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Part 2 May 1, 2002

# CURRENT ECONOMIC AND FINANCIAL CONDITIONS

### **Recent Developments**

May 1, 2002

### **Recent Developments**

# Domestic Nonfinancial Developments

### **Domestic Nonfinancial Developments**

#### Overview

Economic activity increased rapidly early this year, with real GDP now estimated to have risen at an annual rate of about 5-3/4 percent in the first quarter. The improvement in economic conditions extended to the industrial sector, where production posted broad-based gains as inventory adjustments slowed and spending on high-tech goods and consumer durables turned up. Although the demand for labor has firmed a bit of late, hours fell again in the first quarter, implying another substantial increase in productivity. Despite the boost to headline inflation from the recent surge in energy prices, core measures of inflation remain subdued.

### **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 5.8 percent in the first quarter. The acceleration from the pace of nearly 2 percent recorded in the fourth quarter was driven by a marked slowing in the rate of inventory liquidation. Final sales increased at about a 2-1/2 percent rate in the first quarter, as sizable increases in spending by households and governments were partially offset by another decline in business fixed investment and a further sharp deterioration in real net exports. At this stage, we do not anticipate any change to the advance GDP estimate. This assessment takes into account the monthly construction data, which were released on May 1 and were weaker than the BEA had assumed, as well as our anticipation of a small upward revision to real net exports.

### **Labor Market Developments**

Although the large declines in payroll employment appear to have ended, the economy has not yet begun to generate robust employment gains. Private nonfarm payroll employment was essentially flat in February and March after having fallen 277,000 per month on average from October to January. The unemployment rate rose 0.2 percentage point in March, retracing most of its decline in January and February.

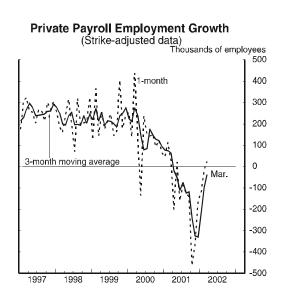
Nevertheless, some leading indicators of labor market conditions did improve in March. The manufacturing workweek rose 0.4 hour, much of the rise due to increased overtime; the factory workweek is now up 3/4 hour from its trough in November. In addition, employment in the help-supply industry rose 69,000 in March after a smaller rise in February; the back-to-back increases in this sector represent the first gains in nearly a year and a half. Though classified as a services industry, help supply provides many of its workers to the manufacturing sector, where employment losses have abated of late as well.

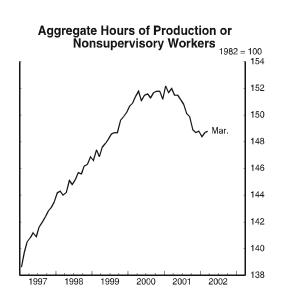
Turning to April, our reading of initial claims for unemployment insurance in recent weeks has been complicated by the federal temporary extended

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

			2001	2002		2002	
	2000	2001	Q4	Q1	Jan.	Feb.	Mar.
	Av	erage mo	onthly c	hange			
Nonfarm payroll employment <sup>1</sup>	167	-87	-303	-18	-109	-2	58
Previous	167	-87	-303		-126	66	
Private	149	-124	-330	-38	-118	-17	21
Mining	1	1	-2	-3	-1	-6	-2
Manufacturing	-12	-109	-136	-69	-116	-54	-38
Construction	18	5	-7	-23	-63	30	-37
Transportation and utilities	14	-16	-52	-8	-17	0	-6
Retail trade	26	-3	-57	29	43	50	-6
Wholesale trade	8	-11	-17	-7	<b>-</b> 5	-14	-2
Finance, insurance, real estate	0	4	-0	<del>-</del> 5	6	-14	-6
Services	93	5	-59	48	35	-9	118
Help supply services	-2	-43	-71	22	-13	10	69
Total government	18	37	27	20	9	15	37
Total employment (household survey)	115	-153	-316	-54	-587	851	-425
Nonagricultural	119	-154	-338	-14	-614	878	-305
Memo: Aggregate hours of private production	on						
workers (percent change) 1,2	1.1	-1.8	-3.8	-0.4	-0.3	0.2	0.1
Average workweek (hours) <sup>1</sup>	34.4	34.2	34.1	34.2	34.1	34.2	34.2
Manufacturing (hours)	41.6	40.7	40.5	40.8	40.6	40.7	41.1

Note. Average change from final month of preceding period to final month of period indicated.





<sup>1.</sup> Survey of establishments.

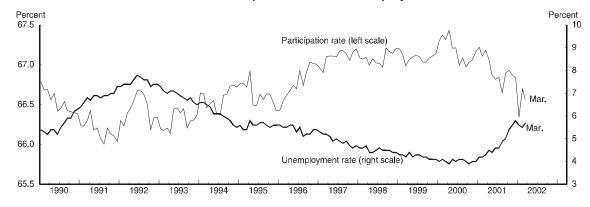
<sup>2.</sup> Annual data are percent changes from Q4 to Q4. Quarterly data are percent changes from preceding quarter at an annual rate. Monthly data are percent changes from preceding month.

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

			2001	2002		2002	
	2000	2001	Q4	Q1	Jan.	Feb.	Mar.
Civilian unemployment rate							
(16 years and older)	4.0	4.8	5.6	5.6	5.6	5.5	5.7
Teenagers	13.0	14.7	15.8	16.0	16.1	15.6	16.4
20-24 years old	7.1	8.3	9.5	9.8	9.7	9.5	10.3
Men, 25 years and older	2.8	3.6	4.4	4.5	4.5	4.4	4.5
Women, 25 years and older	3.2	3.7	4.4	4.4	4.3	4.6	4.4
Labor force participation rate	67.2	66.9	66.9	66.5	66.4	66.7	66.6
Teenagers	52.2	49.9	49.1	48.2	47.8	47.8	48.9
20-24 years old	77.9	77.2	76.9	76.3	76.0	76.6	76.4
Men, 25 years and older	76.0	75.9	75.9	75.6	75.5	75.7	75.6
Women, 25 years and older	59.7	59.7	59.6	59.6	59.4	59.8	59.5

### **Labor Force Participation Rate and Unemployment Rate**

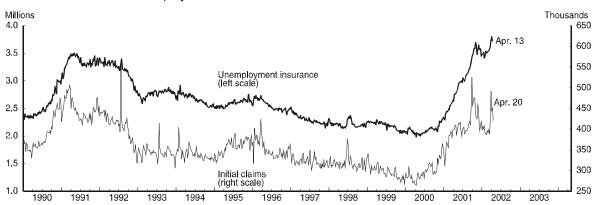




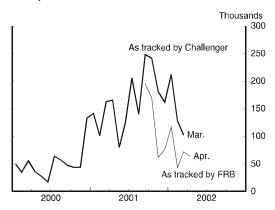


### **Labor Market Indicators**

### Initial Claims for Unemployment Insurance

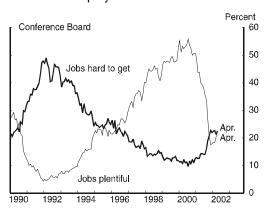


#### Layoff Announcements

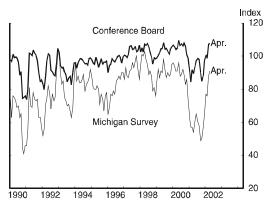


Note. Challenger is the outplacement firm Challenger, Gray and Christmas, Inc.  $\,$ 

### **Current Employment Conditions**

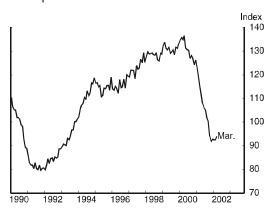


### **Expected Employment Conditions**



Note. Expected conditions index is the proportion of households expecting unemployment to fall, minus the proportion expecting unemployment to rise, plus 100.

### Help Wanted Index



unemployment compensation program (TEUC). The law required some TEUC claimants to file new claims for state unemployment benefits even though they were not eligible for further regular state benefits, and this contributed to initial claims jumping to 492,000 in the week ended March 30. By the week ended April 20, claims had fallen back to 421,000. The TEUC program also appears to have raised the level of insured unemployment, as individuals nearing the expiration of their state benefits—but assured of up to thirteen additional weeks of benefits from TEUC—may have searched less intensively for jobs than they otherwise would have. The data provided by the Employment and Training Administration show that some states continued to report the filing of TEUC-induced initial claims for the week ended April 20, but the sharp drop-off in claims since the end of March leads us to believe that the influence of TEUC on initial claims will largely disappear within the next few weeks. Nonetheless, the effect of the program on the unemployment rate is likely to persist through the end of the year.

Although the exact effect of the TEUC program is difficult to gauge, we think that most of the recent rise in initial claims and insured unemployment reflects this special factor rather than a pickup in the pace of layoffs. Indeed, layoff announcements compiled by the outplacement firm Challenger, Gray, and Christmas, Inc., and by Board staff have declined from the peaks recorded in September and October. In March, the Challenger series stood at about the average level prevailing during the first half of last year. Over the eight months in which it has been compiled, the Board staff's layoff series has trended downward, broadly in line with the Challenger series, and was at a low level in April.

Other indicators of developments in the labor market have been mixed of late. The help-wanted index inched up in March but is little changed from its trough in November. Current employment conditions, as measured by the Conference Board, have firmed only a little in recent months. However, expectations of employment conditions, as measured by both the Michigan Survey Research

<sup>1.</sup> Specifically, under the TEUC law, individuals whose "benefit year" expired after March 15, 2001, are eligible to receive TEUC benefits if they file a new claim for regular UI benefits between March 15, 2001, and the end of this year, when the TEUC program ends. The "benefit year" is the twelve months following the first payment of UI benefits. The TEUC program extends the duration of unemployment insurance benefits by half the length of state benefits. For the week ended April 6, persons receiving benefits from the TEUC program numbered 1.2 million, approximately the number receiving assistance one month after the enactment of a similar program in November 1991.

<sup>2.</sup> Beginning with the April 11 unemployment insurance release, the Employment and Training Administration began seasonally adjusting initial claims and insured unemployment using a procedure developed at the Board. Revised data show the rise and fall in both initial claims and insured unemployment in the last two quarters to have been less precipitous than originally published.

Center and the Conference Board, have improved significantly and have retraced all their losses since the middle of 2000.

The Bureau of Labor Statistics will release its advance estimate of productivity for the first quarter on May 7. 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 about 8-1/2 percent in the first quarter after having risen more than 5 percent in the fourth quarter—making the two-quarter gain the largest since the early 1980s. Rapid increases in productivity in the initial

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

Sector	$2000^{1}$	2001 <sup>1,4</sup>	20	2002	
Sector	2000		Q3	Q4 <sup>4</sup>	Q1 <sup>4</sup>
Nonfarm businesses All persons <sup>2</sup> All employees	2.6 2.3	2.0 2.0	1.1 1.2	5.5 5.8	8.4 7.3
Nonfinancial corporations <sup>3</sup>	2.9	2.7	.9	10.5	n.d.

- 1. Changes are from the fourth quarter of the preceding year to the fourth quarter of the year shown.
  - 2. Includes non-employees (published definition).
- 3. The nonfinancial corporate sector consists of all corporations doing business in the United States with the exception of banks, stock and commodity brokers, and finance and insurance companies; the sector accounts for about two-thirds of business employment.
  - 4. Staff estimate.

quarters of an economic upturn are not unusual because employers, having hoarded labor during the downturn, can increase output without a similar increase in hours. But the recent gain in productivity has been greater than historical relationships would suggest, thereby raising a number of possibilities. First, businesses may have been surprised by the strength of demand during the winter. Moreover, they may still be uncertain about the durability and vigor of the recovery going forward. If so, the recent productivity performance would represent only a temporary departure from its longer-term structural trend. Some evidence that businesses—particularly non-manufacturing firms—were surprised by the upturn in demand appeared in a recent survey conducted by the National Association of Business Economists. More than half of the respondents reported that demand since October has exceeded the expectations that they formed in October, and three-fourths of those whose demand exceeded expectations reported that they had met the increase in demand by increasing productivity. However, we doubt that all of the recent productivity performance

can be attributed to these factors. Thus, we are also inferring that the rate of increase in structural productivity has been faster than we previously assumed.

### **Industrial Production**

Output in the industrial sector rose 0.7 percent in March, its third consecutive monthly gain. Increases were widespread across market groups and among industries. For the first quarter as a whole, production expanded at an annual rate of 2-1/2 percent after having dropped nearly 7 percent in the fourth quarter of 2001. Capacity utilization in manufacturing rose half a percentage point in March, to about 74 percent, but remains 7 percentage points below its long-run (1967 to 2001) average.

The production of motor vehicles averaged 12.2 million units (annual rate) in the first quarter and apparently was slightly above this level in April. With days' supply of vehicles near comfortable levels for GM and Ford, and somewhat lean for other manufacturers, assemblies are scheduled to remain above 12 million units in May and June. Elsewhere in transportation, the production of aircraft and parts fell again in March; for the first quarter as a whole, output dropped at an annual rate of about 30 percent, following a similar decline in the fourth quarter of 2001.

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

Itam	20	001		002			
Item	Q3	Q4	Q1	Jan.	Feb.	Mar.	Apr. <sup>1</sup>
U.S. production Autos Trucks	11.6 4.7 6.9	11.6 4.8 6.8	12.2 5.2 6.9	12.1 5.1 7.1	12.3 5.5 6.8	12.1 5.2 6.9	12.4 5.3 7.1
Days' supply <sup>2</sup> Autos Light trucks <sup>3</sup>	49.1 74.0	38.3 52.3	51.1 61.8	49.4 65.6	51.2 60.0	47.9 61.6	n.a. n.a.
Inventories <sup>4</sup>	2.69	2.27	2.41	2.34	2.42	2.41	n.a.

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

- 1. Production rates reflect Ward's Communications' latest estimates for April.
- 2. Quarterly average calculated using end-of-period stocks and average reported sales.
- 3. Excludes medium and heavy (classes 3-8) trucks.
- 4. End-of-period stocks; excludes medium and heavy (class 3-8) trucks.
- n.a. Not available.

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

		20011	2001 <sup>2</sup>	2002 <sup>2</sup>		2002 <sup>3</sup>	
Component	Proportion 2001	20011	Q4	Q1	Jan.	Feb.	Mar.
<b>Total</b> Previous	<b>100.0</b> 100.0	<b>-5.9</b> -5.8	<b>-6.7</b> -6.6	2.5	<b>.5</b> .2	. <b>3</b> .4	.7
Manufacturing Ex. motor veh. and parts Ex. high-tech industries	86.7	-6.1	-6.3	3.3	.6	.2	.8
	80.4	-6.6	-6.0	2.0	.7	.2	.8
	73.8	-5.5	-6.6	.8	.6	.0	.8
Mining	6.2	-2.4	-11.8	-9.0	1	7	-1.6
Utilities	7.1	-6.1	-7.2	3.0	3	3.0	1.6
Selected industries High technology Computers Communication equipment Semiconductors <sup>4</sup>	6.6	-15.6	1.3	16.9	2.0	1.9	1.4
	1.5	-8.2	3.6	19.6	1.3	1.5	1.2
	1.5	-24.4	-25.9	-18.1	-2.4	3	1.7
	3.5	-14.9	14.4	32.4	4.0	2.8	1.4
Motor vehicles and parts	6.3	4	-10.1	19.4	1	.5	.2
Aircraft and parts	2.6	-11.6	-26.6	-31.4	-1.6	-3.1	-3.7
Market groups excluding energy and selected industries Consumer goods Durables Nondurables	24.0 3.5 20.6	-1.6 -8.0 5	-3.0 -10.5 -1.7	2.5 8.7 1.5	.1 8 .2	.3 1.7 .0	.7 1.8 .5
Business equipment	7.9	-10.8	-8.3	-2.7	1.3	-1.2	.9
Defense and space equipment	2.0	.2	4.2	5.1		.3	1.1
Construction supplies	6.6	-3.8	-9.3	8.3	.1	1.3	1.2
Business supplies	7.1	-8.4	-5.1	-3.8	.2	7	.6
Materials	23.9	-6.9	-9.3	1.9	1.4	.0	1.2
Durables	16.3	-7.3	-12.3	1.6	1.2	2	1.1
Nondurables	7.6	-6.1	-2.7	2.7	1.8	.4	1.3

Fourth-quarter to fourth-quarter change.
 Annual rate.
 Monthly rate.
 Includes related electronic components.

### Capacity Utilization (Percent of capacity)

	1967-	1982	1990- 1982 91	2001		2002		
Sector	2001 average	1982 low	91 low	Q3	Q4	Q1	Feb.	Mar.
Total industry	81.9	71.1	78.1	76.2	74.7	75.0	74.9	75.4
Manufacturing High-tech industries Excluding high-tech industries	80.9 80.0 81.0	69.0 77.3 68.0	76.6 72.4 76.8	74.5 61.3 76.1	73.1 60.7 74.7	73.6 62.0 75.1	73.4 62.1 74.9	73.9 62.4 75.5
Mining Utilities	87.6 87.6	80.3 75.9	87.0 83.4	90.7 86.3	87.6 83.6	85.4 83.2	85.6 83.6	84.3 84.6

The production of high-tech goods increased 1.4 percent in March. During the first quarter, high-tech output surged at an annual rate of 17 percent, driven by a recovery in the production of semiconductors. The strength of the revival in this industry going forward is uncertain. The book-to-bill ratio for semiconductor equipment manufacturers in March exceeded 1 for the first time since November 2000. Industry contacts indicate that inventories held by customers are at desirable levels, except for some segments of the communications equipment industry. They caution, however, that a significant share of this recent increase in orders might be the result of inventory restocking rather than a sustained pickup in demand for downstream equipment.

The recent performance of industries downstream from semiconductors has been mixed. The output of computers rose at an annual rate of nearly 20 percent in the first quarter. Although the production of communications equipment rose in March for the first time since September 2000, M3 orders fell substantially in March, and industry contacts remain pessimistic about prospects for demand in the near term.

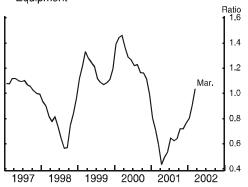
The output of consumer durables other than motor vehicles has risen appreciably in recent months, in part because of a sharp rise in the production of appliances. In response to both the continued strength in housing starts and lean inventories, the production of construction supplies has also increased noticeably. Meanwhile, the production of business equipment has been moving sideways after having fallen considerably in 2001.

The few available data for April point to another increase in monthly production. The weekly physical product data should contribute about 0.2 percentage point to the change in IP, mainly on the strength of motor vehicle assemblies and electricity generation; excluding these two industries, the weekly physical product data have no net effect on IP growth. The staff's series on real adjusted durable goods orders fell 2-1/2 percent in March but rose 2-1/2 percent in the first quarter as a whole.<sup>3</sup> The Institute for Supply Management's diffusion index of new orders retreated in April from the fifteen-year high reached in March but remained comfortably within the region associated with an expanding industrial sector. The new orders index from the Business Outlook Survey conducted by the Federal Reserve Bank of Philadelphia, which has also proved useful as an indicator of near-term manufacturing output, increased in April and has been positive for four consecutive months. By contrast,

<sup>3.</sup> The number of large semiconductor manufacturers choosing not to participate in the M3 survey increased in March. As a consequence, the Census Bureau can no longer produce monthly estimates of semiconductor shipments, orders, and inventories, and the durable goods aggregates no longer include semiconductor data. We have adjusted our orders series to remove semiconductor orders from previous months. Because semiconductors are not considered capital goods, this change has no effect on shipments and orders of nondefense capital goods.

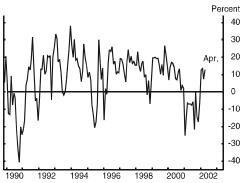
### **Indicators of Manufacturing Activity**

### Book-to-Bill Ratio for Semiconductor Equipment



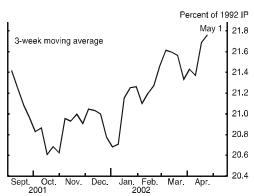
Source. Semiconductor Equipment and Materials International.

#### FRB Philadelphia Business Outlook Survey New Orders



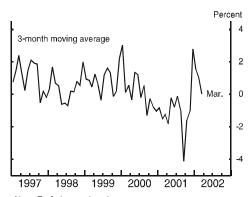
Note. The new orders index equals the percentage of respondents reporting greater levels of new orders, less the percentage of respondents reporting lower levels of new orders.

#### Weekly Production Index



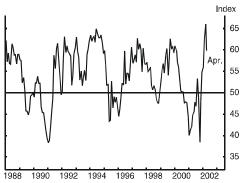
Note. The weekly production index aggregates available weekly physical product data using IP weights; about two-thirds of the index for May 1 uses forecast components.

#### Real Adjusted Durable Goods Orders



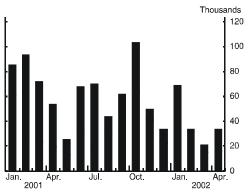
Note. Excludes semiconductors.

#### ISM New Orders Diffusion Index



Note. The diffusion index equals 50 plus half the quantity of the percentage of respondents reporting greater levels of new orders, less the percentage of respondents reporting lower levels of new orders.

### Announced Manufacturing Layoffs



Note. Data are through May 1, 2002. Source. Compiled by staff from news reports.

<b>New Orders for Durable Goods</b>
(Percent change from preceding period except as noted; seasonally adjusted)

Component	Share, 2001:	2001	2002				
Component	H1 (percent)	Q4	Q1	Jan.	Feb.	Mar.	
<b>Total orders</b>	100.0	1.1	.6	.9	2.7	6	
Adjusted orders <sup>1</sup>	71.0	-1.4	2.2	3.3	9	-2.6	
Computers	4.0	8.5	4	4.5	-3.2	-3.3	
Communication equipment	3.0	4.3	4.5	12.2	1.3	-15.1	
Other capital goods	23.0	-2.9	7	-1.5	1.7	-1.7	
Other <sup>2</sup>	37.0	-1.9	4.2	5.4	-2.3	-2.1	
Memo:							
Real adjusted orders		6	2.6	3.1	6	-2.5	
Excluding high tech		-2.1	2.6	3.5	8	-2.9	

<sup>1.</sup> Orders excluding defense capital goods, nondefense aircraft, and motor vehicle parts.

... Not applicable.

manufacturing layoff announcements rose in April after having declined earlier in the year; layoffs were split evenly between the high-tech sector and manufacturers outside the high-tech sector.

#### **Business Inventories**

According to the advance GDP release, real nonfarm inventories excluding motor vehicles contracted at an annual rate of \$39 billion in the first quarter after having fallen \$78 billion in the fourth quarter. The BEA estimate incorporates the book value data for the manufacturing and trade sector in January and February, which showed a liquidation (excluding motor vehicles) of \$48 billion, on average—just about half the fourth-quarter pace. The only hard data for March are for durable goods manufacturers, where stocks fell \$34 billion in book value terms, largely because of a steep drop in aircraft inventories; the liquidation in March was about the same as the average since the middle of last year.

Although some industries still appear to be weighed down by excessive holdings, the inventory situation seems to have improved over the past couple of months. Data from the staff's flow-of-goods system, which classifies inventories by the type of product, regardless of where it is held in the distribution channel, point toward a few areas in which days' supply ratios

<sup>2.</sup> Includes primary metals, most fabricated metals, most stone, clay, and glass products, household appliances, scientific instruments, and miscellaneous durable goods.

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## CHANGES IN MANUFACTURING AND TRADE INVENTORIES (Billions of dollars; annual rate except as noted; based on seasonally adjusted Census book value)

Category		2001		2001	2002	
Category	Q2	Q3	Q4	Dec.	Jan.	Feb.
Manufacturing and trade Less wholesale and retail	-43.3	-61.5	-151.2	-61.7	-12.9	-9.0
motor vehicles	-40.4	-66.2	-96.3	-67.1	-51.4	-43.6
Manufacturing	-34.4	-45.3	-53.5	-49.2	-43.4	-22.6
Merchant wholesalers	.2	-18.8	-35.1	-18.6	-16.8	-22.4
Less motor vehicles	3.3	-19.1	-31.7	-14.8	-12.3	-18.9
Retail trade	-9.0	2.6	-62.5	6.1	47.3	36.0
Automotive dealers	.3	4.4	-51.5	9.2	43.0	38.2
Less automotive dealers	-9.3	-1.8	-11.0	-3.0	4.3	-2.2

### SELECTED INVENTORY-SALES RATIOS IN MANUFACTURING AND TRADE (Months' supply, based on seasonally adjusted Census book value)

a hannana		2001		2001	2002	
Category	Q2	Q3	Q4	Dec.	Jan.	Feb.
Manufacturing and trade	1.42	1.42	1.38	1.39	1.37	1.38
Less wholesale and retail						
motor vehicles	1.38	1.38	1.37	1.37	1.34	1.35
Manufacturing	1.38	1.38	1.37	1.37	1.34	1.37
Primary metals	1.76	1.73	1.76	1.81	1.70	1.76
Stee1	2.20	2.19	2.17	2.19	2.10	2.18
Machinery	2.06	2.09	2.12	2.18	2.05	2.03
Computers and electronics	1.61	1.64	1.53	1.49	1.51	1.53
Electrical equipment	1.39	1.46	1.48	1.48	1.51	1.54
Transportation equipment	1.42	1.42	1.39	1.36	1.32	1.38
Motor vehicles	.59	.58	.55	.54	.50	.53
Aircraft	3.84	3.77	3.80	3.78	3.96	3.78
Fabricated metals	1.69	1.67	1.62	1.63	1.60	1.63
Textiles	1.68	1.60	1.56	1.57	1.58	1.52
Paper	1.18	1.20	1.23	1.26	1.23	1.29
Chemicals	1.43	1.46	1.45	1.47	1.46	1.51
Petroleum	.68	.70	.72	.72	.70	.73
Rubber and plastics	1.22	1.18	1.16	1.16	1.13	1.16
Merchant wholesalers	1.32	1.30	1.29	1.30	1.27	1.26
Less motor vehicles	1.31	1.29	1.28	1.28	1.26	1.24
Durable goods	1.61	1.59	1.56	1.56	1.53	1.51
Nondurable goods	1.03	1.02	1.02	1.03	1.01	1.00
Retail trade	1.56	1.57	1.47	1.49	1.50	1.51
Less automotive dealers	1.47	1.48	1.46	1.46	1.44	1.44
Automotive dealers	1.80	1.83	1.48	1.55	1.67	1.70
General merchandise	1.92	1.91	1.86	1.84	1.78	1.78
Apparel	2.41	2.44	2.30	2.26	2.27	2.21
Food	.86	.85	.84	.84	.83	.83
Memo: Manufacturing and trade shipments and sales	834.5	824.1	821.8	817.6	825.1	817.9
(billions of dollars)						

### **Status of Inventory Overhangs**

Inventory overhang	Products
None evident	Chemicals and products; petroleum products; stone, clay, and glass; fabricated metals; transportation equipment; instruments
Largely eliminated	Electronic components (including semiconductors); computer and office equipment; textiles; lumber and wood products; rubber and plastics; industrial machinery excl. computing equipment; miscellaneous manufactures
Evident but some improvement	Apparel; furniture and fixtures; printing and publishing; primary metals
Evident and little improvement	Communications equipment; paper and products; electrical machinery excluding high-tech equipment

Source. FRB staff flow-of-goods inventory system.

remain elevated and continue to exhibit little improvement: paper products, communications equipment, and electrical machinery excluding high-tech equipment.<sup>4</sup> For some other products, inventories remain high but have retreated, most notably apparel, furniture and fixtures, printing and publishing, and primary metals.<sup>5</sup> By market group, the days' supply ratios for consumer goods and for intermediate products (particularly construction supplies) have fallen sharply in recent months, and excessive inventories appear to have been eliminated. The inventory-consumption ratio for materials has improved considerably, but the days' supply measure for business equipment, although down from its recent peak, remains elevated.

<sup>4.</sup> 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 seventy product categories. For each product category, the system estimates the supply of goods flowing into the economy—that is, domestic production plus imports. The system then estimates 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 that change in inventories. We find inventory accumulation if inflows exceed outflows and inventory liquidation if outflows exceed inflows.

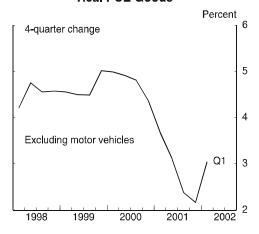
<sup>5.</sup> In the March 2002 Greenbook, industrial machinery excluding computing equipment was included in the "evident but some improvement" category, but this industry has since largely eliminated its overhang problem.

### **Real Personal Consumption Expenditures**

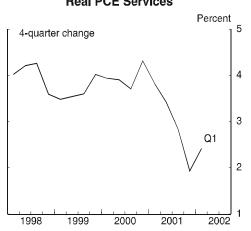
(Percent change from the preceding period unless otherwise noted)

	2001 200			200	2		
Expenditure	H1	H2	Q1	Jan.	Feb.	Mar.	
	Annual rate			Annual rate Monthly rate			е
Total real PCE	2.8	3.5	3.5	.4	.5	.2	
Durable goods Motor vehicles Excluding motor vehicles Nondurable goods Services Energy Non-energy	8.8 10.7 7.4 1.4 2.3 -12.6 3.0	18.6 34.3 7.4 1.5 1.6 -8.1 2.0	-8.0 -29.8 14.3 8.4 3.8 21.8 3.2	3 -2.1 1.0 1.0 .2 .6	2.3 4.4 .7 1 .4 2.2 .4	.7 1.3 .3 4 .3 1.3	
Total real PCE excluding motor vehicles	2.4	2.0	6.0	.5	.3	.1	
Memo: Real disposable personal income	2.6	1.6	10.4	1.7	.6	.3	

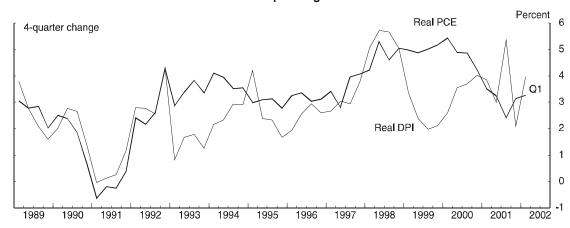
### **Real PCE Goods**



### **Real PCE Services**



### **Real Consumer Spending and Income**



### **Consumer Spending**

Consumer spending has been well maintained of late after having posted big increases around the turn of the year. Expenditures on motor vehicles have been robust—albeit not as high as in the fourth quarter—and outlays on other goods and services have expanded briskly. All told, real PCE rose at an annual rate of 3-1/2 percent in the first quarter; excluding motor vehicles, PCE was up at a 6 percent pace.

Sales of light motor vehicles edged up in March to an annual rate of 16.7 million units, bringing the average for the first quarter to 16.3 million units, about 1 million units higher than the automakers had anticipated at the beginning of the year. Industry contacts report that sales were brisk in April. Since the middle of September, the automakers have supported sales through aggressive incentive packages, which are expected to persist in the near term. These incentive programs are also reflected in the above-average assessments of carbuying conditions in the Michigan Survey Research Center's report on consumer sentiment. Consumers have cited good prices and interest rates as reasons why it is a good time to buy a car.

Outside of cars and trucks, the rise in consumption in the first quarter was broad based. Spending for durable goods other than motor vehicles advanced at an annual rate of more than 14 percent—a pace not seen since early 2000—led by sizable increases in spending on computers and household furnishings. In addition, expenditures for nondurable goods rose at a rate of nearly 8-1/2 percent, with particularly large increases in outlays for food and apparel. Outlays for services also were relatively strong, up at a 3-3/4 percent pace, in part because of a rebound in spending on energy services.

The recent strength in consumer spending has been driven in part by sizable gains in income. Indeed, according to the BEA's advance estimate, real disposable income rose at an annual rate of 10-1/2 percent in the first quarter. This increase reflected in large part the effects of last year's tax legislation and cost-of-living adjustments in government transfer programs, and it brought the increase in real DPI over the year ending in the first quarter to about 4 percent. Moreover, the incoming data on personal income tax collections in April suggest that real DPI may have risen even more rapidly in the first quarter than

### SALES OF AUTOMOBILES AND LIGHT TRUCKS (Millions of units at an annual rate, FRB seasonals)

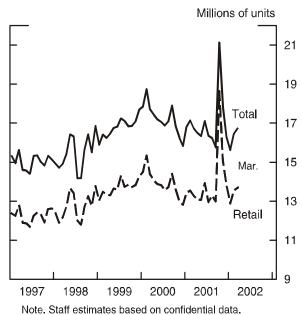
			2001	2002		2002	2002	
	2000	2001	Q4	Q1	Jan.	Feb.	Mar.	
Total	17.2	17.0	18.4	16.3	15.6	16.5	16.7	
Autos	8.8	8. <u>4</u>	8.7	7.9	7.6	7.9	8.3	
Light trucks	8.4	8.6	9.7	8.3	8.0	8.6	8.4	
North American <sup>1</sup>	14.4	13.9	15.0	12.9	12.3	13.2	13.4	
Autos	6.8	6.3	6.4	5.7	5.3	5.6	6.0	
Light trucks	7.5	7.6	8.6	7.3	7.0	7.6	7.3	
Foreign-produced	2.9	3.1	3.4	3.3	3.3	3.3	3.4	
Autos	2.0	2.1	2.3	2.3	2.2	2.3	2.3	
Light trucks	.8	1.0	1.1	1.1	1.1	1.0	1.1	

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.

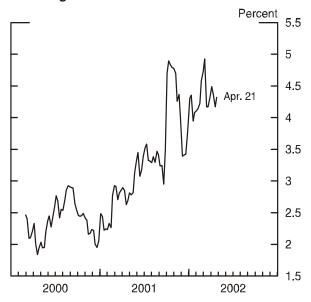
1. Excludes some vehicles produced in Canada that are classified as imports by the industry.

### **Sales of Light Vehicles**

(Annual rate; FRB seasonals)



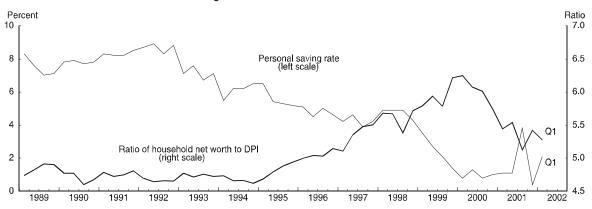
### Total Value of Incentives as a Share of Average Vehicle Price before Incentives



Source. J.D. Power and Associates.

### **Household Indicators**

### Household Net Worth and Saving

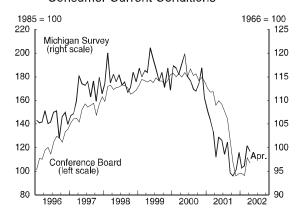


Note. The ratio of household net worth to DPI in 2002:Q1 is a staff estimate.

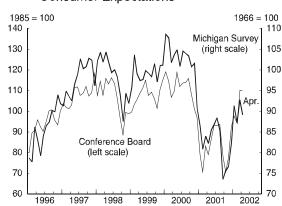
#### Consumer Confidence



### **Consumer Current Conditions**



### Consumer Expectations

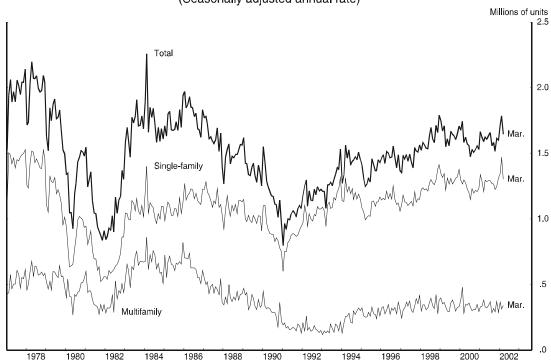


**Private Housing Activity** (Millions of units; seasonally adjusted annual rate)

		2001		2002				
	2001	Q3	Q4	Q1 <sup>p</sup>	Jan. <sup>r</sup>	Feb. <sup>r</sup>	Mar. <sup>p</sup>	
All units Starts Permits	1.60 1.61	1.60 1.56	1.58 1.58	1.72 1.70	1.71 1.72	1.79 1.77	1.65 1.60	
Single-family units Starts Permits Adjusted permits <sup>1</sup>	1.27 1.22 1.25	1.28 1.20 1.24	1.26 1.20 1.23	1.37 1.32 1.35	1.35 1.34 1.37	1.47 1.38 1.40	1.30 1.24 1.29	
New home sales Existing home sales	.91 5.30	.87 5.27	.93 5.24	.88 5.78	.85 6.05	.9 <b>1</b> 5.89	.88 5.40	
Multifamily units Starts Permits	.33 .39	.33 .36	.32 .38	.34 .38	.37 .39	.32 .40	.34 .36	
Mobile homes Shipments	.19	.20	.21	n.a.	.20	.18	n.a.	

<sup>1.</sup> Adjusted permits equals permit issuance plus total starts outside of permit-issuing areas.





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

the BEA figure indicates.<sup>6</sup> In the first quarter, the wealth-to-income ratio was little changed at 5.3, about where it has been since early 2001.

The Michigan Survey Research Center's overall index of consumer confidence rebounded early this year to levels last seen in late 2000, while recent readings from the Conference Board's index are the highest since mid-2001. Although both confidence measures ticked down in April, the indexes stand close to their averages over the past decade, at levels consistent with moderate increases in overall consumer spending.

### **Housing Markets**

Starts of single-family homes jumped to a 23-year high of 1.47 million units in February but fell back in March, to an annual rate of 1.30 million units. Permit issuance for single-family construction—adjusted to include construction in areas where permits are not required—decreased in March to about the same level as starts. Meanwhile, the backlog of unused single-family permits edged down toward the middle of its range over the past year and a half. The February peaks in starts and permits appear to be outliers, even when compared with the brisk pace of activity in recent years; unusually mild weather conditions probably explain part of the jump, and a return to normal weather in March drove part of the dropoff in starts in that month. Nevertheless, with support from relatively low mortgage rates, a high backlog of permits, and a tight inventory level, the pace of starts in March remained above the average for last year.

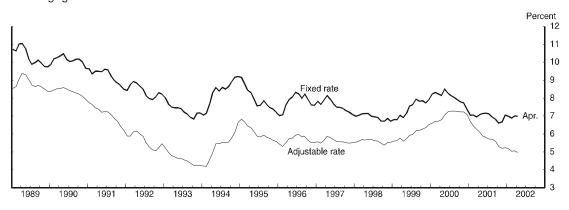
The contract rate on thirty-year fixed-rate conventional mortgages now stands a bit below 7 percent, and initial rates on adjustable-rate mortgages are a bit below 5 percent. Partly reflecting these low rates, homebuying attitudes, as measured by the Michigan survey, remained robust in April, and the latest four-week average from the Mortgage Bankers Association index of mortgage applications for home purchases was at a record high.

New home sales have moderated from the very strong pace in late 2001 and in March stood at an annual rate of 878,000 units. Existing home sales fell 8-1/4 percent in March, to an annual rate of 5.4 million units, following a record

<sup>6.</sup> Under the BEA's normal procedures, its initial estimate of personal tax payments in the first quarter is based on an assumption about April's final payments, which are spread through the year. This year, April collections are much lower than would be consistent with the BEA's assumption. In the Greenbook projection we therefore assume that the BEA will revise up the change in real DPI for the first quarter to an annual rate of about 14 percent and will raise the saving rate to 2-3/4 percent, compared with its advance estimate of about 2 percent. However, on April 26, the BEA also indicated that state unemployment insurance records point to a \$90 billion smaller increase in wages and salaries in 2001 than is currently embedded in the NIPA.

### **Indicators of Single-Family Housing**

### Mortgage Rates



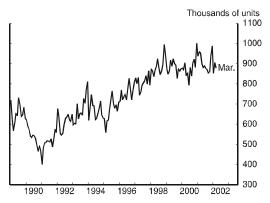
Note. The April reading is based on data through April 26. Source. Freddie Mac.

### Perceived Homebuying Conditions



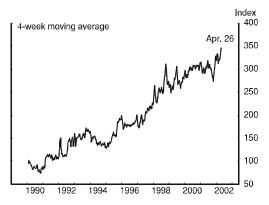
Source. Michigan Survey, not seasonally adjusted.

#### New Home Sales



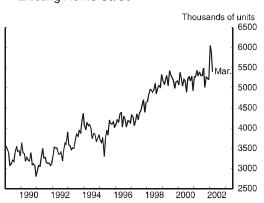
Source. Census Bureau.

### MBA Index of Purchase Applications



Note. The NSA index for March 16, 1990, is equal to 100. The series shown here is the 4-week moving average of the seasonally adjusted data.

### **Existing Home Sales**



Source. National Association of Realtors.

high in January and a surprisingly strong level in February. Some of the movements in home sales this year may owe to shifts in the timing of contract signings and closings caused by the events of September 11. Sales of new homes, which are recorded at signing, peaked in November and December; and sales of existing homes, which are recorded mostly at closing, piled up two months later. These postponements transferred sales into the winter months when seasonal factors—which anticipated weak sales—provided a large boost. All told, the solid pace of sales of both new and existing homes in March suggests continued strength in housing demand.

House prices have been rising briskly of late, likely reflecting the strength in demand. Among the various measures of house price increases, the constant-quality and repeat-sales indexes are probably the most useful. When deflated by the PCE price index, the constant-quality index of new home prices rose 4-1/2 percent over the year ending in the first quarter, the most rapid real increase in the past twenty years. In the fourth quarter of last year, the real repeat-sales index of existing home prices increased 5-3/4 percent from a year earlier. This rise in the repeat-sales price index was among the more rapid in the history of the series, but it was slower than the year-over-year increases recorded in each of the four preceding quarters. The deceleration in repeat-sales prices was especially pronounced in the Pacific region.

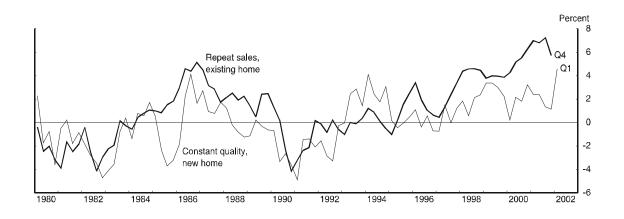
Turning to the multifamily sector, starts rose about 9 percent in March to an annual rate of 343,000 units, as construction rebounded following a drop in February. The average level of starts in the first quarter was 340,000 units, similar to the pace of construction seen over 2001 as a whole. Available indicators suggest that market conditions for multifamily rental units have deteriorated over the past year. In the first quarter, the vacancy rate for multifamily rental units rose to the highest level since the late 1980s, and was only a touch below the peak in the 34-year history of the series. Furthermore, property values for multifamily housing did not increase last year for the first time since mid-1993, and the average year-over-year increase in nominal rent,

<sup>7.</sup> Transaction prices—such as the average and median prices of new homes—can be misleading because they register the effects of compositional changes both in the quality of the houses sold and in the geographic composition of sales, which can be a problem owing to the substantial price differences among regions. The average and median prices of existing homes can also reflect changes in the quality of homes sold, but they are computed with fixed regional weights.

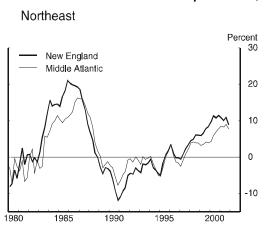
<sup>8.</sup> The constant-quality new home price index uses regression techniques to estimate how the price has changed for a house with structural and locational characteristics typical of houses built in 1996, the base period for the index.

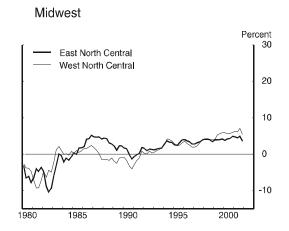
<sup>9.</sup> The repeat-sales price index for existing homes computes the change in house prices from pairs of prices that are generated when the same house is resold or refinanced. However, this index reflects any factors that alter the value of the property between the two "sale" dates, including improvements, structural deterioration, or changes in the neighborhood.

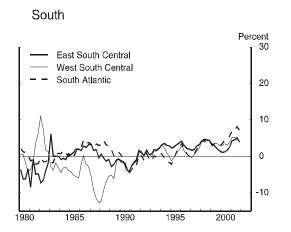
**Real House Price Indexes** (Percent change from year earlier; prices adjusted by PCE deflator)

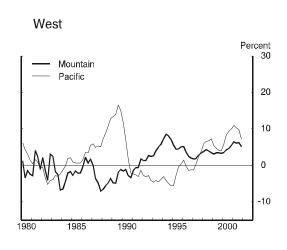


### Repeat Sales, Real Prices by Region









as measured by the National Real Estate Index, was only 3/4 percent, the smallest rise since early 1992.<sup>10</sup> More recently, anecdotal reports have noted rent concessions by landlords in several metropolitan areas.

#### **Business Fixed Investment**

**Equipment and software.** Real outlays on equipment and software were about unchanged in the first quarter after having fallen at an annual rate of about 5 percent in the fourth quarter. Real spending for computer equipment rose at an annual rate of nearly 40 percent—the second large quarterly increase in a row—and outlays for communications equipment were about flat after a series of huge declines. Business spending on both motor vehicles and aircraft decreased sharply. Excluding the high-tech and transportation categories, spending rose moderately.

New orders for nondefense capital goods excluding aircraft fell more than 3 percent in March after having posted small increases in January and February. Although the recovery in real computer spending appears to be on track, bookings for communications equipment plunged in March after two months of increases and once again have fallen below shipments. Outside of the high-tech sector, orders (excluding aircraft) decreased nearly 2 percent in March and were down nearly 1 percent for the first quarter as a whole. These declines are fully explained by a steep drop in orders for engines and turbines. Due to the long delivery lags for engines and turbines, however, the decline in their orders conveys little information about equipment spending in the current quarter.

Business demand for motor vehicles seems to be firming in the most recent months. Fleet sales of light vehicles moved up again in March and, at an annual rate of 3 million units, were only a touch below the average for all of last year. Sales of medium and heavy trucks remained flat in March at an annual rate of 460,000 units, the same rate seen in both the fourth quarter and the first quarter.

Orders for the largest trucks (class 8 trucks) skyrocketed in March. Industry analysts attribute this run-up to a shift in the timing of purchases to avoid buying trucks with modified engines to meet EPA requirements. In a court settlement, manufacturers agreed to begin selling engines as of October 1, 2002, that pass

<sup>10.</sup> This rent index differs considerably from the CPI rent index. The NREI series measures rents as reported by institutional investors in apartment buildings, whereas the CPI index covers not only apartment buildings but also small properties and single-family homes. From mid-1992 through early last year, the NREI index increased much more rapidly than the CPI rent index, but it has since decelerated sharply.

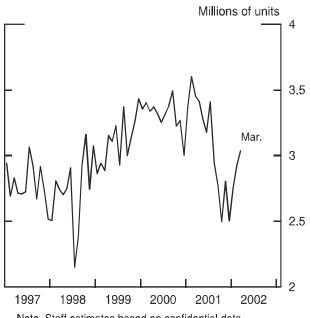
<sup>11.</sup> Big Three fleet sales are reported to us on a confidential basis; sales by other firms are estimated by the staff.

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

	200	2001			2002	
	Q3	Q4	Q1	Jan.	Feb.	Mar.
Shipments of nondefense capital goods	-6.7	-2.6	3	.3	-1.1	.1
Excluding aircraft	-7.1	-3.4	.3	1.9	-1.5	6
Computers and peripherals	-15.4	1.6	-1.3	1.5	-4.3	-3.1
Communications equipment	-11.9	-8.9	-3.5	-3.0	3	-4.5
All other categories	-4.6	-3.5	1.2	2.6	-1.1	. 4
Shipments of complete aircraft	8.8	-1.2	n.a.	6	6.9	n.a.
Medium & heavy truck sales (units)	-6.2	9.6	-1.9	-4.4	2.0	-1.4
Orders for nondefense capital goods	-10.6	-1.9	.9	-1.8	4.6	-2.8
Excluding aircraft	-8.6	7	2	.7	. 9	-3.3
Computers and peripherals	-19.4	8.5	4	4.5	-3.2	-3.3
Communications equipment	-16.6	4.3	4.5	12.2	1.3	-15.1
All other categories	-5.3	-2.9	7	-1.5	1.7	-1.7

n.a. Not available.

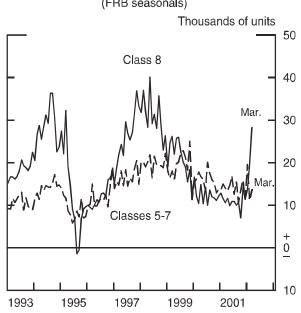
### Fleet Sales of Light Vehicles (Annual rate; FRB seasonals)



Note. Staff estimates based on confidential data.

### **Net New Orders of Trucks**

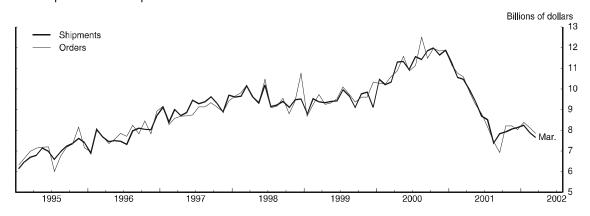
(FRB seasonals)



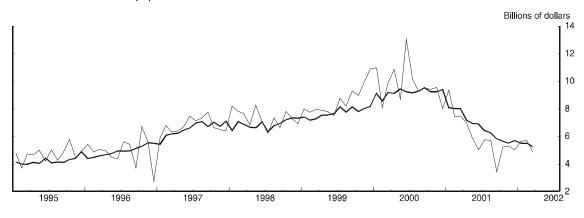
Note. Net orders are orders less cancellations. Source. ACT Research Co.

### **Recent Data on Orders and Shipments**

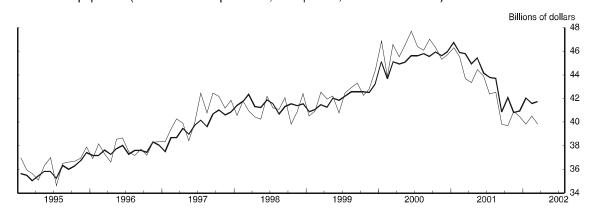
### Computers and Peripherals



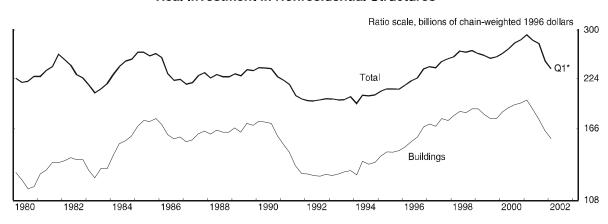
### Communications Equipment



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

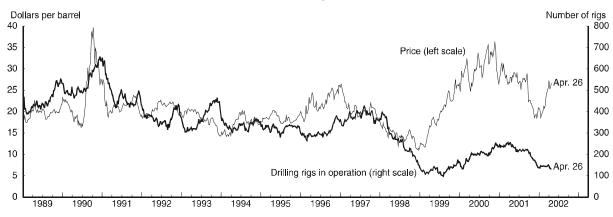


### **Real Investment in Nonresidential Structures**



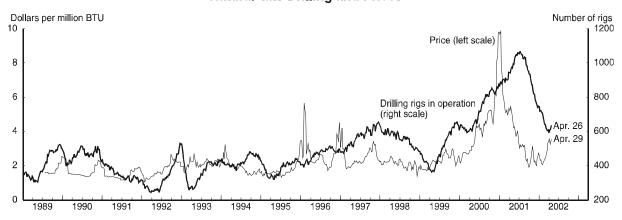
<sup>\* 2002:</sup>Q1 data are staff estimates based on Census' monthly estimates of construction put in place.

### **Petroleum Drilling and Prices**



Note. Data are weekly averages. Source. WTI spot price and DOE/Baker Hughes.

### Natural Gas Drilling and Prices



Note. Data are weekly averages. Source. Henry Hub spot price and DOE/Baker Hughes. emission requirements when in actual operation or to face fines of about \$7,000 per engine sold. Trucking firms believe that these new engines will deliver poorer performance and be more costly to maintain.

Nonresidential construction. Spending on nonresidential construction declined sharply again in the first quarter, with sizable decreases in expenditures for industrial structures, office buildings, lodging facilities, and drilling and mining. Moreover, advance indicators point to further weakness. For example, according to estimates from Torto Wheaton, vacancy rates for office and industrial buildings continued to rise sharply in the first quarter, owing in part to a further contraction in occupied space for both types of structure. The deterioration in the office sector has been especially pronounced in high-technology areas, where space is available for sublease at very low rent. Conditions in the non-office commercial sector have also worsened, as property values and rents for both retail space and warehouses fell appreciably in the fourth quarter.

Expenditures for drilling and mining fell at an annual rate of 44 percent in the first quarter, after an even larger drop in the fourth quarter. Drilling activity for petroleum and particularly natural gas has not yet responded to higher energy prices. One reason may be that, despite the recent upturn, natural gas prices remain far below the levels seen early last year. In recent months, the number of oil drilling rigs in operation has been about flat, and the number of gas rigs has declined. Construction outlays by public utilities declined 2 percent in the first quarter.

#### **Government Sector**

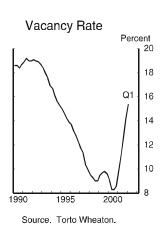
**Federal sector.** The federal government recorded a \$64 billion deficit in March, a considerably larger deficit than was recorded last year, mostly reflecting weak receipts. Overall spending was restrained by declines in net interest payments, which offset robust increases in most other categories—particularly defense and income security.<sup>13</sup>

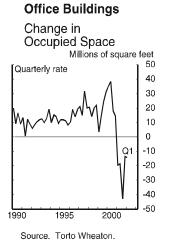
Receipts in March were about 15 percent lower than in March of 2001, with weakness exhibited across the board. Individual income and payroll taxes were down almost 12 percent, reflecting a surge in individual tax refunds, as well as declines in withheld and nonwithheld tax payments. Corporate tax payments were well below last year's levels, as gross payments fell and refunds rose. The

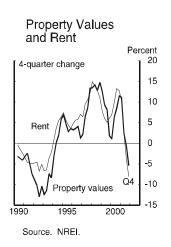
<sup>12.</sup> After taking into account the construction data for March, we estimate that real spending on nonresidential construction declined at an annual rate of almost 18 percent. The BEA's advance estimate had included a 20 percent decline.

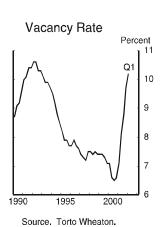
<sup>13.</sup> Part of the increase in income security reflects a surge in the earned income and child tax credits, the refundable portion of which is deemed outlays.

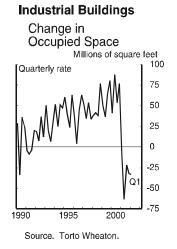
### **Indicators of Nonresidential Construction**

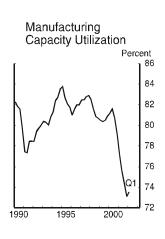


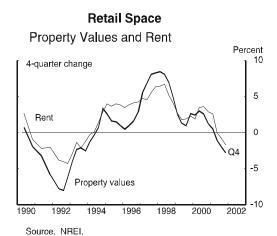


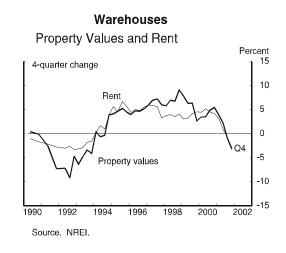












## Federal Government Outlays and Receipts (Unified basis; billions of dollars)

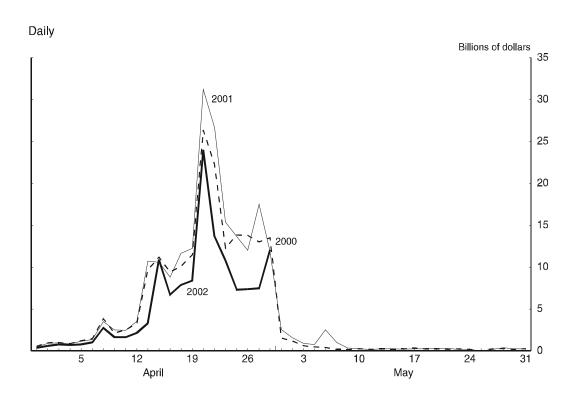
		March			12 months ending in Mar.				
Function or source	2001	2002	Percent change	2001	2002	Percent change			
Outlays	180.7	175.5	-2.9	1,822.1	1,930.0	5.9			
Deposit insurance	-0.1	-0.4	•••	-2.1	0.2				
Spectrum auctions	0.0	0.0	•••	-1.2	0.0				
Sale of major assets	0.0	0.0	•••	0.0	0.0	•••			
Other	180.8	175.8	-2.8	1,825.4	1,929.9	5.7			
Receipts	130.1	111.2	-14.5	2,069.5	1,948.2	-5.9			
Surplus	-50.7	-64.2	•••	247.4	18.2	<b>-</b> 92.6			
	Outlays excluding deposit insurance, spectrum auction, and sale of major assets are adjusted for payment timing shifts <sup>1</sup>								
Outlays	170.5	175.8	3.1	1,824.6	1,937.4	6.2			
National defense	28.5	31.5	10.7	297.2	324.9	9.3			
Net interest	18.6	14.5	-21.8	218.6	185.7	-15.1			
Social security	35.9	38.2	6.3	422.3	445.5	5.5			
Medicare	18.4	19.1	4.1	202.5	221.8	9.5			
Medicaid	11.0	11.8	6.9	123.3	138.6	12.4			
Other health	3.7	4.0	6.6	38.4	46.6	21.3			
Income security	29.1	32.9	12.8	252.6	284.9	12.8			
Agriculture	2.1	2.3	10.0	32.4	29.7	-8.3			
Other	23.2	21.5	-7.1	237.2	259.8	9.5			
Receipts	130.1	111.2	-14.5	2,069.5	1,948.2	-5.9			
Individual income and	04.1	02.0	11.0	1.6647	1 (142	2.0			
payroll taxes	94.1	82.9	-11.9	1,664.7	1,614.3	-3.0			
Withheld + FICA	124.7	122.1	<b>-</b> 2.0	1,402.3	1,394.3	-0.6			
Nonwithheld + SECA	9.2	7.6	-17.2	399.9	416.0	4.0			
Refunds (-)	39.7	46.8	17.8	137.5	195.9	42.5			
Corporate Gross	20.7 27.0	15.3 23.4	-25.9	207.1 241.8	149.4 194.4	-27.8 -19.6			
	6.3	8.1	-13.1 28.9	241.8 34.7	45.0	-19.0 29.7			
Refunds (-) Other	15.3	13.0	-15.0	197.6	184.5	-6.7			
Surplus	-40.4	-64.6		244.9	10.8	-95.6			

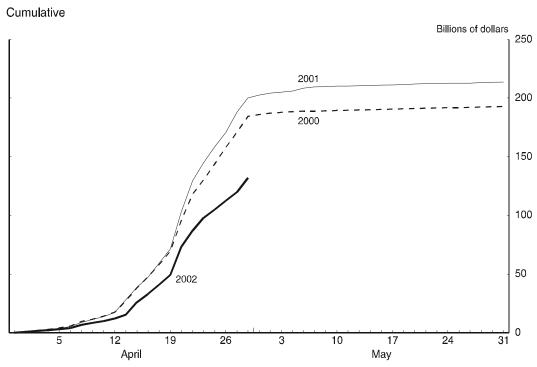
Note. Components may not sum to totals because of rounding.

1. 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.

<sup>...</sup> Not applicable.

### **Nonwithheld Tax Receipts from Individuals**





Note. Dates shown are for 2002; the Monday dates for 2000, 2001 and 2002 are aligned.

decline in corporate tax receipts reflects a combination of weak corporate profits and the recently enacted investment expensing provisions, which retroactively lowered corporate tax liabilities back to September 11, 2001.

According to Daily Treasury Statements, the shortfall in receipts continued into April. Nonwithheld individual income tax payments, which are largely final payments on 2001 tax liabilities, were well below the level recorded last year. Cumulative receipts by the end of April were about 35 percent lower than last year. Although returns are still being processed, payments in May are unlikely to be able to make up much of this shortfall.

This downturn in final payments is much larger than can be explained by changes in the tax law, and collections are significantly lower than the CBO and the OMB had projected. While confirming data will not be available for some time, we suspect that a drop in capital gains realizations is a key factor behind the shortfall. One piece of evidence pointing in this direction is a sharp decline in capital gains realizations from mutual funds recorded for 2001. Although realizations from mutual funds represent only a small share of taxable realizations, they have been a useful indicator of total capital gains realizations in recent years.

The President submitted a \$27 billion supplemental spending package for fiscal year 2002, with \$14 billion allocated to defense. We expect the Congress to pass some form of the bill this spring. The House has passed the Administration's budget request for fiscal 2003; the Senate has yet to pass a budget resolution for 2003.

**State and local governments.** According to the BEA's advance estimate, real spending on consumption and gross investment by state and local governments increased at an annual rate of 5-1/2 percent in the first quarter, although subsequent data for construction suggest that the increase will be revised down to about 4-1/4 percent. After factoring in the new data, we estimate that real spending on construction rose at an annual rate of nearly 20 percent in the first quarter, a bit more than the increase over 2001 as a whole. Real outlays for consumption items, which represent the current expenditures of these governments, rose 2-1/4 percent (annual rate) in the first quarter, down from a gain of nearly 4 percent during the second half of 2001; the slowing probably owed in part to budget-cutting actions in many states and localities.

For several quarters, states have been reporting reduced revenue collections along with overruns in spending, particularly for Medicaid, and many states projected budgetary deficits in their general fund accounts if no actions were taken. However, most states have planned or undertaken remedies, and the National Conference of State Legislatures reported in mid-April that states have generally been successful in addressing pressures on this year's budgets. For

### RECENT PRICE INDICATORS (Percent)

	From 12 From 3					
	months e	earlier	months earlier		2002	
	Mar. 2001	Mar. 2002	Dec. 2001	Mar. 2002	Feb.	Mar.
CDT			-Annual	rate-	-Monthly	rate-
<u>CPI</u>						
Total	2.9	1.5	-1.8	3.0	0.2	0.3
Food Energy Ex. food and energy Ex. tobacco	3.1 6.0 2.7 2.6	2.6 -10.7 2.4 2.4	1.4 -43.4 2.6 2.9	3.0 16.5 2.1 2.1	0.2 -0.8 0.3 0.2	0.2 3.8 0.1 0.2
Core commodities Ex. tobacco Core services	0.6 0.3 3.5	-1.1 -1.5 3.9	-1.4 -0.7 4.0	-1.9 -2.1 3.8	0.0 -0.2 0.4	-0.1 0.0 0.1
Current-methods total Ex. food and energy Ex. tobacco	2.9 2.6 2.6	1.5 2.4 2.4	-1.7 2.6 2.9	3.0 2.1 2.1	0.2 0.3 0.2	0.3 0.1 0.2
PCE Prices						
Total	2.0	0.8	1.7	1.8	0.1	0.2
Food Energy Ex. food and energy Ex. tobacco	2.9 4.5 1.7 1.7	2.7 -11.1 1.1 1.1	1.7 -45.5 5.1 5.3	3.1 17.4 0.9 0.9	0.3 -0.7 0.1 0.0	0.1 3.9 0.1 0.1
Core commodities Ex. tobacco Core services	-0.2 -0.5 2.6	-1.6 -1.9 2.3	-1.3 -0.8 8.0	-2.0 -2.2 2.2	-0.1 -0.3 0.2	-0.2 0.0 0.2
Core market-based Core nonmarket-based	1.8 1.6	1.3 0.6	1.5 19.0	1.1	0.1 0.1	0.1 -0.0
<u>PPI</u>						
Total finished goods	3.0	-1.4	-9.6	5.6	0.2	1.0
Food Energy Ex. food and energy Ex. tobacco	3.7 8.9 1.4 1.1	1.8 -13.5 0.4 0.1	-43.4 -1.3	10.0 26.3 0.3 0.6	1.0 0.4 0.0 -0.0	0.6 5.5 0.1 0.1
Core consumer goods Ex. tobacco Capital equipment	1.8 1.3 0.9	0.7 0.2 -0.1	-1.6	0.0 0.6 0.3	-0.1 -0.1 0.1	0.2 0.2 0.1
Intermediate materials Ex. food and energy	2.3 1.0	-3.2 -1.7		3.5 1.2	-0.1 0.0	1.0 0.3
Crude materials Ex. food and energy	17.1 -10.1		-37.9 <b>-</b> 9.0	30.6 1.3	-0.8 1.5	4.0 -0.7

fiscal 2002, which ends on June 30 in most states, forty states made or expect to make expenditure cuts, almost forty states tapped or expect to tap other funds (rainy-day, special/dedicated, tobacco, and other), and eight states raised or expect to raise taxes or fees or both. Many state analysts think that the weakness in revenue collections will bottom out in the second quarter of 2002, and they are looking for receipts to begin to show gains this summer. Even so, the level of receipts is expected to remain subdued, and states continue to be concerned about fiscal 2003. Hence, along with budget cuts and fund transfers, more than half the states are planning to raise taxes or fees next year.

#### **Prices**

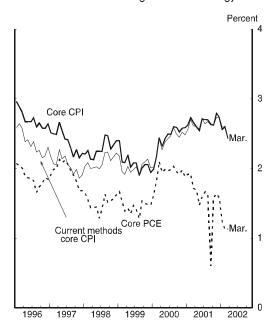
Although higher energy prices pushed up headline consumer price inflation in March, inflation generally looks to be on a downward trajectory. Both the overall CPI and the PCE chain-type price index have decelerated notably over the past year. In part, the smaller increases reflect the sharp declines in energy prices over most of this period: The PCE chain-type price index increased only 0.8 percent over the twelve months to March, while the CPI increased 1.5 percent. Excluding food and energy, inflation has also fallen over the past year. This slowing has been more pronounced in the PCE price index than in the CPI. Over the past twelve months, the core PCE price index increased just 1.1 percent, down from a 1.7 percent increase over the preceding twelve-month period. The core CPI has increased 2.4 percent over the past twelve months, down from a 2.7 percent increase over the preceding year.

Consumer energy prices rebounded after their substantial declines last year. Reflecting a surge in gasoline prices, the CPI for energy jumped 3.8 percent in March, and weekly data point to further increases through early April. These recent gasoline price hikes have totaled about 30 cents per gallon since early March, reflecting higher crude oil costs, strong demand, and the shutdown of two refineries in the Midwest, which has created a major shortfall in inventories of the reformulated gasoline specific to that region. Nevertheless, overall U.S. inventories of gasoline, including stocks of summer-blend reformulated gasoline, remain normal for the season. As a result, futures prices suggest that gasoline prices have likely peaked, and indeed retail gasoline prices have already eased a penny or two per gallon since early April. Nonetheless, on a monthly-average basis, surveys indicate substantial increases in both wholesale and retail gasoline prices in April. Consumer natural gas prices moved up 0.8 percent in March, retracing part of a decline in February. Although natural gas inventories remain at record high levels for the season, spot prices have risen about 70 cents per million BTUs (more than 20 percent) from their level in mid-March. The increase in spot prices may owe to market participants' expectations of higher demand for gas by industry and electric utilities in light of the strength of the economic recovery thus far.

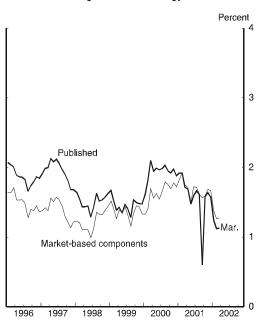
# **Measures of Core Consumer Price Inflation**

(12-month change)

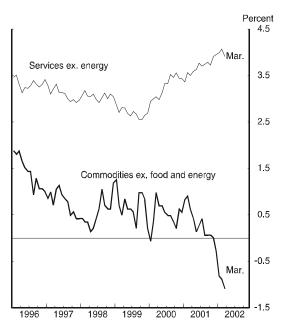
CPI and PCE excluding Food and Energy



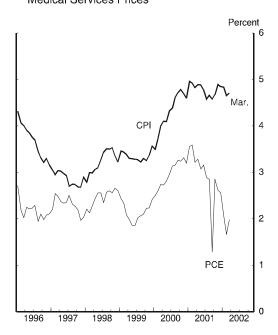
PCE excluding Food and Energy



**CPI Services and Commodities** 



Medical Services Prices



Retail food prices rose at an annual rate of 3 percent over the first three months of the year. Consumer prices for vegetables surged over this period, reflecting both lower winter acreage and some mediocre growing conditions. However, spring acreage, which began to be harvested in early April, is about in line with the previous spring, and during April, new supplies have pushed down the staff's weekly index of vegetable prices by more than 50 percent. Similarly, the CPI for meats, poultry, fish, and eggs jumped in March, but this increase is likely to be short lived given that spot prices for beef, pork, and poultry have fallen sharply over recent weeks. Prices for other food items, including restaurant meals, have been well contained so far this year. Over the twelve months to March, the CPI for food rose 2.6 percent, about 1/2 percentage point less than over the previous year.

Consumer prices other than food and energy have remained subdued. The core CPI edged up 0.1 percent in March after a 0.3 percent rise in February. Goods prices have been especially soft. Prices of apparel have increased over the past two months, but these reported increases likely reflected difficulties in seasonal adjustment; apparel prices are down 3 percent over the past year. Prices of new and used motor vehicles have continued to fall as well. By contrast, prices of non-energy services have accelerated over the past year, driven by the housing sector. Owners' equivalent rent and tenants' rent have both increased 4-1/2 percent over the past twelve months, and owners' equivalent rent in particular has accelerated notably. The rate of inflation of services other than energy and housing has picked up slightly over the past year.

The PCE price index for items other than food and energy has continued to rise by less than the core CPI. As noted above, the PCE index decelerated notably more over the past year, and the difference between the twelve-month changes in these two indexes, at 1-1/4 percent, is now exceptionally large. Frequently, the portions of PCE that are outside the scope of the CPI and for which market-based prices are not available can explain a large part of the different behavior of the two price measures. In the present case, however, our "market-based" core PCE price index, which omits these imputed nonmarket components, has increased at a rate similar to the official core PCE price index. Instead, differences between the core CPI and PCE price measures have been driven by three other factors, and these argue for putting more—though not exclusive—emphasis on the PCE measure.

First, the fact that the PCE index is constructed using a Fisher aggregation formula while the CPI uses a fixed-weight Laspeyres formula appears to have contributed to a slightly larger difference over the past year than it did over the previous year. The PCE index's Fisher formula is preferable because it takes consumer substitution into account, while the CPI's Laspeyres-based formula does not. Second, the indexes for tenants' rent and owners' equivalent rent have a much larger weight in the CPI than in the PCE index; thus, the notable

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#### BROAD MEASURES OF INFLATION (4-quarter percent change)

	1999 Q1	2000 Q1	2001 Q1	2002 Q1
Product prices GDP chain price index Less food and energy	1.3 1.4	2.1	2.3	1.3 1.3
Nonfarm business chain price index $^1$	0.9	1.8	1.9	0.4
Expenditure prices Gross domestic purchases chain price index Less food and energy	1.1	2.6 1.9	2.2 1.7	0.6 1.1
PCE chain price index Less food and energy	1.3 1.5	2.7 1.8		0.6 1.2
PCE chain price index, market-based components Less food and energy	$\begin{smallmatrix}1.1\\1.4\end{smallmatrix}$	2.6 1.5		0.6 1.3
CPI Less food and energy	1.7 2.2	3.2 2.2	3.4 2.7	1.2 2.5
Current-methods CPI Less food and energy	1.6 2.0	3.2 2.2	3.4 2.6	1.2 2.5
Median CPI Trimmed mean CPI	2.9 1.8	2.4 2.2	3.3 2.9	3.9 2.3

<sup>1.</sup> Excluding housing.

SURVEYS OF (CPI) INFLATION EXPECTATIONS

			University of Michigan						
	3 mb 1	1 :	year	5 to 1	0 years	Professional			
	Actual inflation <sup>1</sup>	Mean <sup>2</sup>	Median <sup>2</sup>	Mean <sup>3</sup>	Median <sup>3</sup>	forecasters (10-year) <sup>4</sup>			
2000-Q2 Q3 Q4	3.3 3.5 3.4	3.5 3.6 3.8	3.0 2.9 3.0	3.3 3.4 3.7	2.8 2.9 3.0	2.5 2.5 2.5			
2001-Q1 Q2 Q3 Q4	3.4 3.4 2.7 1.9	3.4 3.9 3.1 1.5	2.9 3.1 2.7 1.1	3.6 3.6 3.5 3.1	3.0 3.0 2.9 2.8	2.5 2.5 2.5 2.6			
2002-Q1 Oct. Nov. Dec.	1.3 2.1 1.9 1.6	2.6 1.6 1.0 1.9	2.2 1.0 0.4 1.8	3.1 2.8 3.2 3.4	2.8 2.7 2.8 3.0	2.5			
2002-Jan. Feb. Mar.	1.1 1.1 1.5	2.2 2.4 3.1	1.9 2.1 2.7 2.8	3.0 3.1 3.3	2.7 2.8 2.8	2.5			

<sup>1.</sup> CPI; percent change from the same period in the preceding year.

<sup>2.</sup> 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.

acceleration in these prices over the past year has had a larger influence on the CPI. Because we believe that measurement problems have generated weights for housing in the CPI that are too large, we again tend to prefer the signal coming from the PCE index.<sup>14</sup>

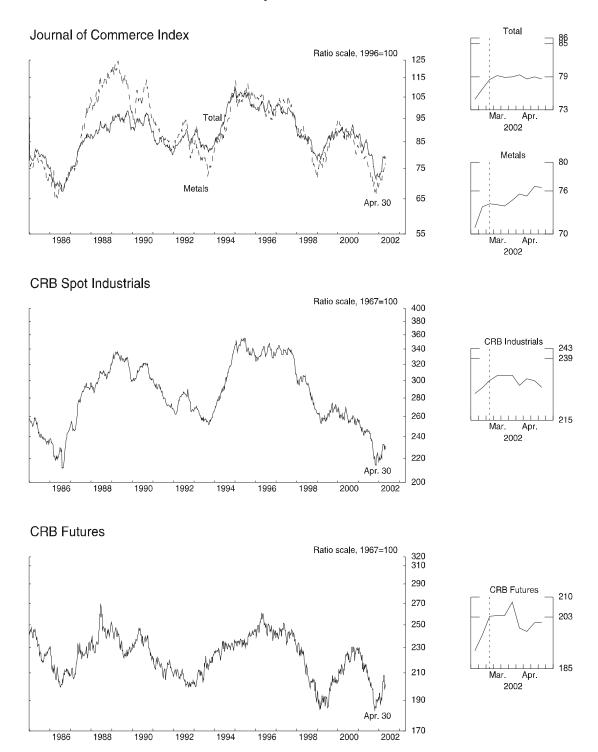
The third—and apparently most important—factor has been the behavior of medical services prices. PCE prices for physicians' and hospital services are based mainly on PPIs instead of CPIs, and in recent years these two measures have diverged strikingly. Over the twelve months to March, for example, the CPI for hospital services increased 8 percent, up from a 6-3/4 percent rise over the preceding twelve-month period. By contrast, the PPI for hospital services only increased 2-1/2 percent over the past year, down from a 3-1/4 percent rise over the preceding period. For physicians' services, the CPI has decelerated about 1 percentage point over the past year, while the PPI has decelerated nearly 3 percentage points.<sup>15</sup> The effects of these price differences are magnified by the fact that medical services have a much larger weight in PCE because the CPI is limited to households' out-of-pocket expenditures. In general, we think that the PPI indexes do a better job than the CPI indexes in capturing medical services prices; but because the recent differences have been so large, and because the small increases in the PPI indexes seem to be inconsistent with anecdotal evidence of rising health-care costs, we hesitate to write off the CPIs for medical services entirely.

Broader price indexes have also decelerated over the past year. The chain-type price index for GDP increased 1.3 percent over the four quarters through 2002:Q1, down 1 percentage point from the increase over the preceding year. GDP prices have been affected by last year's drop in energy prices, but even excluding food and energy, GDP prices decelerated about 1/2 percentage point over the past year. In addition to the drop in energy prices and the slowing in core PCE inflation, GDP prices have been held down by a rapid decline in investment prices. Prices of equipment and software have decreased 2 percent over the past four quarters after having fallen about 1-1/2 percent over the preceding period. A notable deceleration in software prices can account for that

<sup>14.</sup> The weights in the CPI are derived from the consumer expenditure survey. Because the survey relies on respondents' memory of their expenditures on many items, knowledge of the spending of other household members, and willingness to report expenditures that may be viewed as embarrassing, the survey appears to undercount expenditures on a wide variety of items. We believe that the weight of housing (and other items for which expenditures are measured more accurately) is therefore boosted by the undercounting of such expenditures.

<sup>15.</sup> For hospital services, a small part of the difference between the PPI and CPI measures reflects the fact that the PPI includes prices paid by Medicare and Medicaid, which have decelerated notably over the past year. These prices are not in the CPI's scope because they are not paid by consumers out of pocket. For physicians' services, the effect of Medicare and Medicaid on the PPI is not known, though anecdotal evidence suggests that a sharp deceleration in these prices could account for much of the difference between the PPI and CPI measures.

# **Commodity Price Measures**



Note. 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 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

				Percent ch	nange <sup>1</sup>	
	Current price (dollars)	2000	2001	Dec. 25 to Mar. 12 <sup>2</sup>	Mar. 12 <sup>2</sup> to Apr. 30	Memo: Year earlier to date
Metals Copper (lb.) Steel scrap (ton) Aluminum, London (lb.)	0.770 92.833 0.624	5.7 -32.7 1.9		9.9 26.7 5.7	-1.3 12.8 -2.6	-4.9 19.0 -11.8
Precious metals Gold (oz.) Silver (oz.)	308.200 4.535	-4.7 -11.2	1.2 -3.5	5.8 0.7	5.0 0.0	16.7 3.7
Forest products <sup>3</sup> Lumber (m. bdft.) Plywood (m. sqft.)	263.000 330.000	-41.5 -4.9	25.0 3.2	31.1 22.1	-10.8 -6.5	-7.1 1.5
Petroleum Crude oil (barrel) Gasoline (gal.) Fuel oil (gal.)	26.950 0.752 0.686	7.6	-16.3 -28.0 -42.6	24.2 33.0 15.8	16.6 7.0 8.7	-1.3 -23.8 -9.9
Livestock Steers (cwt.) Hogs (cwt.) Broilers (lb.)	63.590 29.500 0.495	10.2	-19.7 -9.9 3.7	18.0 5.9 0.4	-12.9 -18.1 -4.3	-14.2 -40.4 -12.2
U.S. farm crops Corn (bu.) Wheat (bu.) Soybeans (bu.) Cotton (lb.)	1.855 3.125 4.540 0.296	31.4	-4.1 -8.9 -13.4 -45.7	-2.0 0.0 5.6 2.5	-4.9 -1.6 1.0 -9.4	1.6 -10.7 5.7 -28.5
Other foodstuffs Coffee (lb.)	0.445	-47.8	-35.3	13.6	-11.0	-45.1
Memo: JOC Industrials JOC Metals CRB Futures CRB Spot Industrials	78.600 76.500 201.160 227.920	-9.3	-17.1 -17.0 -16.3 -14.6	9.0 7.2 6.1 5.1	0.1 3.1 -1.0 -1.1	-7.1 -3.4 -6.9 -6.7

<sup>1.</sup> 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.

# EMPLOYMENT COST INDEX OF HOURLY COMPENSATION FOR PRIVATE INDUSTRY WORKERS

		20	01		2002
	Mar.	June	Sept.	Dec.	Mar.
		Quarterly (Compoun	percent d annual		
Total hourly compensation <sup>1</sup> Wages and salaries Benefit costs	4.6 4.1 5.1	4.0 4.1 4.3	3.7 2.9 5.5	4.2 3.7 5.2	3.6 3.7 4.4
By industry Construction Manufacturing Trans., comm., and public utilities	3.9 4.4 5.5	4.4 3.5 4.9	4.1 2.4 2.7	4.8 4.0 6.7	2.6 4.2 3.9
Wholesale trade Retail trade FIRE Services	2.9 4.1 5.8 5.8	5.5 2.4 4.1 3.4	3.1 3.2 3.6 5.2	1.8 8.5 1.0 3.6	7.2 -1.0 10.0 3.5
By occupation White collar Blue collar Service occupations	4.5 4.2 5.0	4.2 2.7 3.2	3.6 4.4 4.0	4.9 3.8 5.6	3.3 3.7 4.7
Memo: State and local governments	4.1	4.3	5.6	2.6	2.9
		Twelve-mo	nth perce	nt chang	e
Total hourly compensation Excluding sales workers Wages and salaries Excluding sales workers Benefit costs	4.2 4.4 3.8 4.2 5.0	4.0 4.2 3.8 3.9 4.8	4.0 4.1 3.6 3.9 4.9	4.2 4.2 3.8 3.9 5.1	3.9 3.9 3.5 3.6 4.8
By industry Construction Manufacturing Trans., comm., and public utilities	5.3 3.6 <b>4</b> .6	5.0 3.5 4.6	4.5 3.1 4.1	4.3 3.5 4.9	4.0 3.5 4.5
Wholesale trade Retail trade FIRE Services	3.4 3.8 3.9 4.8	4.2	4.3 3.2 3.7 4.6	3.3 4.5 3.6 4.5	4.4 3.2 4.6 3.9
By occupation White collar Sales Nonsales Blue collar Service occupations	4.3 2.3 4.8 3.9 4.2	4.2 2.8 4.5 3.6 4.1	4.0 2.5 4.4 3.8 4.1	3.5 4.4	4.0 3.5 4.0 3.6 4.3
Memo: State and local governments	3.3	3.6	4.4	4.2	3.9

<sup>1.</sup> Seasonally adjusted by the BLS.

slowdown, while computer prices have declined 18 percent over the past year—the same as the decline over the previous year.

Although inflation is slowing according to all indicators, survey measures of expected inflation have continued to move up after a period of unusually low readings last autumn. According to the Michigan survey, median one-year-ahead inflation expectations were 2.8 percent in April, about the same as had prevailed last summer and well above the readings of 1 percent or lower in October and November. Longer-term inflation expectations have remained relatively low, however. The Michigan survey's median five- to ten-year-ahead inflation expectations were also 2.8 percent in April, a bit below the 3 percent levels from last summer.

Outside of the energy area, few inflationary pressures appear to be coming from earlier stages of processing. The PPI for intermediate materials other than food and energy moved up in March but is down more than 3 percent over the past year, and the PPI for core crude materials has dropped more than 6 percent over the past year. Since mid-March, industrial commodity prices have been little changed on balance after having picked up earlier in the year. The *Journal of Commerce* industrial price index is about unchanged since mid-March, though a rise in steel scrap prices has pushed up the metals component of the index since that time.

#### **Labor Costs**

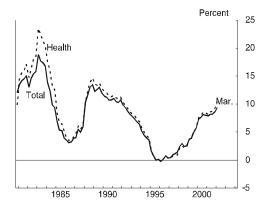
The employment cost index for hourly compensation of private industry workers increased at an annual rate of 3.6 percent over the three months ended in March. The wages and salaries component rose at a 3.7 percent annual rate, and benefits costs were up at a 4.4 percent rate. Over the past twelve months, the ECI for compensation increased 3.9 percent—down about 1/4 percentage point from its increase over the previous twelve-month period. Both the wages and salaries index and the benefits index decelerated a similar amount. Among the major components of benefits, employers' health insurance costs rose rapidly again last quarter, bringing the twelve-month change above 10 percent, up from an increase of about 8 percent over the year-earlier period. But these faster increases in health insurance costs were outweighed by a slowing in the cost increases for other benefits. Nonproduction bonuses declined in the three months ended in March, bringing the twelve-month change in this component to

<sup>16.</sup> Rounding of index levels and separate seasonal adjustment can account for the fact that the indexes for wages and salaries and benefits were both reported to have increased more rapidly than the overall compensation index.

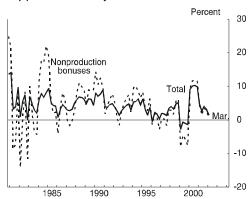
<sup>17.</sup> With the exception of health insurance, detail on the benefits costs are unpublished and are provided by the BLS on a confidential basis.

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

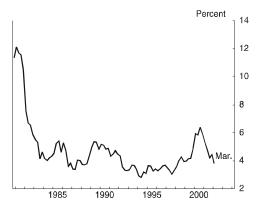
# **Insurance Costs**



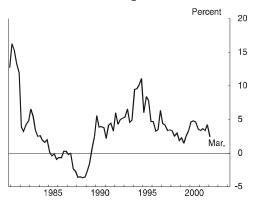
# Supplemental Pay



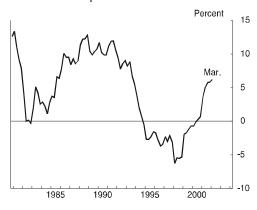
# Paid Leave



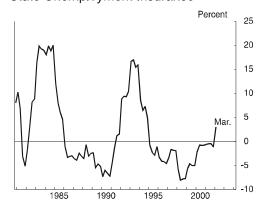
# Retirement and Savings



# Workers' Compensation Insurance



# State Unemployment Insurance



Note. Unpublished and confidential ECI benefits detail.

0.8 percent—down from a 4 percent increase over the preceding period. <sup>18</sup> Increases in pay rates for overtime work and for alternative shifts also slowed over the past year. In addition, pension costs decelerated over the past year, as a flattening out of costs of defined contribution plans outweighed a much faster pace of payments to defined benefit plans that likely reflected the weakening in the stock market

The increase in the ECI for health insurance costs over the past year is roughly in line with survey evidence of this year's premium increases in private employer-sponsored health plans. Looking forward to 2003, California's public employees retirement system—the nation's second largest health-care purchaser behind the federal government's FEHB program—has approved a huge 25 percent increase in premiums for its HMOs next year and a 20 percent increase for its PPOs. A variety of factors are said to be driving recent and prospective premium increases, including cuts in Medicare reimbursements that necessitate larger fee increases from other payers and a general increase in demand for medical care, including prescription drug expenditures.

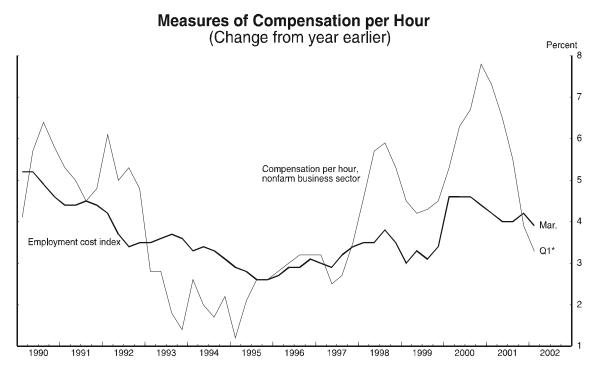
Compensation per hour in the nonfarm business sector (CPH), which had surged in 2000, decelerated sharply thereafter and rose a little less than the ECI in 2001. In the first quarter, CPH likely increased at an annual rate of about 2-1/2 percent, bringing the four-quarter change to 3-1/4 percent, somewhat lower than in the ECI. The main indicator used to construct the recent CPH figures is the monthly series on average hourly earnings of production or nonsupervisory workers, which increased at an annual rate of only 2-1/2 percent over the first three months of the year. In addition, the BEA judgmentally adjusts the compensation data in light of lagged payroll information from unemployment insurance tax records; these data are much more comprehensive than average hourly earnings in that they include such forms of compensation as bonuses and the value of stock option exercises. 19 These unemployment insurance records, which are available through the third quarter of last year, apparently point to very low payroll gains last year, which we interpret as suggesting that stock option exercises slowed considerably; the BEA has extrapolated those low readings going forward through the first quarter of this year, helping to account for the low CPH figures in the past few quarters.

<sup>18.</sup> Nonproduction bonuses in the ECI do not include grants or exercises of stock options.

<sup>19.</sup> The unemployment insurance data are also more comprehensive than average hourly earnings because they are not limited to production workers and cover nearly all nonfarm establishments.

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

	12-month percent change			to Ma	t change ar 2002 indicated	Perce	nt change
	Mar. 2000	Mar. 2001	Mar. 2002	Sept. 2001	Dec. 2001	Feb. 2002	Mar. 2002
			Annual rate	e		-Month	ly rate-
Total private nonfarm	3.7	4.3	3.5	3.1	2.5	0.3	0.3
Manufacturing	3.6	3.0	3.8	3.4	3.2	0.4	0.2
Construction	4.4	3.6	1.9	3.5	2.4	0.2	0.6
Transportation and public utilities	3.2	3.9	4.6	5.0	5.0	0.3	0.2
Finance, insurance, and real estate	2.9	4.6	3.8	2.4	1.5	0.1	0.4
Retail trade	4.2	4.0	3.4	3.7	2.4	0.1	0.5
Wholesale trade	3.5	4.8	2.9	2.3	2.0	0.6	-0.1
Services	3.6	5.0	4.2	3.3	1.9	0.3	0.2



 $<sup>^{\</sup>star}$  Nonfarm business compensation per hour for Q1 is staff estimate.

# Domestic Financial Developments

# **Domestic Financial Developments**

#### Overview

Since the last FOMC meeting, mixed readings on the strength of the economic expansion and comments by Federal Reserve officials led market participants to trim substantially their expectations for policy tightening. In addition, while first-quarter corporate earnings reports mostly matched or exceeded expectations, they were marked by a notable lack of positive guidance on future sales and profits. These developments reinforced investors' sense that the economic expansion may not be as buoyant as previously expected, leading to a slump in equity prices and declines in interest rates on both Treasury and corporate bonds.

Domestic nonfinancial debt continued growing at a moderate rate, even though business borrowing remained sluggish. On the household side, the most recent data suggest that borrowing has been well maintained, as households continue to tap mortgage markets. In addition, shortfalls in tax receipts and increased spending have prompted an expansion of federal government debt so far this year.

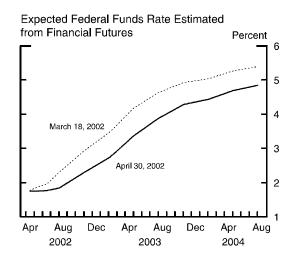
# **Interest Rates, Policy Expectations, and Stock Prices**

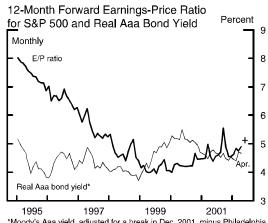
Market participants are confident that the FOMC will leave the target federal funds rate unchanged at next week's meeting—a significant change from only a month ago, when most expected a 25 basis point tightening. In addition, recent survey evidence suggests that market participants generally believe that the FOMC will retain its current assessment of balanced risks at the May meeting. Looking further out, futures quotes suggest a firming in monetary policy by year-end of 50 basis points, less than half the rise expected at the time of the March FOMC meeting.

Against this backdrop, Treasury rates fell 11 to 36 basis points across the maturity spectrum over the intermeeting period. Corporate bond yields also moved lower, but credit risk spreads increased for investment-grade borrowers because of concerns about financial transparency at companies such as General Electric and warnings of expected lower sales by a number of highly rated telecom firms. In contrast, risk spreads for junk-rated firms fell slightly. Risk spreads on commercial paper narrowed, although they remained somewhat above historical norms.

Even though earnings reports suggested that profits met expectations in the first quarter, broad indexes of stock prices declined 6 percent over the intermeeting period because of the uncertainty about future profitability. Larger share-price declines were posted for telecom and technology firms, for which earnings' guidance was especially gloomy, and the broad-based Dow Jones telecom and technology indexes fell 19 percent and 14 percent respectively. The decline in

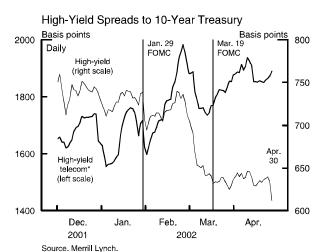
# Policy Expectations, Stock Prices, and Corporate Risk Spreads





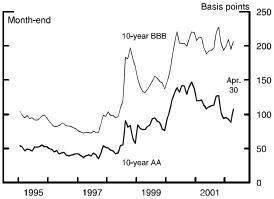
\*Moody's Aaa yield, adjusted for a break in Dec. 2001, minus Philadelphia Fed 10-year expected inflation.

<sup>+</sup> Denotes the latest observation using daily prices and latest earnings data from I/B/E/S.

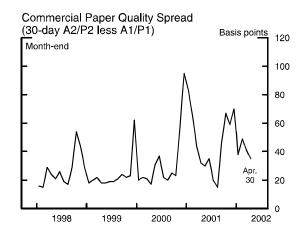


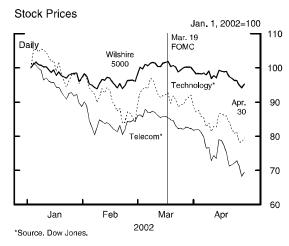
\*Adjusted for a rebalancing of index on April 30.

# Investment-Grade Spreads to 10-Year Treasury



Source. Estimated from Merrill Lynch bond data.





share prices pushed the forward earnings-price ratio up, but with the rise in AAA yields, the gap between these two measures of return remained narrow.

#### **Business Finance**

Gross bond issuance proceeded at a rapid clip in March and April as investment-grade issuers continued to substitute long-term debt for commercial paper. In addition, some investment-grade firms issued bonds to pay down bank debt and bonds having higher coupons. Issuance of below-investment-grade bonds held up well, accounting for about 20 percent of issuance in the past two months; this share is about the same as it was last year but is well below the shares seen in the latter half of the 1990s.

Commercial paper continued to run off in April, but at a slower pace than in the previous two months. Some firms have been shut out of the market because of concerns about their accounting transparency, while others have shifted to alternative forms of financing in the face of elevated risk spreads. Moreover, bank caution has added to the cost of commercial paper issuance. In the April Senior Loan Officer Survey, many banks reported having tightened standards and increased fees and spreads on commercial paper back-up lines of credit over the past year, especially for lower-rated issuers. The respondents pointed to heightened concerns about deterioration in issuers' credit quality and a higher probability of lines being drawn down.

C&I loans at banks also continued to run off in April, consistent with the Senior Loan Officer Survey responses of generally weaker business loan demand. Banks reported that they continued to tighten standards and terms on such loans, on net, but to a lesser degree in April than at any time over the past two years.

Public equity issuance remained subdued in April. Seasoned equity offerings, while off somewhat in April, have been fairly well maintained this year. The pace of initial public offerings has continued to be weak, though new IPO filings and the number of deals slated for completion in the coming months have increased modestly, with a heavy concentration in the energy sector. Share retirements from cash-financed mergers and acquisitions were small in the first quarter, and only \$10 billion of share repurchases were announced, the slowest level since 1994.

With about 80 percent of the S&P 500 firms reporting so far, first-quarter earnings are estimated to have exceeded fourth-quarter earnings by almost 10 percent (on a seasonally adjusted basis). However, much of the first-quarter

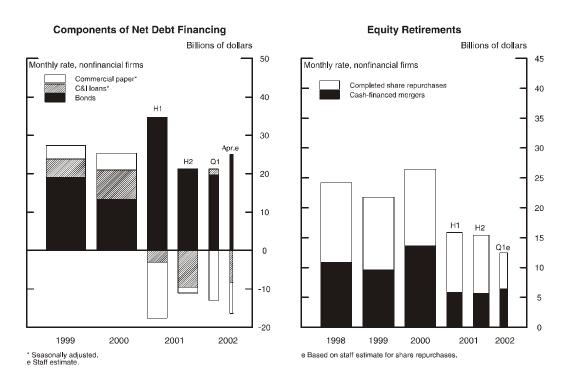
#### Gross Issuance of Securities by U.S. Corporations

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

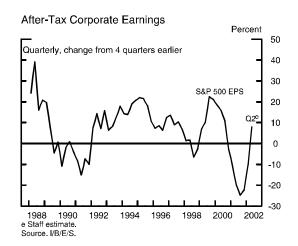
			20		2002			
Type of security	1999	2000	H1	H2	Q1	Mar.	Apr. e	
Nonfinancial corporations								
Stocks <sup>1</sup> Initial public offerings Seasoned offerings	9.2 4.2 5.0	9.9 4.4 5.5	7.5 3.2 4.2	5.5 1.0 4.5	6.1 0.9 5.2	4.9 0.4 4.5	4.8 1.0 3.8	
Bonds <sup>2</sup> Investment grade <sup>3</sup> Speculative grade <sup>3</sup> Other (Sold Abroad/Unrated)	24.5 13.9 7.5 3.1	20.2 11.9 4.5 3.7	43.1 28.9 11.9 2.4	31.2 24.0 5.8 1.4	30.7 18.3 6.6 5.8	42.3 21.2 6.8 14.3	35.3 24.6 7.8 2.9	
Memo: Net issuance of commercial paper <sup>4</sup> Change in C&I loans at commercial banks <sup>4</sup>	3.6 4.7	4.5 7.5	-14.5 -3.1	-1.5 -8.1	-13.0 1.7	-10.7 -3.6	-8.0 -8.4	
Financial corporations Stocks 1 Bonds	1.8 53.9	1.4 47.1	3.0 69.9	5.5 64.7	4.9 75.1	7.9 104.1	2.1 49.3	

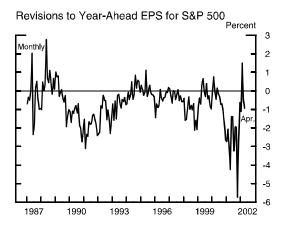
Note. Components may not sum to totals because of rounding. These data include speculative-grade bonds issued privately under Rule 144A. All other private placements are excluded. Total reflects gross proceeds rather than par value of original discount bonds.

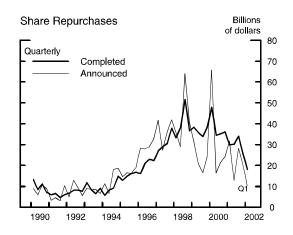
- Excludes equity issues associated with equity-for-equity swaps that have occurred in restructurings.
   Excludes mortgage-backed and asset-backed bonds.
   Bonds sold in U.S. categorized according to Moody's bond ratings, or to Standard & Poor's if unrated by Moody's.
- 4. End-of-period basis, seasonally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

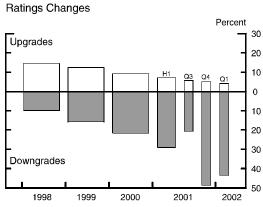


# **Corporate Earnings and Credit Quality**

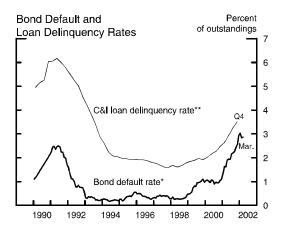




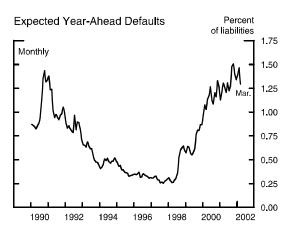




Note. Nonfinancial debt upgrades (downgrades) as a percentage of par value of all bonds outstanding. Source. Moody's Investors Service.

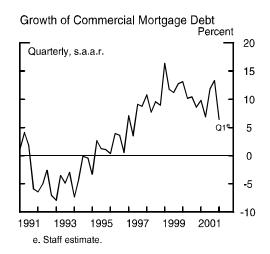


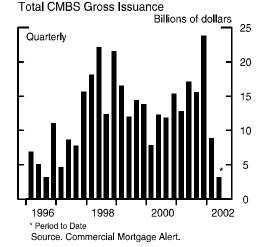


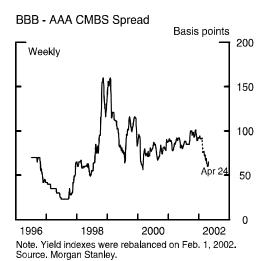


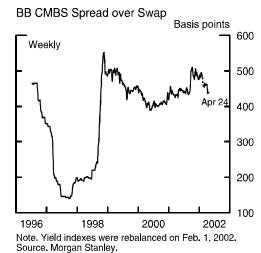
Note. Firm-level estimates of default weighted by firm liabilities as a percent of total liabilities. Source. KMV Corp.

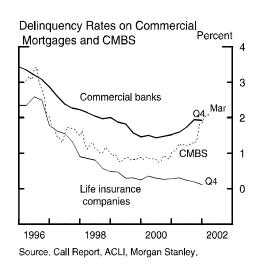
# **Commercial Real Estate**













earnings improvement appears to reflect cost-cutting rather than revenue gains.<sup>1</sup> Overall, company reports offered little support for the strong rebound in earnings that analysts were expecting for the coming year.

The most recent measures of corporate credit quality continued to show a high level of distress but did not deteriorate further in March. Moody's downgraded \$75 million more debt than it upgraded in March, leaving the pace of first-quarter net downgrades similar to the fourth-quarter pace. The twelve-month moving average of bond defaults remained elevated, but a forward-looking measure of aggregate credit quality, KMV's year-ahead expected default frequency, improved in March, reflecting stock price gains early in the month and a decline in asset volatility.

#### **Commercial Real Estate Finance**

Growth in commercial mortgage debt dropped back in the first quarter after having surged late last year. Moreover, CMBS issuance—a major component of commercial mortgage debt—remained weak for the first three weeks of April, although trade reports indicated that a sizable amount is in the pipeline. Risk spreads have narrowed considerably this year, despite a steady rise in office vacancy rates and in CMBS delinquency rates.

Some observers have cited the difficulty of purchasing terrorism insurance as one reason for the falloff in CMBS issuance. However, market reports indicate that only high-profile properties, which constitute a small part of the CMBS market and of bank portfolios, are having difficulty getting funding because of a lack of terrorism insurance. According to the April Senior Loan Officer Survey, most domestic banks required terrorism insurance on fewer than 10 percent of the loans being used to finance high-profile or heavy-traffic commercial properties, although a few banks required much higher levels.

#### **Household Finance**

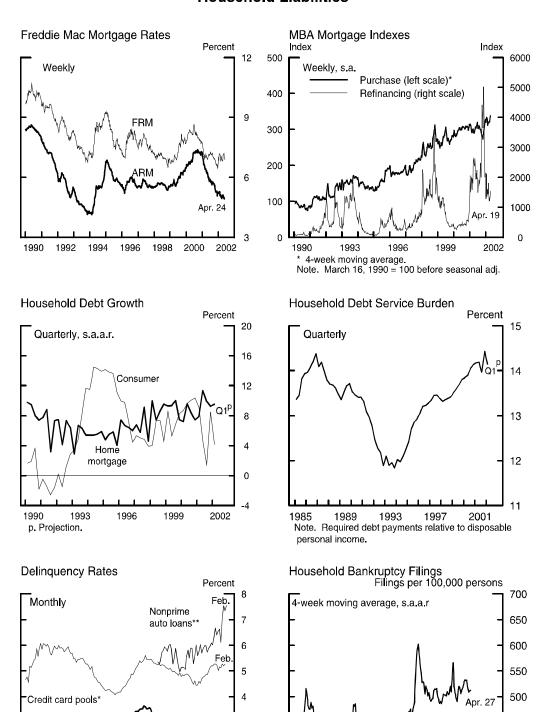
Since the last FOMC meeting, home mortgage rates have again dipped below 7 percent, helping to sustain a robust pace of home sales. Mortgage refinancing activity, while well below its peak late last year, remains at a relatively high level.

Overall, household debt is estimated to have risen 8 percent at an annual rate in the first quarter, the same pace as in the fourth quarter of 2001. Mortgage debt expanded at a robust 9-1/2 percent pace, slightly faster than in the fourth quarter. However, consumer credit growth slowed to 4 percent at an annual rate in the

<sup>1.</sup> In addition, earnings estimates were revised upward in January and February because of new goodwill accounting rules, which further reduce amortization expenses.

<sup>2.</sup> The survey defined such properties as landmark buildings and commercial properties in their vicinity, stadiums and other sports/entertainment venues, and large shopping malls.

# **Household Liabilities**



450

400

350

1999 2000 2001 2002 Source. Visa Bankruptcy Notification Service.

Auto loans

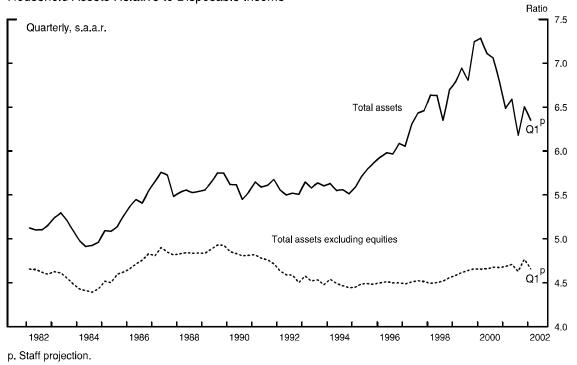
at finance companies

Feb.

<sup>1990 1992 1994 1996 1998 2000 2002</sup> \* Securitized receivables (Moody's, seasonally adjusted). \*\* Staff calculations using Moody's data.

# **Household Assets**

Household Assets Relative to Disposable Income



Net Flows into Long-Term Mutual Funds (Excluding reinvested dividends; billions of dollars, monthly rates)

	2000		20	01		2002		Assets
	H1	H2	H1	H2	Q1	Mar.	Apr. e	Mar.
Total long-term funds	23.8	13.1	20.7	13.6	29.6	39.5	21.5	4,817
Equity funds	34.4	15.9	16.1	6.3	15.2	29.3	12.2	3,499
Domestic	26.7	15.7	15.9	8.5	14.9	26.4	8.6	3,056
Capital appreciation	34.4	16.7	10.1	4.0	7.9	15.4	3.9	1,820
Total return	-7.6	-0.9	5.8	4.5	7.0	11.0	4.6	1,236
International	7.7	0.2	0.1	-2.2	184.3	2.9	3.6	443
Hybrid funds	-4.0	-1.3	1.3	1.2	2.6	3.4	2.3	359
Bond funds	-6.6	-1.5	3.3	6.2	11.8	6.8	7.0	959
International	-0.2	-0.2	-0.0	-0.3	0.1	-0.1	0.2	19
High-yield	-1.1	-0.9	0.2	0.9	2.2	3.7	1.6	100
Other taxable	-2.8	-0.3	2.9	4.9	7.8	3.4	5.4	540
Municipals	-2.5	-0.0	0.2	0.6	1.7	-0.1	-0.1	299

e. Staff estimates based on confidential ICI weekly data. Source. Investment Company Institute (ICI).

# **Treasury Financing**

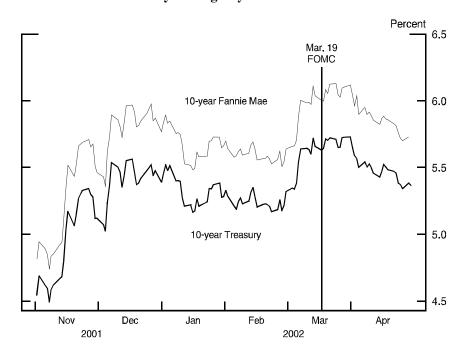
(Billions of dollars)

Item	20	001	2002				
пеш	Q3	Q4	Q1	Feb.	Mar.	Apr.(e)	
Total surplus, deficit (-)	-41.9	-37.1	-96.6	-76.1	-64.2	n.a.	
Means of financing deficit Net borrowing	68.6	59.5	50.8	63.9	2.1	-43.4	
Nonmarketable	6.2	10.5	7	-1.1	1.0	6	
Marketable	74.4	49.0	51.5	64.9	1.1	-42.8	
Bills	114.8	73.3	23.1	40.5	1.1	-40.9	
Coupons <sup>1</sup>	-32.6	-15.8	28.4	24.4	0.0	2.1	
Debt buybacks	-7.7	-8.5	0.0	0.0	0.0	-4.0	
Decrease in cash balance	5	-8.1	38.3	30.7	30.5	-13.1	
Other <sup>2</sup>	-26.2	-14.3	7.5	-18.6	31.6	n.a.	
MEMO Cash balance, end of period	44.2	52.4	14.1	44.6	14.1	27.2	

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.

# **Treasury and Agency Interest Rates**



first quarter, after a surge in motor vehicle sales in the fourth quarter pushed the rate up to 8-1/4 percent.

Despite further substantial growth in household debt, a continuation of low interest rates and a sharp rise in disposable income growth led to a small decline in the household debt-service burden last quarter. Although subprime delinquency rates remained quite elevated, rates on some broader delinquency measures continued to hover within their range of recent years. Bankruptcy filings by households declined in recent weeks but remained in the elevated range seen so far this year. According to the April Senior Loan Officer Survey, credit standards for residential mortgage loans were largely unchanged, while standards for consumer loans continued to tighten somewhat.

The ratio of household assets to disposable income is estimated to have decreased slightly in the first quarter, as the jump in disposable personal income outpaced a moderate rise in the value of household assets. Net flows into long-term mutual funds slowed in April, as contributions into equity funds slowed from their robust pace in March.

#### **Government Finance**

Individual non-withheld tax receipts were considerably weaker than expected in April. Indeed, as part of its midquarter refunding announcement, the Treasury indicated that it expected to borrow \$1 billion, on net, over the second quarter, as opposed to paying down a large amount of debt, as it had announced several months ago.<sup>3</sup> To avoid breaching its statutory borrowing limit, the Treasury disinvested almost \$19 billion in April from the Government Securities Investment Fund (the G-fund). This disinvestment, which elicited little market reaction, allowed the Treasury to issue cash-management bills to meet its short-term financing needs and still stay under the debt ceiling.<sup>4</sup> Later in the month, the Treasury was able to reinvest the G-fund assets, with an adjustment for lost interest.

Both Fannie Mae and Freddie Mac issued sizable amounts of securities over the intermeeting period, including a little more than \$15 billion of Fannie Mae benchmark securities and \$9 billion of Freddie Mac reference securities. Yields

<sup>3.</sup> The Treasury also announced the discontinuance of regular reopenings of five-year notes and that it would conduct an additional TIIS auction in October in an effort to enhance the liquidity of these securities.

<sup>4.</sup> The Treasury also conducted three buyback operations last month totaling \$4 billion--the first ones this year. The April 18 buyback was the first to include Treasury inflation-indexed securities. Prices on those securities seemed to benefit from their inclusion, as yields immediately fell several basis points relative to those on nominal Treasury securities.

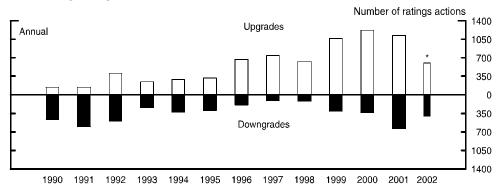
# **State and Local Government Finance**

# Gross Offerings of Municipal Securities (Billions of dollars; monthly rates, not seasonally adjusted)

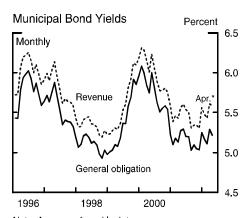
			20	001		2002			
	2000	2001	H1	H2	Q1	Mar.	Apr. e		
Long-term 1	15.0	22.5	21.4	23.7	21.5	23.8	20.4		
Refundings <sup>2</sup>	2.2	6.5	6.4	6.7	6.6	7.0	4.7		
New capital	12.9	16.0	15.0	17.1	14.9	16.9	15.7		
Short-term	2.8	4.3	3.7	5.0	1.9	1.9	2.9		
Total tax-exempt	17.9	26.9	25.0	28.7	23.4	25.8	23.3		
Total taxable	0.7	1.1	1.2	1.0	1.0	1.1	0.6		

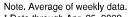
- 1. Includes issues for public and private purposes.
- 2. All issues that include any refunding bonds.
- e. Staff estimate based on preliminary data through Apr. 25.

# **Bond Rating Changes**

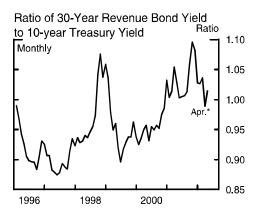


\* Data through March 29, 2002 at an annual rate. Source. S&P's Credit Week Municipal and Ratings Direct.





\* Data through Apr. 25, 2002.



Note. Average of weekly data.

\* Data through Apr. 25, 2002.

on these securities over the intermeeting period moved down with Treasury yields.<sup>5</sup>

Gross offerings of long-term debt by state and local governments have remained strong in recent months, boosted by continued hefty new capital issuance to fund a variety of infrastructure projects. In contrast, partly because municipal yields have risen, refundings slowed in April to about two-thirds of the level seen earlier in the year. While the overall credit quality of the sector remains at a high level, the fiscal stresses being felt by state and local governments resulted in some additional rating downgrades in municipal bonds, and the pace of upgrades, while remaining above downgrades, has tailed off. Yield ratios relative to Treasuries ticked up in April and remained in the elevated range observed since late 1999.

### Monetary Aggregates and Bank Credit

The broad monetary aggregates decelerated noticeably over the intermeeting period. A slowdown in the liquid components of M2 owed in part to less mortgage refinancing and low tax payments<sup>6</sup> and a leveling out in the opportunity cost of holding deposits.<sup>7</sup> Precautionary demands for M2, built up last year, apparently continued to unwind, further slowing liquid components. Foreign demands for U.S. currency added very little to money growth, on net, despite sizable shipments to Argentina in March. M3 growth also dropped off, but not as much as the growth of M2, because of a surge in large time deposits.

Bank credit expanded at a fairly brisk pace in April, with the strength concentrated in banks' securities portfolios. Loans edged up, continuing the pattern of anemic lending activity that has prevailed this year.

<sup>5.</sup> Amid increasing concerns about their disclosure practices, Fannie Mae and Freddie Mac both voluntarily provided more information about their derivatives positions and counterparty exposures, which indicated that their total exposure in the event of a default by all over-the-counter derivative counterparties was small. Fannie Mae also attracted attention last month with its announcement that it would exercise a "cleanup call" of \$1-1/2 billion of older MBS. It later retracted this comment to quell investors' criticism, effectively forgoing near-term profit in excess of \$100 million. Neither of the events had a significant effect on agency yields or issuance.

<sup>6.</sup> Mortgage refinancings cause liquid deposits to swell as mortgage servicers accumulate the proceeds of prepaid mortgages in escrow accounts for a short time before their distribution to holders of mortgage-backed securities. In addition, households typically build up M2 assets ahead of April 15 to make final payments on their prior-year tax liabilities. M2 growth is held down when refinancings subside or tax payments are low.

<sup>7.</sup> Deposit rates typically lag movements in market rates. As policy eased aggressively last year, deposits became increasingly attractive. Now that short-term market rates have been stable for some time, deposit rates have caught up.

# **Monetary Aggregates**

(Based on seasonally adjusted data)

		2001	2002		2002		Level
							(bil. \$)
	2001	Q4	Q1	Feb.	Mar.	Apr.	Apr. 02
Aggregate or component						(p)	(p)
Aggregate			Percent c	hange (annı	ıal rate) <sup>1</sup>		
1. M2 <sup>2</sup>	10.4	9.4	5.3	6.7	-1.3	-3.4	5483.0
2. M3	12.8	12.3	5.0	6.4	0.8	-0.3	8069.3
Selected components							
3. Currency	9.0	9.9	10.4	10.7	7.1	7.3	598.1
4. Liquid deposits <sup>3</sup>	17.9	17.6	17.6	20.0	8.8	4.1	3014.9
5. Small time deposits	-5.0	-12.0	-15.5	-13.7	-10.8	-8.3	932.0
6. Retail money market funds	9.0	8.9	-12.1	-15.3	-27.5	-29.2	930.3
7. M3 minus M2 <sup>4</sup>	18.2	18.6	4.3	5.7	5.2	6.4	2586.3
8. Large time deposits, net <sup>5</sup>	-2.7	-6.3	9.1	3.8	14.7	36.9	837.2
9. Institution-only money							
market mutual funds	50.7	49.2	-0.9	-0.8	1.6	-4.2	1163.8
10. RPs	0.6	-1.4	9.4	12.2	-7.3	-17.0	368.9
11. Eurodollars	8.5	-3.8	6.8	37.8	11.7	-10.4	216.4
Мето							
12. M1	6.8	1.5	5.3	1.6	2.5	-18.8	1167.0
13. Sweep-adjusted M1 <sup>6</sup>	7.9	5.8	7.4	4.4	6.1	-2.9	1655.6
14. Demand deposits	3.8	-7.4	-4.0	-8.5	-3.3	-71.3	304.1
15. Other checkable deposits	6.3	-4.2	6.4	-5.1	-0.5	-13.4	257.2
16. Savings deposits	21.8	24.2	22.0	26.8	11.4	16.1	2453.6
17. Monetary base	8.5	6.5	9.0	10.0	6.4	8.3	654.1
		Avera	ige monthly	change (bil	llions of do	llars) <sup>7</sup>	
Selected managed liabilities							
at commercial banks							
18. Large time deposits, gross	3.3	8.5	9.8	4.2	4.0	20.5	1027.4
19. Net due to related foreign							
institutions	-6.5	-9.0	-15.9	-19.2	2.3	-9.8	99.0
20. U.S. government deposits							
at commercial banks	1.5	0.1	1.1		-5.2	-29.9	8.4

- 1. For the years shown, Q4 to Q4 precent change. For the quarters shown, based on quarterly averages.
- 2. Sum of M1, retail money market funds, saving deposits, and small time deposits.
- 3. Sum of demand deposits, other checkable deposits, and saving deposits.
- 4. Sum of large time deposits, institutional money funds, RP liabilities of depository institutions, and Eurodollars held by U.S. addressees.
- 5. Net of holdings of depository institutions, money market mutual funds, U.S. government and foreign banks and official institutions.
- 6. Sweep figures used to adjust these series are the estimated national total of transaction account balances initially swept into MMDAs owing to the introduction of new sweep programs on the basis of monthly averages of daily data.
- 7. 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

Incoming reports for large bank holding companies show earnings coming in at or above expectations, with first-quarter earnings 28 percent above levels a year ago. However, with credit quality an ongoing concern, loan loss provisions and charge-offs increased substantially in the first quarter relative to a year earlier, although banks generally remained very well capitalized.

III-16

**Commercial Bank Credit** 

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

Type of credit	2001	Q4 2001	Q1 2002	Feb. 2002	Mar. 2002	Apr. <sup>p</sup> 2002	Level, Apr. 2002 <sup>p</sup> (\$ billions)
Total							
1. Adjusted <sup>1</sup>	4.3	4.4	.8	.6	1.0	5.9	5,326
2. Reported	5.1	5.2	-1.0	.3	-2.2	3.9	5,445
Securities							
3. Adjusted <sup>1</sup>	9.9	15.3	8.0	-5.0	10.5	18.5	1,375
4. Reported	12.3	17.0	.4	-5.6	-2.2	10.2	1,494
5. Treasury & Agency	3.8	27.8	1.5	-11.5	24.6	24.3	847
6. Other <sup>2</sup>	25.1	4.5	9	1.6	-34.5	-7.7	647
Loans <sup>3</sup>							
7. Total	2.6	.9	-1.5	2.6	-2.3	1.6	3,950
8. Business	-3.8	-8.6	-5.3	8.7	-2.3	-10.6	1,021
9. Real estate	7.1	11.7	3.3	3.8	-1.9	1.9	1,788
10. Home equity	18.4	31.1	26.5	24.4	40.4	28.2	170
11. Other	6.2	10.0	1.1	1.7	-6.0	7	1,619
12. Consumer	4.2	3.1	4.0	5.6	-4.5	8.3	566
13. Adjusted <sup>4</sup>	7.7	6.4	4.6	-1.1	9	1.5	911
14. Other <sup>5</sup>	.1	-15.0	-14.5	-15.4	-1.1	16.1	575

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.

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.

<sup>4.</sup> Includes an estimate of outstanding loans securitized by commercial banks.

<sup>5.</sup> 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 2002 Senior Loan Officer Opinion Survey

The April 2002 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. The survey contained two sets of supplementary questions. The first set addressed changes in banks' lending policies with regard to commercial paper backup lines of credit over the past twelve months, and the second set focused on the role in commercial real estate lending of problems in the market for terrorism insurance. Loan officers representing fifty-six large domestic banks and twenty-one U.S. branches and agencies of foreign banks participated in the April survey.

Results of the survey indicate some further tightening of standards and terms for loans to both businesses and households. However, the number of domestic and foreign banking institutions that reported tightening standards and terms on commercial and industrial (C&I) loans over the past three months moved down considerably from the January survey. The net fraction of domestic institutions that indicated that they had tightened standards for commercial real estate loans in the April survey also declined, though it remained in a relatively high range. Banks continued to report a weakening of demand for C&I and commercial real estate loans, albeit at a lesser rate than in January. According to the domestic respondents, standards for residential mortgage loans were largely unchanged over the past three months, and demand for these loans was moderately stronger on net. As in January, only a small portion of domestic banks, on net, reported tightening standards for consumer loans. For the second consecutive survey, banks reported tightening terms on non-credit-card loans to a greater extent than they have terms on credit card loans. Demand for consumer loans was roughly unchanged over the past three months.

# **Lending to Businesses**

Compared with the January survey, significantly smaller fractions of domestic banks and U.S. branches and agencies of foreign banks reported that they had tightened standards on C&I loans. The percentage of domestic banks that reported having tightened their standards on C&I loans to large and middle-market firms over the past three months moved down to 25 percent from 45 percent in the previous survey; the percentage tightening standards on business loans to small firms declined even more, from more than 40 percent in January to about 15 percent in April. Similarly, the fraction of U.S. branches and agencies of foreign banks that had tightened standards for customers seeking C&I loans or credit lines fell from 70 percent in January to about 40 percent in the current survey.

In April, smaller fractions of domestic banks reported tightening the terms listed in the survey to large and middle-market firms than in January. The largest change was in the net fraction of banks that had increased spreads of loan rates over their cost of funds, which fell from 40 percent in January to about 25 percent in the current survey. In addition, somewhat smaller net percentages of banks reported that they had tightened loan covenants and increased the cost of credit lines for these customers over the past three months. However, about 45 percent of domestic banks increased premiums charged on riskier loans to large and middle-market firms, about the same as in the January survey.

Changes in terms on C&I loans to small firms followed a similar though more pronounced pattern. The net fraction of domestic banks that tightened covenants on loans to small firms fell from 40 percent in January to only about 12 percent in the current survey; the net percentage of banks that increased spreads of loan rates over their cost of funds moved down from 37 percent to 13 percent over the same period. The net fraction of banks that reported increasing premiums charged on riskier loans to small firms over the past three months edged down from 40 percent in January to 34 percent in the current survey.

The fraction of U.S. branches and agencies of foreign banks that tightened terms on C&I loans generally declined but remained in an elevated range. The percentage of foreign institutions that raised premiums on riskier loans decreased from 75 percent in January to 52 percent in the current survey, and the fraction of foreign banks that strengthened loan covenants declined from 52 percent to 43 percent over the same period. The one exception was the percentage of foreign institutions that increased the costs of credit lines, which moved up noticeably from 35 percent in the previous survey to 57 percent in April. Among foreign institutions, the tightening of terms on C&I loans was particularly widespread at the branches and agencies of Japanese banks. All six Japanese institutions that participated in the April survey increased the cost of credit lines, and all but one of these institutions reported raising spreads of loan rates over their cost of funds. According to these banks, the most common reason for imposing more stringent terms on business borrowers was a deterioration in their capital position followed by a less favorable economic outlook and reduced tolerance for risk.

A significant percentage of banks that tightened standards or terms on C&I loans over the past three months pointed to a reduced tolerance for risk as a reason for doing so and continued to voice concerns about the economic outlook. In the current survey, three-quarters of domestic and foreign respondents cited reduced tolerance for risk as a reason for tightening their lending policies, about the same fraction as in January. About 70 percent of domestic banks also indicated that a less favorable or more uncertain economic outlook was a reason for changing their standards and terms over the past three months. While still high, this fraction represents a marked decline from the January survey in which all but one domestic bank indicated that this was at

least a somewhat important reason for tightening their lending policies. Furthermore, only 10 percent of domestic respondents in the current survey noted that a less favorable or more uncertain economic outlook was a "very important" reason, down from 40 percent in the January survey.

About one-third of domestic banks, on net, reported weaker demand for C&I loans from both large and small firms over the past three months, down from roughly one-half in the January survey. Every domestic bank that experienced weaker demand reported that a decline in customers' needs for bank loans to finance capital expenditures was at least a somewhat important reason for the weakness in demand, and more than one-third of respondents chose this reason as "very important." As in the January survey, banks also reported weaker demand for loans to finance mergers and acquisitions, inventories, and accounts receivable. Out of eight banks that reported an increase in demand for C&I loans, six of them indicated that the increase was due to a shift in borrowing from other bank or nonbank credit sources that became less attractive, likely, at least in part, a reflection of the recent pressures in the market for commercial paper. The same number of banks identified a decline in customers' internally generated funds as a reason for higher C&I loan demand.

The net percentage of foreign branches and agencies reporting weaker demand for C&I loans fell from nearly 50 percent in January to 14 percent in the current survey. Despite the widespread tightening of lending standards and terms at Japanese banks, only one of these institutions reported moderately weaker demand for C&I loans over the past three months. The most frequently cited reason for weaker demand at foreign institutions was a decline in requests for merger and acquisition financing.

Commercial paper backup lines of credit. A series of special questions were aimed at changes in banks' lending policies for commercial paper backup lines of credit over the past twelve months. Forty-six of the largest domestic banks and nineteen foreign institutions indicated that they provide these facilities on a regular basis.¹ Domestic banks accounting for more than one-third of total lending facilities—defined as the sum of C&I loans and unused commitments—tightened standards on commercial paper backup lines of credit for nonfinancial firms with A1/P1 commercial paper ratings; domestic institutions accounting for about 60 percent of total lending facilities indicated doing so for firms with A2/P2 ratings. The (unweighted) fraction of foreign institutions that had tightened standards on commercial paper backup lines of credit for nonfinancial firms with an A1/P1 commercial paper rating over the

<sup>1.</sup> To account for the concentration of commercial paper backup lines of credit among the largest institutions, responses for domestic banks were weighted by the sum of C&I loans and unused commitments obtained from the 2001:Q4 Call Report. These weights are intended to proxy for banks' participation in this line of business.

past twelve months stood at 60 percent, while almost 90 percent reported doing so for lower-rated borrowers.

Domestic banks accounting for more than 90 percent of total lending facilities indicated that they had increased fees and raised spreads associated with commercial paper backup lines of credit for commercial paper issuers with both A1/P1 and A2/P2 ratings. Banks pointed to heightened concerns about possible deterioration in issuers' credit quality and a higher probability of lines being drawn because of less certain conditions in the commercial paper market as reasons for tightening standards and terms. Over the past twelve months, about 10 percent of domestic banks (weighted) and 10 percent of foreign institutions (unweighted), on net, reported stronger demand for commercial paper backup lines of credit from nonfinancial issuers with both A1/P1 and A2/P2 ratings.

Commercial real estate lending. The net fraction of domestic banks that reported tighter standards on commercial real estate loans over the past three months declined from 46 percent in January to 30 percent in the current survey. At branches and agencies of foreign banks, the net percentage reporting tighter standards on commercial real estate loans remained stable at about 20 percent. In the current survey, more than 30 percent of domestic respondents, on net, noted that demand for commercial real estate loans had weakened, down from 43 percent in January; among foreign institutions, 25 percent, on net, reported weaker demand for this type of loan over the past three months.

A set of special questions addressed how the lack of insurance against terrorism has affected commercial real estate lending. About 70 percent of domestic respondents indicated that less than 5 percent of the dollar volume of their commercial real estate loans outstanding—either held on their books or securitized—is backed by "high profile" or "heavy traffic" commercial real estate properties.<sup>2</sup> For about one-fifth of banks, loans financing high profile properties make up between 5 percent and 10 percent of their commercial real estate loan portfolio, while for the remainder, such loans account for between 10 percent and 20 percent of commercial real estate loans outstanding. At foreign institutions, loans backed by high profile properties account for somewhat larger shares of the respondents' commercial real estate portfolios.

Almost three-quarters of domestic banks indicated that they require terrorism insurance on less than 10 percent of loans financing high profile or heavy traffic commercial real estate properties. Indeed, in their comments, a number of banks noted that their standard commercial real estate loan

<sup>2.</sup> For the purposes of the survey, high profile or heavy traffic commercial real estate properties were defined as landmark buildings and commercial properties in their vicinity, stadiums and other sports/entertainment venues, and large shopping malls.

contracts—especially for smaller loans (less than \$10 million)—generally do not require terrorism insurance. However, six domestic and six foreign respondents that answered these special questions reported that they require insurance against terrorism on more than 90 percent of loans financing such properties. At the end of last year, these six domestic institutions held about 9 percent of all commercial real estate loans on the books of domestic banks according to the 2001:Q4 Call Report. The most recent weekly bank credit data indicate that the six foreign institutions account for less than 2 percent of all commercial real estate loans on the books of domestic banks and U.S. branches and agencies of foreign banks.

Domestic respondents indicated that if coverage was required and an existing borrower were unable to secure adequate insurance against terrorism for a high profile commercial real estate property, their most likely response was to ask for additional collateral and to modify the existing loan covenants to allow for partial coverage. The foreign institutions, by contrast, noted that their most likely course of action was to increase fees or interest rates associated with the loan, and three foreign respondents indicated that they are very likely to call the loan or refuse to roll it over when the loan comes due.

Among domestic banks that received applications for loans to finance high profile commercial real estate properties since the events of September 11, 90 percent indicated that their rejection rate on these loan applications has stayed about the same. Sixty percent of U.S. branches and agencies of foreign banks that received applications for loans to finance these types of properties reported their rejection rate as essentially unchanged. Almost 80 percent of domestic banks and more than 70 percent of foreign institutions indicated that they experienced little or no change in demand for loans to finance high profile properties because potential borrowers were unable to secure affordable insurance against acts of terrorism. Seven domestic banks reported moderately weaker demand and four domestic and three foreign institutions experienced substantially weaker demand for loans to finance high profile commercial real estate properties because of terrorism insurance issues.

#### **Lending to Households**

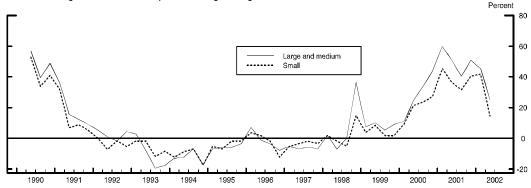
Domestic banks' credit standards for approving residential mortgage loans were largely unchanged over the past three months, with only one bank reporting that it had tightened lending standards somewhat, the same as in the January survey. On net, about 6 percent of domestic respondents reported increased demand for residential mortgages, down from 30 percent in January.

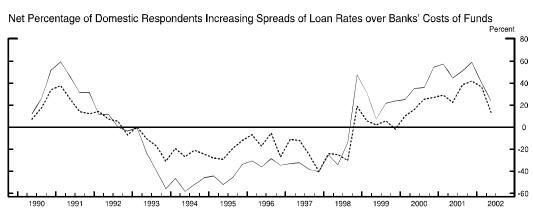
In the current survey, less than 10 percent of banks indicated that they had tightened standards on credit card loans over the past three months, a somewhat smaller percentage than in January; terms and conditions on existing credit card accounts were largely unchanged. For other types of consumer loans, one-fifth

of banks reported that they had tightened standards over the past three months, about the same percentage as in the January survey. Almost one-quarter of domestic banks raised the minimum required credit score on consumer loans other than credit card loans, and 15 percent reduced the number of exceptions granted to customers not meeting credit-scoring thresholds. On net, banks reported demand for consumer loans as about unchanged over the past three months.

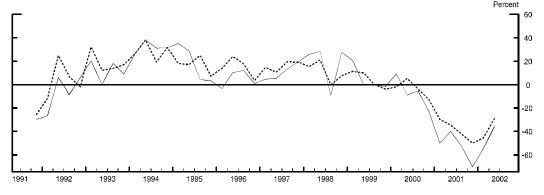
# Measures of Supply and Demand for C&I Loans, by Size of Firm Seeking Loan

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



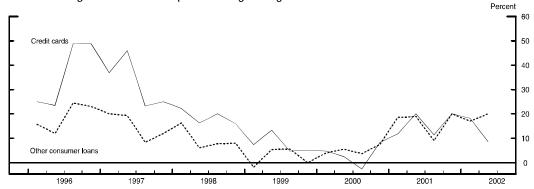


Net Percentage of Domestic Respondents Reporting Stronger Demand for C&I Loans

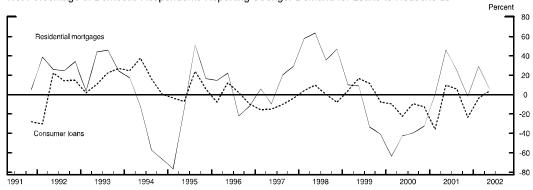


# Measures of Supply and Demand for Loans to Households

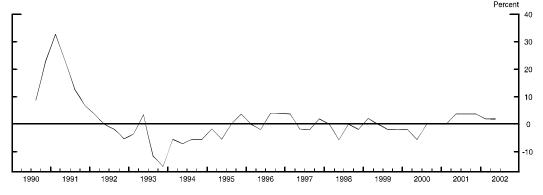
Net Percentage of Domestic Respondents Tightening Standards on Consumer Loans



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



Net Percentage of Domestic Respondents Tightening Standards for Mortgages to Individuals



# **International Developments**

# **International Developments**

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

### **Trade in Goods and Services**

The U.S. international trade deficit in goods and services was \$31.5 billion in February, up \$3.3 billion from January (revised). The widening of the trade deficit was accounted for primarily by a strong increase in imports of goods and services. For January and February combined, the trade deficit was \$359 billion at an annual rate, \$27 billion larger than in the fourth quarter of 2001.

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

		A	nnual rat	e	Monthly rate			
	2001	200	01	2002	2001	200	02	
		Q3	Q4	Q1e	Dec.	Jan.	Feb.	
Real NIPA <sup>1</sup>								
Net exports of G&S	-408.7	<b>-</b> 411.0	<b>-</b> 412.7	<b>-</b> 448.5				
Nominal BOP								
Net exports of G&S	-347.5	-313.8	-331.4	-358.5	<b>-</b> 24.7	-28.2	-31.5	
Goods, net	-426.3	-422.2	-401.3	-424.3	-31.0	-33.8	-36.9	
Services, net	78.8	108.4	69.9	65.7	6.3	5.5	5.4	

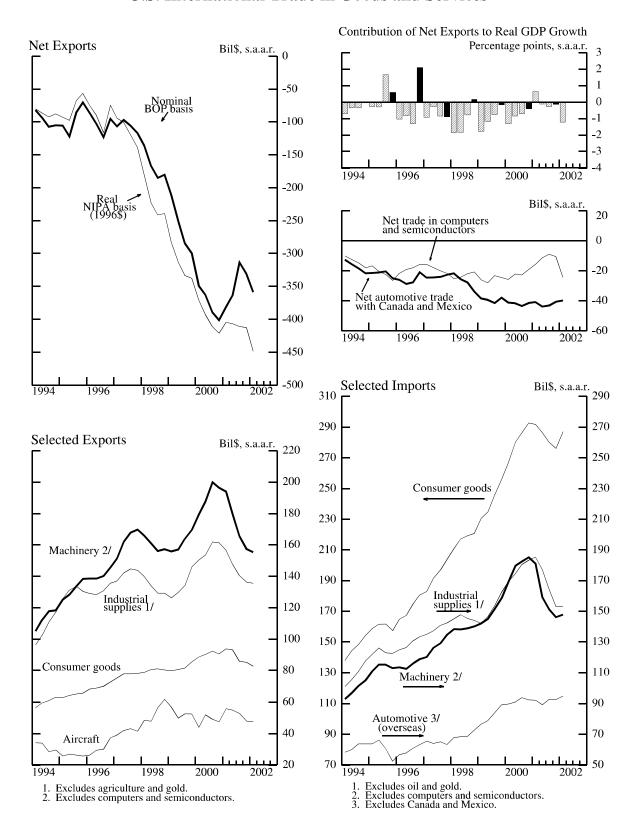
<sup>1.</sup> Billions of chained (1996) dollars.

The value of exported goods and services rose 1.2 percent in February. A 3.6 percent rise in services exports, which were boosted by receipts associated with the Winter Olympic Games, accounted for nearly all of the increase. Goods exports were little changed, as a modest decrease in exports of capital goods (mainly aircraft) was offset by small increases in most other categories of trade. For January and February combined, the value of exported goods and services increased about 1 percent from the fourth quarter level: a 1.4 percent decline in goods exports was outweighed by a 6.6 percent increase in services exports.

The value of imported goods and services surged 4 percent in February. Services imports rose more than 5 percent, though about half of that increase is explained by royalties and license fees paid to the International Olympic Committee for the rights to broadcast the 2002 Winter Olympic Games. The value of imported goods, excluding gold and oil, rose 4.6 percent, with relatively strong increases occurring in all major categories of trade. Within the capital goods category, imports of computers and aircraft declined somewhat in February, but this was more than offset by higher imports of semiconductors, telecommunications equipment, and other machinery. The value of imported oil

e. BOP data are two months at an annual rate; NIPA data are BEA's advance estimate. Source: U.S. Department of Commerce, Bureaus of Economic Analysis and Census. n.a. Not available. ... Not applicable.

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



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

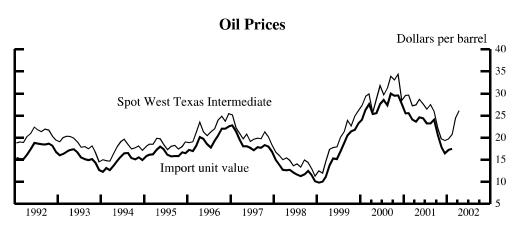
		Lev				Amount (	Change <sup>1</sup>	
	2001	2002	20		2001	2002	200	
	Q4	Q1e	Jan.	Feb.	Q4	Q1e	Jan.	Feb.
Exports of G&S	936.1	944.6	938.9	950.3	-36.5	8.5	2.4	11.4
Goods exports	669.7	660.7	660.0	661.4	-24.0	<b>-</b> 9.0	0.6	1.4
Gold	2.9	2.5	2.5	2.4	0.5	-0.4	-0.6	-0.0
Other goods	666.8	658.3	657.6	659.0	-24.4	47.9	1.2	1.4
Aircraft & parts	47.8	47.7	49.3	46.2	-5.0	-0.1	10.1	-3.1
Computers	41.9	38.4	37.9	38.9	-2.4	-3.5	-5.0	1.0
Semiconductors	37.9	41.6	42.7	40.4	-0.7	3.7	5.7	-2.3
Other capital gds	160.4	157.5	156.7	158.3	<b>-</b> 7.4	<b>-</b> 2.9	<b>-</b> 7.1	1.5
Automotive	73.0	72.0	71.0	73.1	-4.3	-1.0	2.0	2.1
to Canada	38.5	40.5	39.1	41.9	-1.8	2.0	1.6	2.9
to Mexico	16.6	13.9	13.9	13.8	1.0	<b>-</b> 2.7	0.7	-0.1
to ROW	17.9	17.6	18.0	17.3	-3.5	-0.2	-0.3	-0.6
Agricultural	56.4	56.3	56.2	56.5	1.4	-0.1	1.9	0.2
Ind supplies (ex. ag)	136.4	135.6	135.4	135.9	-3.9	-0.7	-1.1	0.4
Consumer goods	85.3	82.6	82.4	82.9	-0.5	<b>-</b> 2.7	<b>-</b> 4.5	0.4
All other goods	27.7	26.4	25.9	26.9	-1.6	-1.2	-2.1	1.0
Services exports	266.4	283.8	278.8	288.9	-12.5	17.5	1.8	10.0
Imports of G&S	1267.5	1303.1	1277.8	1328.4	-18.9	35.6	44.7	50.6
Goods imports	1071.0	1085.0	1065.4	1104.6	<b>-</b> 44.8	14.0	34.1	39.3
Petroleum	80.9	73.5	76.6	70.4	-21.6	<b>-</b> 7.4	6.9	-6.1
Gold	2.4	1.8	1.7	2.0	0.2	-0.6	0.2	0.4
Other goods	987.7	1009.7	987.2	1032.2	-23.4	22.0	27.1	45.0
Aircraft & parts	32.3	28.8	29.8	27.9	1.6	-3.5	-3.7	-1.9
Computers	67.6	79.0	81.0	77.1	-0.0	11.4	15.0	-3.9
Semiconductors	22.9	25.4	23.0	27.8	-1.5	2.5	0.6	4.8
Other capital gds	148.4	149.4	146.0	152.8	-5.3	1.0	1.0	6.8
Automotive	188.4	189.0	179.6	198.4	-3.5	0.5	<b>-</b> 4.9	18.8
from Canada	55.6	56.3	51.5	61.0	-3.3	0.6	<b>-</b> 4.7	9.5
from Mexico	40.2	37.8	37.0	38.7	-0.1	-2.3	1.2	1.6
from ROW	92.6	94.8	91.0	98.7	-0.1	2.2	-1.4	7.7
Ind supplies	153.2	152.9	149.4	156.4	-11.3	-0.3	1.6	7.0
Consumer goods	276.0	286.9	280.4	293.3	-4.0	10.8	16.6	13.0
Foods, feeds, bev.	47.2	47.4	46.5	48.4	-0.8	0.3	1.0	1.9
All other goods	51.7	50.9	51.7	50.2	1.3	<b>-</b> 0.7	-0.2	-1.5
Services imports	196.5	218.1	212.4	223.8	25.9	21.6	10.6	11.4
Мето:								
Oil quantity (mb/d)	12.06	11.61	12.19	11.02	0.10	-0.45	0.58	-1.17
Oil import price (\$/bbl)	18.33	17.34	17.19	17.49	-5.16	-0.99	0.75	0.30

<sup>1.</sup> 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)

		nual rate		Mo	nthly rat 2002	es
	$\frac{200}{Q3}$	Q4	<u>2002</u> Q1	Jan.	Feb.	Mar.
			S prices (		ighta)	
<b>Merchandise imports</b>	-7.2	-13.9		0.4	-0.1	1.1
Oil	-12.2	-65.6	$\frac{-1.7}{13.9}$	5.5	3.0	15.7
Non-oil	-6.6	-4.0	-2.3	0.1	-0.5	0.0
Core goods*	-6.3	-3.7	-2.2	0.0	-0.4	0.0
Cap. goods ex comp & semi	-1.1	-0.4	-3.7	-0.3	-0.4	-0.3
Automotive products	-0.5	1.2	-0.3	-0.1	0.2	-0.2
Consumer goods	-1.1	-1.5	-1.2	0.0	-0.2	-0.2
Foods, feeds, beverages	-6.9	0.6	-0.1	1.5	-2.3	0.6
Industrial supplies ex oil	-20.9	-15.6	-4.6	0.6	-1.3	1.0
Computers	-13.4	-12.5	-3.0	-0.2	-0.5	-0.1
Semiconductors	-1.2	-2.1	-2.7	0.0	0.2	0.1
Merchandise exports	<b>-</b> 2.8	<b>-</b> 4.1	-1.8	-0.1	-0.2	0.3
Core goods*	-2.1	-3.4	-1.2	0.1	-0.3	0.4
Cap. goods ex comp & semi	-0.8	-1.2	0.8	0.2	0.0	0.1
Automotive products	0.0	0.0	1.5	0.3	0.0	0.1
Consumer goods	0.5	0.9	-2.0	-0.4	-0.3	0.0
Agricultural products	6.2	-8.8	-2.8	0.6	-2.5	0.6
Industrial supples ex ag	-10.7	-10.6	-3.6	0.1	<b>-</b> 0.1	0.7
Computers	-8.0	-5.6	-5.4	-0.3	0.8	-0.2
Semiconductors	-7.0	-15.2	-8.1	-2.4	0.0	0.3
Chain price index	Pri	ces in the	e NIPA a	ccounts (	1996 we	ights)
Imports of goods & services	-17.1	2.4	-1.2	`	•••	
Non-oil merchandise	-6.7	-4.1	-2.0			
Core goods*	-6.2	-3.4	-1.9		•••	•••
Exports of goods & services	-1.7	-3.1	-0.6			
Total merchandise	-2.2	-3.6	-1.2			
Core goods*	-1.5	-3.4	-1.3			

<sup>\*/</sup> Excludes computers and semiconductors. n.a. Not available. ... Not applicable.



declined 8 percent, resulting entirely from a lower import volume. For January and February combined, the value of imported goods and services rose 2.8 percent from the fourth quarter level, with both goods and services contributing to the increase.

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

**Oil.** The BLS price of imported oil shot up nearly 16 percent in March, following smaller increases in the two preceding months. For the first quarter, the price of imported oil was up about 14 percent (a.r.) relative to the fourth quarter of last year. The spot price of West Texas intermediate (WTI) crude oil, which also rose in both January and February, moved sharply higher in March. In April, the spot price has been volatile, ranging between \$23 and \$28 per barrel. The current spot price of WTI is about \$27 per barrel. Factors generating the price increase include production restraint by OPEC, heightened tensions in the Middle East, a suspension of exports by Iraq, and uncertainty regarding political stability in Venezuela, and hence its oil shipments.

Non-oil imports. The price of imported non-oil core goods was unchanged in March following a decline of about 0.4 percent in February. Increases in prices of foods and industrial supplies (excluding petroleum), both of which had fallen in February, were offset by continued small declines in prices of capital and consumer goods. For the first quarter on average, the core goods price index was down about 2.2 percent at an annual rate, the fourth consecutive quarterly decline. However, the first-quarter drop was less steep than the earlier declines, as prices of industrial supplies fell only about 5 percent at an annual rate following three quarters of double-digit declines. The slower rate of deflation in industrial supplies reflects the recent turnabout in prices of raw industrial commodities, which were about 8 percent above their November trough by mid-April.

**Exports**. Prices of U.S. core goods exports rose 0.4 percent in March, following more than a year of nearly continuous declines. Among major categories, the largest increase in March was in the price of industrial supplies, which rose 0.7 percent following a decline of about 8.5 percent over the preceding year. Food prices also rose in March, partially reversing their February decline. Prices in other major categories were unchanged or up slightly in March. On average, the price of core goods was down about 1.2 percent at an annual rate in the first quarter following an annual rate decline of 3.4 percent in the fourth quarter.

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

U.S. financial flows through international securities transactions decreased considerably in the first two months of the year. For January and February combined, net purchases of foreign securities by U.S. investors were near zero (line 5 of the Summary table of U.S. International Transactions), while net purchases of U.S. securities by private foreigners (line 4) recorded the lowest two-month total since early 1999.

The weakness in foreign demand for U.S. securities was first apparent last September, but the pattern has varied somewhat by instrument. Private net foreign purchases of all types of U.S. securities—Treasury, agency, and corporate—were very weak in September. Net private foreign purchases of U.S. Treasury and agency securities (lines 4a and 4b) then bounced back strongly in the fourth quarter—perhaps owing to flight-to-quality buying—but slowed markedly in the first two months of 2002. The recent weak demand by private foreigners for Treasury securities was not entirely unexpected; net sales were the norm before the fourth quarter. For agency bonds, however, the recent weakness has been surprising since it coincided with strong issuance.

Private purchases of U.S. corporate securities have exhibited a slightly different pattern (lines 4c and 4d). Foreigners sold U.S. equities heavily last September, but returned to the U.S. equity market with strong demand in the last two months of 2001. The demand for U.S. equities continued, albeit at a somewhat lower level, in January, but fell to only \$6 billion in February, about half of which took the form of a merger-related stock swap. Foreign purchases of corporate bonds followed a similar but more muted pattern—weakening in September followed by very solid demand through January and some slowing in February.

Issuance patterns for March could support a pickup in foreign purchases of agency and corporate debt. In particular, Fannie Mae reports strong foreign demand for its new issues in the month, and bond issuance by U.S. corporations reached near-record levels.

In February, capital inflows from foreign official sources were somewhat stronger than in previous months (line 1). The largest inflow in the month was attributable to China, whose holdings increased \$12 billion, in line with their overall increase in foreign reserves. Taiwan's official holdings in the United States also increased substantially (\$3.5 billion), while the largest decrease in the month was posted for Norway (\$5 billion).

We have no new data on foreign direct investment flows. As noted previously, U.S. direct investment abroad (line 6) was very strong in 2001, notwithstanding a slight weakening in the fourth quarter. Foreign direct investment in the United

States (line 7), however, fell off sharply in the second half of 2001. Timely data on completed merger and acquisition activity suggest that both inflows and outflows of direct investment may well be weak in the first quarter.

With inflows through securities slowing, net banking inflows increased to \$28 billion in February, following moderate outflows in January (line 3).

### **Summary of U.S. International Transactions**

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

	2000	2001		200	)1		2002	
	2000	2001	Q1	Q2	Q3	Q4	Jan.	Feb.
Official financial flows	39.3	2.0	4.8	-21.3	13.2	5.4	3.7	7.8
1. Change in foreign official assets								
in the U.S. (increase, +)	39.6	6.9	4.6	-20.0	16.8	5.6	3.7	7.5
a. G-10 countries	12.3	-7.9	-5.5	-6.1	-5.6	9.2	2.9	2.4
b. OPEC countries	10.7	-1.9	.8	-2.1	-4.7	4.1	-2.6	-2.7
c. All other countries	16.6	16.8	9.2	-11.8	27.0	-7.7	3.4	7.8
2. Change in U.S. official reserve								
assets (decrease, +)	3	-4.9	.2	-1.3	-3.6	2	.0	.3
Private financial flows	404.0	453.9	98.9	175.9	27.1	151.9	•••	•••
Banks								
3. Change in net foreign positions								
of banking offices in the U.S. <sup>1</sup>	-6.7	0.5	-75.0	23.8	-3.3	55.0	-11.6	28.3
Securities <sup>2</sup>								
4. Foreign net purchases of U.S.								
securities (+)	435.7	500.3	149.0	125.0	73.9	152.2	10.9	19.8
<ul> <li>a. Treasury securities</li> </ul>	-52.4	16.4	.7	-8.5	-9.3	33.4	-14.6	2.3
b. Agency bonds	111.9	144.2	38.8	29.4	33.2	42.8	1.6	5.0
c. Corporate and municipal bonds	182.1	218.1	68.9	69.6	37.2	42.4	15.4	6.8
d. Corporate stocks <sup>3</sup>	194.0	121.6	40.7	34.5	12.9	33.5	8.5	5.7
5. U.S. net acquisitions (-) of								
foreign securities	-101.1	-62.9	-20.6	-44.1	20.4	-18.6	2.8	-2.2
a. Bonds	-4.1	30.4	-2.0	8.8	26.5	-2.9	-1.0	2.3
b. Stock purchases	-13.1	-50.1	-16.0	-18.7	-6.1	-9.3	3.8	-2.7
c. Stock swaps <sup>3</sup>	-84.0	-43.2	-2.6	-34.2	.0	-6.4	.0	-1.8
Other flows (quarterly data, s.a.)								
6. U.S. direct investment (-) abroad	-152.4	-156.0	-41.1	-41.2	-43.2	-30.4		
7. Foreign direct investment in U.S.	287.7	157.9	52.8	65.6	22.6	17.0		
8. Foreign holdings of U.S. currency	1.1	23.8	2.3	2.8	8.2	10.5		
9. Other $(inflow, +)^4$	-60.2	-9.7	31.5	44.1	-51.5	-33.3	•••	
U.S. current account balance (s.a.)	-444.7	-417.4	-112.1	-107.9	-98.5	-98.8	•••	•••
Capital account balance (s.a.) <sup>5</sup>	.7	.7	.2	.2	.2	.2	•••	•••
Statistical discrepancy (s.a.)	.7	-39.2	8.3	-46.8	58.1	-58.7	•••	•••

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.

<sup>1.</sup> 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.

<sup>2.</sup> 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.

<sup>3.</sup> Includes (4d) or represents (5c) stocks acquired through mergers.

<sup>4.</sup> 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.

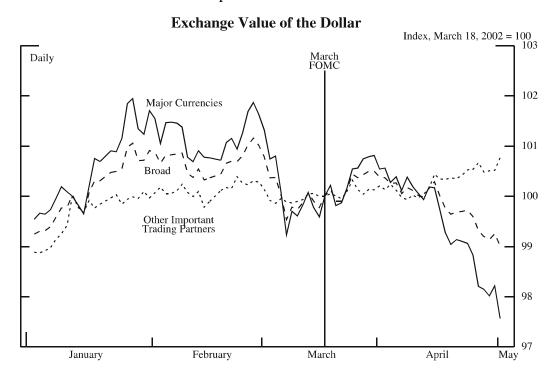
<sup>5.</sup> Consists of transactions in nonproduced nonfinancial assets and capital transfers.

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

### **Foreign Exchange Markets**

On balance, the trade-weighted index of the dollar's exchange value against other major currencies fell 2.4 percent over the intermeeting period. The dollar depreciated as market participants pushed back expectations of monetary policy tightening in the United States, following mixed economic data releases, the Chairman's Congressional testimony, and comments by other FOMC members. Late in the intermeeting period, the dollar fell following Congressional testimony by Treasury Secretary O'Neill. Some market participants apparently interpreted his remarks as suggesting a softening of the "strong dollar" policy.

The index of the dollar's value against our other important trading partners, in contrast, rose 0.8 percent, led by a large depreciation of the Argentine peso and a modest decline in the Mexican peso.



On net, the dollar depreciated 2.7 percent against the euro and 2.6 percent versus sterling. The European Central Bank and the Bank of England left their policy rates unchanged over the intermeeting period, as expected. Expectations of future monetary policy tightening that are implicit in interest rate futures have been pushed back in time in both the euro area and the United Kingdom, although not as much as in the United States. Yields implied by euro and sterling interest rate futures contracts maturing in the last quarter of 2002 fell about 40 basis points on net over the period. Factors that tended to limit the appreciation of the euro against the dollar included concerns over labor unrest in

Germany and Italy and the success of the far-right candidate, Jean-Marie Le Pen, in the first round of the French Presidential election. The Swiss franc appreciated 3.3 percent relative to the dollar, which market participants attributed to safe haven flows and the belief that domestic inflationary pressures leave the Swiss National Bank little scope to weaken the currency by easing monetary policy.

**Financial Indicators in Major Industrial Countries** 

	Three-mo	onth rate Percentage	Ten-yea	r yield Percentage	Equities
Country	May 1 (Percent)	Point Change	May 1 (Percent)	Point Change	Percent Change
Canada	2.52	.29	5.57	12	-3.90
Japan	.05	.02	1.38	07	11
Euro area	3.39	.00	5.12	10	-4.64
United Kingdom	4.00	06	5.19	08	-2.83
Switzerland	1.46	12	3.53	20	.01
Australia	4.65	.14	6.10	27	-2.68
United States	1.80	14	5.09	23	-8.23
Memo: Weighted-average	2.21	00	4.72	10	
foreign	2.21	.09	4.73	10	n.a.

NOTE. Change is from March 18 to May 1 (10 a.m. EDT).

The Bank of Canada raised its policy rate 25 basis points. This followed the Canadian March employment report, which was much stronger than expected. Data on Canadian GDP and housing starts also came in above market expectations. The Canadian dollar appreciated 1.9 percent against the U.S. dollar. The New Zealand dollar and Australian dollar likewise appreciated against the U.S. dollar following strong economic data releases in both countries. The Reserve Bank of New Zealand and the Bank of Sweden both raised their policy rates 25 basis points twice over the intermeeting period.

The Japanese yen appreciated 2.9 percent against the dollar, despite a one-notch downgrade of Japan's sovereign debt rating by Standard & Poor's to AA- and reports that Moody's is considering an aggressive two-notch downgrade. Japanese officials stated that they were concerned about the strengthening of the yen.

n.a. Not available.

After rising sharply at the end of the fiscal year, current account balances at the Bank of Japan have fallen back somewhat but have remained above the current 10-15 trillion yen target range.

On net, broad equity indices fell about 2 to 5 percent in Europe and Canada and were little changed in Japan. The new fiscal year did not produce the large capital outflows from Japan that some market participants had feared. Indeed, Japanese public pension funds are reported to have made large purchases of Japanese stocks. Shares in export-oriented firms outperformed broader indexes in Japan, as market participants hope for an export-led recovery. Japanese banking shares also outperformed, in part following a report on the loan portfolios of banks by the Financial Services Agency that contained no negative surprises. Benchmark 10-year bond yields in most industrial economies decreased over the intermeeting period, but by smaller amounts than in the United States.

The dollar appreciated 28 percent against the Argentine peso. The peso had fallen even further but later retraced some of its losses in very thin and restricted trading. Reports indicate that the peso was supported by central bank intervention and by the requirement that exporters repatriate their earnings within 5 days, instead of the 180 days that had previously been allowed. The central bank declared a banking and foreign exchange holiday that lasted for one week in response to the depletion of its dollar reserves and an ongoing trend of bank withdrawals facilitated by court orders allowing access to frozen deposits. In response, the Argentine congress passed legislation making it harder for depositors to do this. Economy Minister Remes Lenicov resigned after the Argentine congress failed to act on a plan converting frozen bank deposits into government bonds and was replaced by Roberto Lavagna. Negotiations with the IMF are in stalemate.

The Venezuelan bolivar appreciated against the dollar after President Chavez was ousted in a coup, but the currency fell back after he was reinstated a few days later.

Developments in Argentina and Venezuela had little contagion effect on other emerging markets. In Taiwan and Malaysia, stock prices rose 1 to 5 percent, led by gains in technology shares. In Korea, the won appreciated 2.4 percent against the dollar and sovereign bond yield spreads over Treasuries fell 17 basis points, in part due to an upgrading of Moody's sovereign debt rating for Korea. The Mexican peso fell 4.1 percent against the dollar, following the recent loosening of monetary policy in Mexico. In Brazil, stock prices fell 8.1 percent, sovereign bond yield spreads over Treasuries rose 145 basis points, and the *real* fell

0.7 percent against the dollar. Market participants attributed these movements in part to the fact that the candidate of the opposition Workers' Party is ahead of the current government's likely candidate in opinion polls for the October presidential election.

Financial Indicators in Latin America, Asia, and Russia

	Currer US do	•	Interes	t-term st rates <sup>1</sup>	bond s	nominated spread <sup>2</sup>	Equity prices
Economy	May 1	Percent Change	Apr. 30/ May. 1 (Percent)	Percentage Point Change	Apr. 30/ May. 1 (Percent)	Percentage Point Change	Percent Change
Mexico	9.44	4.05	5.96	-1.57	2.55	.06	1.85
Brazil	2.36	.72	18.25	05	8.49	1.45	-8.14
Argentina	2.96	27.59	100.00	85.00	50.04	-1.14	-2.07
Chile	646.70	-1.52	4.28	50	2.32	.36	-4.14
China	8.28	.00	n.a.	n.a.	1.59	.06	2.70
Korea	1294.00	-2.38	4.30	.15	.90	17	-3.15
Taiwan	34.72	88	2.46	-1.04		•••	1.57
Singapore	1.81	-1.04	.75	19			-3.63
Hong Kong	7.80	.00	1.89	36			2.38
Malaysia	3.84	1.00	2.88	01	1.81	.13	4.83
Thailand	43.24	46	2.13	.00	.78	30	88
Indonesia	9320.00	-6.43	16.95	20	3.42	.78	13.85
Philippines	50.50	88	5.94	.19	3.83	16	-2.55
Russia	31.24	.44	n.a.	n.a.	4.77	22	10.81

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

NOTE. Change is from March 18 to April 30/May 1.

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.

<sup>2.</sup> 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.

### **Developments in Foreign Industrial Countries**

Indicators for the first quarter point to a recovery of activity among most foreign industrial countries, but the pace of the rebound varied widely. Signs of strong growth emerged in Canada, including a large increase in employment and a rebound in manufacturing output. Data in the euro area suggest a modest recovery started in the first quarter. In the United Kingdom, real GDP expanded slightly, while it appears likely that Japan continued to contract, though at a more moderate rate than over the second half of last year.

The first quarter was marked by a pick-up in the rate of inflation in most foreign industrial countries. The twelve-month rate approached the 2 percent midpoint of the Bank of Canada's 1 to 3 percent target range in March, after ending last year just below the bottom limit. In the United Kingdom, the rate of retail price inflation ticked up slightly in March, but remained below the Bank of England's 2.5 percent target. Euro-area inflation remained above the European Central Bank's (ECB) 2 percent target ceiling. Deflation appears to be moderating a bit in Japan.

In **Japan**, indicators suggest that the pace of contraction has moderated and signs of stabilization have begun to emerge in some sectors. Industrial production rose slightly in the first quarter, the first increase in over a year, with notable growth in the production of electrical machinery. The broader all-industry index, a production-based proxy for GDP, was up slightly in January and February on average, although service sector activity continued to decline. Real exports rose sharply in the first quarter, reflecting an increase in shipments to Asia and the United States. However, most indicators of domestic demand continued to weaken. On average, core machinery orders in January and February were roughly 7 percent below their fourth-quarter average level, while nonresidential building starts continued to decline, suggesting further retrenchment in capital spending. Residential building starts were about flat in January and February on average. Private consumption remained sluggish, with workers' household expenditures up slightly in January and February on average.

Labor market conditions generally remain unfavorable, although March data showed slight improvement. The unemployment rate edged down to 5.2 percent in March, from 5.3 percent in February and a record-high 5.5 percent in December. The job-offers-to-applicants ratio edged up to .51 in March, still well below its recent peak of .66 in December 2000. Core consumer goods prices in the Tokyo area (which exclude fresh food but include energy) were down

1.1 percent from a year earlier in April. Wholesale prices for domestic goods were unchanged in March from February, but continued to decline at a significant rate on a twelve-month basis.

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

	2001		2002	2002			
Indicator	Q3	Q4	Q1	Jan.	Feb.	Mar.	Apr.
Industrial production <sup>1</sup>	-4.4	-3.4	.5	1	1.2	.5	n.a.
All-industry index	-1.8	9	n.a.	1	.5	n.a.	n.a.
Housing starts	4.4	-2.5	.8	9.0	-4.9	-6.2	n.a.
Machinery orders <sup>2</sup>	-5.7	-7.8	n.a.	-15.6	10.8	n.a.	n.a.
Machinery shipments	-5.9	-4.7	3.4	1.4	1.9	1.6	n.a.
New car registrations	1.6	-5.5	1.9	3.0	-2.4	-5.3	10.8
Unemployment rate <sup>3</sup>	5.1	5.4	5.3	5.3	5.3	5.2	n.a.
Job offers ratio <sup>4</sup>	.58	.52	.51	.51	.50	.51	n.a.
Business sentiment <sup>5</sup>	-36	-40	-41				
CPI (Core, Tokyo area) <sup>6</sup>	-1.2	-1.0	9	-1.2	9	7	-1.1
Wholesale prices <sup>6</sup>	-1.1	-1.4	-1.4	-1.5	-1.4	-1.3	n.a.

- 1. Mining and manufacturing.
- 2. Private sector, excluding ships and electric power.
- 3. Percent.
- 4. Level of indicator.
- 5. Tankan survey, diffusion index.
- 6. Percent change from year earlier, n.s.a.
- n.a. Not available. ... Not applicable.

The Bank of Japan's Tankan index of business conditions worsened slightly in March, with the diffusion index for all enterprises edging down to -41 from -40 in December. Survey respondents project a slight improvement in the index, back to -40, for June. The closely watched index for large manufacturers was unchanged at -38, the first time in five quarters that the index did not deteriorate. The index for large non-manufacturing firms was also unchanged, while sentiment among small-sized manufacturing and non-manufacturing firms continued to deteriorate. Fewer firms expect output prices to fall over the next three months, while the number of firms that expect input prices to fall was unchanged. Sales and profits are expected to recover in FY2002. However, capital investment is expected to fall 8 percent in FY2002, compared with an

estimated decline of roughly 5 percent in FY2001, suggesting weakness in domestic demand.

The Bank of Japan continued to provide funds in excess of its \\$10 trillion to \\$15 trillion target range for the outstanding balance of financial institutions' accounts held at the central bank. In the last week of FY2001, which ended in March, the balance moved above \\$20 trillion, reaching \\$27.6 trillion on March 29. Since then, the BOJ has begun to drain reserves from the banking system, although balances remain relatively high at about \\$18 trillion. On March 20, the BOJ announced measures to broaden the range of instruments that can be used in open-market operations to include loan certificates issued by the Deposit Insurance Corporation and by regional governments.

On April 12, the Financial Services Agency (FSA) released the results of its special examination of 149 borrowers from Japan's major banks. The examination, which focused on borrowers that had experienced large downward movements in stock prices, credit ratings, or other financial indicators, forced the banks to take additional loan losses of ¥1.9 trillion and to classify an additional ¥4.7 trillion in loans as non-performing over what was reported last September. Despite the current write-offs, the FSA release states that the major banks' total capital ratios remain in the 10-11 percent range.

Recent data point to a modest improvement in the **euro-area** economy in the first quarter. Euro-area industrial production for January and February on average was 0.2 percent above the fourth-quarter average. Survey data on production expectations suggest a further production increase in March, making it likely that industrial production rose in the first quarter for the first time since the fourth quarter of 2000. The volume of retail sales for January and February on average also edged up slightly from the fourth quarter. Euro-area business sentiment continued to rebound in March, rising back to its September level. The purchasing managers' index (PMI) for the manufacturing sector rose in March to its highest level in a year, suggesting that growth likely returned to the sector last month, and the service sector PMI rose in March to its highest level since last July. Other indicators, however, suggest that the recovery is uneven and still somewhat tentative. Consumer sentiment has picked up less than business sentiment; the April survey of Italian consumers showed confidence falling back to the lowest level in more than a year, in part owing to increased tensions over labor reform. German growth appears to be lagging that of the other major economies, and German March manufacturing orders and April business sentiment (based on both the ZEW and IFO surveys) have retraced part of their earlier gains.

Labor market data for the euro area as a whole continue to show only slight deterioration, as the harmonized unemployment rate edged up to 8.4 percent in November and remained at that rate through March. According to the preliminary estimate, the twelve-month rate of euro-area consumer price inflation edged down to 2.2 percent in April, exceeding the ECB's 2 percent ceiling for the 23<sup>rd</sup> consecutive month. Excluding food and energy prices, the twelve-month inflation rate was 2.5 percent in March. Producer prices remain below year-ago levels.

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

	2001		2002	2002			
Indicator	Q3	Q4	Q1	Jan.	Feb.	Mar.	Apr.
Industrial production <sup>1</sup>	4	-1.7	n.a.	.0	.2	n.a.	n.a.
Retail sales volume	.3	.2	n.a.	4	.5	n.a.	n.a.
Unemployment rate <sup>2</sup>	8.3	8.4	8.4	8.4	8.4	8.4	n.a.
Consumer confidence <sup>3</sup>	-7.7	-10.7	-9.7	-11.0	-9.0	-9.0	n.a.
Industrial confidence <sup>4</sup>	-10.0	-17.0	-13.0	-14.0	-14.0	-11.0	n.a.
Mfg. orders, Germany	-2.4	-1.0	n.a.	7	-1.3	n.a.	n.a.
CPI <sup>5</sup>	2.5	2.2	2.5	2.7	2.4	2.5	2.2
Producer prices <sup>5</sup>	1.6	8	n.a.	9	-1.1	n.a.	n.a.
M3 <sup>5</sup>	6.8	8.2	7.3	7.9	7.4	7.3	n.a.

- 1. Excludes construction.
- 2. Euro-area standardized to ILO definition. Includes Eurostat estimates in some cases.
- 3. Diffusion index based on European Commission surveys in individual countries; Averages of responses to questions on financial situation, general economic situation, and purchasing attitudes.
- 4. Diffusion index based on European Commission surveys in individual countries; Averages of responses to questions on production expectations, orders, and stocks.
  - 5. Eurostat harmonized definition, 12-month percent change.
  - n.a. Not available.

Bi-annual German wage negotiations have come to a turning point, with members of the bellwether metalworkers union having voted to go on strike to back the demand for a wage increase of at least 4 percent, versus the employers' latest offer of 3.3 percent. The German chemical industry recently agreed to a 3.6 percent increase, and that is believed to have set the floor for increases in the much larger metalworking industry. The European Central Bank has expressed

concern that high wage settlements, seeking to catch up for past inflation surprises, run the risk of keeping inflation from falling below its 2 percent ceiling.

The first round of the French presidential election produced a surprise, with far-right candidate Jean-Marie Le Pen moving into the second round of voting along with incumbent President Jacques Chirac. Chirac led the voting with 19 percent, while Le Pen took 17 percent of the vote to 16 percent for Prime Minister Lionel Jospin. The second round had been expected to be a showdown between Chirac of the center-right and Jospin of the center-left, but voters perceived little difference between the two mainstream candidates and responded by abstaining in record numbers and voting for a plethora of marginal candidates, especially on the left. President Chirac now is expected to win the second round on May 5, with polls showing as much as 80 percent of the electorate supporting him against Le Pen.

Real GDP in the **United Kingdom** rose 0.4 percent (s.a.a.r.) in the first quarter of 2002, after being flat in the previous quarter. For the four quarters ending in March, real GDP grew 1 percent, the weakest four-quarter growth rate since the fourth quarter of 1992, when it was 0.9 percent. The service sector grew at a rate of 1.9 percent (s.a.a.r), similar to its growth in the fourth quarter. The Office of National Statistics estimates that industrial production fell sharply again in the first quarter.

The few available indicators for the second quarter indicate a pick-up in growth. The manufacturing sector's four-month-ahead output expectations continued to climb in April. The manufacturing PMI was more positive with the overall index, as well the indices for output and new orders, all rising again in April and continuing to indicate expansion. Consumer confidence ticked-up slightly in April, remaining around its pre-September level. April's retail sales survey suggested increased sales volumes for the month. Housing prices surged 3.4 percent in April, bringing the twelve-month growth rate to around 16 percent.

Notwithstanding the recent slowing of GDP growth, labor market conditions remain tight. The official claims-based unemployment rate remained at 3.1 percent in March, and the labor force survey measure of the unemployment rate held steady at 5.1 percent for the three months centered in January. Both unemployment rates are near record lows.

	U.K. Economic Indicators	
(Percen	nt change from previous period except as noted, s	s.a.)

	20	2001						
Indicator	Q3	Q4	Q1	Jan.	Feb.	Mar.	Apr.	
Real GDP*	1.7	.0	.4					
Industrial production	-1.1	-2.2	n.a.	6	2	n.a.	n.a.	
Retail sales	1.5	1.3	.9	.0	1.1	.1	n.a.	
Unemployment rate <sup>1</sup>								
Claims-based	3.2	3.2	3.1	3.2	3.1	3.1	n.a.	
Labor force survey <sup>2</sup>	5.1	5.1	n.a.	5.1	n.a.	n.a.	n.a.	
Business confidence <sup>3</sup>	-6.0	-24.0	-3.3	-13.0	1.0	2.0	14.0	
Retail prices <sup>4</sup>	2.4	2.0	2.4	2.6	2.2	2.3	n.a.	
Producer input prices <sup>5</sup>	-2.7	-8.2	-5.4	-6.2	-7.4	-2.5	n.a.	
Average earnings <sup>5</sup>	4.4	3.3	n.a.	2.9	.8	n.a.	n.a.	

- \* Preliminary release.
- 1. Percent.
- 2. Three-month average centered on month shown.
- 3. Percentage of firms expecting output to increase in the next four months less percentage expecting output to decrease.
  - 4. Excluding mortgage interest payments. Percent change from year earlier.
  - 5. Percent change from year earlier.
  - n.a. Not available.

The twelve-month rate of retail price inflation (excluding mortgage interest payments) ticked up slightly to 2.3 percent in March. As a result of lower bonuses, the twelve-month growth rate of average earnings dropped to 0.9 percent in February, well below the 4.5 percent rate that the Bank of England believes to be compatible with its inflation target.

Chancellor of the Exchequer Gordon Brown presented the government's budget to Parliament on April 17. The budget includes additional spending on public services, directed primarily towards the National Health Service, as well as an increase in the National Insurance payroll tax rate, several tax breaks for businesses, and a supplementary surcharge on North Sea oil profits. The budget deficit was 0.1 percent of GDP in 2001-2002, instead of an expected 0.3 percent of GDP. For 2002-2003 and 2003-2004, the deficit is expected to be 1 percent of GDP and 1.2 percent of GDP, respectively.

In **Canada**, real GDP measured by industry in January and February on average increased 4.5 percent (s.a.a.r) from the fourth quarter, with auto sales and

housing-related purchases providing much of the impetus for growth. Manufacturing shipments increased 3.2 percent in January and 0.8 percent in February, the first back-to-back monthly increases since 1999. In January, the gain was broad-based as 18 out of 21 sectors experienced growth, with the motor vehicle industry being a notable exception. February's increase, conversely, was largely the result of a 9.1 percent (monthly rate) increase in motor vehicle shipments, as shipments excluding motor vehicles actually fell 0.4 percent. In March the PMI survey, which includes both manufacturing and service sectors, rose for the third consecutive month to its highest level since May 2001.

Residential construction, a key component of growth in the fourth quarter, continued to show strength throughout the first quarter. In the first quarter, housing starts increased 19 percent from the fourth quarter, reaching a twelve-year high. Auto sales extended their fourth quarter run-up, with the average of January and February new vehicle sales running 3.5 percent (quarterly rate) above the fourth quarter level. Business confidence recovered sharply in the first quarter, returning to a level not seen since the end of 2000.

The unemployment rate in March declined to 7.7 percent from 7.9 percent in February. The Canadian economy added a net of 88,000 jobs in March, the highest one-month increase in the 26-year history of the series.

The twelve-month rate of consumer price inflation rose to 1.8 percent in March, largely on account of higher vegetable, electricity, and tobacco prices. Excluding energy and food prices, the twelve-month rate stood at 2.2 percent in March, up from 1.8 percent in February.

**Canadian Economic Indicators** 

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

	200	2001 2		2001	2002		
Indicator	Q3	Q4	Q1	Dec.	Jan.	Feb.	Mar.
GDP at basic prices	3	.3	n.a	.2	.6	.5	n.a
Industrial production	-2.2	-1.7	n.a	9	1.7	1.7	n.a.
New mfg. orders	-3.6	-4.7	n.a	-2.1	4.0	2.2	n.a.
Retail sales	7	2.6	n.a	1.5	1.3	1	n.a.
Employment	1	.1	.7	1	.5	.0	.6
Unemployment rate <sup>1</sup>	7.2	7.7	7.8	8.0	7.9	7.9	7.7
Consumer prices <sup>2</sup>	2.7	1.1	1.5	.7	1.3	1.5	1.8
Consumer attitudes <sup>3</sup>	107.9	114.1	125.9			•••	
Business confidence <sup>3</sup>	93.0	117.6	141.5				

<sup>1.</sup> Percent.

<sup>2.</sup> Percent change from year earlier, n.s.a.3. Level of index, 1991 = 100.

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

# **External Balances**

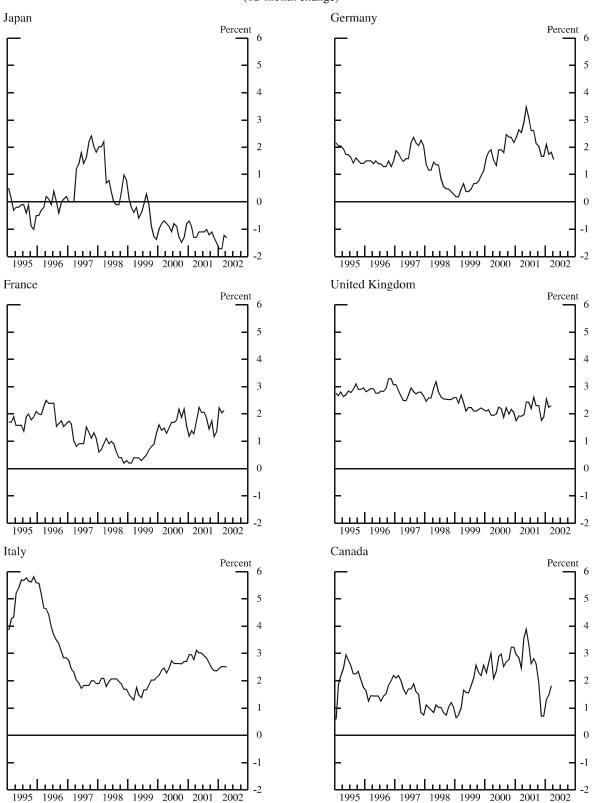
(Billions of U.S. dollars, s.a.a.r.)

Country	200	)1			2002		
and balance	Q3	Q4	Q1	Dec.	Jan.	Feb.	Mar.
Japan		_					
Trade	52.0	52.7	72.4	50.7	59.8	60.6	96.8
Current account	87.8	101.1	n.a.	97.3	112.0	100.7	n.a.
Euro area							
Trade <sup>1</sup>	61.5	82.7	n.a.	85.0	10.8	43.3	n.a.
Current account <sup>1</sup>	26.8	53.7	n.a.	47.1	-15.9	21.9	n.a.
Germany							
Trade	48.5	46.7	n.a.	58.5	62.3	50.8	n.a.
Current account	3.7	25.5	n.a.	14.8	5.4	35.8	n.a.
France							
Trade	1.2	1.3	n.a.	.5	2.1	.7	n.a.
Current account	5.6	4.6	n.a.	5.2	5.6	2.2	n.a.
Italy							
Trade	2.1	15.1	n.a.	15.6	4.4	7.1	n.a.
Current account <sup>1</sup>	9.3	9.9	n.a.	-2.5	-28.4	4	n.a.
United Kingdom							
Trade	-46.3	-48.2	n.a.	-55.3	-42.8	-44.7	n.a.
Current Account	-13.7	-43.7	n.a.				
Canada							
Trade	31.1	32.0	n.a.	34.5	38.1	34.2	n.a.
Current Account	10.2	8.2	n.a.				

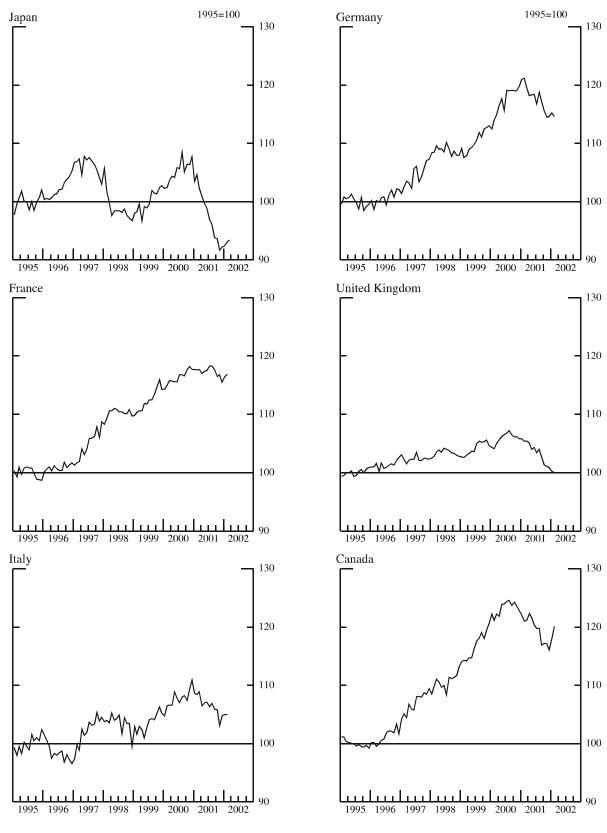
Not seasonally adjusted.
 n.a. Not available. ... Not applicable.

### **Consumer Price Inflation in Selected Industrial Countries**

(12-month change)



### **Industrial Production in Selected Industrial Countries**



### **Economic Situation in Other Countries**

Since the last Greenbook, evidence of economic recovery in the major developing countries has mounted, with the exceptions of Argentina, Venezuela, and Hong Kong. Argentina's economic and financial crisis deepened, but with little spillover to other emerging market economies to date. Inflation in most countries has remained well contained.

Over the intermeeting period, the economic environment continued to deteriorate in **Argentina**. Banking conditions worsened even further as legal challenges by depositors allowed for continued drain in deposits. In late April, Economy Minister Jorge Remes Lenicov resigned after his proposal to convert a large amount of deposits into government bonds was rejected by the congress. He was replaced by Roberto Lavagna. To address the deposit drain, following Remes Lenicov's resignation the Argentine congress approved a measure to slow the legal process that has been allowing many depositors access to their funds. However, this is only a stop-gap measure and the government is expected to unveil a plan similar to that proposed by Remes Lenicov.

Argentine banks reopened on April 29, after being closed for one week. Since mid-April, the peso has appreciated 5½ percent on balance, closing at P2.95/\$ on April 30, reflecting very tight liquidity conditions. International reserves stood at \$12.3 billion on April 29, down from \$13.3 billion in mid-March. Observers are watching to see whether Argentina's central government and provinces take the steps that they promised to take in a statement issued on April 25. This statement promises to reform the bankruptcy law, stimulate the economy, undertake fiscal reforms, improve relations with the international financial community, and revoke an "economic subversion" law that has been used to harass bank executives. IMF staff will again visit Argentina in mid-May, but prospects for an IMF agreement within the next few weeks are unclear. Nevertheless, hoping that an agreement with the IMF can be completed in June, the Argentine government is attempting to obtain a bridge loan to enable it to make a sizeable payment to the World Bank in May.

Data releases since the last Greenbook continue to paint a picture of an economy in distress; industrial production continued to fall in March, putting it more than 25 percent below its peak in mid-1998, and consumer confidence remained depressed. Inflation continued to rise, reflecting the effects of the collapse of the peso. The CPI has increased a total of 9 percent in 2002 through March, and analysts estimate that inflation in April was at least 6 percent. The depressed state of the economy has contributed to an improvement in the trade balance.

### **Argentine Economic Indicators**

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

Indicator	2000	2001	2001				
Indicator	2000	2001	Q4	Q1	Jan.	Feb.	Mar.
Real GDP <sup>1</sup>	-1.9	-9.9	-18.5	n.a.			
Industrial production	-1.8	-5.4	-5.4	-3.3	-1.2	.1	3
Unemployment rate <sup>2</sup>	15.1	17.4	18.3				
Consumer prices <sup>3</sup>	7	-1.5	-1.6	4.2	.6	4.0	7.9
Trade balance <sup>4</sup>	1.2	6.3	11.1	17.6	15.8	18.9	18.0
Current account <sup>5</sup>	-10.3	-5.6	.6	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.

In **Mexico**, there are signs that the economy is turning around. Overall economic activity (a monthly index that proxies for real GDP) and industrial production posted significant gains in February. Business confidence has continued to rise and in March was at about the level that prevailed around early 2000. After several quarters of decline, exports stabilized in the first quarter and, as imports continued to fall, the trade deficit narrowed. The unemployment rate was up a bit in March.

In mid-April, the Bank of Mexico (BOM) surprised observers by loosening monetary policy (through a relaxation of the "corto") only two months after tightening policy in February. The BOM argued that its February tightening had restrained inflation expectations and thus helped keep price increases in line with this year's 4½ percent target—the twelve-month rise in consumer prices in March was 4.7 percent—thereby justifying the subsequent loosening. However, the policy move is increasingly being viewed by markets as aimed at weakening the peso because of concerns that the strength of the currency may hinder an economic recovery. Since the monetary policy decision, the peso has depreciated over 3 percent against the dollar.

# **Mexican Economic Indicators**

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

Indicator	2000	2001	2001				
indicator	2000	2001	Q4	Q1	Jan.	Feb.	Mar.
Real GDP <sup>1</sup>	4.9	-1.5	9	n.a.		•••	
Overall economic activity	6.5	1	4	n.a.	1	.6	n.a.
Industrial production	6.0	-3.3	-1.0	n.a.	3	.7	n.a.
Unemployment rate <sup>2</sup>	2.2	2.5	2.8	2.7	2.8	2.5	2.7
Consumer prices <sup>3</sup>	9.0	4.4	5.2	4.7	4.8	4.8	4.7
Trade balance <sup>4</sup>	-8.0	-10.0	-11.0	-7.3	-6.2	-9.8	-5.8
Imports <sup>4</sup>	174.5	168.4	163.1	160.1	158.8	164.4	157.1
Exports <sup>4</sup>	166.5	158.4	152.1	152.9	152.7	154.6	151.3
Current account <sup>5</sup>	-17.7	-17.7	-23.2	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.

In **Brazil**, data releases since the last Greenbook have provided further evidence of economic recovery. Industrial output rose nearly 5 percent between October and February, putting it about 2 percent below its year-earlier level. However, retail sales were flat on balance over the January-February period, and consumer confidence remains at a low level. Inflation rose in March, driven by rises in government-controlled gas and electricity rates, bringing twelve-month inflation to 7.8 percent. The rebound in economic activity contributed to a narrowing in the trade surplus in the first quarter.

At its mid-April meeting, the central bank left its target for the overnight interest rate unchanged at 18.5 percent, after having reduced the rate 50 basis points in two steps earlier this year. The central bank cited its concern that the recent rise in the price of oil makes it increasingly likely that inflation, by the end of this year, will still exceed the 5.5 percent upper limit of the government's inflation target range.

### **Brazilian Economic Indicators**

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

Indicator	2000	2001	2001	2002				
indicator			Q4	Q1	Jan.	Feb.	Mar.	
Real GDP <sup>1</sup>	4.1	-2.3	-6.5	n.a.				
Industrial production	6.6	1.5	3	n.a.	1.4	.3	n.a.	
Unemployment rate <sup>2</sup>	7.1	6.2	7.5	7.3	7.5	7.4	7.0	
Consumer prices <sup>3</sup>	6.0	7.7	7.5	7.6	7.6	7.5	7.7	
Trade balance <sup>4</sup>	7	2.6	9.2	4.6	7.7	-1.8	7.8	
Current account <sup>5</sup>	-24.6	-23.2	-23.0	-12.9	-13.7	-13.1	-12.0	

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

In Venezuela, political events have taken center stage since the last Greenbook. In early April, tensions between President Hugo Chavez and workers at Venezuela's state-owned oil company led to work stoppages that paralyzed the oil industry. The strike escalated into mass anti-government demonstrations that culminated in violence and the brief ouster of Chavez by a faction of the military, supported by a loose coalition of business and labor groups. With the help of loyal troops and militant civilian supporters, Chavez reclaimed the presidency after only two days. Since his return, Chavez has called for national unity and has changed the leadership of the oil company to appease the workers, but many analysts are skeptical that his conciliatory stance will last once he has consolidated power. Tensions in the country remain high and the political upheaval has brought into even sharper relief the divisions within the military and between the business community and the poor.

On the economic front, conditions are also precarious. Over the twelve months ended March, consumer prices rose 17.6 percent, up notably from previous months, as the effect of February's move to a floating currency continues to feed into prices. Anecdotal reports are that investment has all but ceased and that the number of unemployed has jumped sharply.

### **Venezuelan Economic Indicators**

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

Indicator	2000	2001	2001				
Indicator	2000		Q4	Q1	Jan.	Feb.	Mar.
Real GDP <sup>1</sup>	5.7	n.a.	n.a.	n.a.			
Unemployment rate <sup>2</sup>	13.4	13.3	11.8	n.a.	16.4	n.a.	n.a.
Consumer prices <sup>3</sup>	13.4	12.3	12.4	14.6	12.3	13.7	17.6
Non-oil trade balance <sup>4</sup>	-10.8	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Trade balance <sup>4</sup>	18.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Current account <sup>5</sup>	13.4	4.4	-1.8	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.

Economic conditions in **Korea** have further strengthened over the intermeeting period. In the first quarter, industrial production was up 1.4 percent and consumption rose sharply, while consumer confidence reached a five-year high. Moreover, government spending in the first quarter was boosted by preparations for hosting the World Cup in June. The trade and current account balances also improved in the first quarter, as exports rebounded while imports were essentially flat. Inflation remains well within the central bank's 2 to 4 percent target range, but strong growth indicators in the first quarter have raised concerns that inflationary pressures are mounting. As a result, the newly appointed Governor of the Bank of Korea, Park Seung, signaled that interest rates would be raised soon. The Finance Ministry also changed hands over the intermeeting period and the new minister, Jeon Yun Churl, is thought likely to accelerate reforms and bolster investor confidence. Even before his appointment, Moody's upgraded its sovereign debt rating of Korea to A3 as a result of Korea's improved macroeconomic performance and progress on structural reforms.

### **Korean Economic Indicators**

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

Indicator	2000	2001	2001	2002				
Indicator			Q4	Q1	Feb.	Mar.	Apr.	
Real GDP <sup>1</sup>	5.1	4.4	6.4	n.a.				
Industrial production	16.9	1.7	2.2	1.4	-4.0	3.7	n.a.	
Unemployment rate <sup>2</sup>	4.1	3.7	3.4	3.0	2.8	2.9	n.a.	
Consumer prices <sup>3</sup>	2.8	3.2	3.3	2.5	2.7	2.3	2.5	
Trade balance <sup>4</sup>	16.9	13.4	7.8	19.4	11.6	23.1	n.a.	
Current account <sup>5</sup>	12.2	8.6	4.2	7.2	4.6	13.1	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.

Recent data for the **ASEAN** region continue to indicate that a recovery has been underway. Thailand, the last to report fourth-quarter real GDP numbers, grew 8.8 percent (s.a.a.r.). Since the last Greenbook, industrial production in the region continued to rebound, putting each country's production well above its fourth-quarter level.

The region continued to report strong trade surpluses in January and February, and in most cases the first-quarter trade surplus is on pace to exceed that of the fourth quarter. Exports have, in general, been above fourth-quarter levels, although imports have also risen somewhat. With the exception of Indonesia, inflationary pressures have been kept at bay.

# **ASEAN Economic Indicators: Growth**

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

Indicator and country	2000	2001	2001	2002				
Indicator and country	2000		Q4	Q1	Jan.	Feb.	Mar.	
Real GDP <sup>1</sup>								
Indonesia	7.3	1.2	3.4	n.a.				
Malaysia	6.4	9	7.1	n.a.				
Philippines	3.9	3.8	3.9	n.a.				
Singapore	11.4	-6.4	5.6	n.a.				
Thailand	3.5	2.1	8.8	n.a.				
Industrial production <sup>2</sup>								
Indonesia <sup>3</sup>	11.6	.7	.3	n.a.	1.6	7.3	n.a.	
Malaysia	19.1	-4.1	5	n.a.	3.6	5.3	n.a.	
Philippines	14.9	4	4.7	n.a.	.2	n.a.	n.a.	
Singapore	15.3	-11.6	4.5	7.4	17.9	-5.6	2.0	
Thailand	3.3	1.3	3.3	.6	1	.4	4.1	

- 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	2000	2001	2001	2002					
Country			Q4	Q1	Jan.	Feb.	Mar.		
Indonesia	28.6	25.2	25.8	n.a.	27.9	31.2	n.a.		
Malaysia	16.0	14.4	13.0	n.a.	19.2	13.2	n.a.		
Philippines	6.7	2.6	5.9	n.a.	10.1	4.0	n.a.		
Singapore	3.3	5.8	6.5	6.5	16.4	.8	2.3		
Thailand	5.5	2.5	2.7	2.9	.1	3.7	4.9		

n.a. Not available.

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

Country	$2000^{1}$	20011	2001	2002				
Country	2000	2001	Q4	Q1	Jan.	Feb.	Mar.	
Indonesia	9.3	12.5	12.6	14.5	14.4	15.1	14.1	
Malaysia	1.3	1.2	1.2	1.4	1.1	1.2	2.1	
Philippines	6.7	4.1	4.7	3.6	3.8	3.4	3.6	
Singapore	2.1	6	2	8	-1.1	6	9	
Thailand	1.4	.8	1.1	.6	.8	.3	.6	

<sup>1.</sup> December/December.

China recorded 8.5 percent (s.a.a.r.) growth in real GDP in the first quarter. This was above even the most optimistic expectations of private-sector analysts. Strong growth in investment, consumption, and net exports, were all cited by Chinese officials as contributing to first-quarter growth. The March figure on the trade balance was in line with the average level for last year, but was down considerably from the first two months of this year. Both exports and imports are up about 20 percent over fourth-quarter levels. Industrial production also continued to rise at a robust pace in the first quarter. Despite all of the signs of strong economic activity, consumer prices continued to fall and are now 0.8 percent below their year ago levels.

What little data we have received for **Hong Kong** since the last Greenbook suggest that economic conditions remain weak. The three-month average unemployment rate hit 7 percent in March, a new high. Consumer prices have continued to fall, although at a somewhat slower pace than in the previous few months. The trade balance recorded a smaller deficit in the first quarter than in the fourth quarter, but exports remain weak.

Recent indicators for **Taiwan** point to a recovery in economic activity. Industrial production rose 3.6 percent in the first quarter, as the economy continued to rebound from last year's slowdown. The unemployment rate has stabilized, after rising most of last year. The trade balance also improved in the first quarter, although the March data were significantly weaker than the previous two months. Consumer prices were flat in March after rising in February, a big change from the almost 2 percent deflation experienced last year.

### **Chinese Economic Indicators**

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

Indicator	2000	2001	2001	2002				
mulcator	2000		Q4	Q1	Jan.	Feb.	Mar.	
Real GDP <sup>1</sup>	8.0	7.5	7.1	8.5				
Industrial production <sup>2</sup>	11.4	8.9	8.5	8.2	18.6	2.7	10.9	
Consumer prices <sup>2</sup>	1.5	3	1	6	-1.0	.0	8	
Trade balance <sup>3</sup>	24.1	23.1	34.2	40.3	42.5	55.4	22.9	

- 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 Economic Indicators**

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

Indicator	2000	2001	2001	2002				
Indicator			Q4	Q1	Jan.	Feb.	Mar.	
Real GDP <sup>1</sup>	6.9	-1.8	8					
Unemployment rate <sup>2</sup>	5.1	4.9	6.1	7.0	6.7	6.8	7.0	
Consumer prices <sup>3</sup>	-2.1	-3.5	-2.1	-2.6	-3.4	-2.3	-2.1	
Trade balance <sup>4</sup>	-11.0	-11.4	-7.6	-4.5	-15.5	5.4	-3.5	

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

# **Taiwan Economic Indicators**

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

Indicator	2000	2001	2001				
indicator			Q4	Q1	Jan.	Feb.	Mar.
Real GDP <sup>1</sup>	3.9	-1.8	10.3	n.a.			
Unemployment rate <sup>2</sup>	3.0	4.6	5.3	5.3	5.4	5.2	5.3
Industrial production	7.4	-7.3	1.4	3.6	3.8	.7	2.2
Consumer prices <sup>3</sup>	1.7	-1.7	6	1	-1.7	1.4	.0
Trade balance <sup>4</sup>	8.3	15.6	21.0	22.9	26.5	28.1	14.0
Current account <sup>5</sup>	8.9	19.0	28.2	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.