipment	-0.1	0.4	-1.7	4.7	-0.4	0.8
Intermediate materials	-3.5	8.0	1.9	23.8	2.1	2.0
Ex. food and energy	-1.8	2.6	1.2	5.1	0.7	0.2
Crude materials	-21.6	47.3	43.0	159.9	4.8	13.3
Ex. food and energy	-4.9	15.0	7.1	20.3	2.7	1.0

Core PCE prices rose 0.1 percent in March and 1.5 percent from a year earlier, the same pace as in the preceding year. The absence of any deceleration in the PCE measure of inflation mainly reflects a sharp pickup in the prices of PCE items for which no market-based prices exist.<sup>14</sup> The market-based component of the core PCE price index has decelerated 0.4 percentage point over the past year, to 0.9 percent. We estimate the bias in core PCE price inflation to be about 1/2 percentage point; because the PCE is a chain-weighted index, its estimated bias is slightly smaller than that of the CPI. The core portion of the chained CPI, which also uses a superlative aggregation formula intended to take into account substitution by consumers in response to changes in relative prices, rose 1.2 percent over the twelve months ending in March, a deceleration of 0.6 percentage point from the preceding year.

Consumer energy prices surged in March, but survey evidence indicates that the sharp drop in the spot price of West Texas intermediate crude oil after mid-March has caused gasoline and heating oil prices to turn down in April—the first step toward what will, in all likelihood, be a sustained downward move. Natural gas prices have held in a narrow range since mid-March, following the unwinding of February’s dramatic spike. Looking ahead, although inventories of crude oil and natural gas are currently quite low, futures prices suggest that traders are anticipating a recovery in supplies over coming months.

Consumer prices for food, as measured by the CPI, edged up 0.2 percent in March, following a larger February rise that reflected upward pressure on prices for livestock and some fats and oils. The CPI for food away from home, which accounts for roughly two-fifths of all food expenditures, came in at about the past year’s average monthly rate of 0.2 percent, after swinging widely in January and February. Over the twelve months ending in March, consumer prices for food increased 1.4 percent, a deceleration of about 1 percentage point from the previous year’s pace.

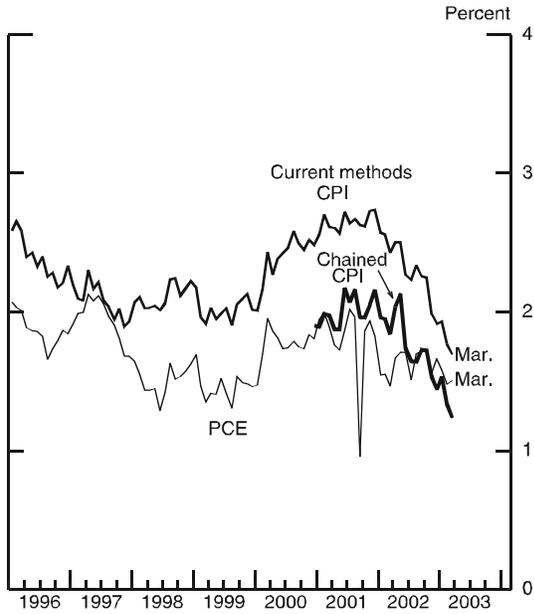
Prices for capital equipment, as measured in the producer price index, rose 0.8 percent in March, following a decline of 0.4 percent in February. These prices have fluctuated in recent months with the substantial movements in prices for cars and light trucks associated with incentives. For the twelve months ending in March, prices for capital equipment increased 0.4 percent, a pickup of 1/2 percentage point from the preceding twelve months.

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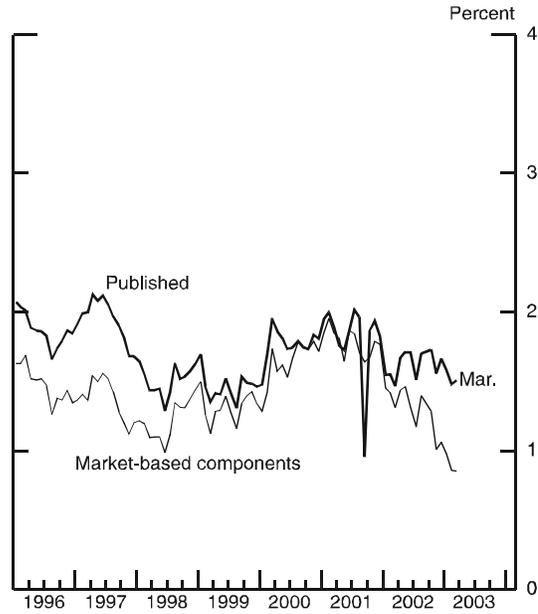
14. The nonmarket component of PCE prices increased 3.9 percent in the twelve months ending in March, up from 2.0 percent in the year-earlier period. Imputed service charges at financial institutions and prices for travel abroad accounted for much of this acceleration.

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

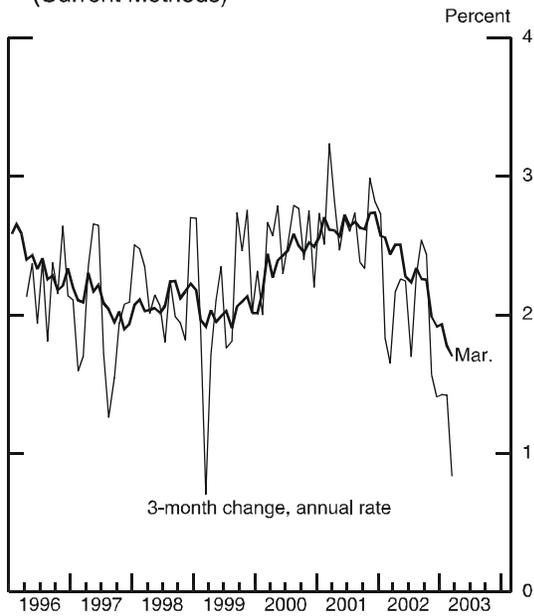
CPI and PCE excluding Food and Energy



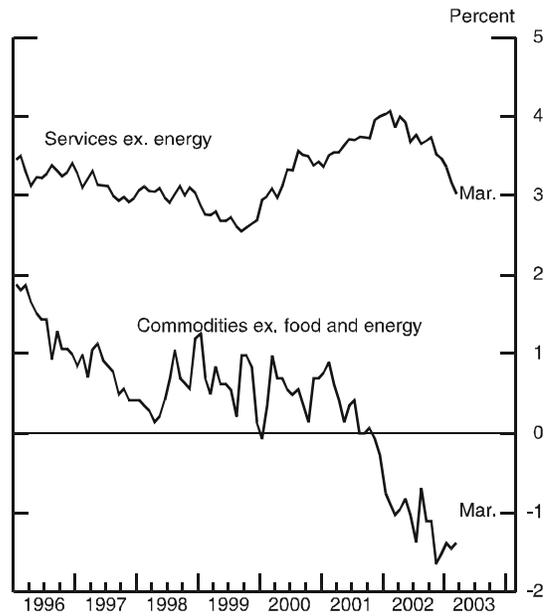
PCE excluding Food and Energy



CPI excluding Food and Energy  
(Current Methods)

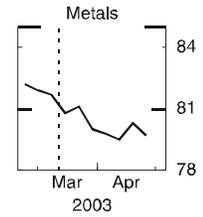
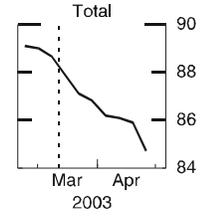
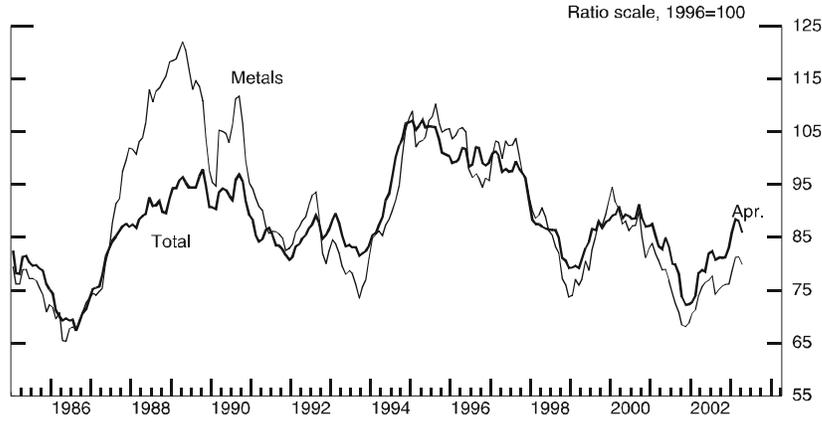


CPI Services and Commodities

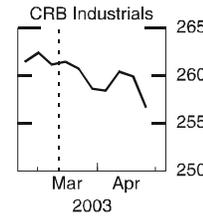
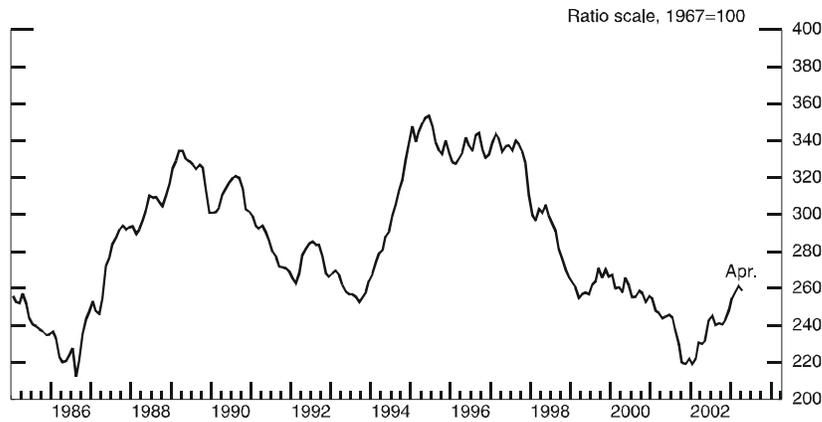


## Commodity Price Measures

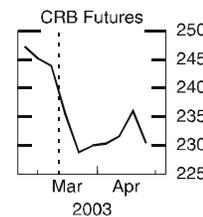
### Journal of Commerce Index



### 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 <sup>1</sup> -----				Memo: Year earlier to date
		2001	2002	Dec. 31 to Mar. 11 <sup>2</sup>	Mar. 11 <sup>2</sup> to Apr. 29	
<b>Metals</b>						
Copper (lb.)	0.750	-22.0	2.8	6.8	-3.8	-2.6
Steel scrap (ton)	119.667	-17.7	49.2	24.4	-0.8	28.9
Aluminum, London (lb.)	0.606	-14.3	0.7	4.8	-5.1	-2.8
<b>Precious metals</b>						
Gold (oz.)	331.400	1.2	24.7	1.1	-5.0	7.5
Silver (oz.)	4.590	-3.5	3.0	-2.0	-2.2	1.2
<b>Forest products<sup>3</sup></b>						
Lumber (m. bdf.)	234.000	25.0	-13.0	3.5	13.0	-11.0
Plywood (m. sqft.)	294.000	3.2	-0.3	1.7	0.0	-10.9
<b>Petroleum</b>						
Crude oil (barrel)	22.940	-16.3	65.8	5.7	-32.1	-14.9
Gasoline (gal.)	0.729	-28.0	54.6	22.2	-29.5	-3.0
Fuel oil (gal.)	0.789	-42.6	57.4	34.6	-32.2	15.0
<b>Livestock</b>						
Steers (cwt.)	77.000	-19.7	12.9	6.1	0.7	21.1
Hogs (cwt.)	42.000	-9.9	-18.9	23.3	13.5	42.4
Broilers (lb.)	0.549	3.7	7.4	-3.9	-4.4	10.9
<b>U.S. farm crops</b>						
Corn (bu.)	2.295	-4.1	19.2	1.5	-1.5	23.7
Wheat (bu.)	3.715	-8.9	30.4	-7.7	-3.1	18.9
Soybeans (bu.)	6.170	-13.4	35.6	0.6	9.4	35.9
Cotton (lb.)	0.509	-45.7	53.8	12.2	-5.1	71.8
<b>Other foodstuffs</b>						
Coffee (lb.)	0.493	-35.3	1.1	0.0	10.7	10.7
<b>Memo:</b>						
JOC Industrials	84.700	-17.1	16.2	5.7	-4.5	7.8
JOC Metals	79.700	-17.0	9.5	7.8	-2.4	4.2
CRB Futures	230.480	-16.3	23.0	4.0	-5.5	14.6
CRB Spot Industrials	256.610	-14.6	14.4	5.1	-1.7	12.6

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 March Greenbook.

3. Reflects prices on the Friday before the date indicated.

BROAD MEASURES OF INFLATION  
(4-quarter percent change)

	2000 Q1	2001 Q1	2002 Q1	2003 Q1
<u>Product prices</u>				
GDP chain price index	1.9	2.4	1.4	1.6
Less food and energy	1.9	2.1	1.5	1.5
Nonfarm business chain price index <sup>1</sup>	1.7	2.0	0.6	1.1
<u>Expenditure prices</u>				
Gross domestic purchases chain price index	2.5	2.4	0.8	2.2
Less food and energy	1.8	2.0	1.3	1.6
PCE chain price index	2.6	2.5	0.9	2.3
Less food and energy	1.7	1.9	1.5	1.5
PCE chain price index, market-based components	2.6	2.6	0.7	1.9
Less food and energy	1.5	1.9	1.4	0.9
CPI	3.3	3.4	1.2	2.9
Less food and energy	2.2	2.7	2.5	1.8
Chained CPI	n.a.	2.7	0.9	2.5
Less food and energy	n.a.	2.0	1.9	1.4
Median CPI	2.4	3.3	3.8	2.7
Trimmed mean CPI	2.2	2.8	2.3	2.2

1. Excluding housing.

SURVEYS OF (CPI) INFLATION EXPECTATIONS  
(Percent)

	Actual inflation <sup>1</sup>	University of Michigan				Professional forecasters (10-year) <sup>4</sup>
		1 year		5 to 10 years		
		Mean <sup>2</sup>	Median <sup>2</sup>	Mean <sup>3</sup>	Median <sup>3</sup>	
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	2.9	3.2	2.8	3.0	2.7	2.5
2002-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.	3.0	3.2	2.7	3.1	2.7	
Mar.	3.0	3.8	3.1	2.9	2.8	2.5
Apr.		2.7	2.4	3.1	2.7	

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

	2002				2003
	Mar.	June	Sept.	Dec.	Mar.
	-----Quarterly percent change----- (Compound annual rate)				
Total hourly compensation <sup>1</sup>	3.9	4.4	2.5	3.0	5.5
Wages and salaries	3.7	3.7	1.8	2.1	4.1
Benefit costs	4.4	5.3	4.3	5.0	10.0
By industry					
Construction	2.4	2.4	3.1	4.2	3.3
Manufacturing	3.9	3.9	3.3	4.3	7.4
Trans., comm., and public utilities	3.9	3.9	4.6	3.5	3.0
Wholesale trade	7.2	8.9	0.5	2.7	6.9
Retail trade	-1.3	5.3	1.6	1.5	-0.3
FIRE	10.0	5.2	1.7	1.2	20.9
Services	3.5	2.7	2.5	2.5	3.4
By occupation					
White collar	3.3	4.3	2.5	2.7	5.9
Blue collar	3.7	3.4	3.4	3.6	5.4
Service occupations	4.5	2.8	3.9	2.3	4.8
Memo:					
State and local governments	3.1	3.6	5.2	4.1	3.8
	-----Twelve-month percent change-----				
Total hourly compensation	3.9	4.0	3.7	3.2	3.8
Excluding sales workers	3.9	4.0	3.6	3.3	3.8
Wages and salaries	3.5	3.6	3.2	2.7	3.0
Excluding sales workers	3.6	3.5	3.2	2.7	2.9
Benefit costs	4.8	5.1	4.8	4.7	6.1
By industry					
Construction	4.0	3.3	3.0	3.2	3.2
Manufacturing	3.5	3.6	3.8	3.8	4.7
Trans., comm., and public utilities	4.5	4.3	4.8	4.0	3.8
Wholesale trade	4.4	5.4	4.6	4.5	4.7
Retail trade	3.2	3.9	3.4	1.7	2.0
FIRE	4.6	4.9	4.4	4.5	7.0
Services	3.9	3.7	3.1	2.7	2.8
By occupation					
White collar	4.0	4.1	3.7	3.2	3.8
Sales	3.5	4.6	4.3	3.3	3.7
Nonsales	4.0	3.9	3.6	3.1	3.9
Blue collar	3.6	3.9	3.5	3.6	4.0
Service occupations	4.3	4.0	4.2	3.2	3.4
Memo:					
State and local governments	3.9	3.6	3.8	4.1	4.2

1. Seasonally adjusted by the BLS.

Reflecting the jump in energy prices and rising import prices, prices at earlier stages of processing have been moving up significantly. The PPI for intermediate materials rose 2 percent in March and 8 percent over the past twelve months, after a decline of 3-1/2 percent over the preceding year. A smaller, but still pronounced, upswing is evident in the PPI for intermediate materials excluding food and energy, which includes energy-intensive items such as plastic, resins, nitrogenates, and industrial chemicals. The PPI for core crude materials has also risen sharply in recent months, with the March reading 15 percent above its level a year ago.

More recently, broad-based spot commodity indexes, which had also moved up considerably early in the year, have retreated somewhat. The Journal of Commerce industrial price index, which has a large energy component, rose almost 6 percent in the first couple of months of 2003, but in the last several weeks it has retraced about half of that bulge. Prices of industrial metals have also turned down of late, with the Journal of Commerce index of metal prices down about 2-1/2 percent since early March. In addition, the Commodity Research Bureau's index of futures prices, which is heavily weighted toward agricultural commodities, is down considerably since the last Greenbook.

Turning to broader measures of inflation, the chain-type price index for GDP rose 1.6 percent over the four quarters ending in 2003:Q1, up 0.2 percentage point from the previous year. Excluding food and energy, GDP price inflation was unchanged at 1.5 percent.

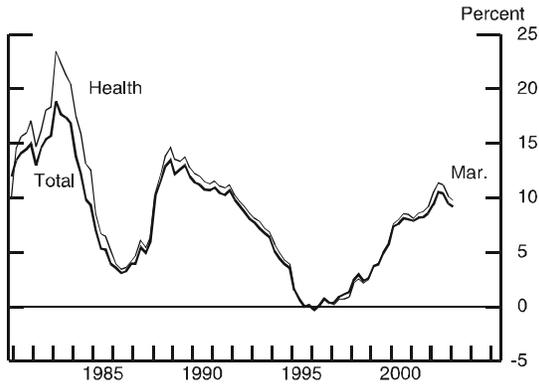
Near-term inflation expectations from the Michigan survey drifted above 3 percent in March, likely reflecting the run-up in energy prices. In April, however, the median expected inflation rate for the next year was back down to 2.4 percent, in line with readings from 2002. In contrast, longer-term inflation expectations have been unaffected by the energy price swings; the April reading on median expectations of inflation over the next five to ten years was 2.7 percent, little different from the typical reading over the past year.

### **Labor Costs**

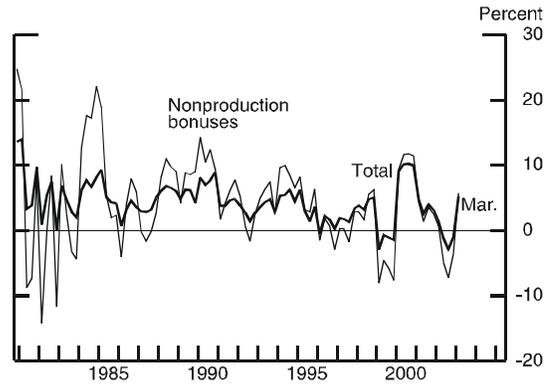
The employment cost index of hourly compensation for private industry workers increased at an annual rate of 5.5 percent over the three months ending in March, the largest quarterly increase in three years. The wages and salaries component rose 4.1 percent, while benefit costs moved up 10 percent. However, the first-quarter jump in compensation costs followed two quarters of much smaller increases, and over the twelve months ending in March, the overall ECI for compensation rose 3.8 percent, a shade less than the increase posted over the preceding year.

**Components of ECI Benefits Costs (CONFIDENTIAL)**  
(Private industry workers; 12-month change)

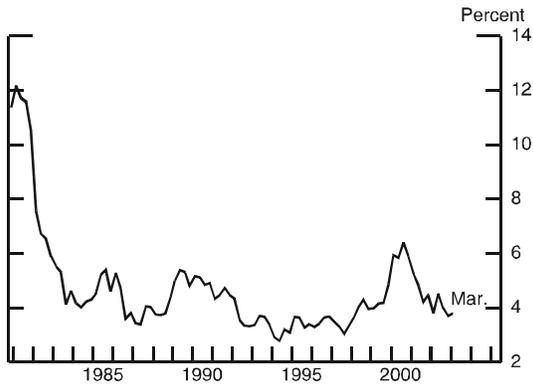
Insurance Costs



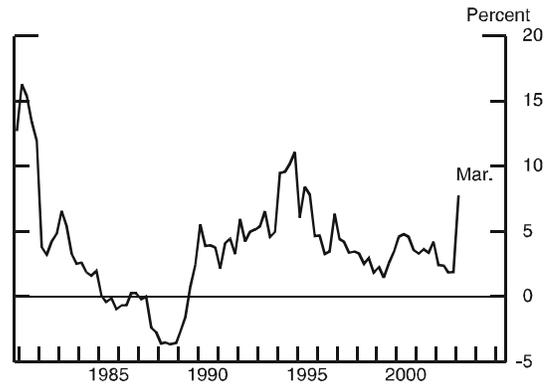
Supplemental Pay



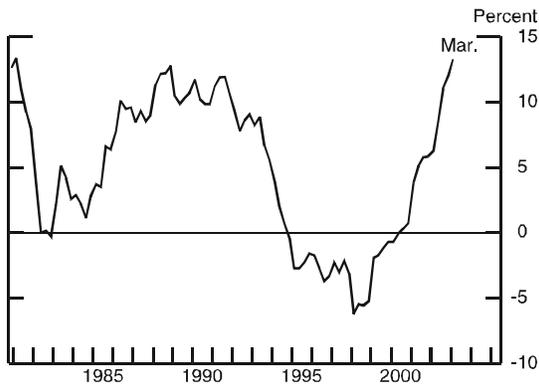
Paid Leave



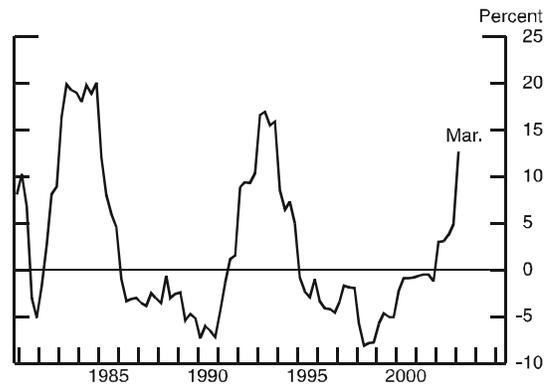
Retirement and Savings



Workers' Compensation Insurance



State Unemployment Insurance



LABOR COSTS

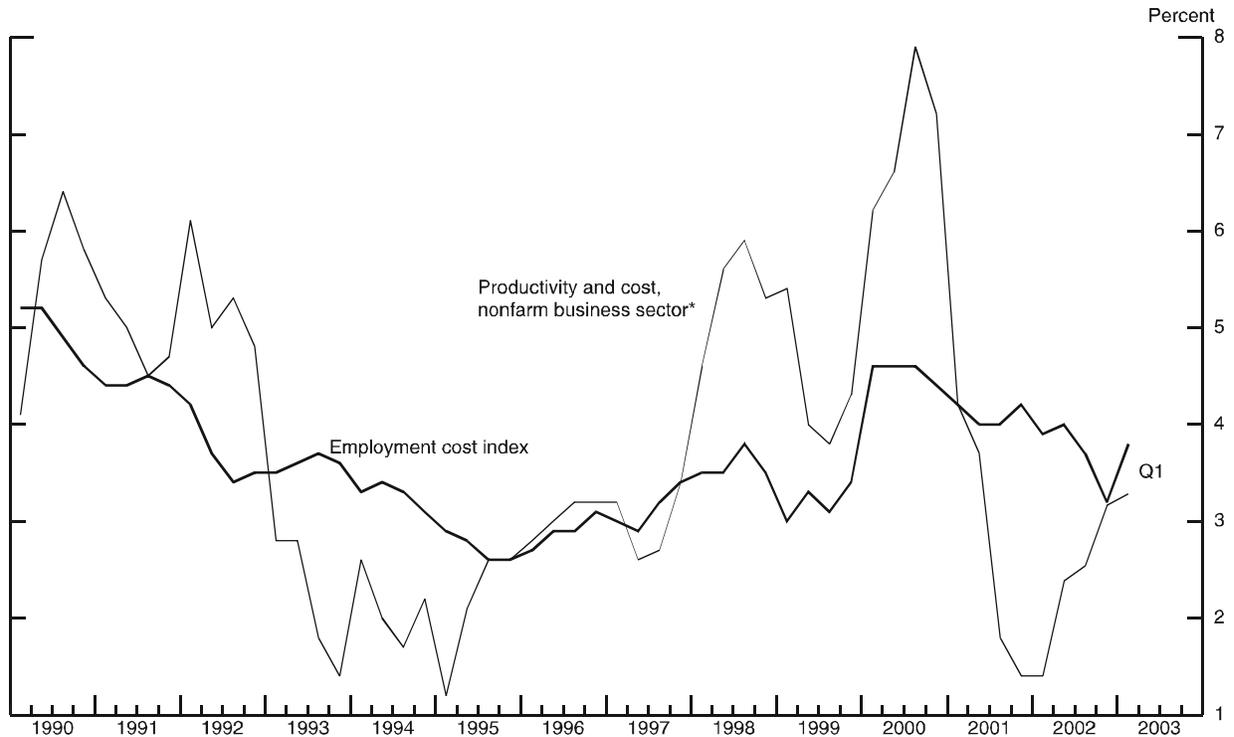
(Percent change, annual rate; based on seasonally adjusted data)

	2001 <sup>1</sup>	2002 <sup>1</sup>	2002			2003	2002:Q1 to
			Q2	Q3	Q4	Q1	2003:Q1
<b>Compensation per hour</b>							
Nonfarm business <sup>2</sup>	1.4	3.2	4.0	1.8	4.0	3.4	3.3
<b>Unit labor costs</b>							
Nonfarm business <sup>2</sup>	-0.5	-0.9	2.3	-3.5	3.2	2.0	1.0

1. Changes are from fourth quarter of preceding year to fourth quarter of year shown.

2. Figures for 2002:Q3 to 2003:Q1 are staff estimates.

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

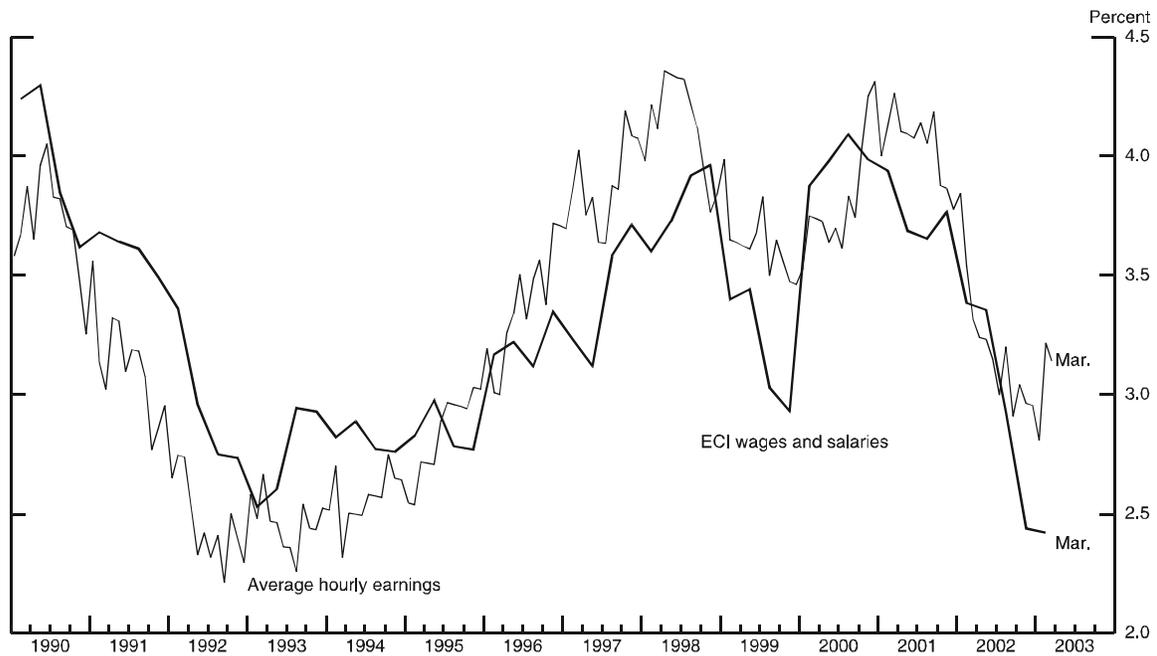


\* Note. NFB compensation per hour for 2002:Q3 to 2003:Q1 is staff estimate.

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

	12-month percent change			Percent change to Mar 2003 from month indicated		Percent change	
	Mar. 2001	Mar. 2002	Mar. 2003	Sept. 2002	Dec. 2002	Feb. 2003	Mar. 2003
	- - - - - Annual rate- - - - -					-Monthly rate-	
Total private nonfarm	4.3	3.3	3.1	3.4	3.2	0.6	0.1
Manufacturing	3.0	3.5	2.8	3.5	3.7	0.3	0.3
Construction	3.5	2.5	2.2	1.9	0.4	0.6	0.0
Transportation and public utilities	3.2	3.9	2.4	3.0	4.0	0.9	0.2
Finance, insurance, and real estate	4.7	3.1	4.1	3.3	1.7	0.1	0.1
Retail trade	3.9	2.5	2.6	2.2	1.2	0.7	-0.1
Wholesale trade	5.2	3.2	1.5	2.2	2.5	0.9	-0.2
Services	5.2	4.4	3.8	4.2	4.5	0.9	0.1

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



The wage and salaries component of the ECI rose 3 percent over the twelve months ending in March, about 1/2 percentage point less than over the preceding year. There was a sizable acceleration in the wages of workers in the financial industry, likely related, at least in part, to a surge in commissions associated with the spate of mortgage refinancings that has occurred in recent quarters. Many other industries saw a deceleration in wages over the past year, with the sizable increases in wage costs in the first quarter only partly offsetting unusually small increases late last year.

In contrast, benefit costs accelerated about 1-1/4 percentage points over the year ending in March, and the latest twelve-month change now stands above 6 percent.<sup>15</sup> Employers' health insurance costs rose nearly 10 percent, about the same pace as in the prior year; in addition, costs for workers' compensation, which generally follow health insurance costs with a lag, have accelerated noticeably. Among the other components of benefits, costs for state unemployment insurance have risen sharply as a result of higher employer premiums associated with increased unemployment claims. In addition, a significant increase in employer contributions to defined benefit retirement plans in response to declines in the market value of the assets held by these plans has pushed up this component of labor costs markedly. Nonproduction bonuses have also turned up in the last two quarters, after falling over much of 2002.

Four-quarter changes in compensation per hour in the nonfarm business sector, which ran well below the ECI for most of last year, appear to have come back roughly into line with the ECI measure late in 2002 and early this year. Official figures for the first quarter will be released on May 1, but we currently estimate that compensation per hour increased at an annual rate of 3.4 percent last quarter. The May 1 release will also incorporate revisions to compensation in the third and fourth quarters of last year, based on unemployment insurance tax records that are more comprehensive (but much less timely) than the average hourly earnings figures used by the BEA in forming its initial compensation estimates.<sup>16</sup> We currently estimate that the four-quarter change in compensation per hour through the first quarter of this year was about 3-1/4 percent.

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15. With the exception of health insurance, detail on benefit costs are unpublished and are provided by the BLS on a confidential basis.

16. The unemployment insurance data are more comprehensive than the average hourly earnings data because they cover a broader range of workers, they cover almost all nonfarm establishments, and they include alternative forms of compensation such as bonuses and stock options.

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## **Domestic Financial Developments**

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## Domestic Financial Developments

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### Overview

The progress in Iraq, in tandem with favorable earnings news, has contributed to a rise in stock prices and a further narrowing of corporate risk spreads since the March Greenbook. Easing of geopolitical tensions also seemed to push up Treasury yields as safe-haven demand diminished, but this effect was offset by incoming economic data that were somewhat weaker than investors had expected, and on balance, Treasury yields were little changed over the intermeeting period. Judging from futures quotes, investors have marked down the expected path of the federal funds rate from late 2003 forward.

Borrowing by nonfinancial firms remained tepid in March and April. In contrast, household debt growth, boosted by mortgage borrowing, again was brisk, and municipal borrowing remained strong. After reaching the statutory federal debt ceiling in February, the Treasury has continued to make room for scheduled debt auctions by using “extraordinary” measures, but these have had no discernible impact on Treasury markets.

### Policy Expectations and Interest Rates

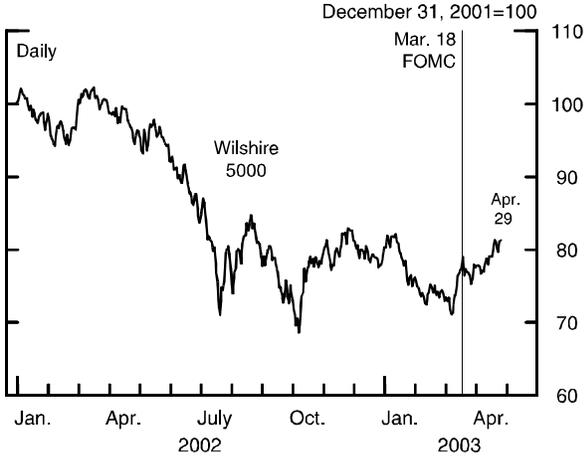
Investors had placed only modest odds on a policy easing at the March meeting, so there was muted market reaction to the FOMC’s decision to leave the target federal funds rate unchanged. During the intermeeting period, expectations for a near-term policy easing declined with the resolution of uncertainty about the conflict in Iraq. Based on federal funds futures quotes, market participants now place only about one-in-four odds on a 25-basis-point easing at the May meeting, but they have also marked down the funds rates they expect to prevail late this year and beyond, apparently in response to releases of weaker-than-anticipated economic data. The reduction in geopolitical risks is evident from measures of near-term policy uncertainty derived from options prices; these implied volatilities are now at the lower end of historical ranges.

Over the intermeeting period, yields on nominal Treasury coupon securities rose with coalition military advances but generally fell in response to macroeconomic data releases. On balance, yields on two-year notes fell 2 basis points, while those on ten-year notes and thirty-year bonds rose 9 and 4 basis points, respectively.

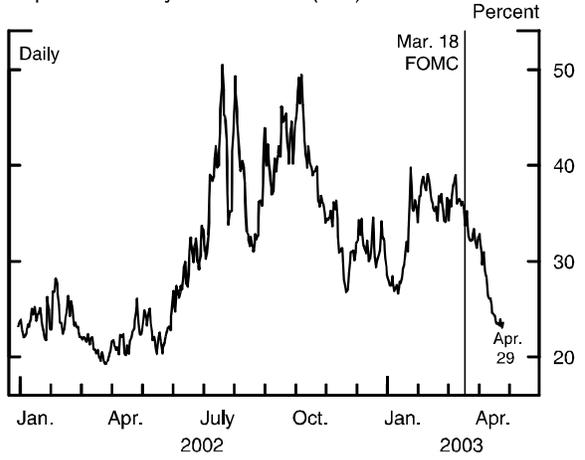
Market-based inflation expectations fell a bit, perhaps in response to declines in oil prices. Yields on five- and ten-year TIPS increased a little more than yields on comparable nominal Treasury securities, implying a decrease in inflation compensation. At the same time, median long-term inflation expectations in the Michigan survey were, on net, unchanged in the past two months.

**Stock Prices and Corporate Risk Spreads**

Stock Prices



Implied Volatility on S&P 100 (VIX)

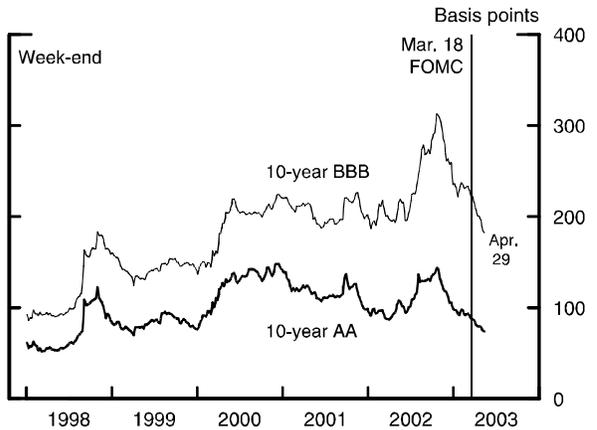


12-Month Forward Earnings-Price Ratio for S&P 500 and 10-Year Treasury

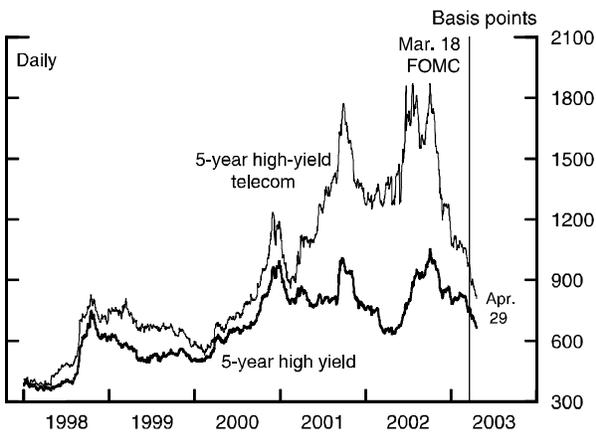


\* 10-year Treasury yield minus Philadelphia Fed 10-year expected inflation.

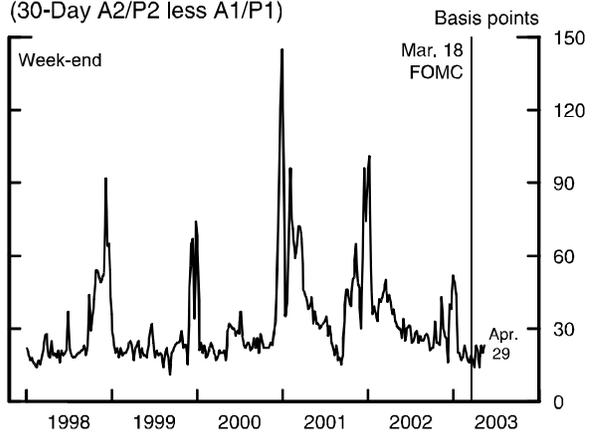
Investment-Grade Spreads to 10-Year Treasury



High-Yield Spreads to 5-Year Treasury



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



**Stock Prices and Corporate Interest Rates**

The success of coalition forces in Iraq, along with earnings reports that mostly exceeded—some by wide margins—modest expectations, left broad equity price indexes up 6-1/2 percent, on net, over the intermeeting period. These gains came on the heels of a sharp rise in stock prices as the commencement of the war approached (just prior to the March FOMC meeting), and broad equity indexes are now 14 percent above their levels at the close of the March Greenbook. Share-price gains over the intermeeting period were fairly widespread across sectors, though financial companies outperformed other industry groups. The unwinding of war-related uncertainty and positive earnings news evidently drove down near-term expected stock-price volatility. A measure of the equity premium—the spread between the twelve-month forward earnings-price ratio and the real ten-year Treasury yield—narrowed a bit in April but remains quite high.

Yield spreads on investment-grade bonds narrowed moderately over the intermeeting period. Spreads on speculative-grade bonds plunged more than 100 basis points, bringing the cumulative drop since last fall to about 400 basis points. Large inflows to junk bond mutual funds in the past two months indicate a renewed appetite for these assets. Despite the declines in investment- and speculative-grade yields, corporate risk spreads remain somewhat elevated.

Risk spreads on commercial paper remained low over the intermeeting period, as firms continued to improve their balance-sheet liquidity by substituting bonds for commercial paper. The spread of yields on thirty-day A2/P2 paper over those for A1/P1 issues averaged about 20 basis points, near the bottom of the range observed over the past several years.

**Business Finance**

Gross bond issuance by nonfinancial corporations was solid in March and April, as low rates continued to attract firms to the market. Speculative-grade issuance was considerable in both months. Still, net debt financing has been weak over this period, with corporate bond retirements and net paydowns of commercial paper and C&I loans almost completely offsetting gross bond issuance. The April Senior Loan Officer survey indicated that once again, demand for C&I loans slackened in the most recent three months. Meanwhile, there was a noticeable decline in the fraction of domestic banks reporting tightened lending standards and terms.

Gross public equity issuance by nonfinancial corporations weakened further in March and April from its already anemic pace, and there still have not been any nonfinancial IPOs this year. Proceeds from seasoned equity offerings, about half of which continue to be made by energy companies, in many cases have been

**Business Finance**

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

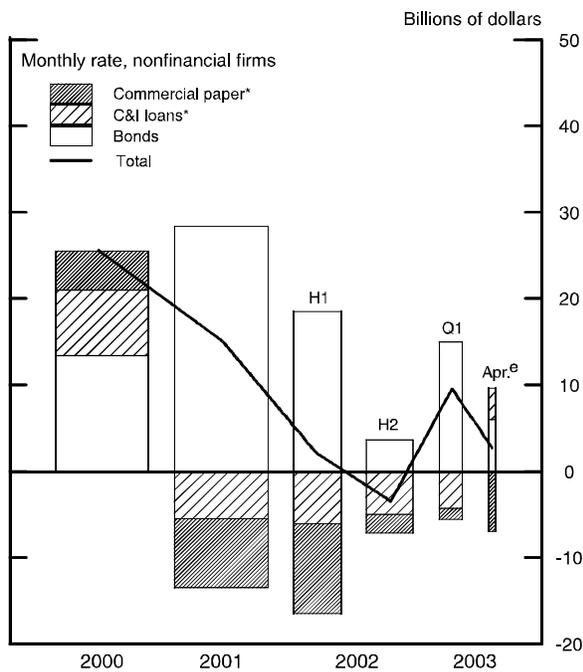
(Billions of dollars; monthly rates, not seasonally adjusted)

Type of security	2000	2001	2002		2003		
			H1	H2	Q1	Mar.	Apr. <sup>e</sup>
<i>Nonfinancial corporations</i>							
Stocks <sup>1</sup>	9.9	6.5	7.4	2.9	2.5	1.0	1.2
Initial public offerings	4.4	2.1	1.2	0.3	0.0	0.0	0.0
Seasoned offerings	5.5	4.4	6.3	2.6	2.5	1.0	1.2
Bonds	22.6	39.1	31.4	18.0	29.2	27.5	22.0
Investment grade <sup>2</sup>	13.2	27.5	19.8	11.6	18.9	18.5	12.0
Speculative grade <sup>2</sup>	4.7	8.9	6.4	3.3	6.8	7.8	10.0
Other (sold abroad/unrated)	4.8	2.7	5.3	3.1	3.6	1.3	0.0
<i>Memo</i>							
Net issuance of commercial paper <sup>3</sup>	4.5	-8.0	-10.4	-2.2	-1.3	-4.3	-7.0
Change in C&I loans at commercial banks <sup>3</sup>	7.8	-5.7	-6.2	-4.2	-5.1	-6.5	3.6
<i>Financial corporations</i>							
Stocks <sup>1</sup>	1.4	4.2	4.2	3.8	3.9	4.5	4.0
Bonds <sup>4</sup>	57.9	80.2	89.8	83.9	105.1	125.4	70.0

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.

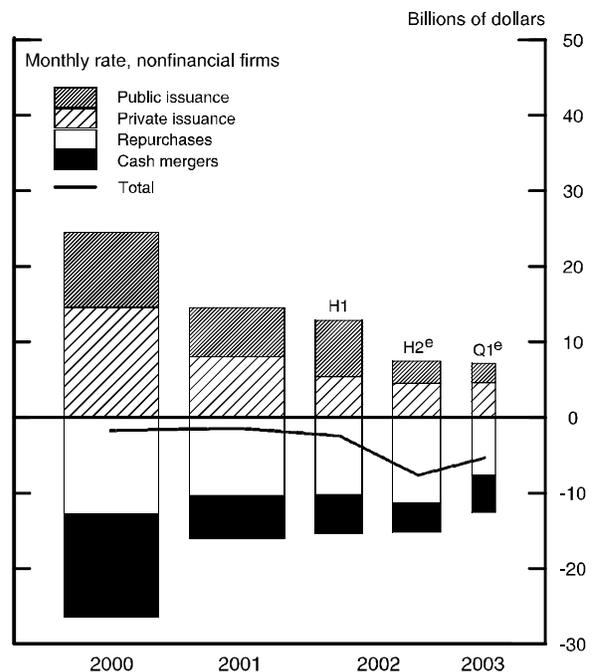
- 1. Excludes equity issues associated with equity-for-equity swaps that have occurred in restructurings.
- 2. Bonds sold in U.S. categorized according to Moody's bond ratings, or to Standard & Poor's if unrated by Moody's.
- 3. End-of-period basis, seasonally adjusted.
- 4. Excludes mortgage-backed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

**Components of Net Debt Financing**



\* Seasonally adjusted.

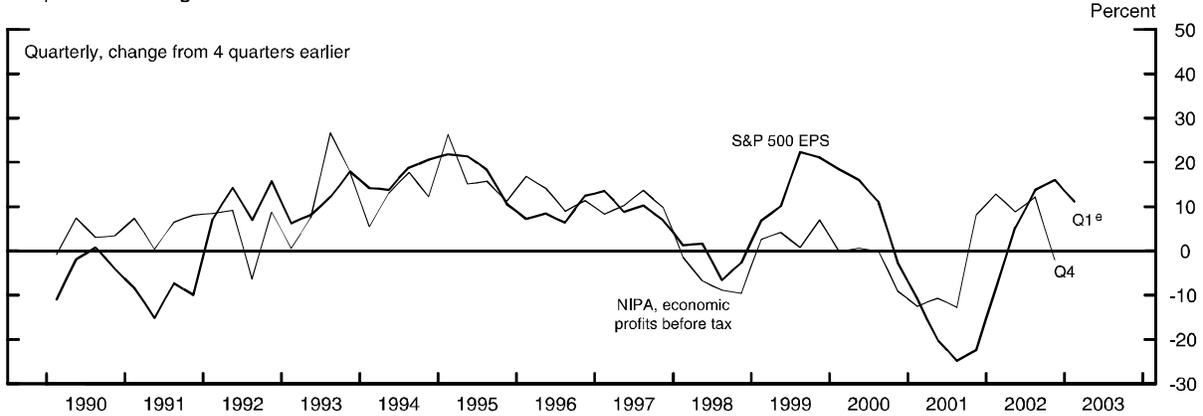
**Components of Net Equity Issuance**



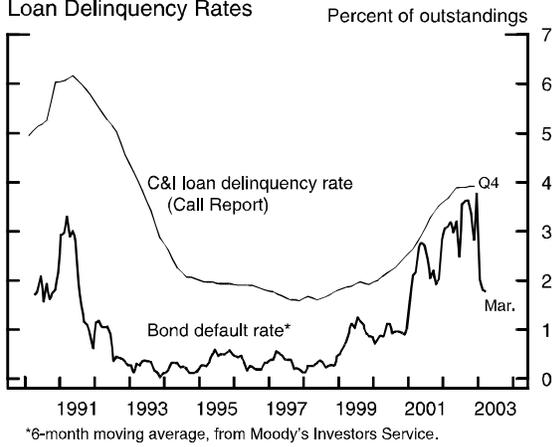
e Staff estimate.

### Corporate Credit Quality and Earnings

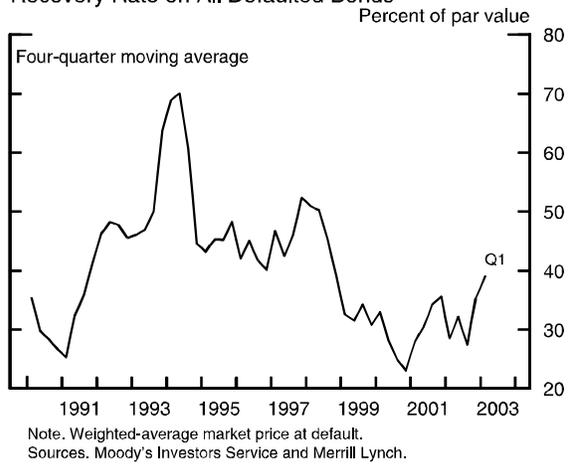
#### Corporate Earnings



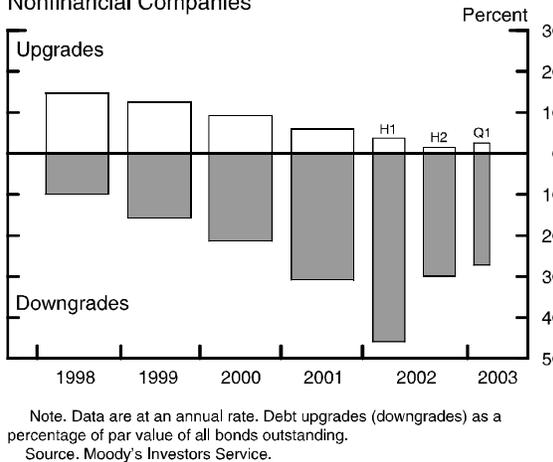
#### Bond Default and Loan Delinquency Rates



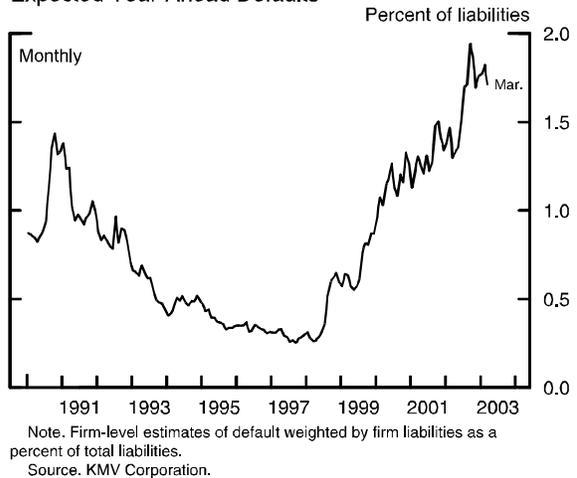
#### Recovery Rate on All Defaulted Bonds



#### Ratings Changes of Nonfinancial Companies

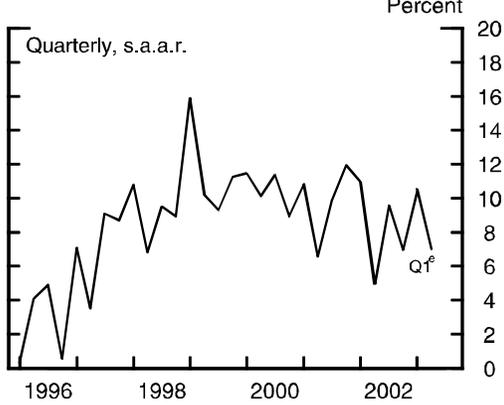


#### Expected Year-Ahead Defaults

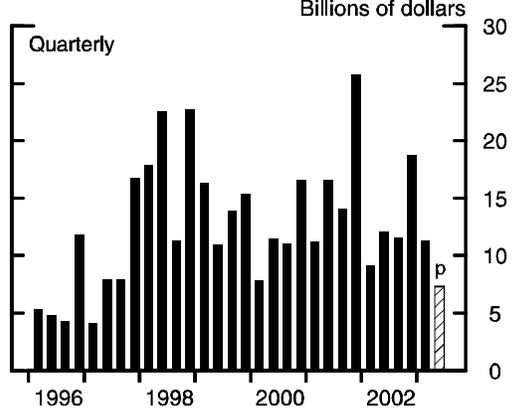


**Commercial Real Estate**

**Growth of Commercial Mortgage Debt**

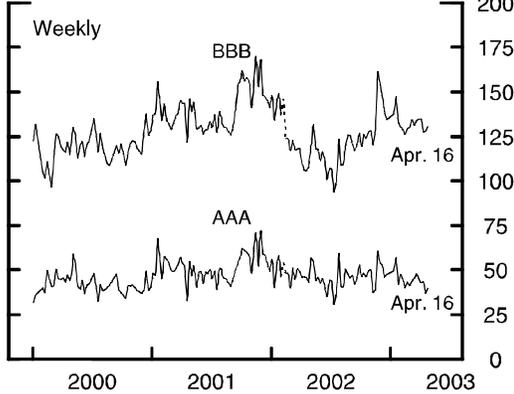


**Total CMBS Gross Issuance**



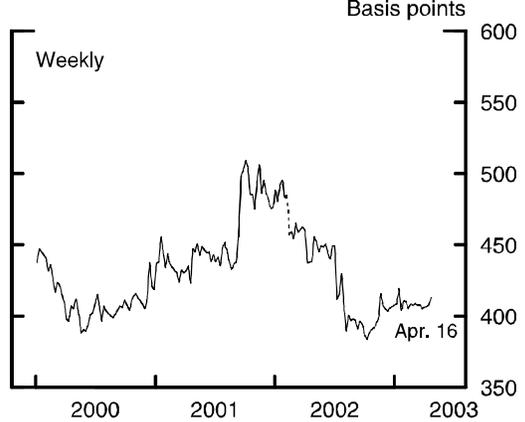
Source. Commercial Mortgage Alert.  
p Period to date.

**Investment-Grade CMBS Spreads over Swaps**



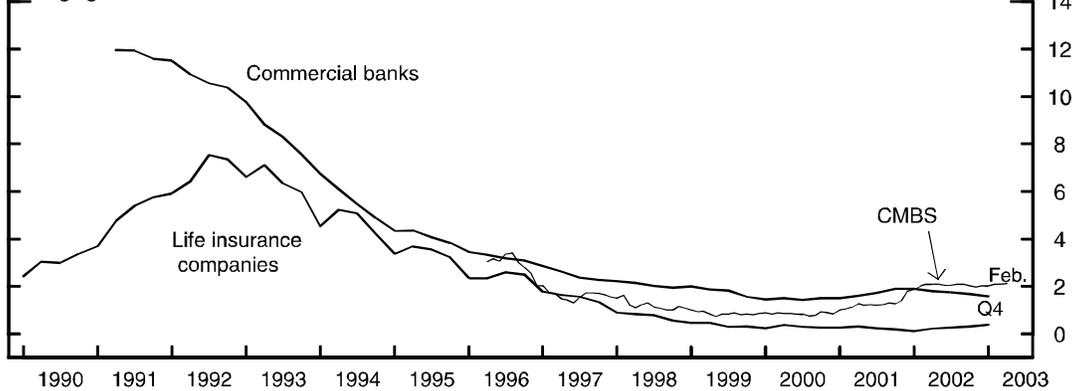
Note. Yield indexes were rebalanced on Feb. 1, 2002.  
Source. Morgan Stanley.

**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.

used to pay down debt. Equity retirements in the first quarter are estimated to have been just a bit below their pace in the past two years, and net equity issuance evidently remained negative.

### **Corporate Earnings and Credit Quality**

With more than 300 companies in the S&P 500 having reported, earnings per share in the first quarter is estimated to have increased about 12 percent from a year earlier, although the three largest oil companies accounted for about half of the aggregate growth. Earnings for several sectors—particularly financial, utilities, and consumer durables—have generally exceeded expectations by wider-than-usual margins. Many companies reported that profits growth was achieved through cost-cutting rather than increased sales. Moreover, several special factors boosted corporate bottom lines in the first quarter; for example, utilities benefited from an unusually cold winter, and the depreciation of the dollar augmented the profits of multinational corporations.

Judging from changes in bond ratings, corporate credit quality deteriorated again in the first quarter, but the pace of net downgrades continued to moderate, and some other measures of credit quality showed modest improvement. The bond default rate, measured as a six-month moving average, moved down further in March, though it remains at an elevated level, and the four-quarter moving average of recovery rates on defaulted bonds continued to improve in the first quarter. KMV's year-ahead expected default probability edged down in March, although it too remains at a high level. Rising share prices and falling implied share-price volatilities in April pointed to further improvements in this measure.

### **Commercial Real Estate**

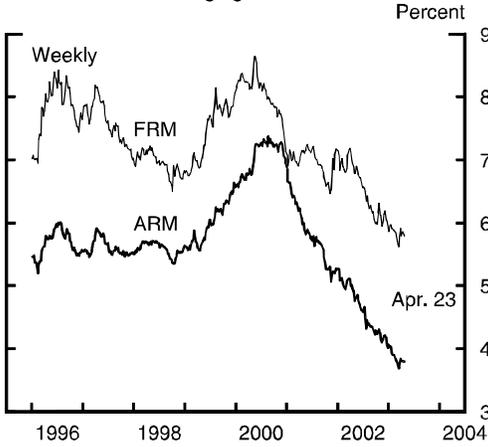
Commercial mortgage debt growth and gross CMBS issuance appear to have slowed in the first quarter from elevated rates in the fourth quarter, but the pace of CMBS issuance picked up in early April. Despite rising vacancy rates in some property sectors, delinquency rates on commercial mortgages and CMBS have remained low, in part because—according to respondents to the April Senior Loan Officer Survey—falling interest rates have reduced borrowers' debt-servicing costs. In addition, respondents noted that borrowers still have considerable equity in their properties and thus have strong incentives to continue interest payments. Concerns about credit quality of CMBS evidently remain subdued, with spreads on investment- and speculative-grade CMBS over swaps staying in the lower halves of the ranges observed over the past couple of years.

### **Household Finance**

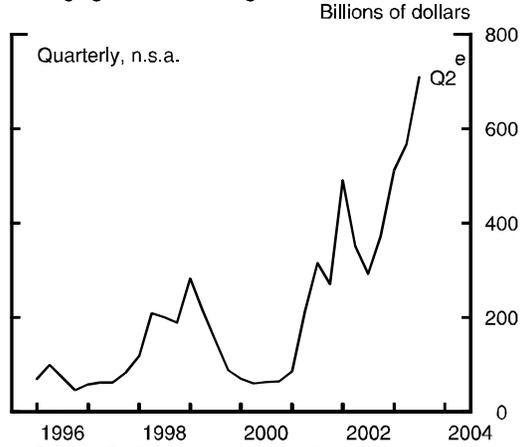
Household debt is estimated to have grown at an annual rate of 9-1/2 percent in the first quarter—about the same pace as last year. With mortgage rates near

**Household Liabilities**

**Freddie Mac Mortgage Rates**

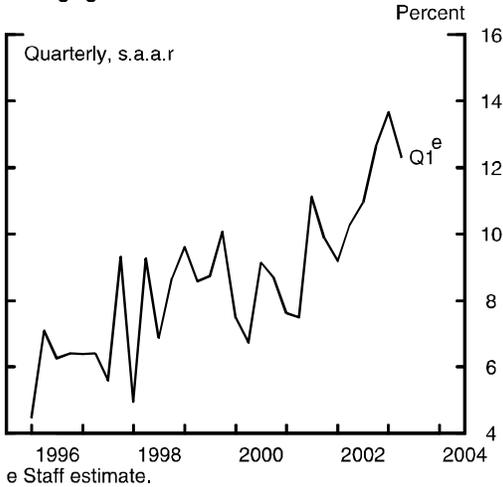


**Mortgage Refinancing**



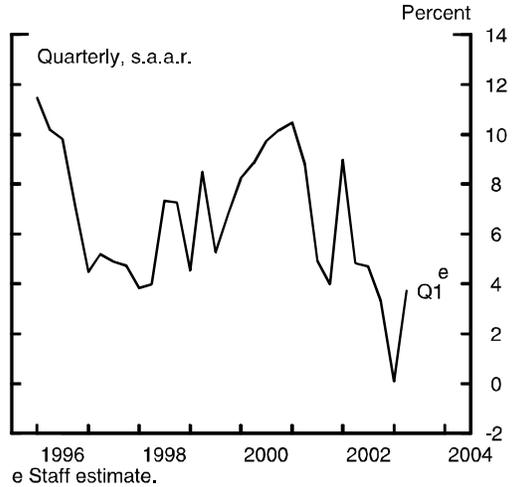
Source. Staff estimates based on Home Mortgage Disclosure Act records (1996-2001) and on the MBA applications index (since 2001).

**Mortgage Debt Growth**



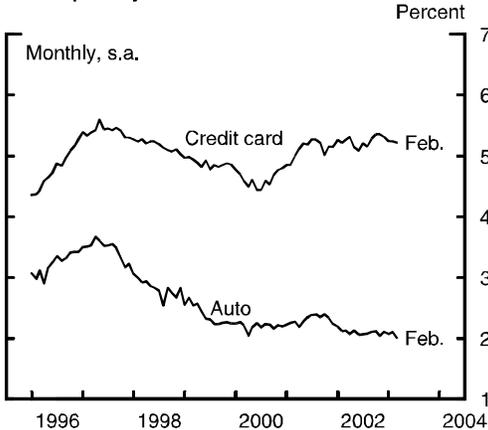
e Staff estimate.

**Consumer Credit Growth**



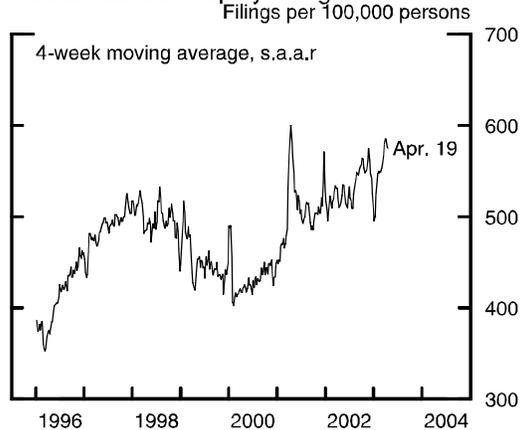
e Staff estimate.

**Delinquency Rates on Household Debt**



Source. Credit card, Moody's; auto, Federal Reserve.

**Household Bankruptcy Filings**



Source. Visa Bankruptcy Notification Service Statistics.

historical lows, refinancings reached record levels last quarter, and mortgage debt grew 12-1/4 percent at an annual rate. Refinancing activity is on track to set another record this quarter. Consumer credit expanded at roughly a 4 percent annual rate in the first quarter, similar to the average pace last year.

The credit quality of the household sector appears to have remained generally stable through the first quarter. Although household debt has continued to outpace disposable income, the ongoing shift toward mortgage debt—which has reduced the average interest rate on household debt and stretched out repayment obligations—has kept the debt-service burden roughly flat in recent quarters. Delinquency rates on auto loans and credit cards ticked down early this year, and respondents to the April Senior Loan Officer Survey continue to report only modest net tightening of terms and standards on household loans. However, a rise in household bankruptcy filing rates since the last FOMC meeting may indicate that a small but growing number of households are suffering from financial stress.

The rise in stock prices in April has likely reversed the slight decline in the ratio of household assets to disposable income posted in the first quarter. Positive net flows to equity mutual funds starting in late March, along with hefty net inflows to junk bond funds, indicate that investors have become more willing to hold riskier assets.

### **State and Local Government Finance**

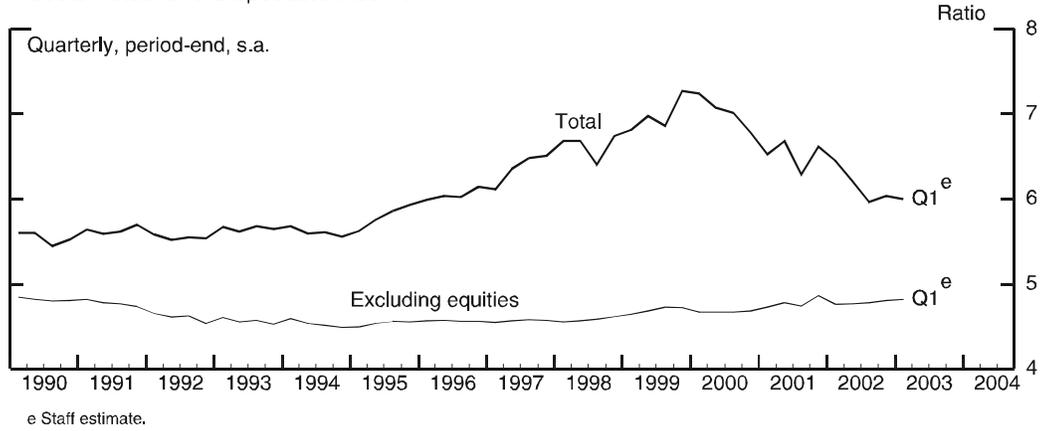
Gross issuance of long-term municipal bonds continued at a robust pace in March and April, as municipalities continued to tap the market for education- and transportation-related capital spending. Despite continuing fiscal pressures, the credit quality of municipal bonds showed hints of some stabilization, as the number of municipal bonds upgraded by S&P this year has almost matched the number downgraded. The downgrades in March of municipal bonds backed by payments from tobacco companies (pursuant to the 1998 settlement with state governments) after an Illinois court ruled against Philip Morris apparently caused investors to reassess the ability of tobacco companies to make future payments. Yield spreads on these bonds rose, on balance, and several states have postponed planned offerings of new tobacco-backed securities. More broadly, the yield spread on BBB- relative to AAA-rated revenue bonds declined a bit during the intermeeting period but remained high relative to levels observed over the past few years.

### **Treasury Finance**

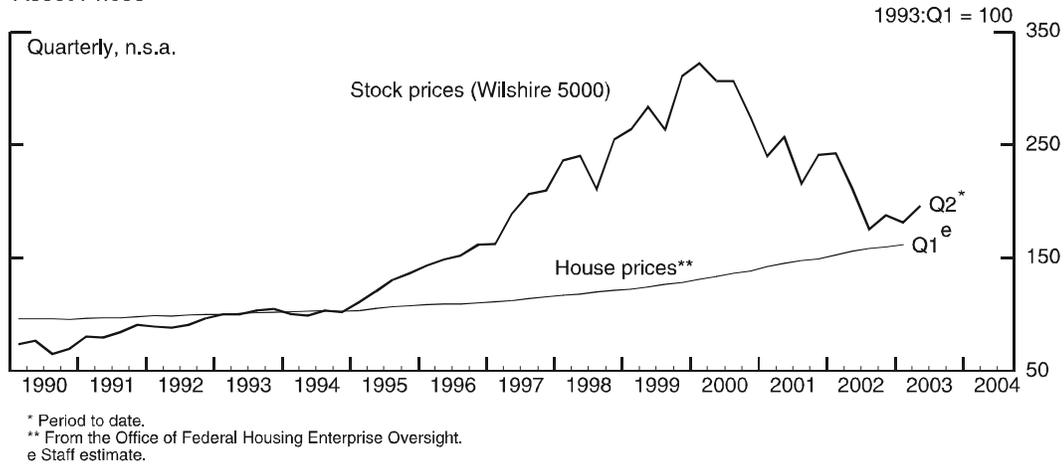
The Treasury has continued to employ “extraordinary” financing measures to cope with the debt ceiling, which was reached on February 20. However, market participants have become quite accustomed to the use of such measures, and the

**Household Assets**

Assets Relative to Disposable Income



Asset Prices



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

	2000	2001	2002		2003			Assets
			H1	H2	Q1	Mar.	Apr. <sup>e</sup>	Mar.
<b>Total long-term funds</b>	<b>18.5</b>	<b>10.8</b>	<b>21.0</b>	<b>-0.5</b>	<b>11.4</b>	<b>11.9</b>	<b>32.8</b>	<b>4,061</b>
<b>Equity funds</b>	<b>25.2</b>	<b>2.8</b>	<b>9.1</b>	<b>-13.4</b>	<b>-3.7</b>	<b>0.2</b>	<b>17.5</b>	<b>2,552</b>
Domestic	21.3	4.6	7.9	-11.8	-3.5	1.6	13.3	2,222
International	3.9	-1.8	1.2	-1.6	-0.3	-1.3	4.1	330
<b>Hybrid funds</b>	<b>-2.6</b>	<b>0.7</b>	<b>2.2</b>	<b>-0.7</b>	<b>0.7</b>	<b>0.8</b>	<b>2.7</b>	<b>325</b>
<b>Bond funds</b>	<b>-4.0</b>	<b>7.3</b>	<b>9.7</b>	<b>13.7</b>	<b>14.5</b>	<b>10.8</b>	<b>12.7</b>	<b>1,184</b>
High-yield	-1.0	0.6	0.9	0.9	3.5	5.4	6.6	116
Other taxable	-1.8	5.7	7.6	11.4	10.3	5.5	6.3	736
Municipals	-1.2	1.0	1.3	1.5	0.6	0.0	-0.2	331

Note. Excludes reinvested dividends.

Source. Investment Company Institute.

e Staff estimates based on confidential ICI weekly data.

**State and Local Government Finance**

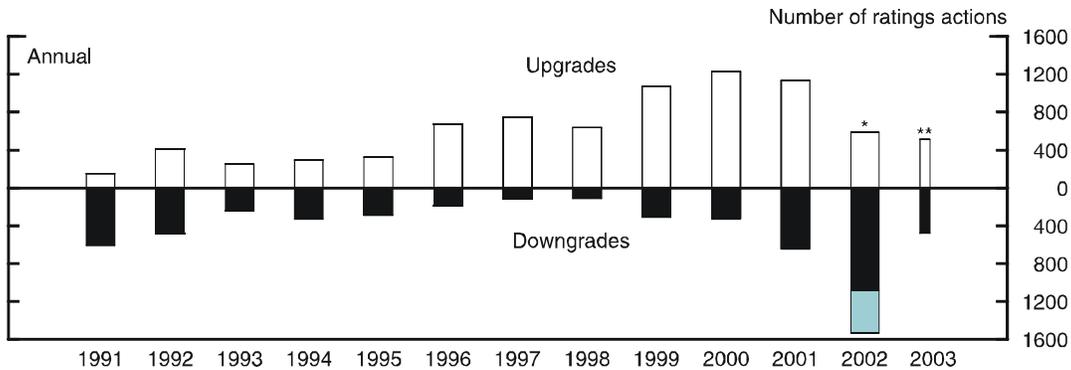
**Gross Offerings of Municipal Securities**

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

Type of security	2000	2001	2002		2003		
			H1	H2	Q1	Mar.	Apr. <sup>e</sup>
Total	17.9	29.0	33.1	39.6	30.7	30.1	28.7
Long-term <sup>1</sup>	15.0	24.3	27.9	32.8	28.3	28.2	27.5
Refundings <sup>2</sup>	2.2	7.6	9.4	10.7	9.9	11.7	8.7
New capital	12.9	16.7	18.5	22.1	18.5	16.4	18.9
Short-term	2.8	4.7	5.2	6.8	2.4	1.9	1.1
Memo: Long-term taxable	0.7	1.4	1.4	2.0	1.7	2.0	2.3

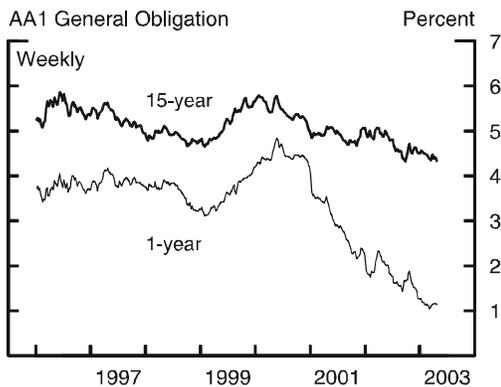
- 1. Includes issues for public and private purposes.
- 2. All issues that include any refunding bonds.
- e. Staff estimate based on preliminary data through April 24.

**Bond Rating Changes**



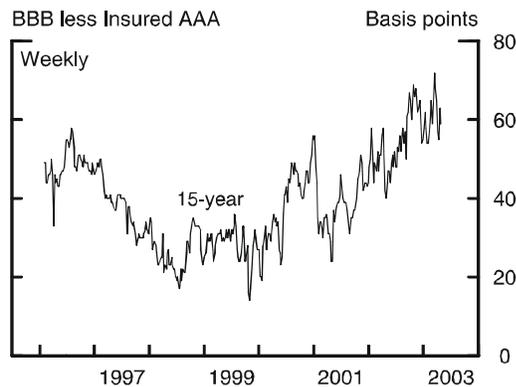
\* Lightly shaded region shows a staff estimate of the number of downgrades related to downgrades of financial institutions that provided financial support for the bonds.  
 \*\* Data through April 23 at an annual rate.  
 Source: S&P's Credit Week Municipal and Ratings Direct.

**Municipal Bond Yields**



Note. Last observation is for week of April 24.  
 Source: Bloomberg.

**Revenue Bond Spread**



Note. Last observation is for week of April 24.  
 Source: Bloomberg.

**Treasury Financing**  
(Billions of dollars)

Item	2002		2003			
	Q3	Q4	Q1	Feb.	Mar.	Apr. <sup>e</sup>
<b>Total surplus, deficit (-)</b>	<b>-41.5</b>	<b>-108.3</b>	<b>-143.9</b>	<b>-96.3</b>	<b>-58.7</b>	<b>n.a.</b>
Means of financing deficit						
Net borrowing	89.4	96.9	77.3	45.2	29.2	-19.7
Nonmarketable	6.7	14.9	-35.3	-34.5	-13.9	-3.1
Marketable	82.8	82.0	112.6	79.8	43.1	-16.6
Bills	44.4	20.0	67.5	50.4	36.7	-25.0
Coupons <sup>1</sup>	38.4	62.0	45.0	29.3	6.4	8.4
Debt buybacks	.0	.0	.0	.0	.0	.0
Decrease in cash balance	-21.3	27.9	19.8	22.6	-4.7	-16.3
Other <sup>2</sup>	-26.7	-16.4	46.9	28.5	34.2	n.a.
MEMO						
Cash balance, end of period	60.9	33.0	13.3	8.6	13.3	29.5

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

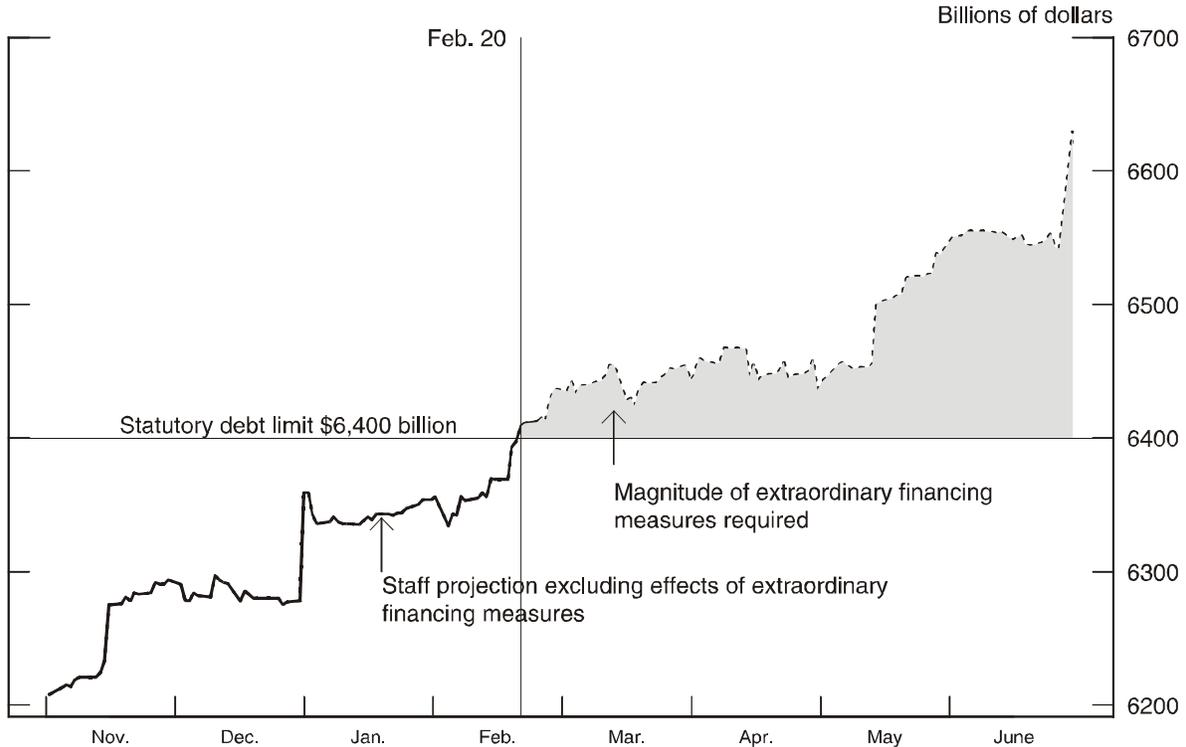
1. Does not include Treasury debt buybacks.

2. Direct loan financing, accrued items, checks issued less checks paid, and other transactions.

e Estimated.

n.a. Not available.

**Federal Debt Subject to Limit**



recent actions seem to have elicited no market response. The Treasury has announced that, through the manipulation of three federal trust funds, it will be able to proceed with its May 15 mid-quarter refunding of \$55 billion, but that it may well run out of maneuvering room in the second half of May. The Treasury also announced that, provided that the statutory debt ceiling is raised, it will be increasing the frequency and size of its public debt auctions of both nominal and inflation-indexed coupon securities.

### **Money and Bank Credit**

M2 growth in the past two months was held down by tax-related effects. Due to the increased use of electronic filing, the annual boost to M2 from tax refunds came earlier than usual this year, in February, and reduced seasonally adjusted growth in subsequent months. A weaker-than-average buildup of liquid deposits in advance of April 15 tax payments also held down money growth. In addition, resumption of net inflows to equity mutual funds in the past two months may have siphoned funds from M2.

Growth in bank credit also stepped down in the past two months from its very rapid pace in February, as banks slowed their acquisition of securities. Bank loans continued to grow at a moderate pace through April: A slowdown in consumer lending was offset by more robust growth in real estate loans and a smaller contraction in business loans in April.

Bank holding companies reported that first-quarter earnings grew modestly from a year ago, apparently as strength in noninterest income, in part from mortgage refinancings, was offset by declines in net interest margins. Many firms described the credit quality of their loans as having improved slightly, and loss provisioning decreased, but some firms expressed concerns about a possible decline in the quality of their credit card loans.

**Monetary Aggregates**  
(Based on seasonally adjusted data)

Aggregate or component	2002	2002	2003	2003			Level
		Q4	Q1	Feb.	Mar.	Apr. (p)	(\$ billions) Apr. 03 (p)
<i>Aggregate</i>							
Percent change (annual rate) <sup>1</sup>							
1. M2 <sup>2</sup>	6.9	7.1	6.7	11.6	3.2	2.8	5,913
2. M3 <sup>3</sup>	6.4	7.6	5.4	7.6	1.6	-2.5	8,563
<i>Components of M2</i> <sup>4</sup>							
3. Currency	8.2	5.0	7.4	9.9	7.4	6.4	643
4. Liquid deposits <sup>5</sup>	16.4	15.5	14.2	21.0	6.8	10.5	3,486
5. Small time deposits	-9.9	-8.2	-6.4	-7.0	-5.4	-6.3	866
6. Retail money market funds	-4.1	-4.4	-7.8	-3.7	-5.2	-19.7	911
<i>Components of M3</i>							
7. M3 minus M2 <sup>6</sup>	5.4	8.6	2.6	-1.1	-1.7	-14.1	2,650
8. Large time deposits, net <sup>7</sup>	3.7	-2.0	-.1	12.4	-8.1	-25.0	796
9. Institutional money market funds	2.1	1.9	-5.1	-20.1	-12.7	-19.4	1,145
10. RPs	19.6	44.9	27.4	34.0	41.2	12.3	494
11. Eurodollars	4.8	19.4	5.4	-20.5	-11.5	-4.4	215
<i>Memo</i>							
12. Monetary base	7.2	5.0	7.6	10.0	6.6	6.3	699
Average monthly change (billions of dollars) <sup>8</sup>							
<i>Selected managed liabilities at commercial banks</i>							
13. Large time deposits, gross	2.3	-6.2	1.8	13.2	-5.0	-23.4	984
14. Net due to related foreign institutions	-3.2	11.1	5.5	-10.8	-6.2	4.7	144
15. U.S. government deposits at commercial banks	-1.0	-.2	-4.2	-1.5	3.7	-.4	12

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 market funds, RP liabilities of depository institutions, and eurodollars held by U.S. addressees.

7. Net of holdings of depository institutions, money market 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	Q4 2002	Q1 2003	Feb. 2003	Mar. 2003	Apr. <sup>p</sup> 2003	Level, Apr. 2003 <sup>p</sup> (\$ billions)
<b>Total</b>							
1. Adjusted <sup>1</sup>	7.1	12.4	7.4	13.9	7.0	2.9	5,810
2. Reported	7.1	11.8	8.1	15.3	6.0	-1	5,994
<i>Securities</i>							
3. Adjusted <sup>1</sup>	13.3	16.1	11.9	26.3	11.1	-5.6	1,549
4. Reported	12.7	13.5	14.0	29.8	7.3	-15.2	1,733
5. Treasury and agency	19.2	25.2	17.1	30.3	11.3	-3.1	1,055
6. Other <sup>2</sup>	4.4	-2.6	9.5	29.1	1.2	-33.7	678
<i>Loans<sup>3</sup></i>							
7. Total	5.0	11.1	5.8	9.4	5.5	6.1	4,261
8. Business	-6.9	-4.0	-5.9	-9.7	-8.6	-1	946
9. Real estate	13.1	20.4	13.6	17.9	8.7	16.4	2,120
10. Home equity	36.7	24.7	26.2	25.4	38.3	14.1	232
11. Other	10.8	19.9	12.1	17.1	5.1	16.6	1,888
12. Consumer	5.5	8.6	4.2	2.2	-6.1	-4.3	589
13. Adjusted <sup>4</sup>	4.1	4.9	7.7	7.4	.6	-8	950
14. Other <sup>5</sup>	1.4	8.5	-2	17.8	28.6	-9.2	606

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.

## Appendix

### April 2003 Senior Loan Officer Opinion Survey

The April 2003 Senior Loan Officer Opinion Survey on Bank Lending Practices focused on changes in the supply of and demand for bank loans to businesses and households over the past three months. In addition, the survey contained two sets of supplementary questions that focused on the reasons for recent changes in the credit quality of business and commercial real estate loans, as well as changes in lending terms for commercial real estate loans. Responses were received from fifty-four domestic and eighteen foreign banking institutions.

On net, both foreign and domestic banks continued to report that they had tightened business lending conditions in the April survey. However, the fractions of domestic banks that tightened lending standards and terms on C&I loans declined noticeably. On the household side, the fractions of banks that tightened standards on credit cards and other consumer loans remained modest and within the narrow range of recent surveys. Banks reported that demand for almost all types of loans weakened, on net, over the past three months, with increased demand for residential mortgages the lone exception.

#### **Lending to Businesses**

Only six domestic banks tightened lending standards to large and middle-market firms in April, and one bank reported that it had eased lending standards to those firms in the most recent survey. This represents a significant difference from the January survey, when about 20 percent of domestic banks reported having tightened standards on C&I loans to larger firms, and three of the banks that had tightened lending standards classified the tightening as considerable. Indeed, the net percentage of banks reporting tighter lending standards for large and middle-market firms in April, 9 percent, was the lowest percentage since the November 1999 survey.

Furthermore, the net fraction of domestic banks that reported increasing spreads on loans to larger borrowers fell from 27 percent in January to 15 percent in April. Moreover, the number of banks that reported reducing those spreads rose to seven in April from only two in the previous survey. The net fraction of domestic banks that strengthened loan covenants also fell, to 17 percent in April from 27 percent in January. The net shares of banks that reported tightening other loan terms remained about unchanged from the previous survey, including the percentage of banks that reported increasing premiums on riskier loans, which stayed at around 40 percent.

In April, the percentage of domestic banks that reported tightening standards for small firms remained within its recent range, at 13 percent. The percentages of banks tightening terms on loans to small firms, which have been notably lower than those for large and middle-market firms, moved down somewhat further. Indeed, almost equal fractions of banks lowered the cost of credit lines for small firms as raised them, and the net fraction of banks that increased spreads on these loans fell from 16 percent in January to 12 percent in April. In addition, the net fraction of banks that increased premiums charged on riskier loans to small firms fell from 35 percent in January to 19 percent in April.

A less favorable economic outlook was cited by all but one of the domestic banks that had tightened standards or terms as at least a somewhat important reason for doing so. Large majorities of those banks also continued to cite a reduced tolerance for risk and worsening industry-specific problems as important reasons for the change. All nine of the banks that reported having eased standards or terms said they had done so in response to increased competition from other banks or nonbank lenders, which is consistent with a record amount of institutional participation in the syndicated loan market during the first quarter of 2003. One bank that eased lending conditions indicated that a more favorable economic outlook had played a role in its decision.

The fraction of U.S. branches and agencies of foreign banks that tightened standards and terms on C&I loans, which had been trending down since last August, was unchanged from January at about 30 percent in the current survey. The fraction of foreign institutions that increased spreads on all loans over their cost of funds was also steady, at just below 50 percent for the second consecutive survey. The fractions of branches and agencies that tightened most other terms edged down, except for the fraction that boosted premiums on loans to riskier customers, which rose to more than 50 percent in April from about 40 percent in January. Foreign institutions that tightened standards or terms generally cited a less favorable economic outlook as the most important reason for tightening.

The net fractions of domestic banks reporting weaker demand rose in April. About 40 percent of domestic banks reported weaker demand for loans from large and medium-size firms over the past three months, and no bank reported increased demand from those customers. For small firms, the net percentage of banks reporting weaker demand remained at 21 percent, with only three banks reporting increased demand. The net share of branches and agencies of foreign banks reporting weaker demand more than doubled to 44 percent in April from 20 percent in January.

As in previous surveys, almost all domestic banks that experienced weaker loan demand reported that a decline in customers' need for bank loans to finance capital expenditures was at least a somewhat important reason, and reduced needs to finance inventories was the second most cited reason. Large fractions of domestic banks also blamed reduced merger and acquisition business and reduced need to finance accounts receivable for weaker demand. The most frequently cited reasons for weaker loan demand at branches and agencies of foreign banks continued to be a decline in merger and acquisition activity and reduced customer investment in plant and equipment.

**Credit Quality of Business Loans.** Over the past several quarters, delinquency rates on C&I loans at commercial banks have leveled off, while charge-off rates have remained very high. Almost all of the domestic banks indicated that delinquency rates had stabilized because reduced interest rates have allowed borrowers to lower their debt-servicing costs by refinancing loans and restructuring their balance sheets. Foreign banking institutions also pointed to refinancing at lower interest rates, but reported that a reduction in industry-specific problems had played a somewhat greater role, on net, in stabilizing their delinquency rates. Both domestic and foreign banks also credited the aggressive tightening of lending standards over the past several years for reducing the incidence of new problem loans. Large fractions of banks reported a

variety of reasons for elevated charge-off rates, including unusually low recovery rates on delinquent loans and their own aggressiveness in dealing with problem credits.

**Commercial real estate lending.** The net fraction of domestic banks that reported tightening standards on commercial real estate loans over the past three months was 19 percent in April—well within its recent range. Two of ten foreign institutions reported tightening standards for these loans in the current survey, up from zero in the January survey. Demand for these loans continued to weaken at domestic banks, where the net share of banks reporting weaker demand edged up from 21 percent in January to 30 percent in April. On net, demand at foreign institutions was unchanged.

Notable fractions of domestic and foreign banks indicated that over the past year they had tightened various lending terms associated with commercial real estate loans; however, the fractions were generally lower than they were when the same questions were asked in January 2002. For instance, about 25 percent of domestic banks reported that they had raised loan-to-value ratios over the past twelve months, down from almost 50 percent in the year-earlier survey. As they did for C&I loans, banks most commonly cited concern about the economy as a reason for tightening terms, and also specifically pointed to the condition of the commercial real estate sector. Among the eleven domestic banks that had eased commercial real estate lending terms during the past year, almost all cited more aggressive competition from other commercial banks as the reason for doing so, and a majority also reported increased competition from nonbank lenders.

Despite rising vacancy rates and falling rents for commercial office space over the past several years, the delinquency rate on commercial real estate loans at banks declined steadily during 2002. Most banks reported that the majority of their commercial real estate loans did not contain prepayment penalties, and therefore borrowers had been able to avoid delinquencies by refinancing their loans at lower interest rates to reduce their debt-servicing costs. Banks also indicated that many borrowers still have considerable equity in their properties, which maintains the incentive for them to continue payments. Some foreign and domestic institutions also reported that long-term leases that had insulated property owners from declining rents were a very important reason for the good performance of commercial real estate loans.

### **Lending to Households**

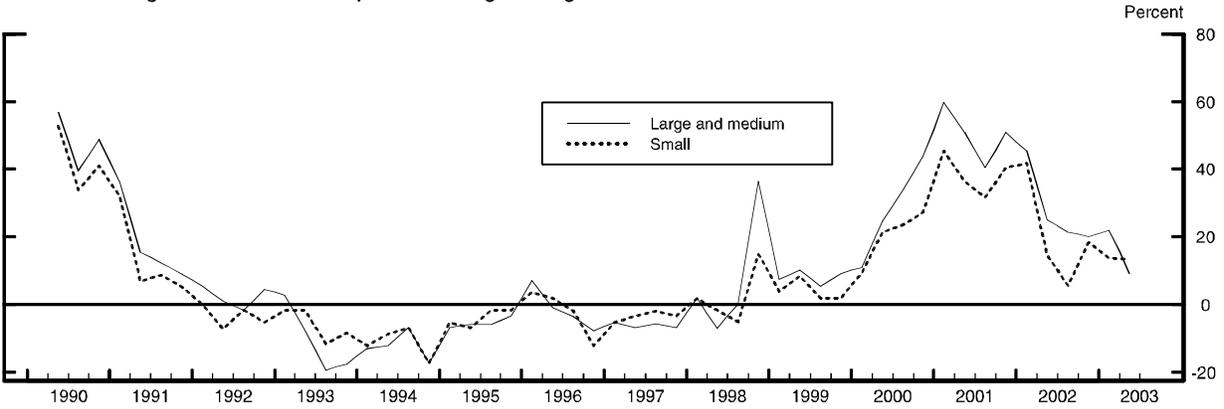
Only 6 percent of domestic banks reported that they had tightened standards on residential mortgage loans in the April survey, down from about 10 percent in both the January and the October surveys. The net fraction of respondents that reported stronger demand for mortgages to purchase homes over the past three months edged up to 17 percent in April from 8 percent in January but remains well below the levels that prevailed in 2002.

The shares of banks that reported tightening standards for credit cards and other consumer loans remained within their narrow ranges of the past two years at 10 percent and 13 percent, respectively. About 10 percent of banks, on net, indicated that they had increased the minimum credit score required for both credit card and other consumer loans. Larger percentages of banks reported that they had reduced the extent to which

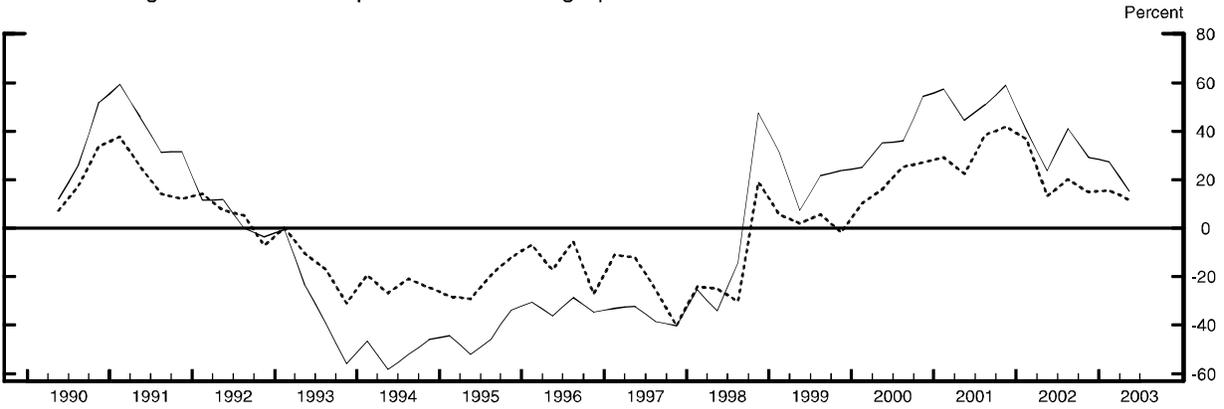
loans were granted to customers that did not meet those thresholds, especially for non-credit-card consumer loans. By contrast, banks reduced, on net, the spread of loan rates over their cost of funds for both credit card and other types of consumer loans, and a few also extended the maximum maturity for installment loans. About 4 percent of banks, on net, reported that demand for consumer loans was somewhat weaker.

## Measures of Supply and Demand for C&I Loans, by Size of Firm Seeking Loan

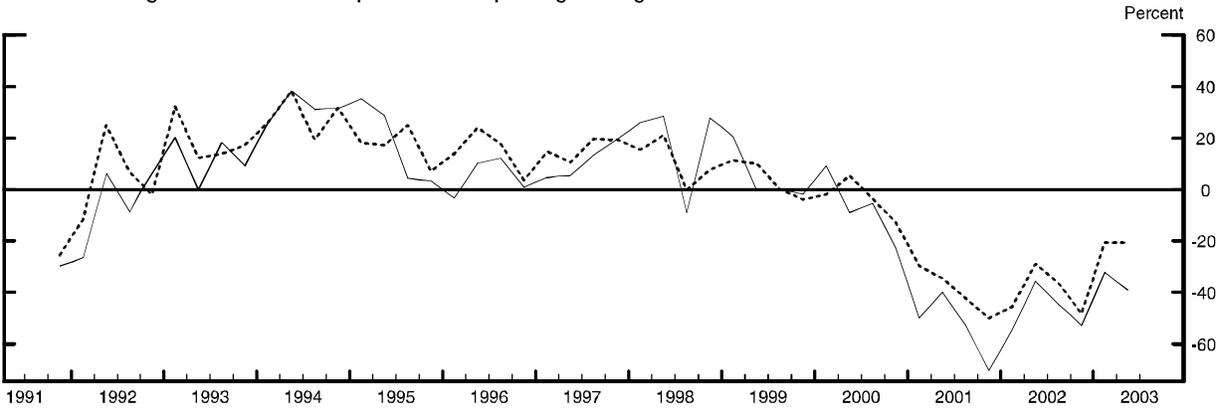
Net Percentage of Domestic Respondents Tightening Standards for C&I Loans



Net Percentage of Domestic Respondents Increasing Spreads of Loan Rates over Banks' Costs of Funds

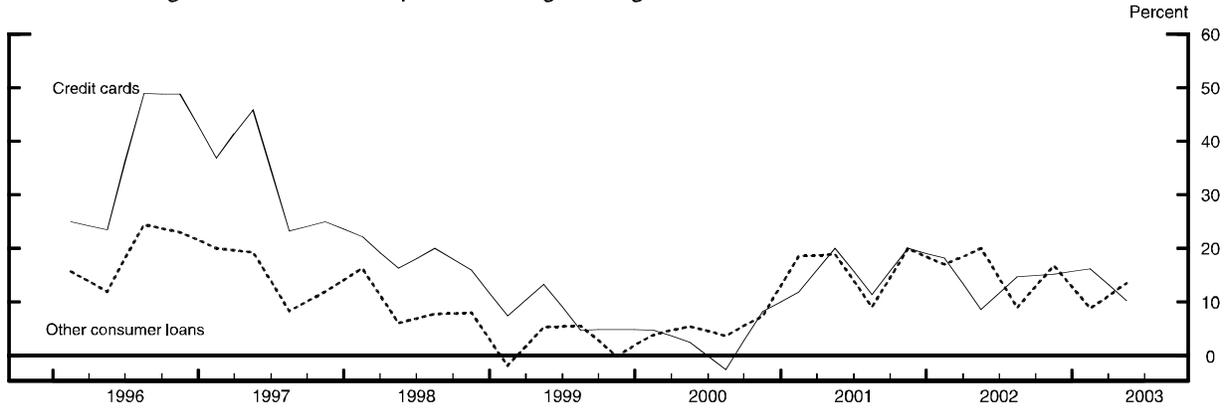


Net Percentage of Domestic Respondents Reporting Stronger Demand for C&I Loans

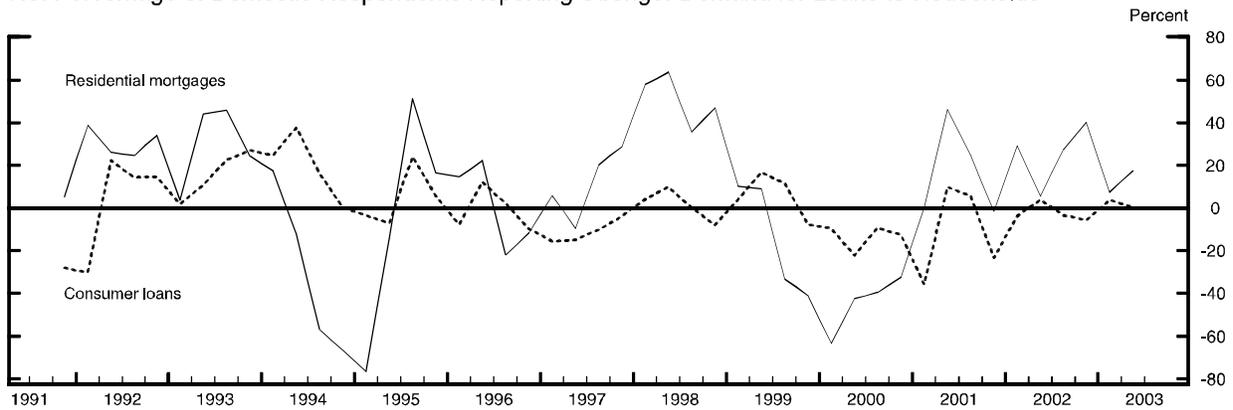


## Measures of Supply and Demand for Loans to Households

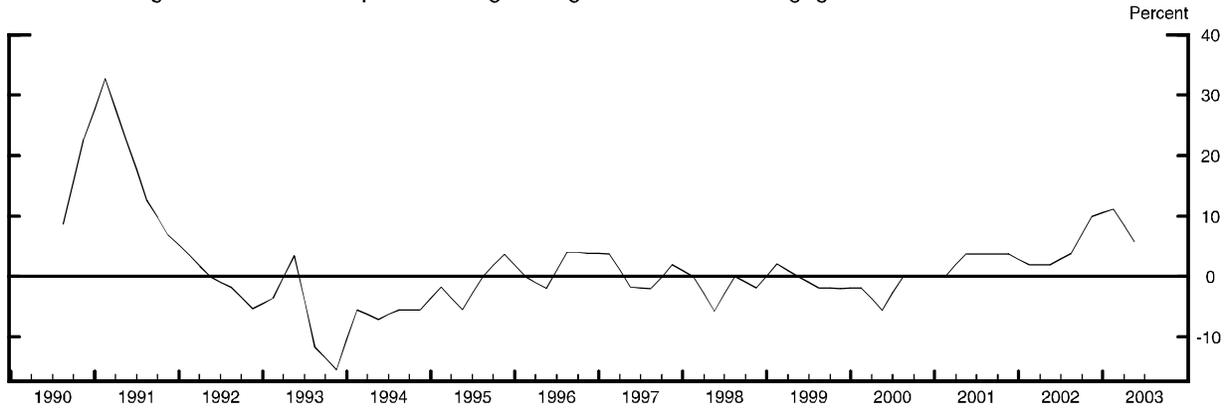
Net Percentage of Domestic Respondents Tightening Standards on Consumer Loans



Net Percentage of Domestic Respondents Reporting Stronger Demand for Loans to Households



Net Percentage of Domestic Respondents Tightening Standards for Mortgages to Individuals



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## **International Developments**

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## International Developments

### U.S. International Transactions

#### Trade in Goods and Services

The U.S. international trade deficit was \$40.3 billion in February, \$0.9 billion smaller than in January as exports of goods and services inched up and imports edged down. For January-February at an annual rate, the deficit was \$489 billion, \$8 billion larger than the fourth quarter.

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

	2002	Annual rate			Monthly rate		
		2002		2003	2003		
		Q3	Q4	Q1 <sup>e</sup>	Dec.	Jan.	Feb.
<i>Real NIPA<sup>1</sup></i>							
Net exports of G&S	-488.5	-488.0	-532.2	-508.2	...	...	...
<i>Nominal BOP</i>							
Net exports of G&S	-435.7	-441.0	-481.4	-489.3	-44.9	-41.2	-40.3
Goods, net	-484.5	-491.4	-529.6	-535.1	-48.5	-45.0	-44.2
Services, net	48.8	50.4	48.2	45.8	3.6	3.7	3.9

1. Billions of chained (1996) dollars.

e. BOP data are two months at an annual rate; NIPA data are BEA's advance estimate.

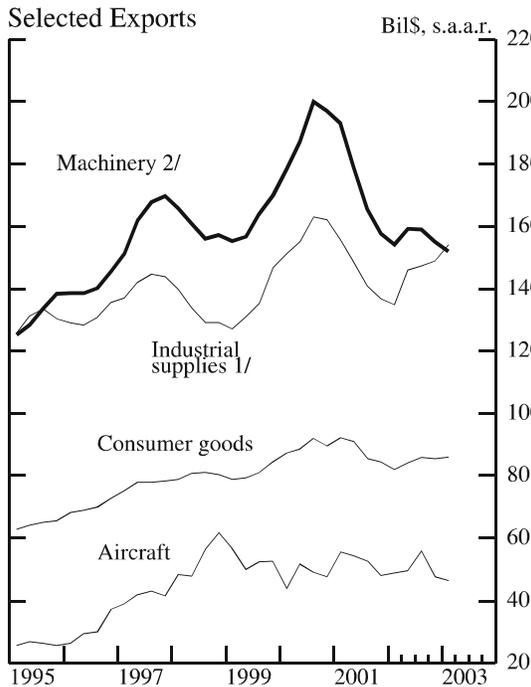
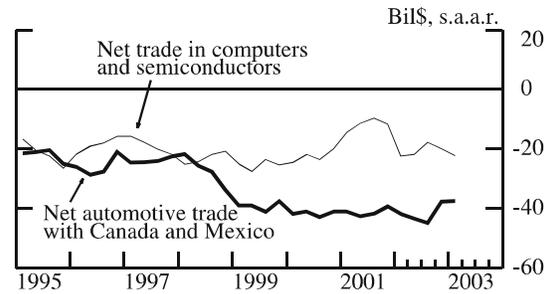
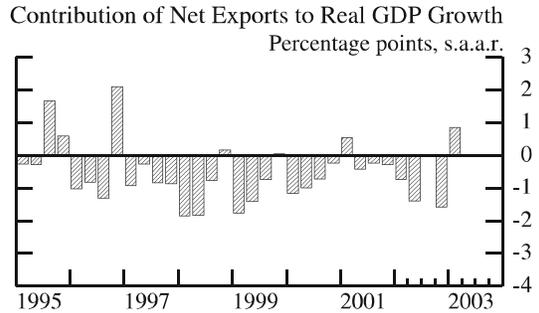
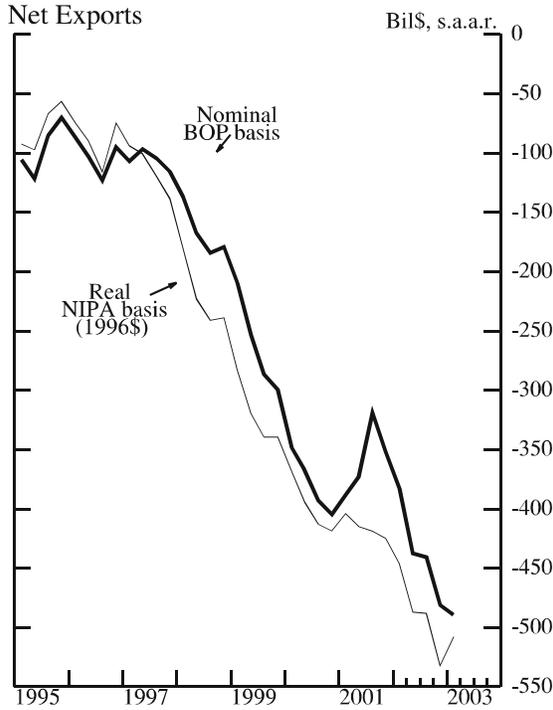
Source: U.S. Department of Commerce, Bureau of Economic Analysis and Census.

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

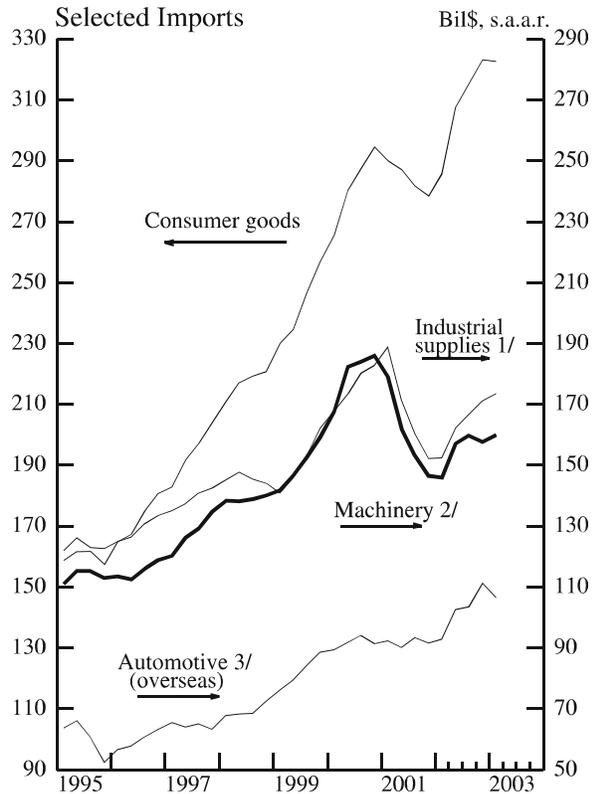
Exports of goods and services rose only marginally (0.5 percent) in February as a sharp rise in the value of exported aircraft and a small increase in exported machinery were largely offset by declines in the value of consumer goods (particularly pharmaceuticals), computers, and services receipts. For January-February at an annual rate, the level of exported goods and services was 0.5 percent higher than in the fourth quarter. Strong increases in the value of exported industrial supplies and smaller rises in agricultural products and services were partly offset by a drop in exported capital goods (partly aircraft but largely machinery). In the first quarter, NIPA real exports of goods and services decreased slightly, a second consecutive quarterly decline.

Imports of goods and services declined slightly in February (0.4 percent) as a rise in the value of imported oil and natural gas was outweighed by declines in most other trade categories, particularly computers and services. For January-February at an annual rate, the value of imports was 0.9 percent higher than in the fourth quarter, boosted by increases in oil (entirely due to higher prices), computers, and services. The value of imported semiconductors and core goods declined slightly. Within core goods, a sharp rise in the value of

## U.S. International Trade in Goods and Services



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



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 <sup>1</sup>			
	2002	2003	2003		2002	2003	2003	
	Q4	Q1 <sup>e</sup>	Jan.	Feb.	Q4	Q1 <sup>e</sup>	Jan.	Feb.
<b>Exports of G&amp;S</b>	<b>982.2</b>	<b>986.9</b>	<b>984.4</b>	<b>989.4</b>	<b>-13.5</b>	<b>4.7</b>	<b>16.9</b>	<b>5.0</b>
Goods exports	682.0	685.2	681.5	688.9	-19.5	3.2	16.9	7.4
Gold	3.8	4.1	4.4	3.7	0.2	0.2	0.3	-0.7
Other goods	678.1	681.1	677.1	685.1	-19.8	58.1	16.6	8.1
Aircraft & parts	47.6	46.4	40.5	52.2	-8.3	-1.2	1.2	11.6
Computers & accessories	38.9	38.6	40.0	37.2	1.1	-0.3	1.8	-2.8
Semiconductors	40.0	39.5	38.9	40.2	-5.9	-0.4	-1.3	1.3
Other capital goods	157.8	154.7	153.0	156.4	-3.7	-3.1	5.3	3.3
Automotive	77.3	78.3	78.2	78.4	-5.1	1.0	1.3	0.2
to Canada	44.0	46.4	45.8	47.0	-2.9	2.4	1.0	1.2
to Mexico	14.8	12.6	12.8	12.4	0.2	-2.2	1.9	-0.5
to ROW	18.5	19.3	19.6	19.0	-2.4	0.8	-1.6	-0.6
Agricultural	55.2	57.3	57.8	56.8	1.8	2.1	-0.6	-0.9
Ind supplies (ex. ag, gold)	148.9	154.1	154.2	153.9	1.6	5.2	3.6	-0.3
Consumer goods	85.5	86.0	89.2	82.8	-0.4	0.5	6.0	-6.4
All other goods	27.0	26.2	25.2	27.3	-1.0	-0.7	2.9	2.1
Services exports	300.2	301.7	302.9	300.5	6.0	1.5	-0.1	-2.4
<b>Imports of G&amp;S</b>	<b>1463.6</b>	<b>1476.2</b>	<b>1479.2</b>	<b>1473.3</b>	<b>26.9</b>	<b>12.6</b>	<b>-26.9</b>	<b>-5.9</b>
Goods imports	1211.5	1220.3	1221.0	1219.6	18.7	8.8	-25.6	-1.4
Petroleum	118.0	128.2	124.6	131.7	7.2	10.1	13.3	7.1
Gold	2.9	2.5	2.4	2.6	-0.1	-0.4	0.2	0.2
Other goods	1090.6	1089.6	1094.0	1085.3	11.5	-1.0	-39.1	-8.7
Aircraft & parts	26.6	24.6	26.3	22.8	4.4	-2.0	-3.3	-3.5
Computers & accessories	74.3	76.3	80.5	72.1	-0.3	2.0	5.2	-8.4
Semiconductors	24.5	24.1	24.1	24.1	-2.3	-0.4	-0.1	0.1
Other capital goods	159.3	162.1	162.4	161.8	-2.3	2.8	-3.9	-0.6
Automotive	207.9	203.0	202.7	203.3	-2.0	-4.9	-9.8	0.6
from Canada	55.7	58.3	57.0	59.5	-8.4	2.5	4.3	2.5
from Mexico	40.9	38.3	36.2	40.5	-1.4	-2.6	2.9	4.3
from ROW	111.3	106.4	109.5	103.3	7.8	-4.9	-17.0	-6.2
Ind supplies (ex. oil, gold)	171.2	173.6	172.1	175.1	4.6	2.4	-9.3	3.0
Consumer goods	323.1	322.7	321.8	323.5	7.8	-0.4	-13.6	1.6
Foods, feeds, bev.	51.9	54.0	54.4	53.5	1.7	2.1	-0.8	-0.9
All other goods	51.8	49.3	49.6	49.1	-0.1	-2.5	-3.5	-0.6
Services imports	252.0	255.9	258.1	253.7	8.2	3.9	-1.3	-4.5
<i>Memo:</i>								
Oil quantity (mb/d)	12.54	11.63	11.95	11.32	0.65	-0.90	-0.22	-0.63
Oil import price (\$/bbl)	25.76	30.21	28.56	31.85	0.22	4.45	3.52	3.29

1. Change from previous quarter or month. e. Average of two months.

Source: U.S. Department of Commerce, Bureaus of Economic Analysis and Census.

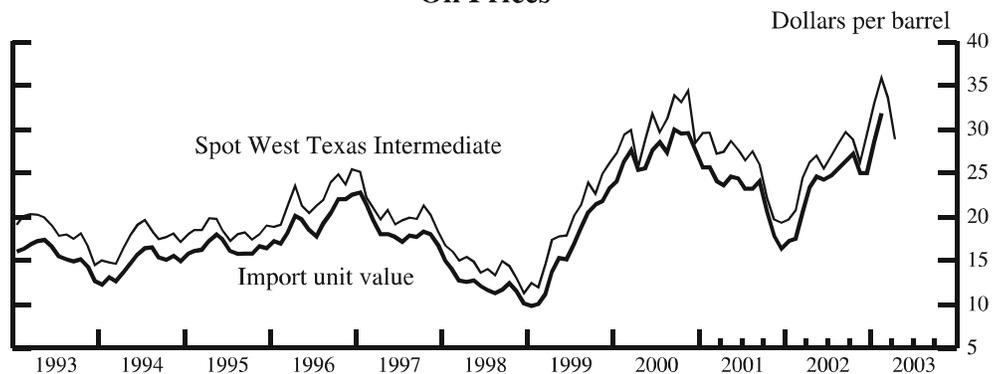
**Prices of U.S. Imports and Exports**  
(Percentage change from previous period)

	Annual rates			Monthly rates		
	2002		2003	2003		
	Q3	Q4	Q1	Jan.	Feb.	Mar.
	----- BLS prices (2000 weights)-----					
<b>Merchandise imports</b>	2.9	0.7	13.4	1.8	1.7	0.5
Oil	28.8	3.8	128.4	14.4	11.1	-1.8
Non-oil	0.3	0.4	4.1	0.3	0.4	0.9
Core goods*	1.2	1.5	5.3	0.4	0.5	1.1
Cap. goods ex comp & semi	1.4	-0.8	2.6	0.2	0.4	0.2
Automotive products	0.8	1.2	-0.5	-0.2	0.1	0.1
Consumer goods	0.1	-0.7	0.1	0.0	0.0	0.1
Foods, feeds, beverages	5.8	9.3	5.4	1.0	-0.4	1.3
Industrial supplies ex oil	2.8	5.8	25.7	2.2	2.1	5.0
Computers	-5.9	-9.3	-5.2	-0.5	-0.6	-0.6
Semiconductors	-6.5	-4.6	-3.1	-0.6	0.5	-0.2
<b>Merchandise exports</b>	2.2	0.7	2.6	0.3	0.5	0.3
Core goods*	4.1	1.3	3.3	0.4	0.5	0.5
Cap. goods ex comp & semi	0.1	0.5	1.2	0.4	0.0	0.0
Automotive products	0.8	1.3	0.0	0.1	0.0	-0.1
Consumer goods	0.9	0.4	-0.4	-0.2	0.2	0.0
Agricultural products	25.3	8.2	1.2	0.3	-0.5	0.0
Industrial supplies ex ag	7.1	1.5	11.7	1.3	1.9	1.5
Computers	-8.7	-5.8	2.8	0.2	1.0	-0.6
Semiconductors	-8.9	-2.8	-5.0	-0.6	-0.1	-0.2
	---Prices in the NIPA accounts (1996 weights)---					
<b>Chain price index</b>						
Imports of goods & services	4.4	0.9	11.6	...	...	...
Non-oil merchandise	0.5	0.7	4.5	...	...	...
Core goods*	1.2	1.5	5.4	...	...	...
Exports of goods & services	3.5	0.9	3.5	...	...	...
Total merchandise	3.4	0.9	3.1	...	...	...
Core goods*	4.4	1.7	4.4	...	...	...

\*/ Excludes computers and semiconductors.

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

**Oil Prices**



natural gas (all price) and smaller increases in machinery and foods were offset by declines in the value of other imported goods (particularly automotive products and other industrial supplies). A small increase in value combined with a large increase in price pushed down the estimated quantity of NIPA imports more than 7 percent a.r.

### **Prices of Internationally Traded Goods**

**Non-oil imports.** In March, the price of imported non-oil goods and the price of imported core goods jumped 0.9 and 1.1 percent, respectively. Within core goods, the largest price movement was an increase of 5.0 percent (not an annual rate) in the price for non-oil industrial supplies, prompted by exceptionally higher prices for natural gas and by higher prices for woodpulp and chemicals. Prices for foods, feeds, and beverages rose 1.3 percent. Prices in other major categories changed little. For the first quarter, prices of imported core goods were up 5½ percent at an annual rate, the highest rate of increase since the second quarter of 1995.

**Oil.** The BLS price of imported oil fell 1.8 percent in March after rising a revised 11.1 percent in February. The spot price of West Texas Intermediate (WTI) crude oil also fell in March, averaging about \$33.50 per barrel, down more than \$2 per barrel from its February average. In mid-March, the spot price of WTI fell rapidly with the unwinding of geopolitical uncertainty surrounding Iraq. Recent increases in OPEC oil production, particularly by Saudi Arabia, Kuwait, and Venezuela, also helped put downward pressure on oil prices. Spot WTI closed on April 29 at \$25.23 per barrel. However, reduced oil supplies from Nigeria, owing to civil unrest, and increased oil demand in Japan, resulting from the shutdown of nuclear reactors, are keeping some upward pressure on oil prices.

**Exports.** In March, the price of exported total goods and the price of exported core goods increased 0.3 and 0.5 percent, respectively. Within core goods, the largest price movement was an increase of 1.5 percent in the price of industrial supplies, driven largely by higher prices for fuel oil, woodpulp, and chemicals. Prices in other major categories remained unchanged. For the first quarter, prices of exported core goods were up 4½ percent at an annual rate, more than double the rate of growth registered in the fourth quarter of last year.

### **U.S. International Financial Transactions**

Treasury data recorded a \$22 billion increase in foreign official assets in the United States in February (line 1 of the Summary of U.S. International Transactions table). These inflows were widespread and largest for Japan (\$6 billion), Russia (\$5 billion), and China (\$4 billion). The increase in Japan's reserves was associated with intervention activity, while the rise for Russia's

likely reflected earnings from higher oil prices. Official inflows may have been even larger than those recorded by the Treasury system: February data from custody accounts at the Federal Reserve Bank of New York show an additional increase in Treasury bonds held for China and Korea arising from transfers from other custodians. (Such transfers of long-term securities are not captured under the Treasury system, and it is possible that when these bonds were initially acquired, the Treasury system recorded them as purchases by private foreigners, rather than by the foreign official sector.) For March, the Federal Reserve Bank of New York's custody accounts show a rise of \$16 billion,

Foreign private net purchases of U.S. securities (line 4) declined sharply to \$5 billion in February from January's \$26 billion inflow. In February, increased foreign sales of Treasury securities (line 4a) in combination with sales of agency issues (line 4b) significantly offset relatively strong private foreign purchases of corporate debt (line 4c) and modest foreign purchases of U.S. equities (line 4d). Although there were continued purchases of U.S. agency bonds and corporate stock in the European and Asian markets, sales of those instruments were recorded against the Caribbean centers. The overall downward movement in February is attributed to general market uncertainties and a decline in agency bond issuance. Total new bond issuance, especially that targeted to foreigners, increased markedly in March.

In February, U.S. investors were small net sellers of foreign securities (line 5) as U.S. sales of foreign bonds (line 5a) exceeded small net purchases of foreign stocks (line 5b). There were no acquisitions of foreign stock through stock swaps in February (line 5c). However, the recently completed acquisition of Household International by British-based HSBC Holdings has a stock swap component of \$14 billion, which we expect to see reflected in the data for March.

Net capital flows through the banking sector (line 3) amounted to an inflow of \$67 billion in February as contrasted with an outflow of \$45 billion in January. The inflow in February was attributed primarily to interoffice activity between U.S. affiliates of foreign-based banks and their related foreign offices.

**Summary of U.S. International Transactions**  
(Billions of dollars, not seasonally adjusted except as noted)

	2001	2002	2002				2003	
			Q1	Q2	Q3	Q4	Jan.	Feb.
<b>Official financial flows</b>	<b>2.4</b>	<b>91.0</b>	<b>7.1</b>	<b>45.3</b>	<b>7.1</b>	<b>31.5</b>	<b>5.9</b>	<b>21.6</b>
1. Change in foreign official assets in the U.S. (increase, +)	7.3	94.7	6.7	47.2	8.5	32.3	4.7	21.5
a. G-10 countries	-7.9	30.4	5.0	17.6	1.8	6.0	5.1	9.5
b. OPEC countries	-1.2	-9.4	-9.6	.9	-1.4	.7	-2.1	-3.8
c. All other countries	16.4	73.7	11.2	28.7	8.1	25.7	1.7	15.8
2. Change in U.S. official reserve assets (decrease, +)	-4.9	-3.7	.4	-1.8	-1.4	-.8	1.2	.0
<b>Private financial flows</b>	<b>379.5</b>	<b>383.2</b>	<b>80.3</b>	<b>27.8</b>	<b>162.4</b>	<b>112.7</b>	<b>...</b>	<b>...</b>
<b>Banks</b>								
3. Change in net foreign positions of banking offices in the U.S. <sup>1</sup>	-5.9	95.8	6.3	-27.2	65.7	51.0	-44.5	67.4
<b>Securities<sup>2</sup></b>								
4. Foreign net purchases of U.S. securities (+)	401.6	387.8	87.2	119.6	105.0	76.0	25.9	4.9
a. Treasury securities	-7.4	97.3	12.0	14.5	57.8	13.0	-2.0	-8.4
b. Agency bonds	85.3	72.1	6.3	33.1	22.0	10.6	9.9	-3.0
c. Corporate and municipal bonds	201.8	160.3	43.3	60.0	17.2	39.9	21.5	12.7
d. Corporate stocks <sup>3</sup>	121.8	58.1	25.5	12.0	8.0	12.6	-3.5	3.6
5. U.S. net acquisitions (-) of foreign securities	-95.0	1.3	2.3	-9.0	18.4	-10.3	-8.9	.6
a. Bonds	12.4	19.5	.6	10.4	5.7	2.7	-2.2	3.9
b. Stock purchases	-62.7	-14.9	3.5	-19.4	14.0	-13.0	-6.7	-3.3
c. Stock swaps <sup>3</sup>	-44.7	-3.2	-1.8	.0	-1.4	.0	.0	.0
<b>Other flows (quarterly data, s.a.)</b>								
6. U.S. direct investment (-) abroad	-127.8	-123.4	-29.5	-34.5	-26.4	-33.0	...	...
7. Foreign direct investment in U.S.	130.8	30.1	16.3	-2.6	2.9	13.5	...	...
8. Foreign holdings of U.S. currency	23.8	21.5	4.5	7.2	2.6	7.2	...	...
9. Other (inflow, +) <sup>4</sup>	52.1	-29.9	-6.7	-25.7	-5.7	8.3	...	...
<b>U.S. current account balance (s.a.)</b>	<b>-393.4</b>	<b>-503.4</b>	<b>-112.5</b>	<b>-127.7</b>	<b>-126.3</b>	<b>-136.9</b>	<b>...</b>	<b>...</b>
<b>Capital account balance (s.a.)<sup>5</sup></b>	<b>.8</b>	<b>.7</b>	<b>.2</b>	<b>.2</b>	<b>.2</b>	<b>.1</b>	<b>...</b>	<b>...</b>
<b>Statistical discrepancy (s.a.)</b>	<b>10.7</b>	<b>28.5</b>	<b>24.9</b>	<b>54.4</b>	<b>-43.4</b>	<b>-7.4</b>	<b>...</b>	<b>...</b>

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 commissions on securities transactions and excludes adjustments BEA makes to account for incomplete coverage; 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.

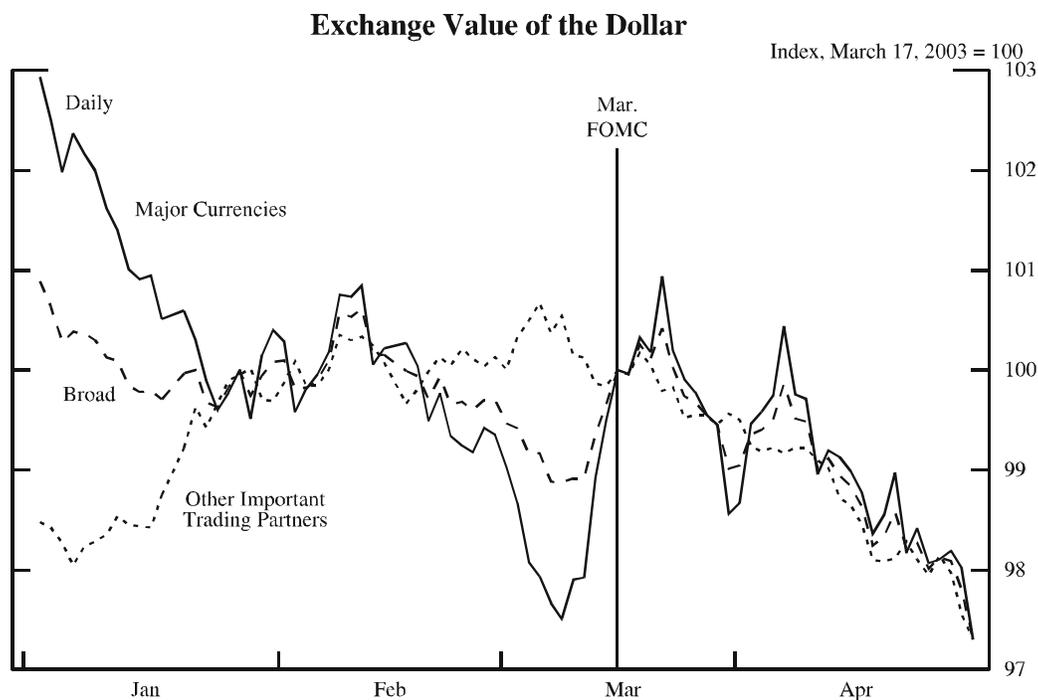
4. Transactions by nonbanking concerns and other banking and official transactions not shown elsewhere plus amounts resulting from adjustments made by the Department of Commerce and revisions in lines 1 through 5 since publication of the quarterly data in the Survey of Current Business

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

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

## Foreign Exchange Markets

Price movements in global financial markets during the first four weeks of the intermeeting period appeared to reflect closely fluctuations in news about developments in Iraq. When major combat operations in Iraq concluded following the fall of Baghdad, market participants shifted their attention to news about the direction of global economic activity. Since mid-March, prices of assets that were viewed as safe havens have declined; the spot price of gold has declined almost 1½ percent to \$336 per ounce, and the exchange value of the Swiss franc against the euro has declined 3 percent.



The exchange value of the dollar, as measured by the major currencies index, declined 2¾ percent, with the dollar depreciating against six of the seven foreign currencies that are in the index; the exception was the yen. The dollar depreciated on net during the first three weeks of the intermeeting period, rebounded only moderately the following week, and has once more trended down since then. Against the currencies of our other important trading partners, the dollar depreciated about 2¾ percent.

The dollar declined 4¾ percent on balance against the euro. The dollar moved down about 3 percent against the Canadian dollar. On April 15, the Bank of Canada raised its overnight interest rate 25 basis points, as market participants had expected, to 3.25 percent. Against the pound, the dollar slid almost

2 percent. In contrast, the dollar appreciated almost 1 percent against the yen amid data releases that indicated a weaker state of the Japanese economy than market participants had expected. At its emergency meeting on March 25, the Bank of Japan left its policy stance largely unchanged, disappointing market participants. At its meeting on April 30, however, the BOJ unexpectedly raised its target for current account balances of financial institutions to ¥22-27 trillion, from ¥17-22 trillion, citing “considerable uncertainty” about the outlook for recovery in the United States and Europe, the possible impact of SARS, and “unstable” stock prices.

### Financial Indicators in Major Industrial Countries

Country	Three-month rate		Ten-year yield		Equities
	Apr. 30 (Percent)	Percentage Point Change	Apr. 30 (Percent)	Percentage Point Change	Percent Change
Canada	3.35	.10	4.95	-.04	2.39
Japan	.08	-.03	.61	-.11	2.49
Euro area	2.53	-.03	4.14	.11	8.31
United Kingdom	3.51	-.02	4.50	.21	6.33
Switzerland	.22	-.02	2.51	.19	11.50
Australia	4.79	.05	5.28	.05	9.59
United States	1.25	.05	3.94	.12	6.06
Memo: Weighted-average foreign	2.13	.01	3.86	.01	n.a.

NOTE. Change is from March 17 to April 30 (10 a.m. EDT).

n.a. Not available.

During the first four weeks of the intermeeting period, market participants were apparently shifting asset allocations between bonds and equities based primarily on news about the developments in the Iraqi conflict. Reports that indicated a quick resolution of the war led to simultaneous increases in equity prices and bond yields, while reports that suggested a more prolonged conflict led to simultaneous declines. However, since the second week of April, the tight link between equity and bond market movements has ended, with bond yields drifting lower and stock prices firming further.

Since the March FOMC meeting, major industrial economy equity markets have risen significantly, except in Japan, with the euro-area value-weighted equity

index up about 8½ percent. In addition to the resolution of the conflict in Iraq, positive news on corporate earnings announcements boosted European and North American equity markets. The Nikkei index of Japanese share prices declined ½ percent on net. This index briefly declined to a twenty-year low late in the period. Market participants attributed some of this decline to poor earning announcements by several large Japanese corporations.

European government bond yields rose slightly on balance over the period, but yields on Japanese government bonds moved lower. Yields of 10-, 20-, and 30-year JGBs declined to record lows of 0.61 percent, 0.93 percent, and 1.02 percent, respectively. Canadian long-term government debt yields declined modestly over the period, and were pressured lower after the World Health Organization (WHO) added Toronto to its SARS travel advisory list.

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

Economy	Currency/ US dollar		Short-term Interest rates <sup>1</sup>		Dollar-denominated bond spread <sup>2</sup>		Equity prices
	Apr. 30	Percent Change	Apr.29/30 (Percent)	Percentage Point Change	Apr.29/30 (Percent)	Percentage Point Change	Percent Change
Mexico	10.28	-5.39	6.25	-2.48	2.42	-.53	8.00
Brazil	2.88	-15.39	26.00	1.50	8.36	-2.31	17.08
Argentina	2.85	-7.63	n.a.	n.a.	52.80	-15.58	10.43
Chile	705.30	-4.53	2.80	-.12	3.96	-.02	10.55
China	8.28	.00	n.a.	n.a.	2.15	.09	3.55
Korea	1215.20	-2.77	4.60	.05	...	...	16.32
Taiwan	34.73	.09	1.47	-.08	...	...	-4.82
Singapore	1.78	.60	.63	-.13	...	...	3.63
Hong Kong	7.80	-.01	1.56	.24	...	...	-.99
Malaysia	3.80	-.01	3.00	.00	2.30	.15	1.25
Thailand	42.86	.16	1.75	.06	n.a.	n.a.	5.65
Indonesia	8671.00	-3.28	11.54	-.57	3.29	-.22	17.98
Philippines	52.51	-4.18	8.69	1.25	4.98	-.67	6.87
Russia	31.11	-.83	n.a.	n.a.	3.43	-.36	13.61

NOTE. Change is from March 17 to April 29/30.

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.

The Brazilian *real* appreciated about 15 percent against the dollar over the intermeeting period, and the spread over Treasury yields of Brazilian sovereign debt, as measured by the Brazilian EMBI+ index, fell 230 basis points. News that Brazil's primary surplus for 2002 came in well above 3.75 percent of GDP—the IMF-agreed target—was well-received by markets. In addition, market participants reacted favorably to economic reform measures proposed by President Lula.

Immediate reactions in Argentine financial markets to the first round of presidential elections on April 27 were mixed. The Argentine peso appreciated 1 percent versus the dollar the following day, but the Merval stock index fell 7 percent and Argentina's EMBI+ spread rose slightly. On net, the Argentine peso has appreciated about 7½ percent against the dollar and Argentina's EMBI+ spread has declined more than 1,500 basis points since the March FOMC meeting.

Optimistic sentiment regarding the outcome of the conflict in Iraq and encouraging corporate earnings announcements also prompted emerging Asian equity markets to rise. However, during the last two weeks of the intermeeting period, news reports of the spread of SARS appeared to weigh on most Asian equity markets. Uncertainty about the spread of the disease seemed to diminish somewhat on April 28, when the WHO stated that the outbreak of SARS had peaked in several countries, prompting Asian equity markets to rally. Hong Kong was particularly hard-hit, with equity prices dropping substantially before recovering somewhat late in the intermeeting period; on net, the Hang Seng index has declined about 1 percent. In the latter part of the intermeeting period, Korean financial markets were bolstered by news of negotiations with North Korea; the Korean equity market rose about 16 percent over the intermeeting period. The Korean won appreciated 2¾ percent against the dollar.

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

## Developments in Foreign Industrial Countries

Recent indicators suggest a continued sluggish pace of growth in most foreign industrial nations. In Japan, both consumption and exports were flat in the early months of the year. In the euro area, activity remained subdued, though data suggest a slight bounceback from the weak pace of late last year. Business confidence declined in the United Kingdom, and retail sales and consumption remained weak through April. In Canada, growth of domestic demand was relatively robust as employment continued to increase and the housing market remained strong, although it appears growth slowed in the beginning of the year.

Twelve-month rates of consumer price inflation remained above the targets of most major foreign central banks in the first quarter, largely on account of high energy prices. However, in Japan, deflation continued.

After easing early in the year, both the European Central Bank (ECB) and the Bank of England have recently left rates unchanged. The Bank of Canada enacted its second 25-basis-point increase of the year in April, as concerns about the country's above-target inflation rate outweighed worries about the weak global economic environment. On April 30, the Bank of Japan (BOJ) voted to ease monetary policy, increasing its target range for the outstanding balance of reserve accounts held by private financial institutions at the BOJ.

In **Japan**, indicators suggest that economic activity was about flat in the early months of this year. In the first quarter on average, worker household expenditures were roughly unchanged from the fourth-quarter average, while new car registrations rose modestly. Both real exports and imports were about flat in the first quarter. Recent readings on business fixed investment have been mixed. Core machinery orders dropped nearly 10 percent in February from the previous month, but the average of January and February orders remained about 5 percent above the fourth-quarter average. Non-residential building starts declined markedly during the first quarter. After expanding strongly in January, industrial production fell in February and March, putting the average for the first quarter only a bit above the fourth-quarter average. The broader all-industries index of output fell 0.8 percent in February. For January and February on average, the index was 0.5 percent above the fourth-quarter average.

Labor market conditions also appear to have stabilized. The unemployment rate in March rose to 5.4 percent, a bit below the record-high 5.5 percent in January. The job-offers-to-applicants ratio, a leading indicator of employment, edged down to 0.60 in March. Core consumer goods prices in the Tokyo area (which exclude fresh food but include energy) fell marginally in April and were down

0.4 percent from a year earlier. Wholesale prices for domestic goods fell 0.7 percent in March from a year earlier.

### Japanese Economic Indicators

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

Indicator	2002		2003				
	Q3	Q4	Q1	Jan.	Feb.	Mar.	Apr.
Industrial production <sup>1</sup>	2.0	.4	.2	1.6	-1.6	-.2	n.a.
All-industries index	.3	-.3	n.a.	1.9	-.8	n.a.	n.a.
Housing starts	-4.6	1.7	.7	6.8	-3.5	-4.8	n.a.
Machinery orders <sup>2</sup>	-1.7	.3	n.a.	7.0	-9.6	n.a.	n.a.
Machinery shipments <sup>3</sup>	1.3	2.3	.1	2.8	-2.6	-1.7	n.a.
New car registrations	4.2	-.9	1.7	3.5	.1	.6	n.a.
Unemployment rate <sup>4</sup>	5.4	5.4	5.4	5.5	5.2	5.4	n.a.
Job offers ratio <sup>5</sup>	.54	.57	.60	.60	.61	.60	n.a.
Business sentiment <sup>6</sup>	-30	-28	-26	...	...	...	...
CPI (Core, Tokyo area) <sup>7</sup>	-.9	-.7	-.7	-.6	-.7	-.7	-.4
Wholesale prices <sup>7</sup>	-2.0	-1.3	-.9	-1.0	-.9	-.7	n.a.

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.

The Bank of Japan's Tankan survey for March paints a mixed picture of business confidence. The closely watched diffusion index for large manufacturers slipped to -10 from -9 in December. The index for large non-manufacturing firms improved a bit, as did sentiment among small- and medium-sized manufacturing firms. For FY2003, firms are expecting an increase in sales and profits, but are planning a small cut in capital investment.

The Bank of Japan announced on April 30 a rise in its target range for the outstanding balance of reserve accounts held by private financial institutions at

the BOJ from ¥17 trillion-¥22 trillion to ¥22 trillion-¥27 trillion. In addition, the BOJ said it would accept bank loans to the newly established Industrial Revitalization Corporation as collateral in its money market operations. In its announcement, the BOJ highlighted considerable uncertainty about the outlook for recovery in the United States and Europe, the possible impact of SARS, and unstable stock prices. Some observers noted that reserve balances have been within the new range since mid-March (i.e., they had been above the old range), in part reflecting the entry of Japan Post (a new public corporation established to take over the services of the postal system) into the BOJ's settlement system on April 1. Japan Post has reportedly maintained ¥4 trillion in reserve balances, instead of the expected ¥2 trillion.

The BOJ announced on April 8 that it will examine the possibility of buying asset-backed securities. In particular, the BOJ will consider outright purchases of commercial paper backed by the accounts receivables of small- and medium-sized enterprises (SMEs). The BOJ's statement noted that the move "has the objective to strengthen the effects of monetary easing by nurturing the development of the asset-backed securities market, thereby promoting smooth corporate financing." (The BOJ already obtains asset-backed commercial paper as collateral under repurchase agreements.) On March 25, the BOJ announced an increase in the total value of equity shares that it will purchase from banks, to ¥3 trillion from the original ¥2 trillion.

Production data for the **euro area** show a moderate rebound in January and February from weakness late last year, but measures of business sentiment suggest renewed weakness in March and April. The January and February average of industrial production rose 0.6 percent over the fourth-quarter average. However, the quarterly comparison is heavily influenced by a drop in production in December and the subsequent rebound in January, a result of the timing of end-of-year holidays. Measures of business sentiment were mixed early in the year, with most rebounding along with production, but sentiment generally turned down in March and declined further in April. With many of the April survey responses coming after the fall of Baghdad, weak sentiment suggests that firms continue to see poor business conditions despite diminished uncertainty regarding Iraq.

Consumer expenditure appears to have strengthened in the first quarter, with average euro-area retail sales in January and February rising 1.2 percent versus the fourth-quarter average. German retail sales also posted solid gains and Italian auto registrations in the first quarter surprised on the upside. In contrast, euro-area consumer confidence continued to fall throughout the first quarter before rebounding somewhat in April.

### Euro-Area Economic Indicators

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

Indicator	2002		2003				
	Q3	Q4	Q1	Jan.	Feb.	Mar.	Apr.
Industrial production <sup>1</sup>	.3	-.1	n.a.	1.3.	.2	n.a.	n.a.
Retail sales volume <sup>2</sup>	.7	-.4	n.a.	2.3	-.8	n.a.	n.a.
Unemployment rate <sup>3</sup>	8.3	8.5	n.a.	8.6	8.7	n.a.	n.a.
Consumer confidence <sup>4</sup>	-10	-14	-19.3	-18	-19	-21	-19
Industrial confidence <sup>4</sup>	-11.7	-10.3	-11	-10	-11	-12	-13
Mfg. orders, Germany	-1.2	.3	n.a.	4.1	-.8	n.a.	n.a.
CPI <sup>5</sup>	2.1	2.3	2.3	2.1	2.4	2.4	2.1
Producer prices <sup>5</sup>	.0	1.3	n.a.	2.3	2.7	n.a.	n.a.
M3 <sup>5</sup>	7.1	6.9	7.9	7.2	7.9	7.9	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.

Euro-area twelve-month consumer price inflation declined to 2.1 percent in April, just above the ECB's target ceiling, according to the preliminary estimate. Excluding energy and unprocessed food, inflation stayed at 2 percent throughout the first quarter, its lowest rate since August 2001. Twelve-month producer price inflation rose to 2.7 percent in February.

In the **United Kingdom**, first-quarter GDP growth was lackluster according to the preliminary estimate; manufacturing output increased, following declines during most of the past two years, while overall industrial production fell because of weakening activity in the energy sector. Growth slowed to 0.9 percent in the service sector, with most service industries experiencing slowing growth.

Limited data for the second quarter suggest that the pace of activity will continue to be positive, but sluggish. Business confidence continued to decline in April, though it remains well above its late 2001 low. Consumer sentiment moved up somewhat in April but has not recovered to its level in the fall of 2002. Retail

sales growth improved in March, though was weak in the first quarter overall and surveys suggest continued weakness in April.

### U.K. Economic Indicators

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

Indicator	2002		2003				
	Q3	Q4	Q1	Jan.	Feb.	Mar.	Apr.
Preliminary real GDP*	4.3	1.5	.8	...	...	...	...
Industrial production	.4	-.8	n.a.	-.2	.7	n.a.	n.a.
Retail sales volume <sup>1</sup>	.7	1.6	.1	-1	.4	.6	n.a.
Unemployment rate <sup>2</sup>							
Claims-based	3.1	3.1	3.1	3.1	3.1	3.1	n.a.
Labor force survey <sup>3</sup>	5.2	5.1	n.a.	5.1	n.a.	n.a.	n.a.
Business confidence <sup>4</sup>	10.7	3	-1.3	2	-1	-5	-10
Consumer confidence <sup>5</sup>	-2.7	-3	-10	-9	-10	-11	-8
Retail prices <sup>6</sup>	2.0	2.6	2.9	2.7	3.0	3.0	n.a.
Producer input prices <sup>7</sup>	-2.3	1.4	5.1	4.5	6.2	4.5	n.a.
Average earnings <sup>7</sup>	3.8	3.7	n.a.	3.3	2.8	n.a.	n.a.

1. s.a.a.r.

2. Excludes motor vehicles.

3. Percent

4. Three-month average centered on month shown.

5. Percentage of firms expecting output to increase in the next four months less percentage expecting output to decrease.

6. Average of the percentage balance from consumers' expectations of their financial situation, general economic situation, unemployment, and savings over the next 12 months.

7. Excluding mortgage interest payments. Percent change from year earlier.

8. Percent change from year earlier.

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

According to one of the leading surveys, housing prices were unchanged in April, bringing the twelve-month increase in prices down to just over 20 percent. First-quarter regional data indicate that the deceleration in prices has spread beyond London to most other regions of the country. Borrowing to finance the purchase of homes remained elevated through February.

Labor market conditions continued to be tight. The official claims-based unemployment rate held steady at 3.1 percent in March, near a record low. The twelve-month rate of retail price inflation (excluding mortgage interest payments) remained at 3 percent in March, above the Bank of England's 2½ percent target.

The twelve-month growth rate of average earnings receded to 2.4 percent in February, held down in part by lower financial sector bonuses.

Chancellor of the Exchequer Gordon Brown presented the government's budget to Parliament on April 9. In addition to confirming that he has set aside £3 billion for the war in Iraq, the Chancellor announced an additional £670 million of spending on domestic counter-terrorism measures and humanitarian work in Iraq. Brown projected public sector net borrowing to be 2.5 percent of GDP for 2003-04 and 2.1 percent of GDP for 2004-05, an upward revision from the deficit projected in the November Pre-Budget Report, but still rosier than consensus forecasts.

In **Canada**, real GDP by industry increased 2.3 percent in February, while industrial production declined 1.7 percent. Output growth was supported by the strength of residential construction. Manufacturing, primarily motor vehicles, and utilities output declined in the month after strong showings in January. The average of January and February GDP by industry increased 0.7 percent above the average fourth-quarter level.

Indicators suggest that domestic demand exhibited continued, though slowing, growth in the first quarter. Employment growth remained strong in the first quarter, though at a lower rate than in 2002. Recent job growth has been supported by the booming housing market, with a large gain in the number of real estate-related service jobs. Manufacturing jobs, after exhibiting strong growth in 2002, declined in the first quarter, but nevertheless the unemployment rate edged down further in March. Auto sales posted an estimated 5 percent decline in the first quarter, falling to the lowest level since the end of 2001. However, Canada's housing boom entered its second year, as housing starts increased 5.1 percent in the first quarter from the previous quarter.

In March, the twelve-month rate of headline CPI inflation declined to 4.3 percent from 4.6 percent in February, but remained well above the ceiling of the Bank of Canada's 1 to 3 percent target band. The twelve-month rate reflects higher energy prices and increases in tobacco taxes, as well as higher automobile insurance premiums. Twelve-month core inflation, excluding food, energy prices, and indirect taxes, decreased slightly, to 3.1 percent in March from 3.3 percent in February.

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**Canadian Economic Indicators**

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

Indicator	2002			2003			
	Q3	Q4	Dec.	Q1	Jan.	Feb.	Mar.
GDP by industry	.9	.5	.1	n.a.	.5	.2	n.a.
Industrial production	1.1	.0	-.1	n.a.	.7	-.1	n.a.
New mfg. orders	.8	-2.4	-2.8	n.a.	3	1.6	n.a.
Retail sales	.7	.8	.2	n.a.	.9	1.5	n.a.
Employment	.9	.8	.3	.5	.0	.4	.1
Unemployment rate <sup>1</sup>	7.6	7.5	7.5	7.4	7.4	7.4	7.3
Consumer prices <sup>2</sup>	2.3	3.8	3.9	4.5	4.5	4.6	4.3
Core Consumer Prices <sup>2,3</sup>	2.2	3.0	3.4	3.2	3.4	3.3	3.1
Consumer attitudes <sup>4</sup>	124.4	121.8	...	114.3	...	...	...
Business confidence <sup>4</sup>	129.7	136	...	131.4	...	...	...

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.

On April 15, the Bank of Canada increased the targeted overnight rate (its key policy rate) and the Bank Rate 25 basis points each, to 3.25 percent and 3.5 percent, respectively. The increase follows a 25-basis-point hike in March. In announcing the April increase, the Bank cited above-target inflation, higher inflation expectations, and an economy operating near capacity as motivation for its action. The Bank also stated that the risks confronting the global economy had become more balanced since the previous announcement date, as geopolitical uncertainties had diminished and the price of oil had declined.

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

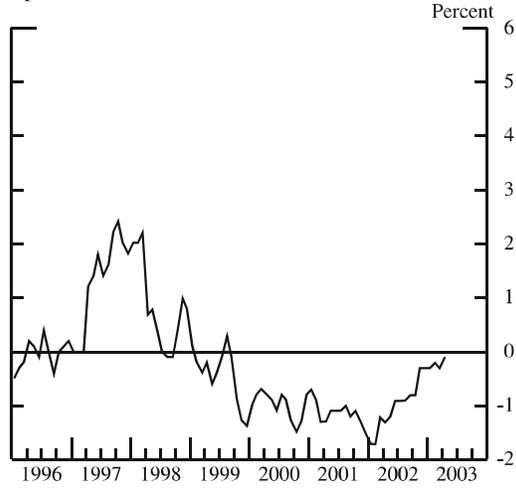
Country and balance	2002		2003			
	Q3	Q4	Q1	Jan.	Feb.	Mar.
<i>Japan</i>						
Trade	82.2	83.5	73.4	71.8	82.9	65.4
Current account	112.3	101.6	n.a.	100.6	124.5	n.a.
<i>Euro area</i>						
Trade <sup>1</sup>	128.1	107.2	n.a.	-10.9	67.0	n.a.
Current account <sup>1</sup>	90.4	98.4	n.a.	-82.5	41.8	n.a.
<i>Germany</i>						
Trade	136.5	124.1	n.a.	136.4	129.4	n.a.
Current account <sup>1</sup>	42.6	77.4	n.a.	-16.7	60.7	n.a.
<i>France</i>						
Trade	2.0	1.3	n.a.	.8	.7	n.a.
Current account	4.4	4.3	n.a.	5.2	3.9	n.a.
<i>Italy</i>						
Trade	8.4	6.2	n.a.	3.2	1.8	n.a.
Current account <sup>1</sup>	12.1	-15.1	n.a.	-53.0	-12.3	n.a.
<i>United Kingdom</i>						
Trade	-55.1	-68.3	n.a.	-61.4	-70.5	n.a.
Current Account	-6.6	-19.3	n.a.	...	...	...
<i>Canada</i>						
Trade	35.0	34.3	n.a.	40.3	36.7	n.a.
Current Account	10.8	8.4	n.a.	...	...	...

1. Not seasonally adjusted.

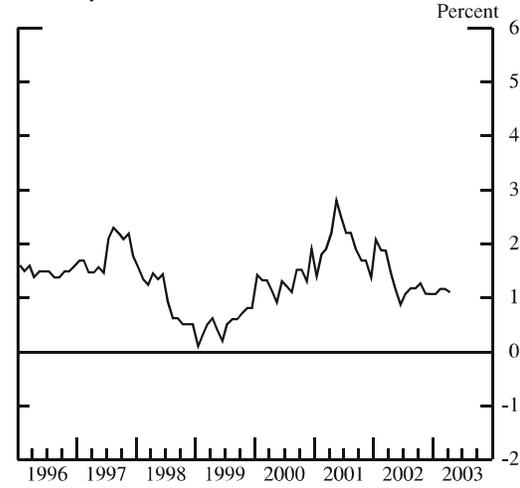
n.a. Not available. ... Not applicable.

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

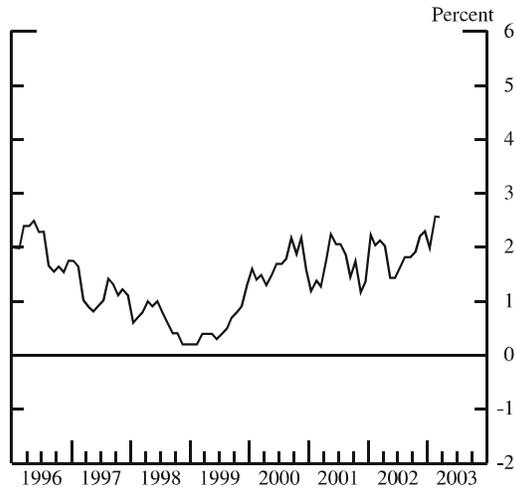
Japan



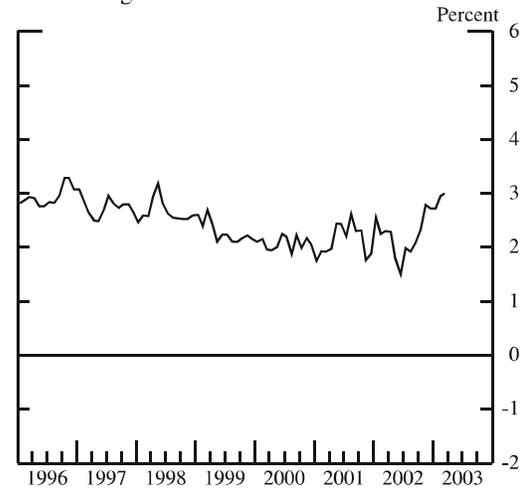
Germany



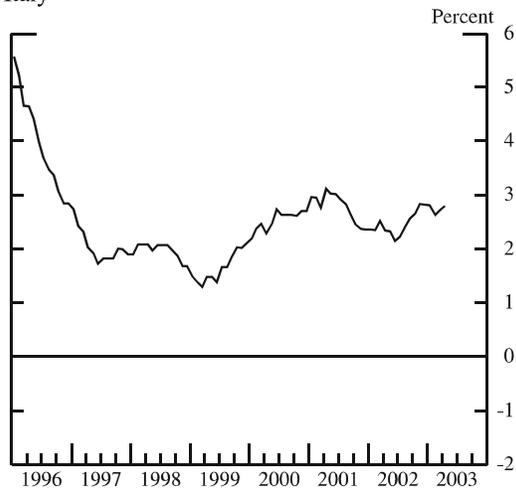
France



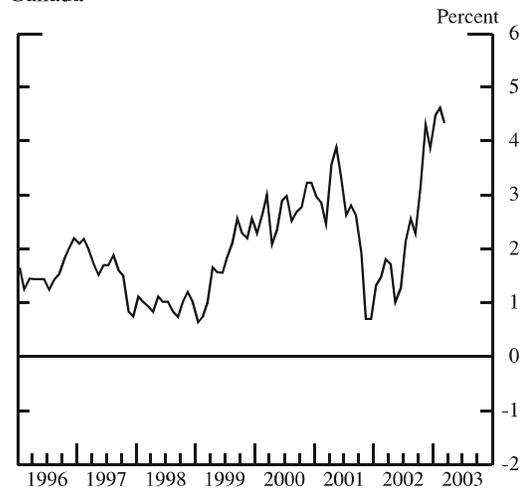
United Kingdom



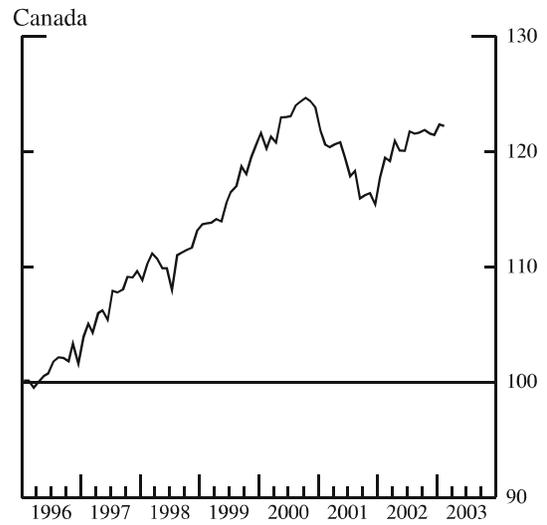
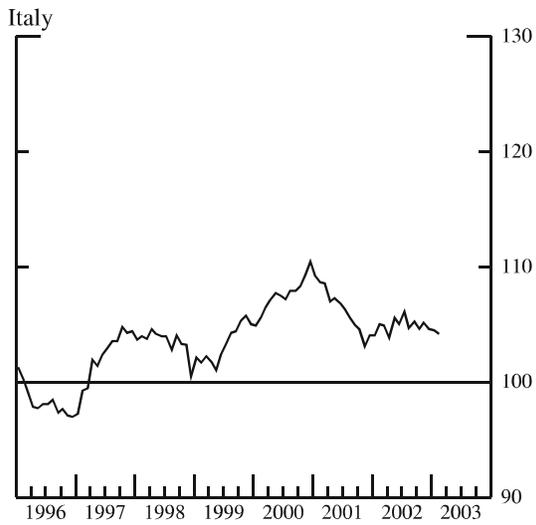
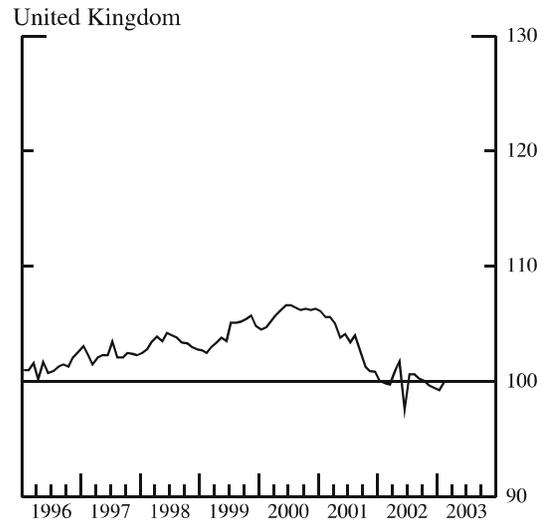
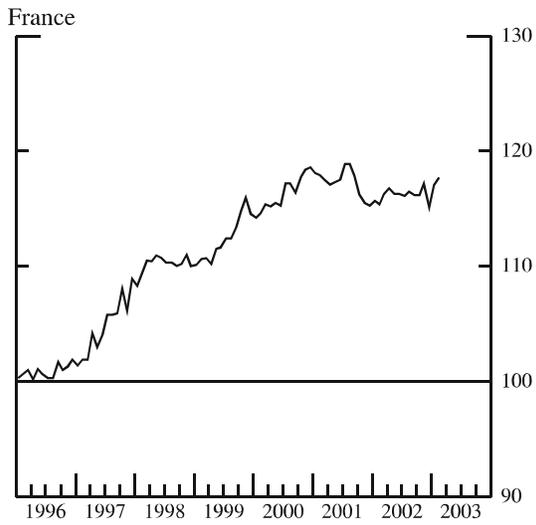
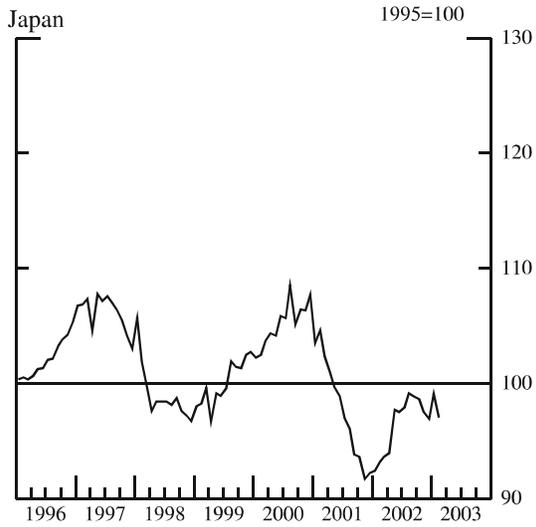
Italy



Canada



**Industrial Production in Selected Industrial Countries**



## **Economic Situation in Other Countries**

Economic conditions were mixed in the developing world. In Latin America, Mexican data releases were generally encouraging, and activity in Argentina continued to recover. Brazilian financial market conditions improved remarkably, but economic activity appears to have slowed. Venezuela remains in crisis. In developing Asia, it appears that SARS is having a significant impact on the Hong Kong economy, and is probably having measurable effects in China and Singapore as well, although we do not yet have much firm data. Activity indicators for the first quarter suggest that growth has slowed somewhat in much of the region. China's very robust reported growth in the first quarter was largely driven by special factors.

**Chinese** real GDP in the first quarter was 9.9 percent above its year-earlier level, which translates into a staff estimate of a growth rate of 16.3 percent (s.a.a.r.) in 2003:Q1. Chinese authorities cited strong exports as well as increases in public and foreign investment when issuing the data. Anecdotal reports suggest that production and exports were up in the quarter as Chinese producers attempted to fill orders before the war in Iraq, due to fears that the war would disrupt trade flows. Production data for the first quarter support these reports. Nevertheless, China recorded its first quarterly trade deficit in about seven years. Both exports and imports soared in the quarter, but imports were up more than 35 percent (s.a.). Elevated oil prices as well as China's reported efforts to boost its oil reserves are part of the explanation for the surge in imports, but it was also due to lower tariffs that were put in place in January as a result of WTO accession. Consumer prices continued to rise on a twelve-month basis in the first quarter, after falling throughout last year. Higher oil prices and the strong economy were responsible for the recent shift from deflation to inflation.

China has reported the world's highest number of SARS cases, and the impact on China's economy is now being felt. Data suggest that tourism was down slightly in March, but this is difficult to interpret because China was still covering up the full extent of the outbreak at that time. Other reports suggest that business travel and tourism have been hit hard since the full extent of China's exposure to SARS has become known. In its efforts to contain the spread of SARS, China cancelled most of a week-long holiday, quarantined almost 10,000 people, and closed schools and many entertainment establishments in Beijing.

### Chinese Economic Indicators

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

Indicator	2001	2002	2002	2003			
			Q4	Q1	Jan.	Feb.	Mar.
Real GDP <sup>1</sup>	7.5	8.0	6.8	16.3	...	...	...
Industrial production <sup>2</sup>	8.9	11.8	14.5	17.0	14.8	19.8	16.9
Consumer prices <sup>2</sup>	-.3	-.4	-.6	.5	.4	.2	.9
Trade balance <sup>3</sup>	23.1	30.3	45.6	-13.1	-29.8	-6.8	-2.6

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.

... Not applicable.

**Hong Kong** reported 7 percent growth (s.a.a.r.) in fourth-quarter real GDP. Growth was led by exports, especially to China. The pace of expansion likely slackened early this year, as the unemployment rate rose to 7.5 percent in March. Manufacturing jobs were lost to lower wage workers in China, and construction has been depressed due to the five-year slump in property prices. Falling property prices also continued to weigh on consumer prices, which fell in March. Exports to China rose sharply in February, narrowing the trade deficit somewhat.

The economic impact of SARS on Hong Kong is already considerable. Tourist arrivals, hotel occupancy rates, and retail sales in certain industries have plummeted, in some cases to 80 percent below their year-ago levels. In late April, the Hong Kong government unveiled a \$1.5 billion (0.9 percent of GDP) relief package that includes government loan guarantees for SARS-hit businesses and cuts in government property rental rates and utility rates.

In **Taiwan**, industrial production was roughly unchanged in the first quarter, as a small increase in high-tech production was offset by declines in other industries. Import growth, owing largely to higher oil imports, outpaced export growth in the first quarter, and the first-quarter trade surplus narrowed a bit as a result. Higher oil prices also caused deflation to abate somewhat, with prices in March only slightly below their year-ago levels. SARS has not had the economic impact on Taiwan that it had on some other Asian economies, primarily due to the small number of cases reported in Taiwan and Taiwan's limited dependence on tourism.

### Hong Kong Economic Indicators

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

Indicator	2001	2002	2002	2003			
			Q4	Q1	Jan.	Feb.	Mar.
Real GDP <sup>1</sup>	-1.0	5.0	7.0	n.a.	...	...	...
Unemployment rate <sup>2</sup>	4.9	7.3	7.2	7.5	7.2	7.4	7.5
Consumer prices <sup>3</sup>	-3.7	-1.6	-2.9	.9	-1.7	1.3	-2.3
Trade balance <sup>4</sup>	-11.4	-7.7	-10.2	-6.9	-8.5	-6.9	-5.3

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.

### Taiwan Economic Indicators

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

Indicator	2001	2002	2002	2003			
			Q4	Q1	Jan.	Feb.	Mar.
Real GDP <sup>1</sup>	-1.8	4.1	3.7	n.a.	...	...	...
Unemployment rate <sup>2</sup>	4.6	5.2	5.1	5.2	5.2	5.2	5.2
Industrial production	-7.3	6.4	1.1	-.1	-.7	.6	-2.7
Consumer prices <sup>3</sup>	-1.7	.8	-.5	-.2	-1.1	-1.5	-.2
Trade balance <sup>4</sup>	15.6	18.1	19.6	13.5	.6	22.0	17.9
Current account <sup>5</sup>	17.9	25.7	30.9	n.a.	...	...	...

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.

Data releases for **Korea** over the intermeeting period suggest a slowdown from the very rapid growth registered in late 2002. Real GDP soared 8.3 percent in the fourth quarter, supported by a jump in fixed investment and strong net export performance. Industrial production rose only slightly in the first quarter, but the unemployment rate remained low. March consumer and business confidence indicators fell sharply. Export growth continued strong in the first quarter, but a

runup in oil imports contributed to a \$6.7 billion current account deficit. Consumer prices rose 3.8 percent over the 12 months ended in April. The U.S. military success in Iraq, the start of multilateral negotiations with North Korea, and the government's efforts to contain a recent corporate scandal have improved financial conditions since the last Greenbook. The won has appreciated over 2 percent against the dollar, and the Korean stock market has risen almost 13 percent since mid-March.

### Korean Economic Indicators

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

Indicator	2001	2002	2002	2003			
			Q4	Q1	Feb.	Mar.	Apr.
Real GDP <sup>1</sup>	4.2	7.0	8.3	n.a.	...	...	...
Industrial production	1.0	7.4	2.7	.4	.3	.3	n.a.
Unemployment rate <sup>2</sup>	3.8	3.1	3.0	3.1	3.0	3.1	n.a.
Consumer prices <sup>3</sup>	3.2	3.8	3.4	4.1	3.9	4.6	3.8
Trade balance <sup>4</sup>	13.5	14.2	15.5	9.6	12.0	-3.8	n.a.
Current account <sup>5</sup>	8.2	6.1	7.9	-6.7	-.8	-14.3	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.

In the **ASEAN** region, data releases over the intermeeting period have painted a mixed picture on activity since the fourth quarter. Growth in industrial production in the Philippines slowed in January and February, and Malaysian industrial production continued the decline seen late last year. In Indonesia, in contrast, activity expanded, reflecting in part recovery from last fall's bombing in Bali. Activity in Singapore and Thailand held up in the first quarter, boosted by net exports. However, within the region, Singapore has suffered the most from the SARS epidemic, and its government announced a relief package in late April. Inflation slowed over much of the region, despite the rise in oil prices during February and early March.

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

Indicator and country	2001	2002	2002	2003			
			Q4	Q1	Jan.	Feb.	Mar.
<i>Real GDP<sup>1</sup></i>							
Indonesia	1.8	3.8	-8	...	...	...	...
Malaysia	-6	5.5	2.6	...	...	...	...
Philippines	3.9	5.8	12.7	...	...	...	...
Singapore	-6.0	3.0	.4	...	...	...	...
Thailand	2.2	6.3	8.2	...	...	...	...
<i>Industrial production<sup>2</sup></i>							
Indonesia <sup>3</sup>	.7	-1.1	1.4	n.a.	-8	4.9	n.a.
Malaysia	-4.1	4.1	-1.0	n.a.	-6	-1.6	n.a.
Philippines	-5.7	-6.1	2.4	n.a.	1.2	-7	n.a.
Singapore	-11.6	8.5	-2.2	3.4	5.6	-13.7	11.3
Thailand	1.3	8.5	2.2	4.3	3.8	-1.9	3.4

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	2003			
			Q4	Q1	Jan.	Feb.	Mar.
Indonesia	25.4	25.9	23.9	n.a.	27.1	27.4	n.a.
Malaysia	14.2	13.4	14.3	n.a.	24.1	16.9	n.a.
Philippines	-9	-2	-8	n.a.	-1.3	-3.5	n.a.
Singapore	5.8	8.7	10.7	16.7	30.8	11.6	7.8
Thailand	2.5	3.5	4.0	5.5	5.9	6.5	4.1

n.a. Not available.

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

Country	2001 <sup>1</sup>	2002 <sup>1</sup>	2002	2003			
			Q4	Q1	Jan.	Feb.	Mar.
Indonesia	12.5	10.0	10.3	7.7	8.7	7.3	7.1
Malaysia	1.2	1.7	1.8	1.3	1.7	1.6	.7
Philippines	4.1	2.6	2.6	2.9	2.7	3.1	2.9
Singapore	-.6	.4	.1	.7	.9	.4	.8
Thailand	.8	1.6	1.4	2.0	2.2	1.9	1.7

1. December/December.

In **Mexico**, data since the last Greenbook have generally pointed to increased activity. Overall economic activity (a monthly proxy for GDP) posted a sizable gain in February, exports were up over 2½ percent in the first quarter, and business confidence turned up sharply in March. The rise in exports led to a significant narrowing of the trade deficit over the first quarter, compared with the fourth quarter of last year, although the deficit widened a bit again in March. Retail sales data also point to a firming of domestic demand over January and February.

The twelve-month rate of consumer price inflation rose slightly in March to 5.7 percent; in anticipation of this higher-than-expected figure, the Bank of Mexico tightened monetary policy again in late March. Expectations for end-2003 inflation based on survey data have been running steady at 4½ percent, well above the Bank of Mexico's target of 3 percent.

In **Brazil**, indicators point to a slowing in economic activity from the second half of last year, when a substantial rise in net exports boosted growth. Over the January-February period, industrial production growth slowed, and the unemployment rate remained high at over 11 percent. The trade surplus narrowed in the first quarter, driven apparently by higher oil imports. Nevertheless, the current account registered a small surplus, the first in ten years.

Persistently high inflation continued to dominate policy concerns. Twelve-month inflation in March was 17.7 percent, well above the 8.5 percent upper limit of the government's inflation target range for 2003. While some rise in inflation had been expected as a result of the sharp depreciation of the *real* in 2002 and the rise in domestic fuel prices, the considerable increase in non-traded goods inflation has been a worrisome development. In response, the Lula government has signaled its determination to pursue disciplined fiscal and

monetary policies. In mid-April, Finance Minister Palocci unveiled long-awaited proposals to reduce pension and survivor benefits for public sector workers and to overhaul the tax system. The reform proposals, which are considered critical to fiscal solvency and sustained growth, were well received, boosting asset prices. Since mid-March, the *real* has appreciated 15 percent and the Brazilian EMBI+ spread over U.S. Treasuries has fallen to about 840 basis points. At its April 23 policy meeting, the central bank kept the overnight interest rate (the Selic) unchanged at 26.5 percent.

On April 29, the Brazilian government became the second major emerging market economy to issue a sovereign bond in New York with collective action clauses (CACs), placing a \$1 billion bond that matures in 2007 at a yield of 10.7 percent. (CACs are aimed at making debt restructurings easier in the event of default.) The Brazilian bonds would require 85 percent of investors to agree to a debt restructuring, compared with the Mexican bonds issued in April, which require a 75 percent supermajority.

### Mexican Economic Indicators

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

Indicator	2001	2002	2002	2003			
			Q4	Q1	Jan.	Feb.	Mar.
Real GDP <sup>1</sup>	-1.5	2.1	.6	n.a.	...	...	...
Overall economic activity	-.1	.9	.2	n.a.	-.2	.5	n.a.
Industrial production	-3.3	-.2	-.3	n.a.	.5	1.1	n.a.
Unemployment rate <sup>2</sup>	2.5	2.7	2.6	2.7	2.7	2.7	2.8
Consumer prices <sup>3</sup>	4.4	5.7	5.3	5.4	5.2	5.5	5.6
Trade balance <sup>4</sup>	-10.0	-8.0	-6.4	-3.1	-3.1	-2.1	-4.1
Imports <sup>4</sup>	168.4	168.7	168.5	169.3	169.3	169.2	169.3
Exports <sup>4</sup>	158.4	160.7	162.0	166.2	166.2	167.1	165.2
Current account <sup>5</sup>	-18.0	-14.0	-18.9	n.a.	...	...	...

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.

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**Brazilian Economic Indicators**

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

Indicator	2001	2002	2002	2003			
			Q4	Q1	Jan.	Feb.	Mar.
Real GDP <sup>1</sup>	-7	3.4	2.9	n.a.	...	...	...
Industrial production	1.6	2.3	2.0	n.a.	.6	.7	n.a.
Unemployment rate <sup>2</sup>	12.4	11.7	12.0	11.1	11.1	11.1	11.1
Consumer prices <sup>3</sup>	7.7	12.5	10.6	15.6	14.5	15.8	16.6
Trade balance <sup>4</sup>	2.6	13.1	23.9	16.7	17.0	15.4	17.7
Current account <sup>5</sup>	-23.2	-7.6	-1.3	0.3	1.9	-2.4	1.4.

1. Annual rate. Annual figures are Q4/Q4.

2. Percent. Break in October 2001 as a result of change in methodology. Thus, 2001 is average for Q4 only.

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**, further evidence of recovery was provided by a sharp rise in industrial production in March to a level 21 percent above that of a year ago, although activity remains well below its 1998 peak. Twelve-month inflation in March was 32 percent, still high, but down considerably from over 40 percent last year. The reduction in inflation seems to reflect the strengthening of the peso. Argentina met the fiscal and monetary targets of its IMF program for the first quarter of 2003.

Following the Supreme Court's decision in early March questioning the constitutionality of the government's January 2002 *corralon*, the Duhalde government in late March offered a settlement to unhappy depositors.<sup>1</sup> Under the deal, depositors would have immediate access to two-thirds of the peso equivalent of their original dollar accounts (converted at the market exchange rate). The remainder would be converted into a ten-year dollar-denominated bond paying below-market interest rates. The low number of depositors agreeing to these terms prompted the government to extend the deadline for its offer to May 23.

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1. In January 2002, following the collapse of the peso's peg to the dollar, the government forcibly converted dollar-denominated deposits into pesos at an unfavorable exchange rate to depositors and lengthened their maturities.

Following a late April first-round presidential election, Néstor Kirchner (backed by President Duhalde) and former president Carlos Ménem will face each other in a run-off on May 18. Neither of these candidates has fully articulated a program that addresses the country's economic problems. The new government will take office on May 25.

### Argentine Economic Indicators

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

Indicator	2001	2002	2002	2003			
			Q4	Q1	Jan.	Feb.	Mar.
Real GDP <sup>1</sup>	-10.3	-4.0	3.4	n.a.	...	...	...
Industrial production	-7.6	-10.7	5.8	7.8	3.4	1.4	1.6
Unemployment rate <sup>2</sup>	17.4	19.7	17.8	n.a.	...	...	...
Consumer prices <sup>3</sup>	-1.4	41.0	40.4	35.8	39.7	36.2	31.7
Trade balance <sup>4</sup>	7.5	16.4	16.1	n.a.	19.5	19.3	n.a.
Current account <sup>5</sup>	-4.5	9.0	8.7	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.

**Venezuela** remains mired in economic and political crisis. Anecdotal reports suggest that oil production and exports have recovered further, but have fallen short of levels prevailing before last December's general strike. The capital controls that have stopped all private sector external transactions since early February remain in effect, along with the fixed exchange rate regime imposed in early February. Monthly consumer price inflation, which had risen sharply last year, dropped back in March in response to the stabilization of the bolivar and to the steep decline in non-oil related activity since the fourth quarter of last year. In mid-April, the central bank lowered its discount rate from 39 to 36 percent.

In March, President Chavez rattled investors by indicating that the government would seek to restructure its foreign debt. Economic officials quickly countered that the government would seek a voluntary restructuring, but there has been no further word on the subject. As of February, international reserves stood at \$14 billion; this compares with scheduled payments of \$5 billion on sovereign external debt over the rest of this year. Tensions between business interests and

the Chavez government, already high, have been exacerbated by the capital controls.

### Venezuelan Economic Indicators

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

Indicator	2001	2002	2002	2003			
			Q4	Q1	Jan.	Feb.	Mar.
Real GDP <sup>1</sup>	.9	-16.7	-41.3	n.a.	...	...	...
Unemployment rate <sup>2</sup>	13.3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Consumer prices <sup>3</sup>	12.3	31.2	30.6	35.5	33.8	38.7	34.1
Non-oil trade balance <sup>4</sup>	-12.2	-7.4	-5.5	n.a.	n.a.	n.a.	n.a.
Trade balance <sup>4</sup>	9.3	13.9	14.80	n.a.	n.a.	n.a.	n.a.
Current account <sup>5</sup>	3.9	7.7	8.63	n.a.	...	...	...

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.